WELCOME

RRI & Open Science Trainer Bootcamp

5 December 2019

Helene Brinken

State and University Library Göttingen, Germany

General Information

- Wifi
  - Eduroam, Guests access
- Materials
  - https://tinyurl.com/rg7m4aw
- Lunch choice
  - https://forms.gle/oBrL1Dr9yedC8p2Y6
- Bathrooms, emergency exits, food/drinks
- Participant list & photo consent
- Name tags

Code of Conduct

> **Today, we want the atmosphere and environment to be:**
> > friendly, open, inspiring, practical, empowering, respectful, encouraging, collaborative & fun.

> **To ensure this, we encourage and are fully in favor of:**
> > asking questions, sharing experiences, listening, being respectful, being on time, collaborating, honesty, supporting each other, constructive criticism.

> **And we will not tolerate and discourage:**
> > interrupting each other, patronizing, passivity, (gender) inequality in discussions.

FIT4RRI

Programme

- 10:00 Welcome & introductions
- 10:30 What is RRI & Open science
- 10:45 Training examples & practical guidance
  - 11:15 – 15 min Coffee break
- 11:30 Copyright & licenses (Elke Brehm)
  - 12:30 – 13:30 Lunch
- 13:30 How to design & give training (Angelika Thielsch)
- 14:30 Good practices
  - 15:00 – 30 min Coffee break
- 15:30 Train-the-trainer card game
- 16:45 Presentations of mini-trainings & feedback
- 17:45 End

Let's get to know each other

- Name
- Affiliation
- Why are you here? Why is it relevant for you?

Key questions

- What is RRI and Open Science?
- What is your role as trainer?
- How can you reach them most effectively?
  - Methods
  - Materials
- Who is your audience?
- What does "openness" and "responsibility" mean in training?
- How to get started?

Today is not about RRI & Open Science

OPEN ACCESS	OPEN DATA	SCIENTIFIC SOCIAL NETWORKS	OPEN SOURCE
OPEN NOTEBOOKS	OPEN PEER REVIEW	OPEN EDUCATIONAL RESOURCES	CITIZEN SCIENCE

PUBLIC ENGAGEMENT	SCIENCE EDUCATION	ETHICS	GENDER EQUALITY
OPEN ACCESS	GOVERNANCE	INCLUSION	SUSTAINABILITY

FIT4RRI

What is RRI? A Definition

> Science & technology can create risks & ethical dilemmas

> RRI seeks to bring R&I into the open, to anticipate consequences, & to involve society

> Societal actors, (e.g. researchers, citizens, policy makers, business, NGOs), work together during the R&I process to better align processes & outcomes with values, needs & expectations of society.

> Involve all stakeholders at all levels to minimize potential negative impact of R&I.

What is Open Science? A Definition

❯ Open Science is the practice of science in such a way that others can collaborate & contribute, where research data, lab notes & other research processes are freely available, under terms that enable reuse, redistribution & reproduction of the research & its underlying data & methods.

❯ The movement to make scientific research, data and dissemination accessible to all levels of an inquiring society.
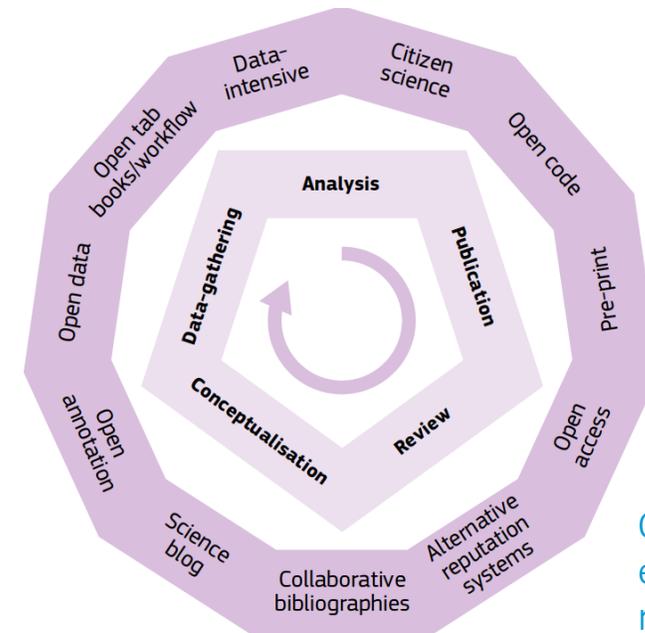
Open up research at every step of the research cycle

