



Data
Schools

Author Carpentry: Teaching

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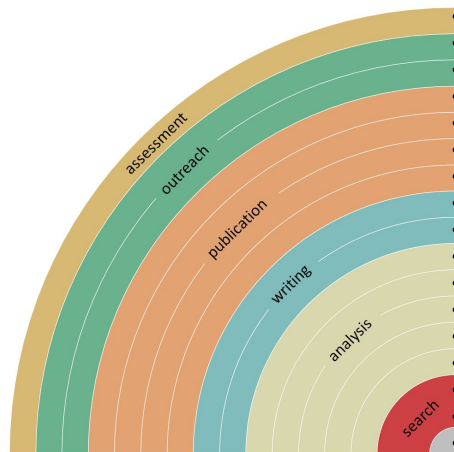
Summary



- Activities to engage ECRs in the classroom
- Using reproducible reporting practices in class projects
- More inclusive classrooms

Class Activities

You can make your workflow more open by ...



 Bianca Kramer & Jeroen Basman <https://101innovations.wordpress.com>

- 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



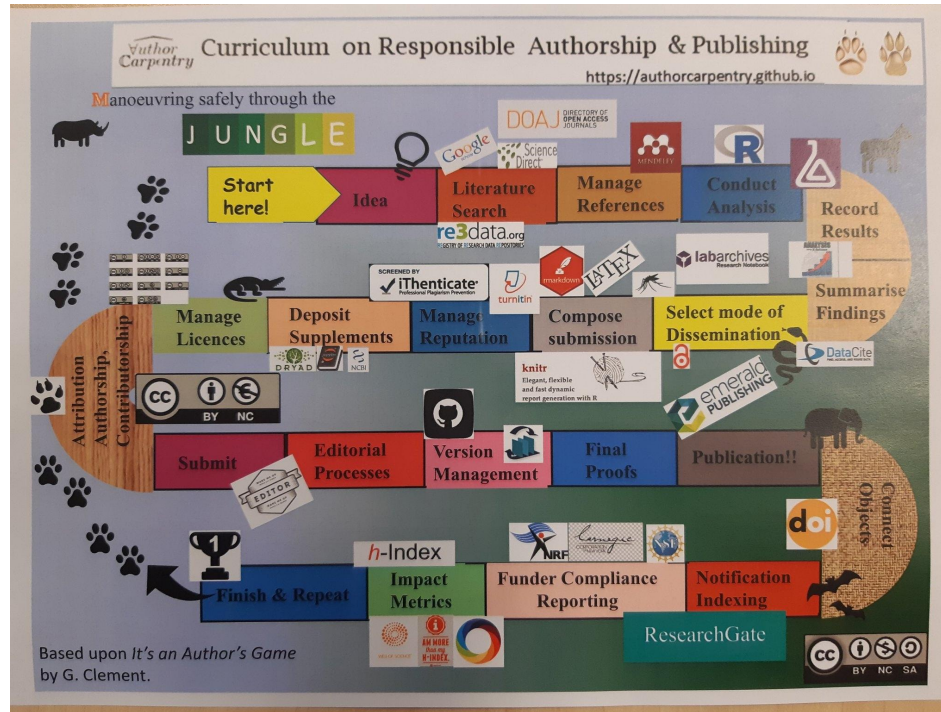
[DOI: 10.5281/zenodo.1147025](https://doi.org/10.5281/zenodo.1147025)

Class Activities

Instructions:

1. Explain each of the levels
2. Ask the students to list the tools they use for each of the levels
3. Work on a group chart, where all the listed options are included
4. Divide the students into subgroups
5. Let each subgroup talk about the tools that they don't know, or can recommend
6. Tell each subgroup to construct a new workflow with their favorite (or newly learned) tools

Class Activities



Class Activities

Instructions:

1. Start with an empty curriculum
2. Explain each of the steps to the group
3. Provide a list of tools (logos printed on paper or digitally), and ask each subgroup to match the most appropriate tools to each step
4. Let each subgroup talk about the tools that they don't know, or can recommend
5. Tell each subgroup to construct a curriculum with their favorite (or newly learned) tools

Ideas

- Ask your students to send you homework using reproducible tools:
Rmarkdown, Jupyter notebooks
- The first two or three assignments can be very similar, so they can see the gain of having a tool for repeating themselves
- After one semester of use they will feel comfortable replacing other word processing options

Ideas



- Role play activities
 - Similar to the activity that Prof. Gail Clement organized in Trieste.
 - Different scenarios:
 - Author 1, Author 2 and Publisher. Author 2 sold the copyrights of the article to a publisher without consulting Author 1. What would you do while wearing each of these hats?
 - Predatory Journal Editor, Author, Funder. Journal is charging \$2000 to the author before the article goes to peer review. Without the money, they are not willing to accept the submission, but the author really needs the publication in that specific journal to fulfill the funders expectations. What would you do while wearing each of these hats?

Inclusive Classrooms



- Be aware of your classroom's context
- What kind of tools are accessible for everyone?
- Do we have restrictions in certain countries to access these tools?
- Always spend time getting to know your audience before teaching



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Thank you!

You can find me on Twitter: [@Fichulina](https://twitter.com/Fichulina)