

Bootcamp participants' lessons learnt

OpenAIRE Open Science Train-the-Trainer Bootcamps

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Your colleagues can be great teachers, not only while teaching, but while asking questions and sharing their experience too.



- So many important changes in the way we do research, in just the last decade (!) - open science, FAIR, GDPR, digitisation, which...
- ...requires much from researchers and support staff, but:
- ‘We’re in this together’
- It was great to hear about the experience of others, get to know about many new resources & training programmes and...clouds!;)



- Illuminate NOT Annihilate
- Relate NOT Dissociate
- Interact NOT Orate
- Cooperate NOT Segregate (yourself)



Build your network
of colleagues and
experts in various
disciplines,
countries and
contexts

Mayya Sundukova

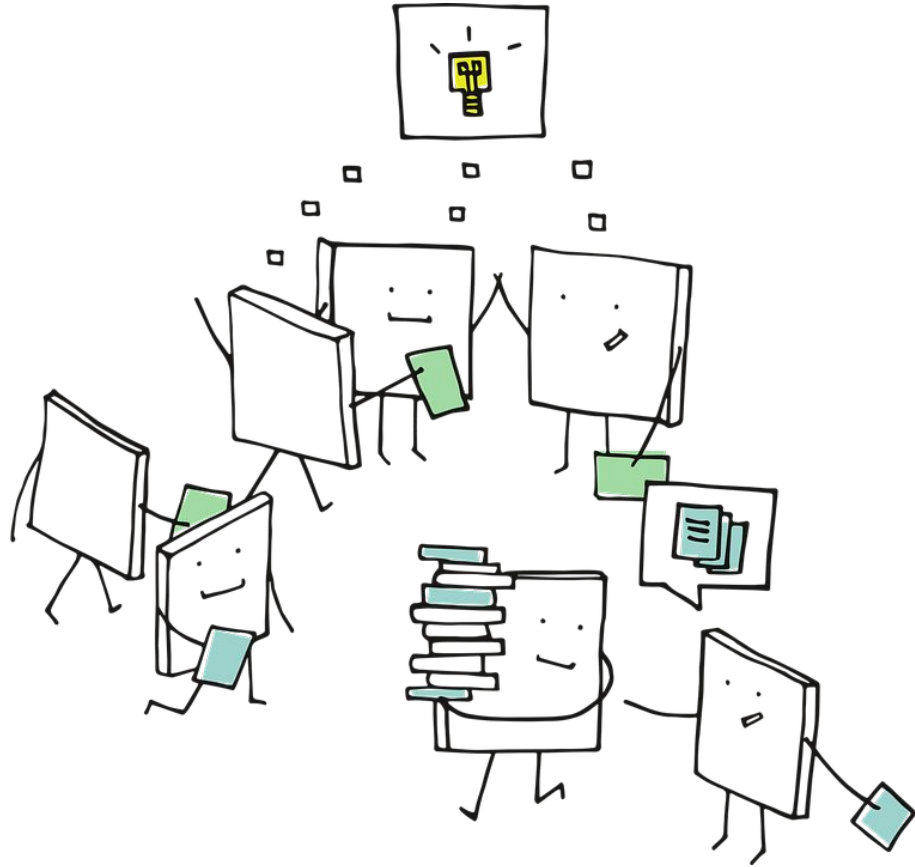


Scriberia 

Distributed Collaboration. *The Turing Way* project illustration by Scriberia. Used under a CC-BY 4.0 licence. DOI: [10.5281/zenodo.3332807](https://doi.org/10.5281/zenodo.3332807)

LL: Collaboration is key. Learning from others' experiences helps improving future trainings.

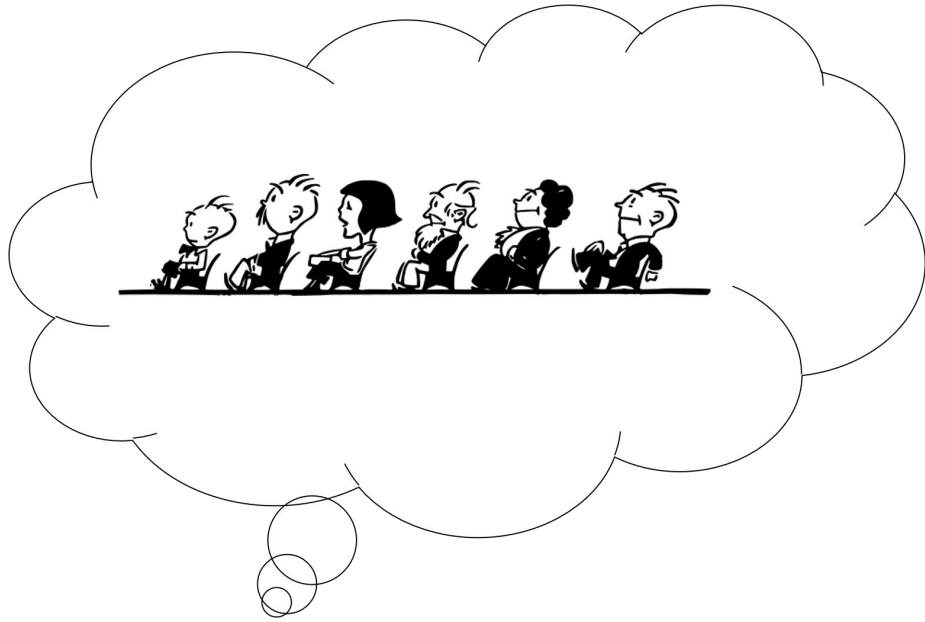
Valeria Di Cola



Think also about
the design of
the training not
only the content.