RRI & Open Science training

Go to **www.menti.com** and use the code **52 63 6**
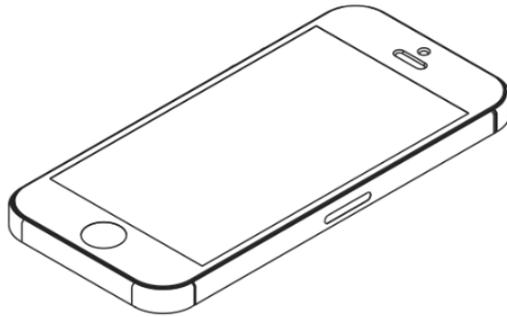
www.menti.com

Please enter the code

12 34 56

Submit

1 Grab your phone

2 Go to www.menti.com

3 Enter the code 52 63 6 and vote!

FIT4RRI
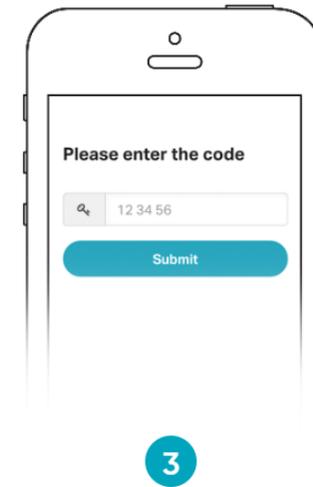
Practical Guidance for Trainers

The Open Science Training Handbook

A group of fourteen authors came together in February 2018 at the TIB (German National Library of Science and Technology) in Hannover to create an open, living handbook on Open Science training. High-quality trainings are fundamental when aiming at a cultural change towards the implementation of Open Science principles. Teaching resources provide great support for Open Science instructors and trainers. The Open Science training handbook will be a key resource and a first step towards developing Open Access and Open Science curricula and andragogies. Supporting and connecting an emerging Open Science community that wishes to pass on their knowledge as multipliers, the handbook will enrich training activities and unlock the community's full potential.

Sharing their experience and skills of imparting Open Science principles, the authors (see below) produced an open knowledge and educational resource oriented to practical teaching. The focus of the new handbook is not spreading the ideas of Open Science, but showing **how** to spread these ideas most effectively. The form of a book sprint as a collaborative writing process maximized creativity and innovation, and ensured the production of a valuable resource in just a few days.

The Open Science training handbook

https://book.fosteropenscience.eu/en/

Practical Guidance

What is Open Science?
This introductory module will help you to understand what open science is and why it is something you should care about.

Best Practice
This module introduces policies and other environmental factors that influence good practice in open research.

Open Peer Review (OPR)
This module will introduce you to OPR and let you know how you can get started with it.

### Data Protection and Ethics
This module helps you to get to grips with responsible data sharing.

Licensing
This module helps you to find the best license for your open research outputs.

Open Data
In this module, you'll focus on which data you can share and how you can go about doing this most effectively.
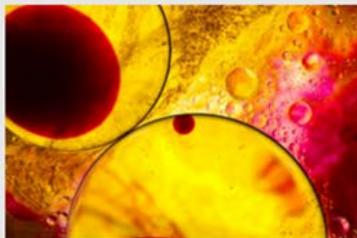
OSS and Workflows
This module introduces Open Source Software (OSS) and workflows as an emerging but critical component of Open Science.

Open Innovation
This module will show you how Responsible Research and Innovation is accelerated through Open Science.

Open Access Publishing
This module will help you become skilled in Open Access publication in the wider context of Open Science.
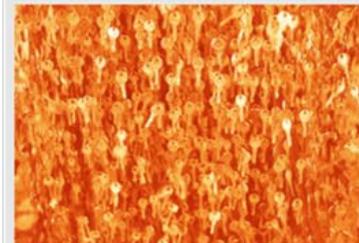
Preprints
This module introduces the practice of sharing preprints and helps you to see how it can support your research.

