

THE OPEN SCIENCE GUIDE OF GUIDES

OPEN SCIENCE AND
Open Access Publishing
Knowledge Justice
Citizen Science
Data Science



27.09.2021 Open Access Tage

Collaborative Open Access Publishing

A Field Report

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4.0 DOI: [10.5281/zenodo.5529955](https://doi.org/10.5281/zenodo.5529955)



Outline

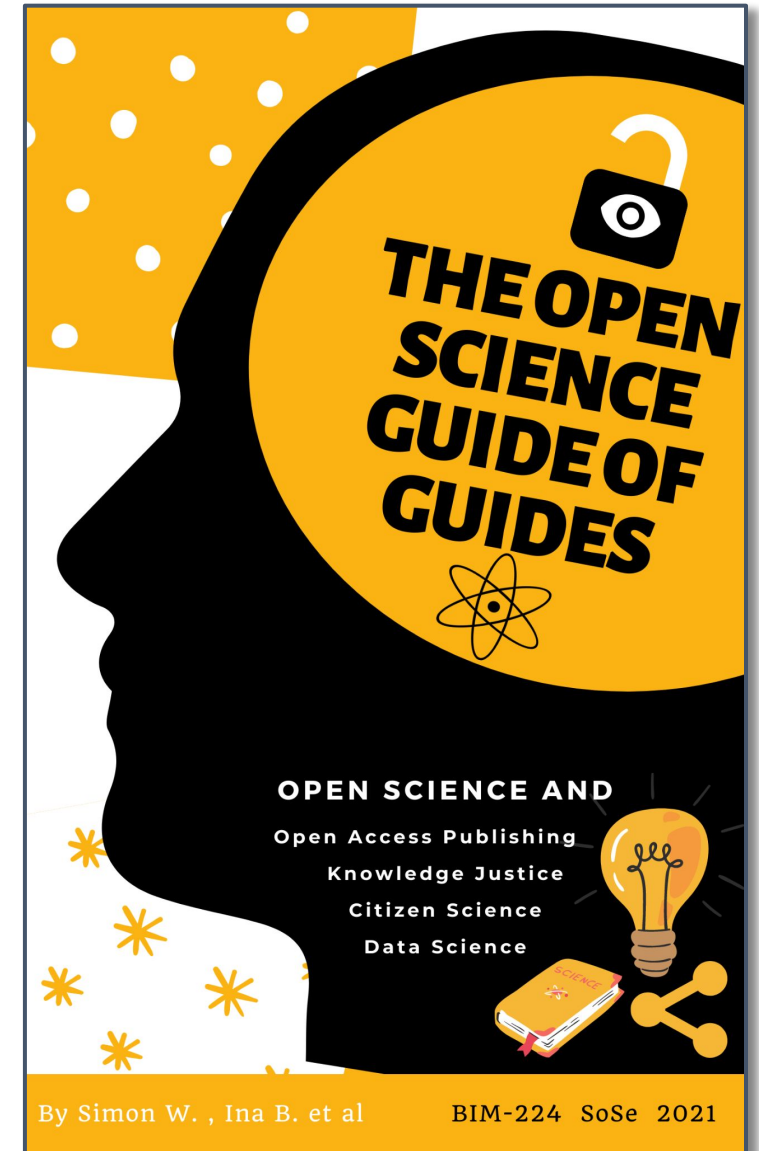
- Introduction and course concept
- Publication
- Software pipeline
- Tasks—literature survey, collaborative authoring, output to GitHub, styling, and publishing
- Challenges
- Learning outcome & reflection

Course concept

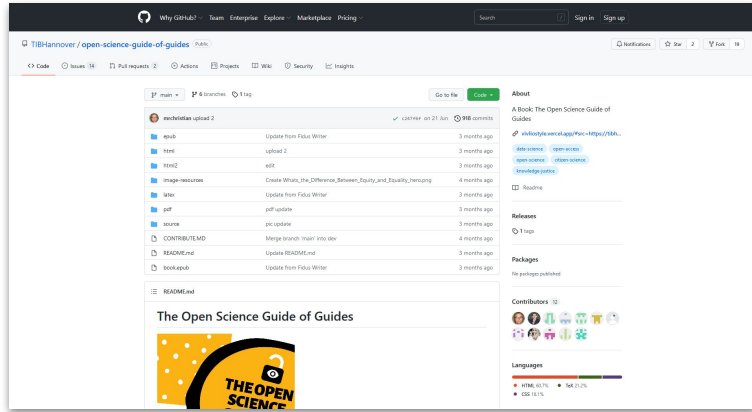
- Introduction to selection of topics in Open Science, get to know the subjects, but also see types of guides used by organisations deal with the subjects.
- Not high barrier in terms of research and authoring, more a taste of a 'research literature review'.
- Touch on systems that are out there used for OA Publishing: software, platforms, standards, PIDS, and licences, etc.

