

¿Qué es la Ciencia Abierta?

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Curso en: **T**ecnologías **R**eproducibles en la **E**nseñanza de la
Metodología y la **E**stadística



Objetivo del Curso

Comprender la definición de ciencia abierta y su relación con Tecnologías Reproducibles para la Enseñanza de la Metodología y la Estadística.



Agenda

- 1 ¿Qué es la Ciencia Abierta?
- 2 Algunas Implicaciones
- 3 Caso de Estudio
- 4 Consideraciones Docentes
- 5 Ejercicio Referencias

¿Qué es la Ciencia Abierta?



https://www.ted.com/talks/anabel_belaus_ciencia_abierta_para_el_futuro



¿Qué es la Ciencia Abierta?

¿Por qué la ciencia abierta plantea implicaciones para la enseñanza?

Organizational Behavior and Human Decision Processes 164 (2021) 1–10



Contents lists available at ScienceDirect

Organizational Behavior and Human Decision Processes

journal homepage: www.elsevier.com/locate/obhdp



Practice what you preach: Credibility-enhancing displays and the growth of open science[☆]



Gordon T. Kraft-Todd^{a,*}, David G. Rand^b

(Kraft-Todd y Rand, 2021)



¿Por qué la ciencia abierta plantea implicaciones para la enseñanza?

Article



Teaching Good Research Practices: Protocol of a Research Master Course

Psychology Learning & Teaching

2020, Vol. 19(1) 46–59

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DOI: 10.1177/1475725719858807

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(Sarafoglou, Hoogeveen, Matzke, y Wagenmakers, 2020)



¿Qué es la Ciencia Abierta?

¿Por qué la ciencia abierta plantea implicaciones para la enseñanza?

Built to last! Embedding open science principles and practice into European universities

The purpose of this article is to examine the cultural change needed by universities, as identified by LERU in its report *Open Science and its role in universities: a roadmap for cultural change*.¹ It begins by illustrating the nature of that cultural change. Linked to that transformation is a necessary management change to the way in which organizations perform research. Competition is not the only, or necessarily the best, way to conduct this transformation. Open science brings to the fore the values of collaboration and sharing. Building on a number of Focus on Open Science Workshops held over five years across Europe, the article identifies best practice in changing current research practices, which will then contribute to the culture change necessary to deliver open science. Four case studies, delivered at Focus on Open Science Workshops or other conferences in Europe, illustrate the advances that are being made: the findings of a Workshop on Collaboration and Competition at the OAI 11 meeting in Geneva in June 2019; alternative publishing platforms, exemplified by UCL Press; open data, FAIR data and reproducibility; and a Citizen Science Workshop held at the LIBER Conference in Dublin in June 2019.

(Ignat y Ayris, 2021)



Algunas Implicaciones

- Cambio cultural de no compartir datos a compartirlos a la comunidad.
- Se aumenta la vida útil de los datos
- Se ofrece la posibilidad de reanalizar los datos y re-usarlos eficientemente (e.g., for meta-analyses)
- Se hace más probable la oportunidad de encontrar errores o fallas en los análisis estadísticos.
- Se comprende el origen de la crisis de replicabilidad y reproducibilidad en psicología.
- Se comprende cómo ha ocurrido el fraude científico.
- Se enriquece la formación hacia la investigación





UNIVERSITY OF AMSTERDAM

Curso titulado “Buenas Prácticas de Investigación” adaptado a Maestría en Psicología.

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42 estudiantes de maestría en psicología.





What Psychology Teachers Should Know About Open Science and the New Statistics

Beth Morling¹ and Robert J. Calin-Jageman²

Abstract

Psychology teachers have likely heard about the “replication crisis” and the “open science movement” in psychology, and they are probably aware that psychologists have proposed new standards for research practice. How should our psychology courses reflect these new standards? We describe several modern practices that have transformed our field and that seem likely to endure: preregistration of studies, transparency of reporting, norms for replication, and the new statistical focus on estimation and precision. We offer suggestions for how to integrate these new practices into psychology courses.

(Morling y Calin-Jageman, 2020)

Teaching of Psychology
2020, Vol. 47(2) 169-179
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DOI: 10.1177/0098628320901372
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General Article

Reproducibility and Replicability in a Fast-Paced Methodological World



Sacha Epskamp 

Department of Psychology, University of Amsterdam

(Epskamp, 2019)

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PSYCHOLOGICAL SCIENCE

Advances in Methods and
Practices in Psychological Science
2019, Vol. 2(2) 145–155
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Ejercicio

Se formarán dos grupos. Un grupo estudiará las consideraciones docentes planteadas en el paper de Morling y Calin-Jageman (2020) y el otro grupo hará lo propio con el paper de Epskamp (2019). Luego, cada grupo hará una presentación oral que sintetice las consideraciones docentes.



Referencias I

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