FOSTER Open Science toolkit

https://www.fosteropenscience.eu/toolkit

Practical Guidance

https://zenodo.org/record/1341023#.XDyZPM1S8l0

# Examples for Hands-On & Interactive Training
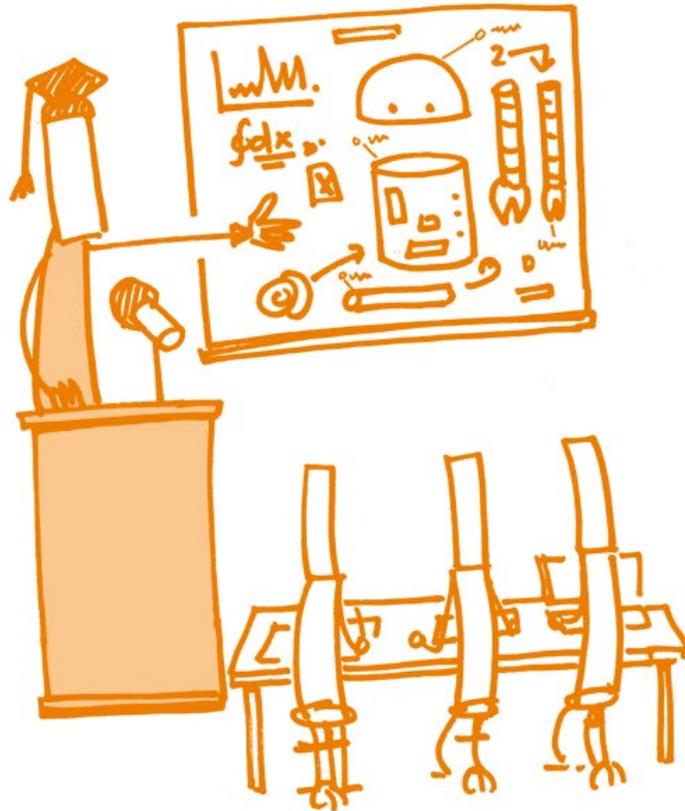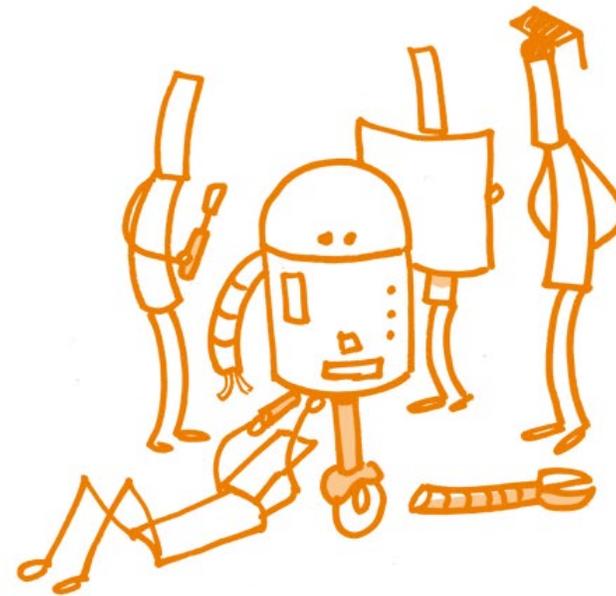
Visualization

- Mind maps, word clouds
- Simplify difficult concepts
- Sketching/graphic novel
- Stickers, post its

@dasaptaerwin

https://twitter.com/dasaptaerwin

A FAIRy tale

A FAKE STORY IN A TRUSTWORTHY GUIDE
TO THE FAIR PRINCIPLES FOR RESEARCH DATA.

https://doi.org/10.5281/zenodo.2248200
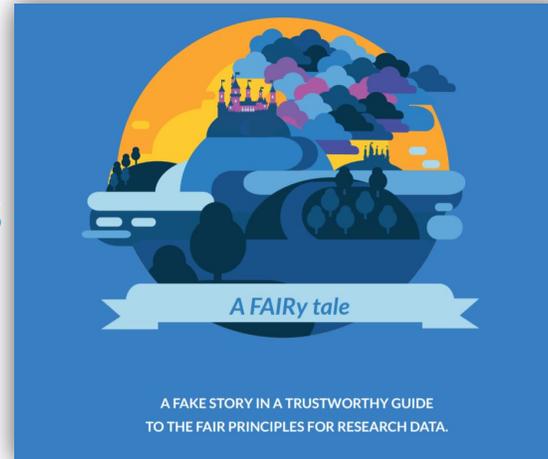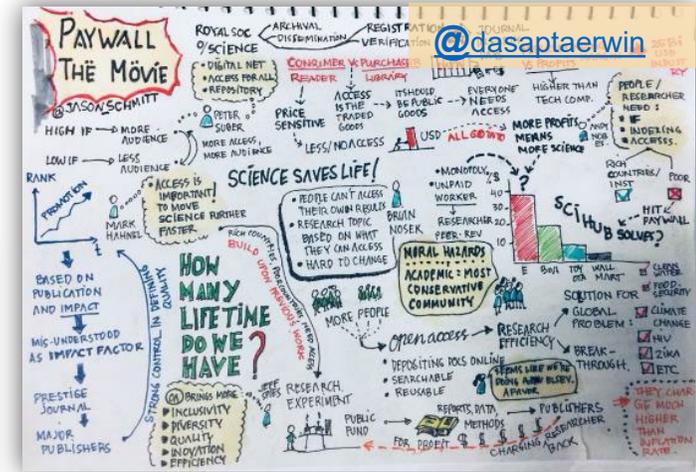
Knowledge Exchange

