

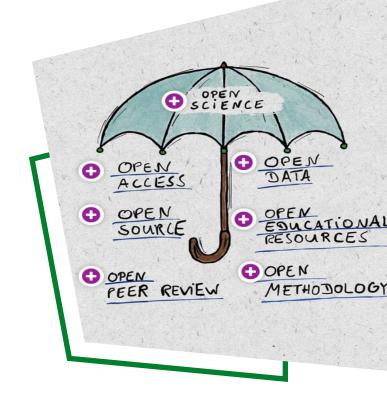






Open Science.
For more transparency and visibility!

19.06.2022 Dr. Stefan T. Siegel



Open Science

1. Why?

2. What?

3. How?

4. Q&A

1. Why Open Science?

Science works



@NASA: https://webbtelescope.org/contents/media/images/2022/031/01G77PKB8NKR7S8Z6HBXMYATGJ



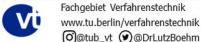
@EULAR: https://www.eular.org/eular_sars_cov_2_vaccination_rmd_patients.cfm

Science doesn't (seem to) work

Need for transformation in sciences – The Academic crisis list

- Academic career crisis
 - Tenure track, WissZeitVG, Junior professorship
- Life Plan Crisis
 - How and when to start a family?
- Working condition crisis
 - Precarity, short contracts, relocation
- PostDoc Crisis
 - Great Resignation
- Power abuse crisis
 - Ultimate dependency on supervisor
- Replication crisis
 - real vs fake data, brain drain
- Culture of failure crisis
 - Failure endagers future funding
- Publication crises
 - publish or perish, review process, predatory publishing
- Funding crisis
 - Funding agencies with very low funding probability: Is it worth it? Research Topic Selection really free?

- Collaboration crisis
 - China Science Investigation, foreign policy through scientific collaboration bans
- Research Assessment crisis
 - Quantity vs. quality, meaning of evaluations
- Quantification crisis
 - employability, university rankings, h-index
- Higher Education Crisis
 - Why even bother doing good lectures
- Mental Health Crisis
 - N2 PHDNet Max Planck
- Intersectionality crisis
 - diversity, first gen, disabled
- Academic Administration crisis
 - The Rise of the All-Administrative University and Why It Matters
- Science and Society crisis
 - Disbelief in science, false balancing, conspiracy theories





Could Open Science the Answer?



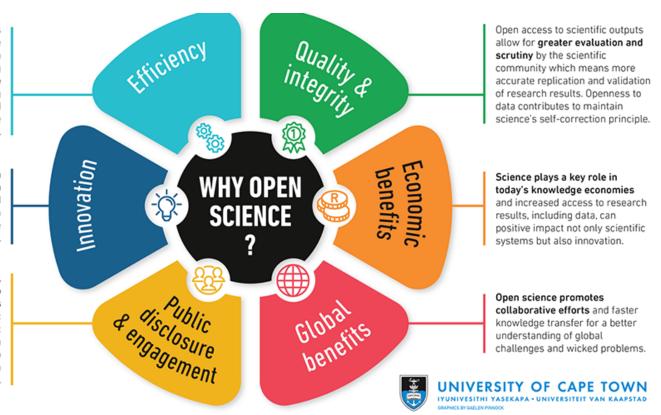
https://zenodo.org/record/1285575 Imming & Tennant, 2018; <u>CC BY 4.0</u>

Some Promises of Open Science

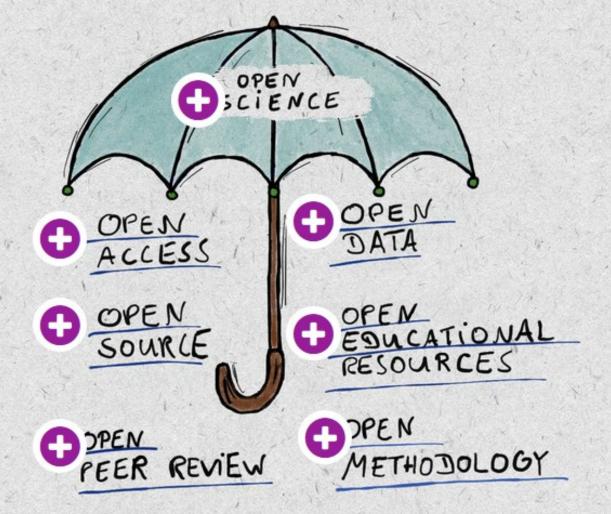
Greater access to scientific inputs and outputs can increase scientific productivity through reducing duplication, allowing more research from the same data and multiplying opportunities for domestic and global participation in the research process.

Open science can reduce delays in the re-use of scientific research including articles and data, and promote a swifter path from research to innovation to produce new products and services.

Science, often publicly funded, should be publicly accessible to promote a greater awareness among citizens and to build public trust and support for public policies and investments in research. Open science also promotes citizen science in experiments and data collection.



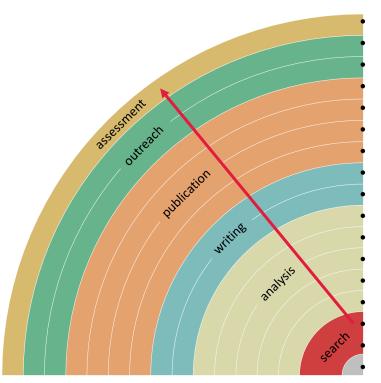
2. What is Open Science?