Crowdsourcing peer feedback on best practices (i.e. Team Science) has been key on the development of Open Science policy in all universities and research centers.



The first thing when preparing a training session is to consider the context and the audience you will be delivering it.



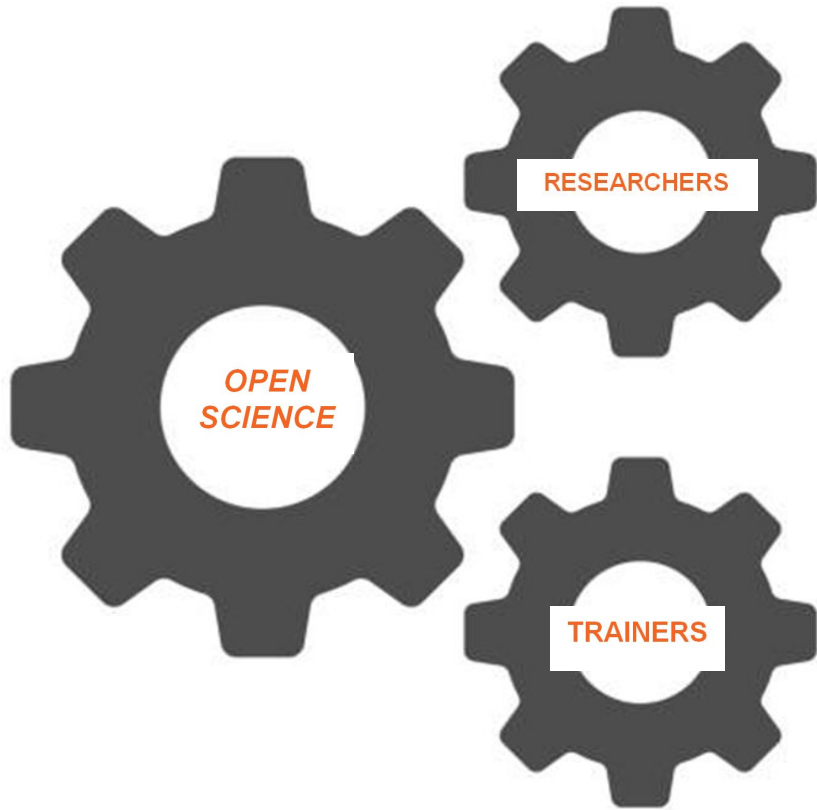
Open Science
should not be a
dogmatic stance.
Every step towards it
counts!



Too much of anything
is good for nothing.
Trainings on open
science should be
served portionwise.

Credit: Photo by Elviss Raiļijs Bitāns from Pexels

Gita Rozenberga



OPEN Science
Trainers-Trainers & Trainers-Researchers

- Connecting and interacting
- Exchanging ideas, knowledge and expertise
- Cooperating and networking



Explaining open science and getting researchers to embrace it is a long road with some challenges. But it is the right way to must follow!



The important thing is to never
stop questioning [or learning].

- Albert Einstein

Proper preparation prevents poor
performance.

- Sorry, cannot remember who said this in this bootcamp...
Feel free to put your name here :)

Vera Moitinho de Almeida



Handling Training Challenges:

- Make the best use of the structured approach
- Do not obscure complexity
- Involve experts
- Use real-life examples

(Data Management Plan ppt by Milica Sevkusic)

<https://www.nature.com/articles/d41586-018-03071-1>

Rozita Petrinska-Labudovikj

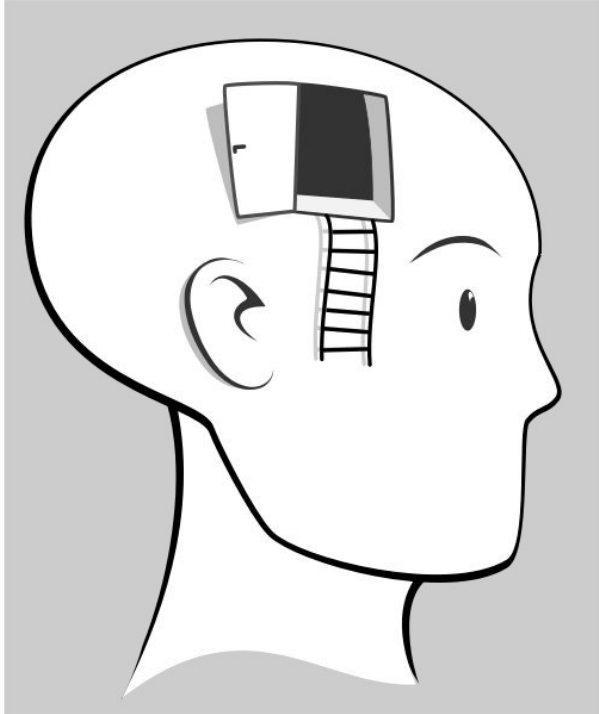
“IF YOU’RE NOT
WILLING TO LEARN,
NO ONE CAN HELP
YOU.
IF YOU’RE
DETERMINED TO
LEARN, NO ONE CAN
STOP YOU.”

BrainQuotes.com

Image taken from
<https://tse4.mm.bing.net/th?id=OIP.XuDwcZkrFgS7qqWOwSo1ogHaE2>

You may not get an answer to every question you intended to ask. You will get answers to questions you didn't even know how to ask.

Dragana Radulovic



If today we succeed on training and advocating for Open Science, tomorrow it will be only Science.

Openness will be the new normal!