Publication (Tasks)

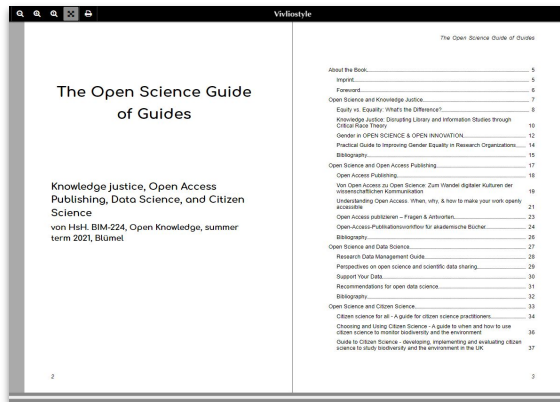
- Book: The Open Science Guide of Guides
- Collect guides on 4 topics: Knowledge Justice, Data Science, Citizen Science, Open Access
- Collaboratively author online - a short review on each guide
- Collaboratively design for multi-format output
- Collaboratively publishing with a DOI [10.5281/zenodo.4740163](https://doi.org/10.5281/zenodo.4740163)



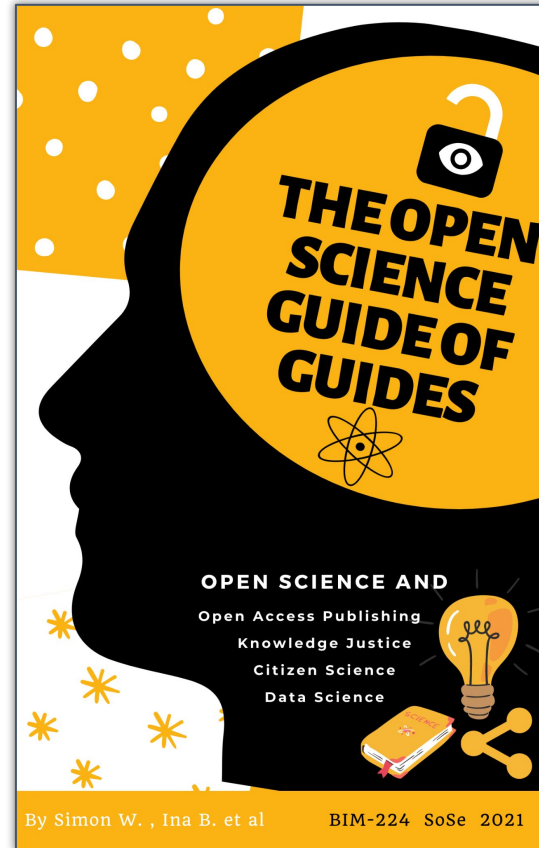
Publication - Single source to multi-format



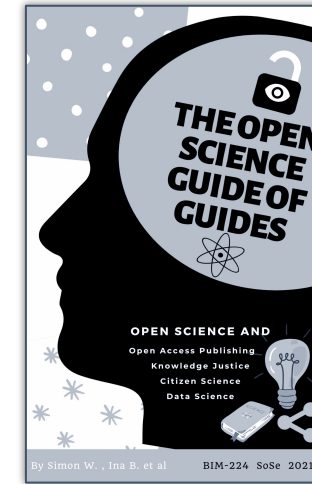
[Source / GitHub](#)



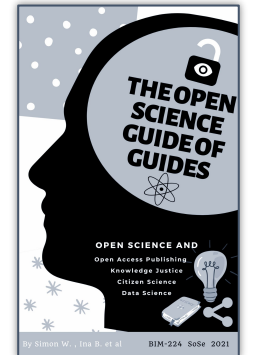
[Paged Web](#)