Melanie Imming

https://www.mentimeter.com/
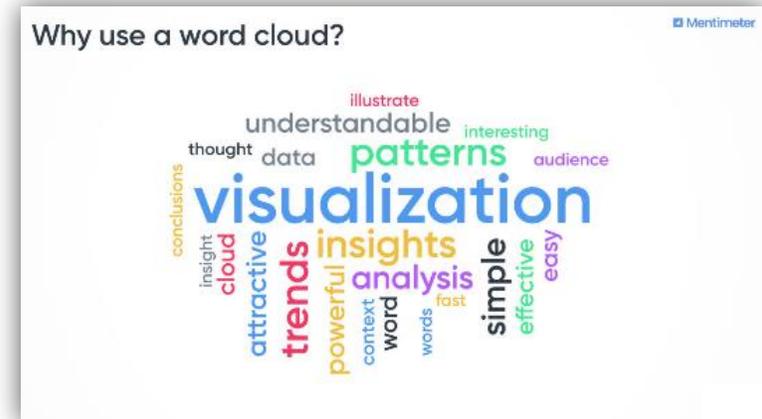
Gamification – Card/Board Games

The Publishing trap

https://copyrightliteracy.org/resources/the-publishing-trap/the-publishing-trap-resources/

https://copyrightliteracy.org/resources/copyright-the-card-game/

CURATE! The Digital Curator Game

https://www.fosteropenscience.eu/content/organise-your-own-open-science-cafe

http://eprints.hud.ac.uk/id/eprint/33874/

http://schreibman.eu/digcurv/curate-game/
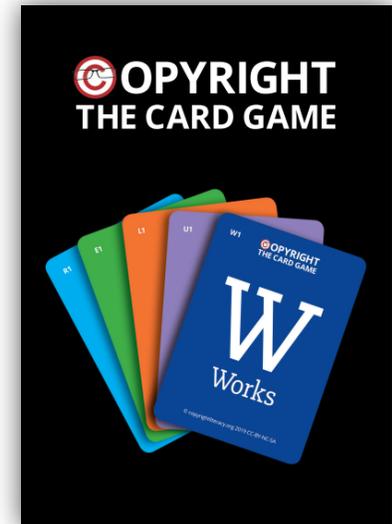
Gamification – Puzzles & Quizzes

https://www.openaire.eu/blogs/open-science-quest
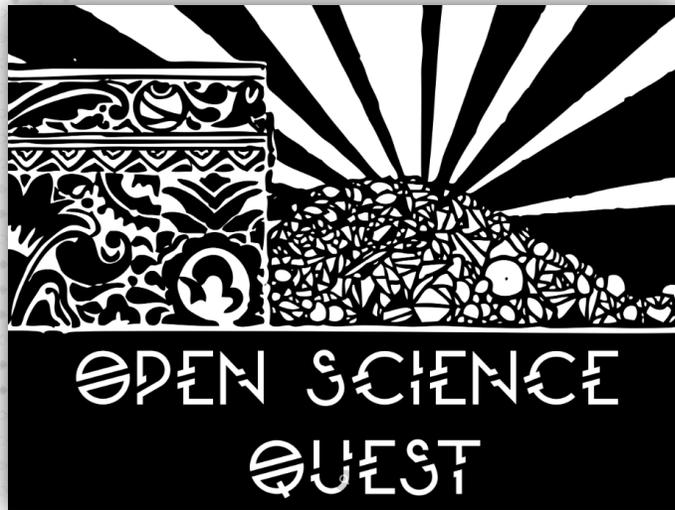
Sundsbø, Katrine. 2019. "**Open Access Escape Room:** The Key to OA Engagement?". *Insights* 32 (1): 8. http://doi.org/10.1629/uksg.459

http://www.openaccessweek.org/events/open-access-quiz?xg_source=facebookshare&fbclid=IwAR2jZPHWj4RHd8C8uca1t2thyUzESKViAFbB0CSZqjHFqYIclA2LZVQxys0

"Open Data Excuse" Bingo			#openDataExcuses
Terrorists will use it	We might want to use it in a paper	What if we want to sell it later	People may misinterpret the data
Lawyers want a custom License	Thieves will use it	There's no API	It's too big
It's too complicated	It's not very interesting	Poor Quality	Data Protection
I don't mind, but someone else might	We will get too many enquiries	There's already a project to...	We'll get spam

For open data teams; print out a copy and put it on your office wall. Cross out each excuse people give you. There are no prizes, but you can tweet "bingo! #openDataExcuses" if you think it might make you feel better".

http://data.dev8d.org/devbingo

Research Integrity Dilemma Game

https://www.eur.nl/sites/corporate/files/24708_integriteitsspel_interactief_2016.pdf

Rewards & Incentives

Networking opportunity

Completed course Data Protection and Ethics

Completed course What is Open Science?