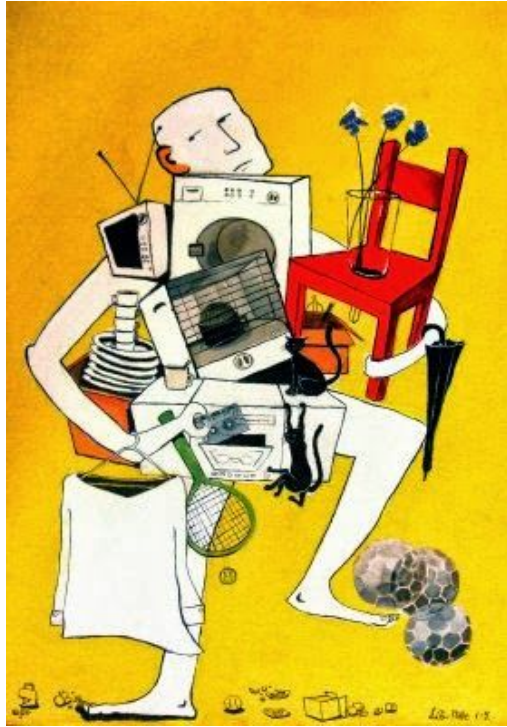
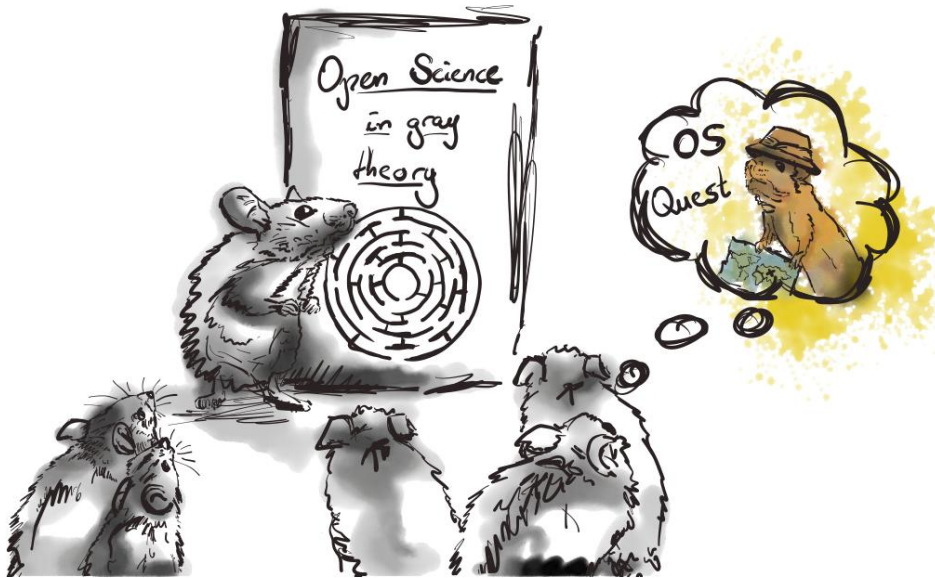


Image taken from
<https://blog.tiatula.com/2013/09/refranes-espanoles-quien-mucho-abarca.html>

Open Science is a transversal topic with different dimensions. You do not need to cover it all at once .

Focus on what you know and enjoy, and remember that saying “I do not know” or “it is out of the scope” is ok.

Leyla Jael Castro



Open Science horror training is gray theory that does not engage the audience. Luckily there are alternatives.



IPR/RRS: Know THY rights!

(from the chat, don't remember who wrote it)

RDM: Language is a barrier -
don't expect automatically that
researchers know the terms like
ontologies, standards for
metadata/data etc. - **EXPLAIN.**

**Technology won't fix poor
training design.**

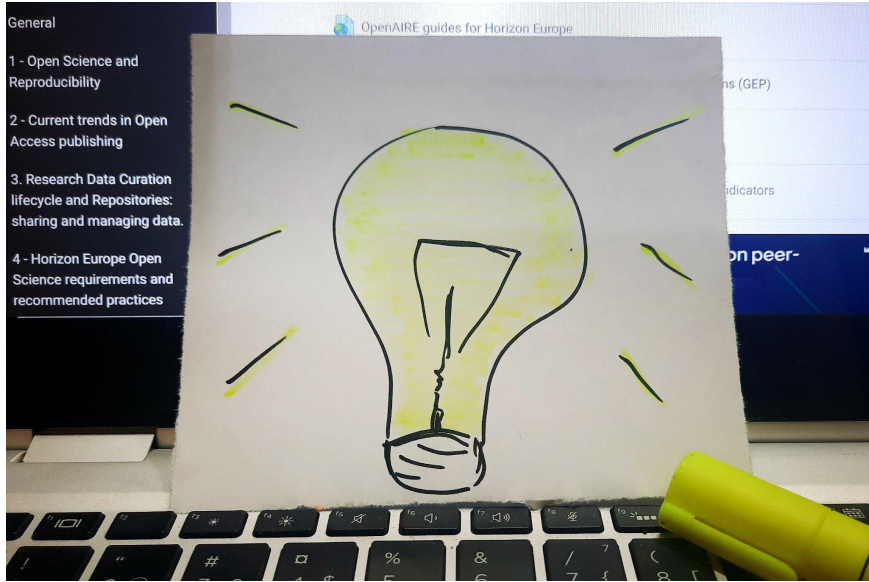


Image: Ana Đorđević



“Good reasons for Open Peer Review are transparency, speed, reliability, consistency, context and motivation.