Was bedeutet eigentlich Open Science? (<u>CC BY 4.0</u>) Florian Hagen 2019

3. Open Science – How to?

You can make your workflow more open by ...



adding alternative evaluation, e.g. with altmetrics communicating through social media, e.g. Twitter sharing posters & presentations, e.g. at FigShare using open licenses, e.g. CCO or CC-BY publishing open access, 'green' or 'gold' using open peer review, e.g. at journals or PubPeer sharing preprints, e.g. at OSF, arXiv or bioRxiv using actionable formats, e.g. with Jupyter or CoCalc open XML-drafting, e.g. at Overleaf or Authorea sharing protocols & workfl., e.g. at Protocols.io sharing notebooks, e.g. at OpenNotebookScience sharing code, e.g. at GitHub with GNU/MIT license sharing data, e.g. at Dryad, Zenodo or Dataverse pre-registering, e.g. at OSF or AsPredicted commenting openly, e.g. with Hypothes.is using shared reference libraries, e.g. with Zotero sharing (grant) proposals, e.g. at RIO

















































Add-ons

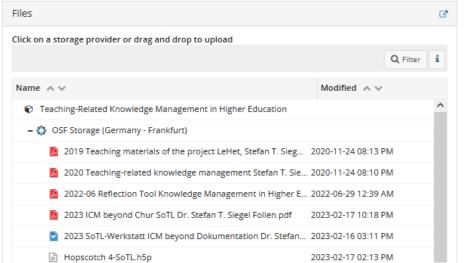
Contributors

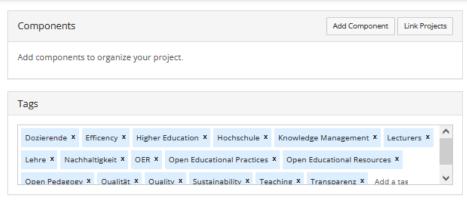


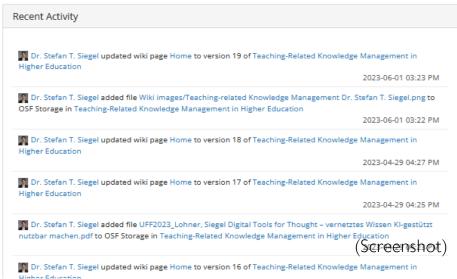
Teaching-Related Knowledge Managem... Metadata Files Wiki Analytics Registrations



Read More



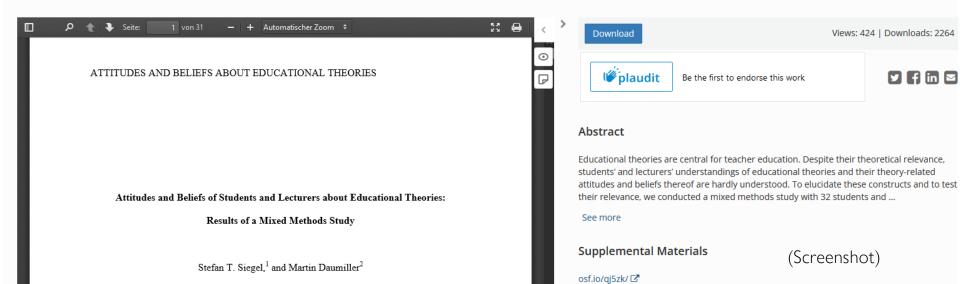




EdArXiv Preprints

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Department of Educational Science, University of Augsburg

Policy Futures in Education

Journal indexing and metrics

IOURNAL HOMEPAGE

SUBMIT PAPER

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The problem of educational theory

Stefan T Siegel and Gert Biesta View all authors and affiliations

Volume 20, Issue 5 https://doi.org/10.1177/14782103211032087

PDF / ePub









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Metrics and citations



Figures and tables

Abstract

This interview sheds light on current developments threatening the disciplinary 'heart' of education. Taking a starting point in the continental 'configuration' of the field, Gert Biesta and Stefan T Siegel argue that there are forms of theory considered distinctively educational. Based on this premise, they discuss why defining educational theories (Erziehungswissenschaftliche Theorien) is so challenging, and why it is nevertheless a rewarding endeavour. By distinguishing between (genuinely) educational theories in a narrow sense and (educationally relevant) theories in a wider sense, Biesta and Siegel attempt to tackle the problem of educational theory and to stimulate the discourse on theorizing education.

A transcontinental perspective on education

(Screenshot)







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Veröffentlichung

The problem of educational theory

(Sage, 2021-07-30) Siegel, Stefan T. 🚨 🍺 ; Biesta, Gert

Abstract This interview sheds light on current developments threatening the disciplinary 'heart' of education. Taking a starting point in the continental 'configuration' of the field, Gert Biesta and **Stefan**

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Type: journal article

Journal: Policy Futures in Education

URL: http://dx.doi.org/10.1177/14782103211032087

DOI: 10.1177/14782103211032087

URI: https://www.alexandria.unisg.ch/handle/20.500.14171/110185

Scopus© Citations 6

Veröffentlichung

El Problema de la Teoría de la Educación

(2022) Siegel, Stefan T. 🚨 🍺 ; Biesta, Gert

Type: journal article

Journal: Teoría de la Educación. Revista Interuniversitaria

Issue: 34

URL: https://revistas.usal.es/index.php/1130-3743/article/view/teri.27157

DOI: https://doi.org/10.14201/teri.27157

URI: https://www.alexandria.unisg.ch/handle/20.500.14171/109532

13



(Screenshot)

References & Resources (Selection)

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- UNESCO. (2021). *UNESCO Recommendation on Open Science*. UNESCO Publishing. https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en

Resources

- Open Science Training Courses: https://www.fosteropenscience.eu/toolkit
- Information and Materials of the Library of the University of Augsburg: https://www.uni-augsburg.de/de/organisation/bibliothek/publizieren-zitieren-archivieren/open-access/





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