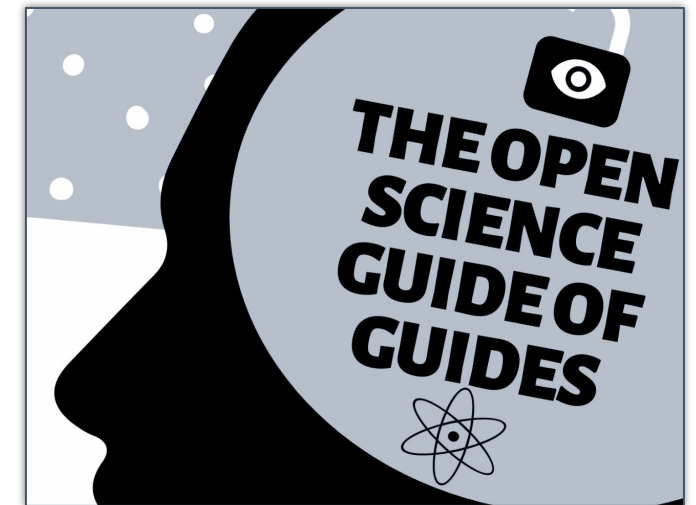
[Screen PDF](#)



[Print-on-demand](#)

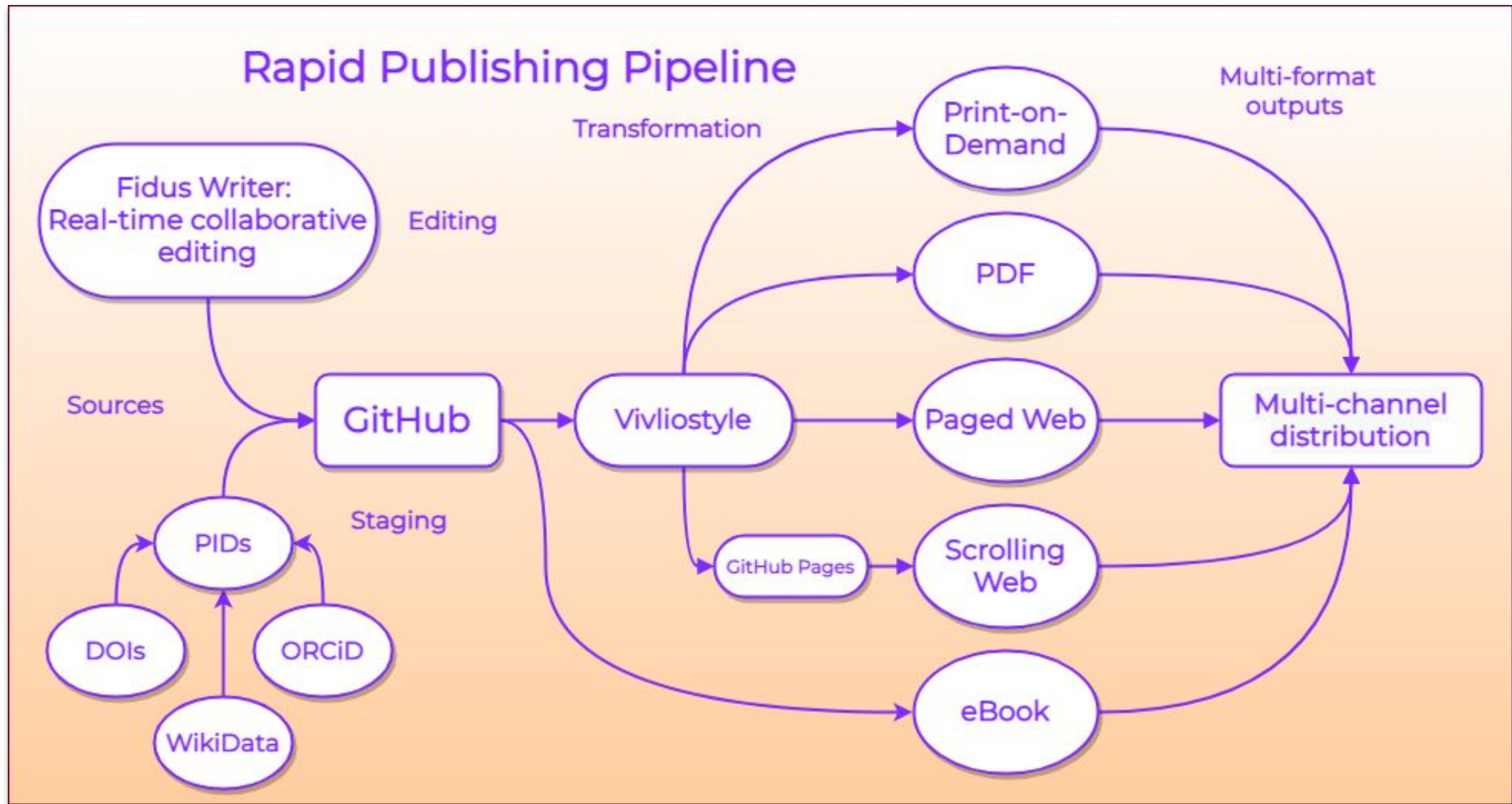


[eBook](#)