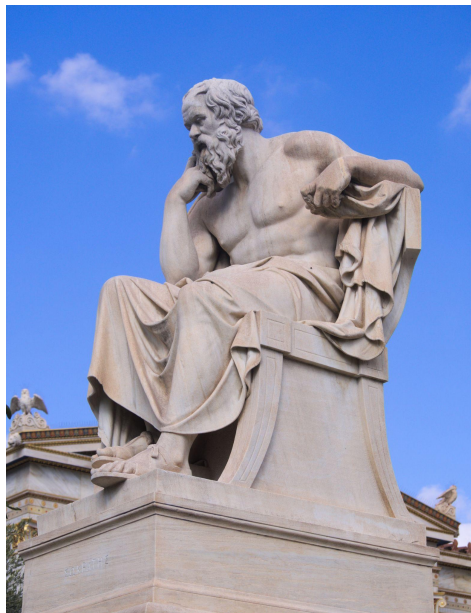
There are many criticism on traditional peer review process, as we know it, and this could be an option, for example, for early career researchers.”

Antónia Correia

Ana Đorđević



It doesn't matter
what you know, but
what you do with
what you know.



As for me,
all I know is
that I know nothing.
Socrates

*(Or let's be honest,
there is so much to learn
for open science +
training methods... it is a
never-ending procedure
and this is exciting :))*

*Thank you OpenAIRE OS
Bootcamp!*

**OPEN SCIENCE:
JUST
SCIENCE
DONE RIGHT**



Jon Tennant presenting in Ljubljana in November 2016

Bootcamp trainers and participants together are a treasury of knowledge and practical experiences on open science support.



<https://www.quotespedia.org/authors/a/african-proverbs/if-you-want-to-go-fast-go-alone-if-you-want-to-go-far-go-together-african-proverb/>

Before the
Open Science
OpenAIRE Train the
Trainer Bootcamp...



when you have finally
understood the breadth
and depth of the OS
ecosystem...and you can
explain it to researchers ...



when you have understood
that OS is a state of
mind (and heart) based on
reliability, critical (self)
approach, and trust... and you
can convince researchers to it ...



Congratulations,
you are
ready to become
the OS Trainer!



Open Science enhance scientific equality in accessibility, reliability through transparency and the restoration of societal trust in research deliverables...name them data, metadata, publications, reviews, inventions, research findings, etc ... It requires a structural and cultural shift in the way research is perceived and conducted.

It is why OS has to be implemented parallelly at global, regional, national and individual (researcher) levels...

So, it seems we have a lot of work to do

... 😊

Natalia Galica

STORAGE AND ARCHIVING



Scriberia

Context is key

Use simple but accurate explanations

Involve colleagues and experts as much as you can

Topics like Open Access may feel new and revolutionary, but they've been there for a long time



TarikVision/Shutterstock.com

Interesting approach in delivering the myths and conceptions of OS to the trainee and participants to help us understand better.

Gamification in training increase engagement.

WOW FACT

I don't know how much is the cost of Journal Subs / APC in Indonesia. Should try to find it!

Madiareni Sulaiman (Reni), Research Data Librarian,
National Research and Innovation Agency, Indonesia



Open Science, the new 'normality'

Let's keep collaborating, keep
dreaming, and keeping chasing
the definition of Open Science

Laura Valeria Bonora



Open Science encompasses multiple spheres.

Allow yourself to learn and teach others step by step.

Good planning leads to good training.

Džalila Muharemagić, University of Bihać,
Bosnia and Herzegovina



Image Credit: www.epictop10.com

Photo sourced from:

<https://www.flickr.com/photos/182229932@N07/49019196696>

There is no holy grail or 1-size fits all approach when it comes to Open Science. Identify what is relevant to your discipline, learn and adapt ideas from colleagues, and never seek perfection: excellence will do.

Fotis Mystakopoulos, Data Manager, R-NANOLAB,
National Technical University of Athens



Contemporary Methodologies for Research Evaluation & traditional journal prestige criterion are a bane to adoption of Open Access publishing, if anything, university administrators are key stakeholders in transitioning to emerging Open Science research practices and principles prestige narratives ar

“Inconsistent terminology tends to confuse Open Access messaging for researchers”

IMPOSTER SYNDROME



Avoid the imposter syndrome when engaging researchers, and when justifying the need for DMPs depart from the bureaucratic stance and present them as part of good research practice.

Tendai Mataranyika



Takeaway from horror and hooray stories:

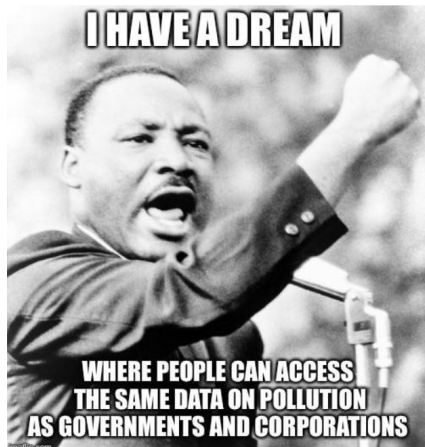
Be prepared for anything

Embrace the upcoming
questions because they can
lead to interesting
conversations



Adapt your speech and training material to your target audience





Researchers understanding the availability, reproducibility and repeatability of data that is open can change perspectives along with the policy and rights of exploitation when this practice information is disseminated across well.

