Open Science Episode Notebook

Part of FAIR in (bio) practice, <https://carpentries-incubator.github.io/fair-bio-practice>

Type your name and institution:

-

-

-

Which of the following statements are true/false, type T or F next to each:

1. Dogs are the best pets:
2. Cats are the best pets:
3. Turtles are the best pets:

**Exercise 1. Benefits of openness**

Being open has other benefits beyond giving free access to information.

For example, “Open educational resources”:  
- enables collaborative development of courses   
- improves teachers’/instructors’ skills by sharing ideas

Discuss in your group what the additional benefits or addressed problems are for the selected open practices:

Open Data:

-

-

-

Open Software:

-

-

-

Open Notebooks:

-

-

Open Peer Review:

-

-

Open Access:

-

-

**Exercise 2 Personal benefits of being “open”**

Below are some personal benefits to adopting Open Science practices. Read through them, select the 3 most important/attractive for you and mark them with +1, select two least important for you and mark them with 0

* get extra value from your work (e.g. collaborators, reuse by modellers, ML specialists):
* complying with funders’ policies
* receive higher citations
* demonstrate research impact
* save own time (reproducibility but also communication overhead)
* become pioneers
* distinguish yourself from the crowd
* plan successful research proposals
* gain valuable experience
* form community
* increased speed and/or ease of writing papers
* speed up and help with peer review
* build reputation and presence in the science community
* evidence of your scientific rigour and work ethic
* avoid embarrassment/disaster when you cannot reproduce your results

Can you think of other benefits? How do personal benefits of Open Science compare to the benefits for the (scientific) society.

OA links

Details of funding bodies and their involvement and requirements can be found at [Plan S/cOAlition S](https://www.coalition-s.org/plan-s-funders-implementation/). There is also a [cOAlition S journal checker tool](https://www.coalition-s.org/blog/unboxing-the-journal-checker-tool/) to assess compliance being developed. The [Directory of Open Access Journals (DOAJ)](https://doaj.org/) is a tool to find which journals are Open Access.

**Exercise 3. Why we are not doing Open Science already**

Discuss Open Science barriers

Where to next links

* Challenges & benefits of OS <https://doi.org/10.1371/journal.pbio.3000246>
* Centre for Open Science   
  <https://www.cos.io/>
* Ted talk supporting OS  
  <https://youtu.be/c-bemNZ-IqA>

**Exercise 4. Open Science Quiz**

Which of the following statements about the OS movement are true/false?

* Open Science relies strongly on the internet:
* Open Access eliminates publishing costs:
* You cannot Open-Source patented software:
* You cannot charge for Open-Source software:
* Open Data facilitates re-use:
* Open Data increases confidence in research findings:
* In Open Peer Review, readers vote on publication acceptance:
* Open Notebooks improve reproducibility:
* Open Notebooks can create patenting issues:
* Open Access permits the whole society to benefit from scientific findings:
* Citizen Science engages public in the research process:

**Feedback**

**Feedback**

1.      How do you feel about the presented topics after this session (type

+1 next to the statement that best describes your feeling):

•       I am more confused:

•       I have a better understanding of them now:

•       My knowledge has not changed much:

2.      Thinking of your knowledge of the lesson topic and its presentation,

which one of the statements best characterise your experience (type +1

next to the statement)

•       I am a novice, and I found the course useful/informative:

•       I am a novice, but I think the course should be improved:

•       I have experience in the presented area, but I found the course

useful/informative:

•       I have experience in the presented area, and I think the course could

be improved:

3. How was the pace of the lesson:

•       Too fast:

•       About right:

•       Too slow:

4. If the lesson had to be 5 minutes shorter, what would you remove:

-

-

-

5. If the lesson could be 5 minutes longer, what would you add or spend

more time on:

-

-

-