[Scrolling Web](#)

Software / Pipeline - Beta



Software / Pipeline - Beta

- Development on GitHub 'ADA Semantic Publishing'
<https://github.com/TIBHannover/ADA-semantic-publishing>
- Use GitHub / GitHub Pages to combine platforms
- Starting with Fidus Writer (collaborative authoring) and Vivliostyle (CSS Typesetting and Heuristic Typesetting)



Vivliostyle

Systems we interacted with (used) out on web

- Fidus Writer – online collaborative authoring
- Vivlio Style – CSS Typesetting
- Zotero – Citation management
- GitHub – versioning, making a commit, GitHub pages, etc
- ORCID – creating ID as authors, using on GitHub
- Zenodo – depositing publication, minting a DOI

Tasks (student view)

- General: Liked to have resources in advance go through (important in Corona setting)
- Collaborative writing – helpful to see the others work while writing own part, so you know your on the right track

Open Science and Knowledge Justice

Contributors: Rami Iqbal, Umil Gunes, My Linh Nguyen Thi, Lorenza Vassao

Tags: Knowledge Justice, Equality, Equity, Justice

Equity vs. Equality: What's the Difference?




Image Source: "Addressing Imbalance," by Tony Kohls for the 2021, Health Justice Forum.

Guide name: [Equity vs. Equality: What's the Difference!](#) (MPH@GW, the George Washington University 2021)

Target group: public health masters students, health community, policy and system designers.

Type: Guide for Masters course.

Summary The guide is an introduction to the difference between equality and equity. Firstly it explains the difference in terms of how society allocates out resources and opportunities using the USA 960 example [The 960s](#). [This](#) is an American children's picture book written and illustrated by Tom Hildebrand. The core idea being that society is not a natural system and has built rewards that prioritize social groups.

Equity is a solution for addressing imbalanced social systems. Justice can take equity one step further by fixing the systems in a way that leads to long-term, sustainable, equitable access for generations to come.

The guide then shows example recommendations from leading health institutions and how they define the topic: for example here with The World Health Organization (WHO) and how [equity is defined](#), US Centers for Disease Control and Prevention (CDC) refers to [health equity](#), and here as the [Race Matters Institute](#) describes.

The guide then shows examples of how equality and equity differ in policy, for example:

Equality - A city cuts the budget for 25 community centers by reducing the operational hours for all centers by the same amount at the same times.

Equity - The city determines which times and how many hours communities actually need to use their community centers and reduces hours for centers that aren't used as frequently.

Short case studies of programs are described and given a list of additional resources.

Knowledge Justice: Disrupting Library and Information Studies through Critical Race Theory




Image: Modified by Rebecca McDonald to be licensed under CC BY.

Guide name: [Knowledge Justice: Disrupting Library and Information Studies through Critical Race Theory](#) (MIRE) and Lopez MORGENTHAU 2021

Tasks (student view)

- Challenge to pick the “right” guide – is a guide scientific or not?
- Zotero super open-source alternative to Citavi, tag and organize references, use it until now
- Citation Style (Citation Styles Language)

The screenshot shows the Zotero web interface. On the left is a sidebar with a folder tree and a tag cloud. The main area displays a list of items with columns for Title, Creator, Date, and Date Added. The selected item is 'Open Science principles for accelerating trait-based science across the Tree of Life' by Gallagher, Rachael. A right-hand pane shows the 'Info' tab for this item, displaying metadata such as Title, Author, Publication, Volume, Issue, Pages, Date, Journal Abbr, Language, DOI, ISSN, URL, Library Catalog, Date Added, Date Modified, and Added By.