Nalina Hamsaiyni Venkatesh

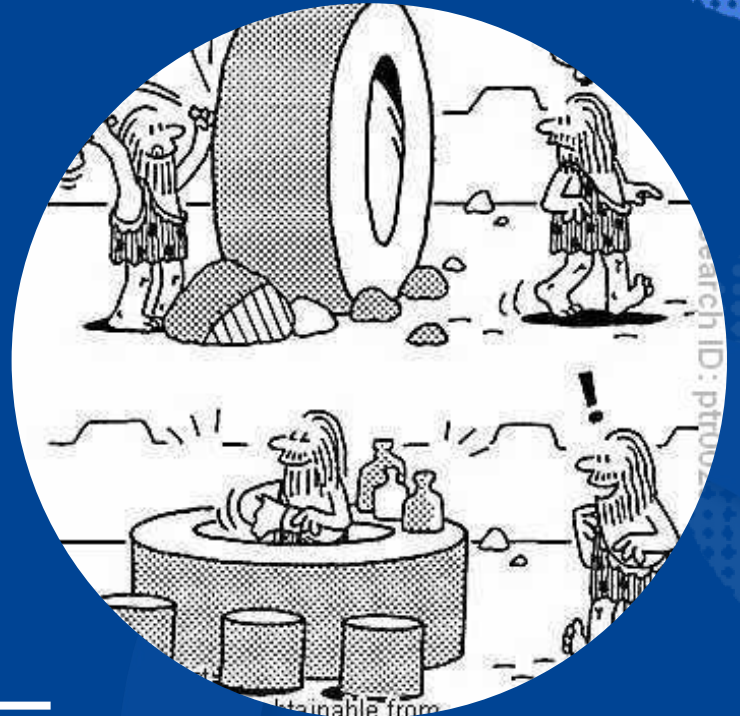
Find use cases in an environment similar to yours. Researchers always follow their peers.

A Guide to Academic Relationships

Same department, different field	=	“Colleague”
Same topic, different field	=	“Collaborator”
Same field, different topic	=	Conference Buddy
Different field, different topic	=	Who cares?
Same field, same topic	=	Bitter Enemy

WWW.PHDCOMICS.COM

You don't have to reinvent the wheel when preparing training content - there are lots of amazing resources out there for Open Science training once you know where to look!



Pick your battles when trying to engage opinionated academics. Some people will be resistant to open research practices and you will waste effort trying to change their mind.



Open Science is moving fast - keep up to date *and* try not to freak out if you do not know something but ask your friendly colleagues.



Susanne Tönsmann

Photo by [Windows](#) on [Unsplash](#)

Open science is benefit for the scientific community and promotes collaboration and quality research. It is important to get the terms and rules right so that researchers understand and use them. It is necessary to describe the benefits and potential risks of publishing results and scientific data.



Pavel Koudelák

Write Intended Learning
Outcomes for every
session and build a lesson
plan around delivering
them



Ask questions about their research and what matters most to them. Researchers love talking about their work - this is why we are supporting them! Open Research needs to be led by researchers, for researchers.



Use concrete examples in your training, i.e. examples to which your audience can relate (e.g. discipline-specific, institution-specific etc)



Collaboration is one of the most important principles of open science.

A network of colleagues who are always ready to share, help and support will mean a great deal to you in reaching common goals for the benefit of science.



Barbara Konjevod

Photo by [Everyday basics](#) on [Unsplash](#)

Careful not to overwhelm participants with too much content and too little time to explore concepts during hands-on activities.



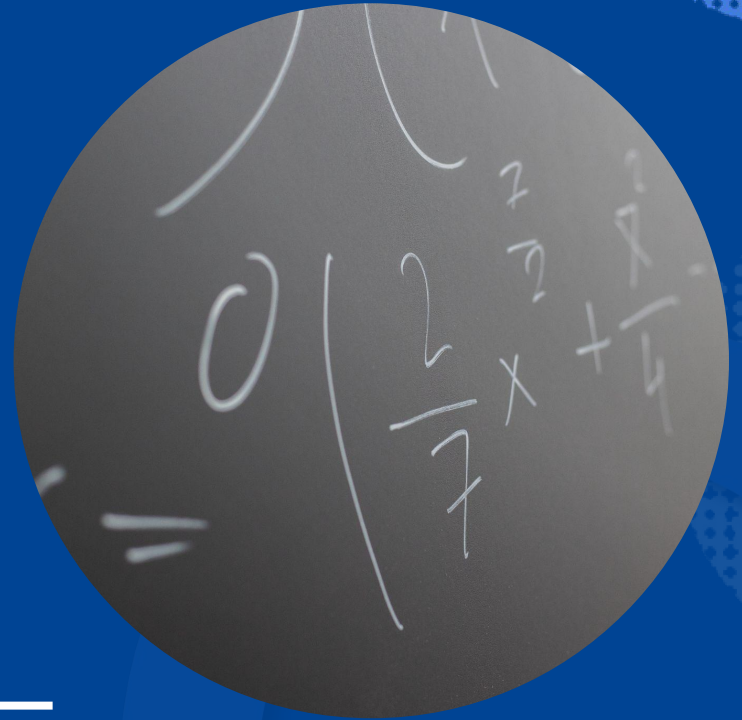
Patricia Condon

Learn as most as you can about the type of trainees you are going to work with and learn also about their concerns to keep them engaged and to make them feel heard and understood.



Helena Vicente

Don't take anything for granted. Researchers don't know everything. Be well informed, concise and focus on the topic you want to share/promote.



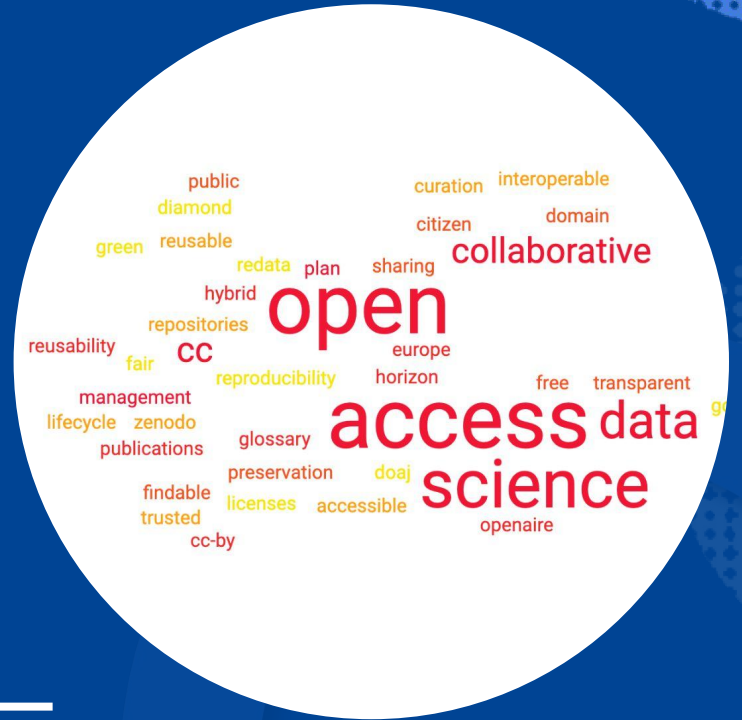
Ifigenia Vardakosta

Use interactive teaching methods in your training. Audience are actively involved in the learning process by activities, assignment, etc. Promote an atmosphere of attention and participation.



Canan Tavluoğlu

Engaging trainees with practice sessions, breakout rooms and group works makes learning easier and effective



Laura Benassi

Teaching about RRS,
involving participants with
Menti and showing real life
cases.



Silvia Sofianos

Open Science is constantly developing and evolving. Sign up to information sources such as mailing lists, newsletters, organisation updates in order to keep your knowledge current, and be aware of new tools or resources available to support your work.



Jenny Perkins

Collaboration should be more than a buzz word in Open Science. Cooperation with researchers should be a basis to build a common ground with researchers and Open Science Advocates.

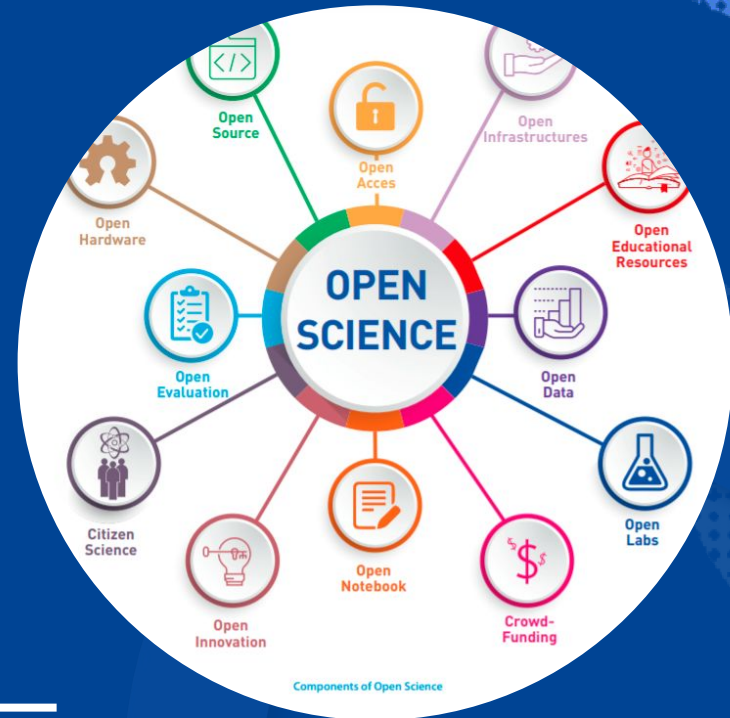


Brígida Riso

“If I have seen further, it is
by standing on the
shoulders of giants.”

Newton

It is all about sharing the
knowledge.



Focus on culture change!
Different way of doing things
needs time and patience.
Demonstrate Open Sciences
practices with use cases and
other examples whenever
possible.



Unexpected situations will always happen. The important thing is to stay calm and be positive and do your best...



Burcu Ersoy

There is an important difference between *depositing* and *giving access to data*.

**AS OPEN AS POSSIBLE,
AS CLOSED AS
NECESSARY.**



Amela Kurta

Language can be a **barrier**.
Be careful of your wording
and be sure to simplify and
adapt your vocabulary to
your trainees.



Martina Žugaj

Train yourself!

In an open science environment it is difficult to know everything and follow every development. Train-the-trainer camps are good opportunities to know that you are not alone in the challenges you face, to refresh your knowledge, to stay informed, to share your experiences and to stay motivated.



KEEP CALM
AND
TRAIN YOURSELF

Learning together

with building a network
of **similar minds** makes
the hardest **mission**
possible!



Antonina Chaban

Use real life case studies!
What you say matters - but
researchers will mirror
each other's practices



Lesley MacRae

Connect with early career researchers and emphasise the importance of Open Science.



Encourage interdisciplinary
and transdisciplinary
collaborations to enhance
mutual understandings in
Open Science.