Title	Creator	Date	Date...	A^
Die FAIR-Prinzipien für Forschungsdaten	Lindstädt	2021-03-25	25.3....	e...
Was bedeutet Open Science? Open Science Kom...			15.4....	e...
Von Open Access zu Open Science: zum Wandel di...	Heise	2018	15.4....	e...
Choosing and Using Citizen Science: a guide to wh...	Pocock et al.	2014	26.3....	F...
Support Your Data: A Research Data Management ...	Borghgi	2018-09-05	23.3....	j...
Citizen Science for all. A Guide for citizen science p...		2016	25.3....	j...
Copyright versus Open Access	Scheufen	2015	26.3....	k...
Knowledge Justice: Disrupting Library and Informat...	Leung and ...	2021-04-13	8.4.2....	k...
A Guide to Research Data Management	Petrovich		23.3....	Kie
A Quick Guide to Data science and Machine Learning	Qureshi	2020-12-21	12.4....	Kie
Open code for open science?	Easterbrook	2014-10-30	28.4....	Kie
Big Data and Open Science Data	Gutierrez	2015-02-07	28.4....	Kie
Recommendations for open data science	Gymrek an...	2016-05-18	12.4....	li...
Knowledge Justice: An Opportunity for Counter-ex...	R. Egert an...	2017-06-21	8.4.2....	l...
Open Science			18.2....	L...
UNESCO - Open Science	UNESCO	2020-02-17	18.2....	L...
Read the Declaration (Deutsch)			18.2....	L...
Digital skills for FAIR and open science EIFL			19.2....	L...
Open Science principles for accelerating trait-base...	Gallagher e...	2020-02-17	22.3....	Mi
All guides: Open Access Publishing: Open access at...	Macvean	2021	15.4....	Mi
Open Science & FAIR Data	Dintzner		26.3....	Mi
RESEARCH DATA MANAGEMENT	Universität ...	2021-03-25	26.3....	Mi
Open Science	Helmholtz-...	2021	11.4....	Mi
Open Access publizieren – Fragen & Antworten	Bundesmini...	2021	13.4....	Mi
Open-Access-Publikationsworkflow Für akademisch...	Böhm et al.	2020-11-03	11.4....	Mi
Practical guide on Open Science for researchers	Barbosa, Lu...	2020-07-31	18.2....	mr

Info Notes Tags Attachments Related

Item Type Journal Article

Title Open Science principles for accelerating trait-based science across the Tree of Life

Author Gallagher, Rachael

Author Falster, Daniel

Author Maitner, Brian

Author Salguero-Gómez, Roberto

Author Vandvik, Vigdis

Author Schneider, Florian

Author Pearse, William

Author Kattge, Jens

Author Poelen, Jorrit

Publication Nature Ecology & Evolution

Volume 4

Issue March 2020

Pages 294-303

Date February 17, 2020

Journal Abbr Nature Ecology & Evolution

Language en

DOI 10.1038/s41559-020-1109-6

ISSN 2397-334X

URL https://www.nature.com/articles/s...