“Open science” means an approach to the scientific process based on open cooperative work, tools and diffusing knowledge



Fadime Taşçı

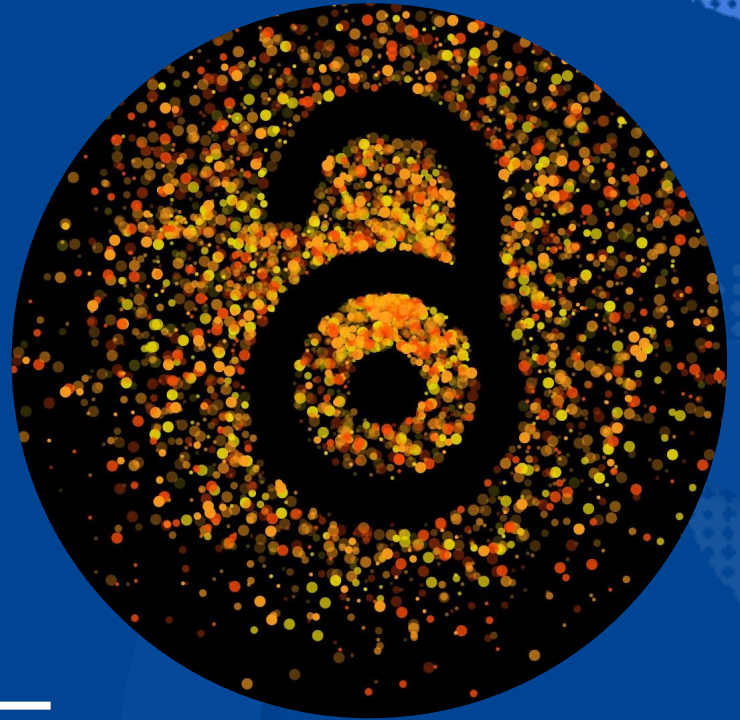
Engagement is the most
important aspect of training



James Normansell

Photo by [Patrick Perkins](#) on [Unsplash](#)

Different international audiences have very different experiences (such as different “normal” Open Access routes) depending on where you’re based. Sharing our varied experiences is a great way to understand the Open Science landscape and design excellent training.



Clare Foley

Fostering Open Science
means advocating for a
culture change – it is hard and
slow. Exchange and mutual
support in our community is
key to success.



Paula Samsó

Be empathetic and understanding to young researchers. Their decisions are not just ethical choices. They are often a compromise between their "moral compass" and the requirements of the institution where they are employed.



Source: High Impact PhD Memes @MemingPhD

For researchers to become open to open science, not only as an idea, use vivid and direct examples for presentation in training, that will be relevant to the researcher's work (link to their direct work, to the specifics of the discipline, etc.).

Foto:
<https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcSEMc5bFeXBGXMsIfF6GCIBfirpg1C0Ksvmw&usqp=CAU>



Martina Kerec

Open science is the future
of academia and the key
to the success is to
exchange knowledge and
embrace the change that
is happening.

Plan based on
learning
outcomes rather
than objectives!



Open Access benefits everyone. Retain your rights.

It's good for you, for science, and for society

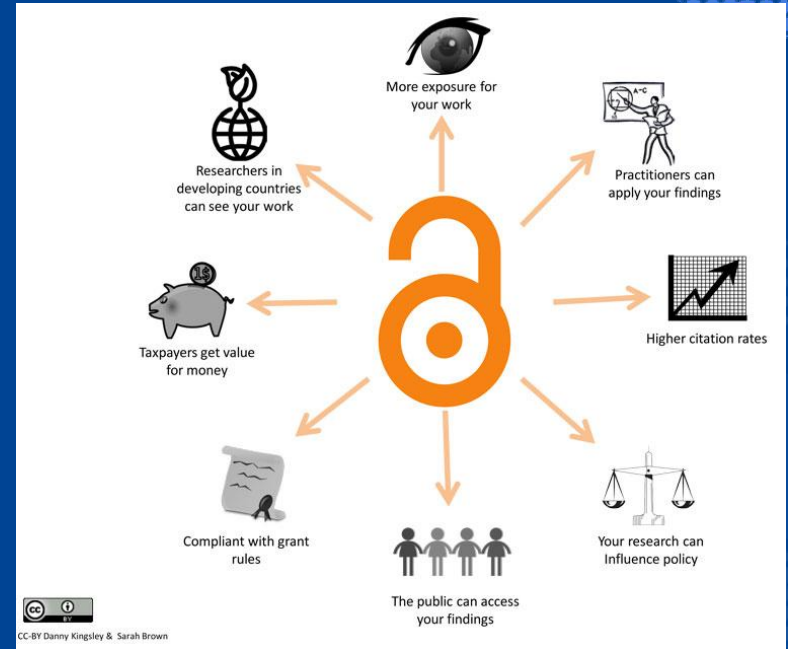
[Rights Retention Strategy \(cOAlition S\)](#)



Image Credit: [Andrea De Santis](#) via Unsplash

Iliana Araka

Finds a way of training that fits your audience.



It is essential that the next generation of researchers adopt open science practices from the get-go.



Training can be draining

Design your training to give participants time to reflect on their own practice and to leave them motivated to change it when the opportunity arises.



Steve Boneham

Tailor the messages to
your audience as much as
possible and keep them
simple



Balance is key!

Make sure your efforts are worth the outcome

Enable the researcher, but don't 'spoon feed' them

The right information at the right time



Make it worthwhile for you and them & continue dialogue

The training should meet at least one
of their needs but also your needs!

Post-event, continue the
dialogue/keep in touch!



Realisation of the
sometimes very large
differences between the
theory and practice.



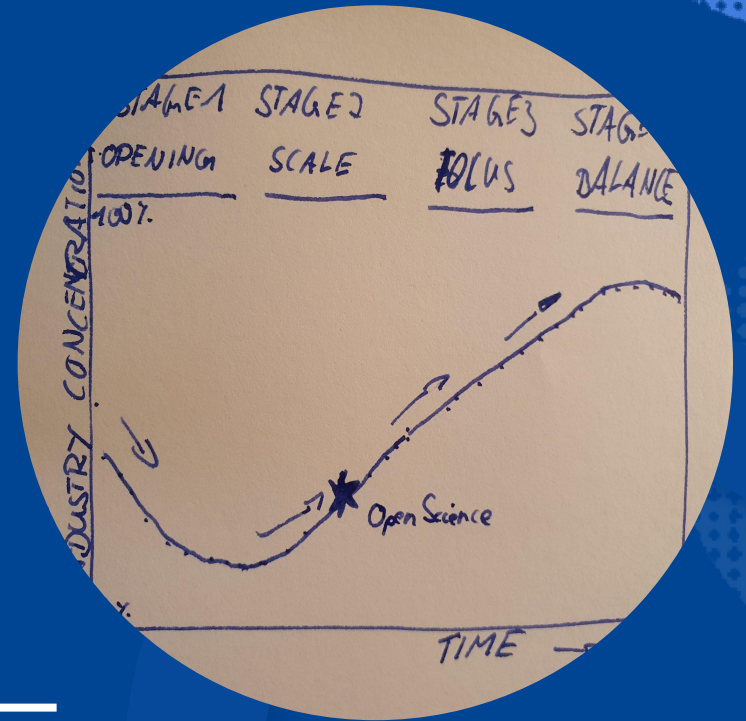
Renske Gudde

Explain, Dispel & Show

- Explain the topic as simply and clearly as possible
- Dispel myths & misconceptions
- Present useful tools & show researchers where to find relevant materials
 - + Use real-life examples and use cases



The Open Science landscape is rapidly evolving. One person cannot cover every aspect. Key is to keep a good overview, build up a network, and help each other.



Lisa Knoche

What about the



?

- Know your audience
- Read the funder requirements
- Follow real life examples
- Use recommended tools
- Try to make learning fun
- Work together to find the solution



Data sharing

The focus should be on sharing scientific research data wisely!



Use gamification to
motivate and engage your
public.

Online education must be
interactive and dynamic.



“Try to compare the innovative approaches to the traditional venues”

“ Present new tools”

Workflow as a research output, WorkflowHub !!!



Community-based Research

- utilise social media and AI in the changing research cycle
- create community-based projects based on participation, inclusivity and open science
- reach out to new social groups and engage them in collaborations



Bence Vida

We need to find the right balance in using and implementing AI as well as OA regarding documents and datasets, reviews.



Let's talk about OS...

Don't panic!

- Keep calm, clear and organized
- Keep you updated on new trends and tools
- Improve your communication skills
- Study your audience
- Balance theory and practice
- Introduce use cases
- *Less is more*



Understandability

Always put a README file into the deposited research collection to meet FAIR principles – so important!

README files sometimes talk more to people, because we've been used to it much longer, than to DOCUMENTATION – so true and what an idea!

Key is to get closer to researchers even by the terms used.



**Let's stay OPEN and learn
from each other!**

So whenever you need help or
support contact a colleague.

Together we can solve complex
problems better!



Ursula Ulrych

Vision to reality?

Implementation needs investment and incentives (from/for individuals and institutions).

Meet your audience where they are. Different audiences have different needs, interests and level of knowledge. Adopt & adapt.



Nevit Dilmen, [CC BY-SA 3.0](#)

- Don't skip the design stage!
- Adapt interactions to suit different situations (eg. is gamification appropriate for my audience? do I have enough time?...)
- Open science ideas and practices can contribute build a more trustworthy AI (RDM importance for the quality of open data, focus on the importance of explainable AI, proper regulation etc.)
- DMPs are structured documents - not essays :)
- The importance of diversity. Recognize that what one person likes may not necessarily be liked by others (eg. the case for social justice arguments)



Flaticon.com

- Open Science is complex and there are no perfect shiny solutions
- It's a culture change - we need to be patient, and most importantly, to discuss the changes in depth and considering the different perspectives
- Being a trainer is not a simple task and requires being up-to-date with the current developments, but also being humble about not knowing things (yet).

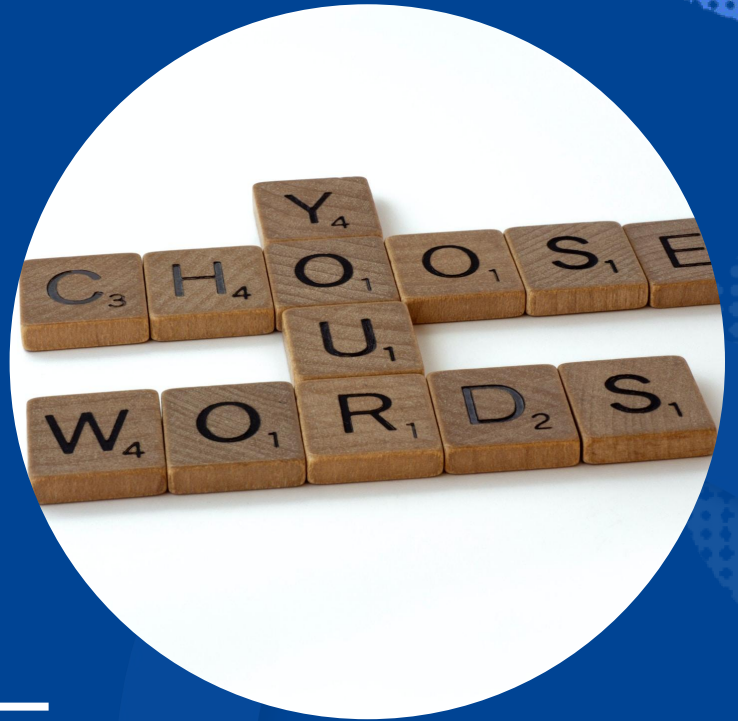


We need to collaborate!

- Plenty of skills are needed on Open Science, let's work together!
- Planning your training with your audience in mind and, if possible, do specific sessions for each one.



Try giving definition without
giving definition



Rasa Dovidonytė