Library Catalog ResearchGate

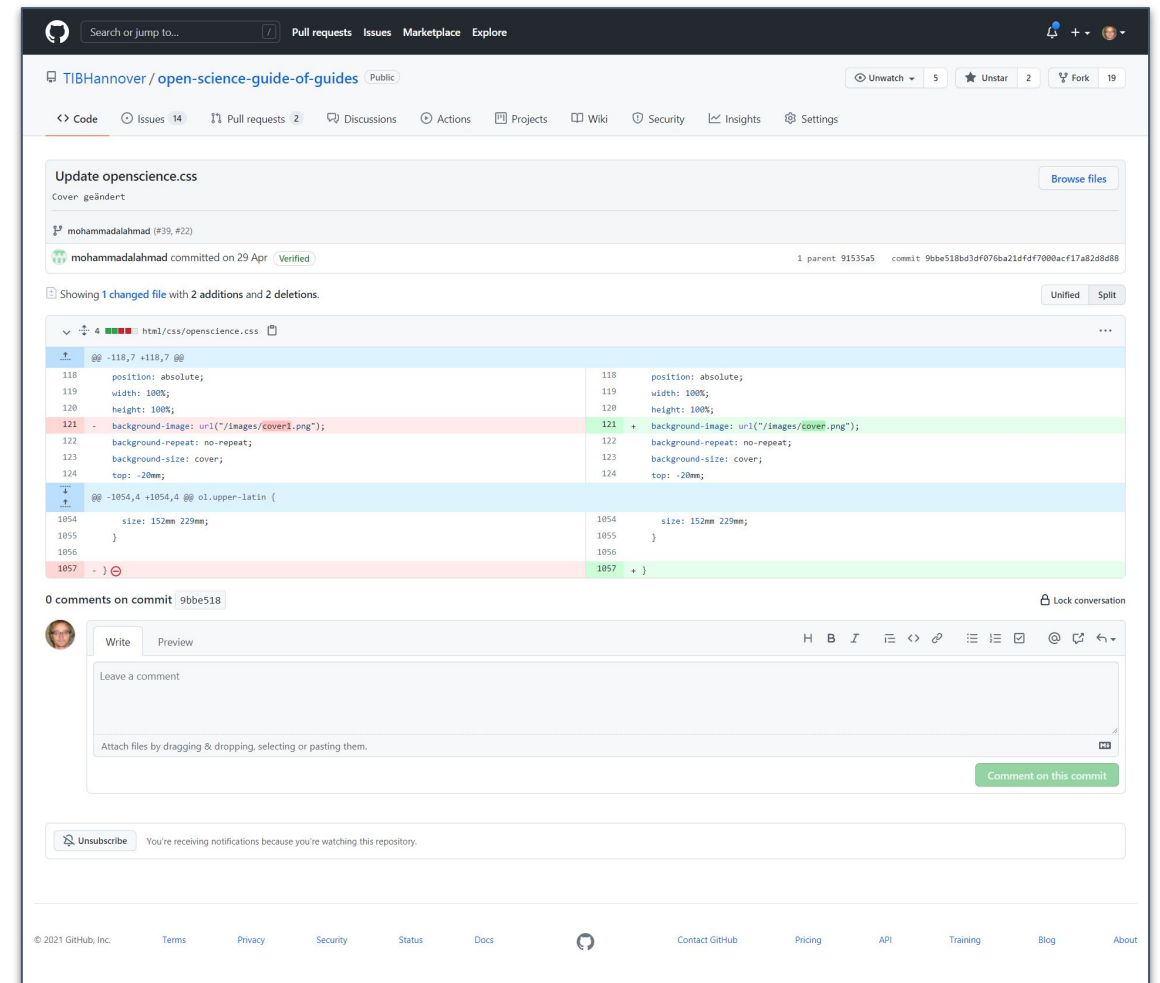
Date Added 22.3.2021, 20:55:53

Date Modified 25.3.2021, 15:10:11

Added By MariaSael

Tasks (student view)

- Learn about GitHub – versioning, etc. – learning about collaborative working, creating branches, guides provided by Simon
- Design and CSS – nice to improve that and compare design and decide together about the best one



Tasks (student view)

- Did not know at all that publishing a book is that easy
- Zenodo, getting DOI and publishing, great responsibility
- Good to have an ORCID now 😎

The screenshot shows the Zenodo website interface. At the top, there is a blue header with the Zenodo logo, a search bar, and links for 'Upload' and 'Communities'. On the right side of the header, there are 'Log in' and 'Sign up' buttons. Below the header, the main content area displays the publication details for 'The Open Science Guide of Guides', dated June 10, 2021. The title is prominently displayed, followed by a list of authors with their ORCID icons. A short description follows, mentioning the book's origin as a student seminar at the Hannover University of Applied Sciences and Arts. Below the description is a preview window showing the first page of the book, which includes the title 'Knowledge justice, Open Access Publishing, Data Science, and Citizen Science' and the author 'von HsH. BIM-224, Open Knowledge, summer term 2021, Blümel'. To the right of the main content, there are several informational boxes: one showing 522 views and 248 downloads with a 'See more details...' link; another indicating the book is indexed in OpenAIRE; and a third providing the publication date (June 10, 2021), the DOI (10.5281/zenodo.4740163), a list of keywords (open science, Guide, Handbook, Knowledge Justice, Social Justice, Equity, Open Access, Open Access Publishing, Open Licence, Scholarly Publishing, Data Science, Best practices, Reproducible research, Citizen Science), and the license (Creative Commons Attribution 4.0 International).

Reflection on Publishing

- By looking at existing OA publications and how they have published—license, PIDs, etc—get a feel of how to improve a publication visibility with OA and Open Science.
- Open Access publishing - Good publications not making use of OA and Open Science publishing good practice.
 - Examples: MIT [Knowledge Justice](#) CC BY NC ND: [Gender Action](#) reports not using DOIs, OA licence, and only PDF.
 - Licence and reuse; Review, feedback, post publication review; Basic PIDs and metadata; Only using locked in formats, etc.
- Writing in public and collaboration – seeing the benefits of this way of writing as opposed to vulnerability of early exposure.

What did we miss? Next steps

- PID graph / Using DataCite Commons
 - Funders – not applicable
 - Organisations – HsH, TIB (RORs)
 - People – students and contributors DOIs, CRediT and tenzing
 - Datasets – data out of Zotero stored as Zenodo
- Record publication on WikiData
- Software citation

Thank you!

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