Badges

Certificates

Coffee

Brown bag lunch

Prices

FIT4RRI

Exercise – Think, Pair, Share

> ❯ What was the best training event you attended?

> ❯ What was the worst?
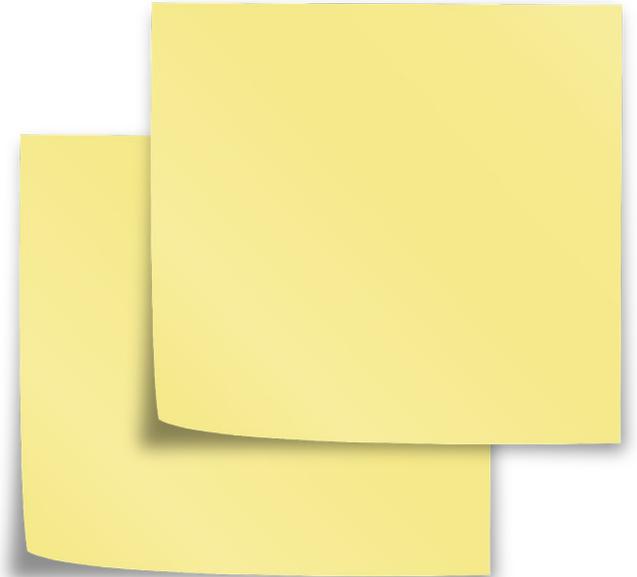
Exercise – Think, Pair, Share

> ❯ What did they have in common?

> ❯ What aspects were predictable?

Open & Responsible Training

Be inclusive

> ## Welcoming atmosphere
>> ### Food & drinks (consider dietary requirements (if you provide vegan food you only need to consider gluten intolerance and nut allergies)
>
>> ### Code of Conduct
>>> E.g. The Carpentries https://docs.carpentries.org/topic_folders/policies/code-of-conduct.html
>> ### Consent forms

Dear Sir or Madam!

Thank you for allowing us to record the interview. To give each other a clear understanding of this agreement, please read and sign this form. If you have any question regarding these issues, please contact the following address.

Thank you very much!

Contact Information
Ms. Helene Brinken, FIT4RRI   Tel. +49 (551) 39-5261
Georg-August University Göttingen,   brinken@sub.uni-goettingen.de
State and University Library   www.fit4rri.eu
Platz der Göttinger Sieben 1
37070 Göttingen
Germany

Publication of my interview recording - Declaration of agreement

Interviewee: _____ Date of interview: _____

Title of interview: _____

I, the interviewee, do hereby authorize the FIT4RRI project to do a video and audio recording of my interview specified above.

I grant FIT4RRI the non-exclusive right to permanently store digital copies of the recording and to non-commercially use and distribute copies or excerpts thereof by means of physical media and the internet, including the deployment via publicly accessible platforms like FIT4RRI website, FOSTER portal, YouTube, Facebook, and Twitter etc.

I have the right to withdraw this consent, but I understand that, because of the nature of the distribution channels, it is only possible for FIT4RRI to erase those copies to which they have control while copies at other locations/systems may remain preserved/accessible.

_____   _____   _____
City   Date   Signature of interviewee

Be inclusive

> ## Accessible facilities
> > Clear legible signs
> > Elevator access
> > Accessible by public transport
> > Child care

Planning Accessible Meetings and Events
A TOOLKIT
okay... Who has questions?

https://www.americanbar.org/content/dam/aba/administrative/mental_physical_disability/Accessible_Meetings_Toolkit.authcheckdam.pdf

Be inclusive

> Invite diverse participants and speakers
>> Gender balance, travel support

DIVERSITY, EQUITY, & INCLUSION   HOME

CONFERENCE-PLANNING CHECKLIST

https://sparcopen.github.io/opencon-dei-report/checklist.html

Engage

> Active learning rather than "passively absorbing"
>> E.g. reading, writing, discussions, problem solving, analysis, synthesis, evaluation & cooperative learning with other attendees
>>> Collectively take notes (e.g. etherpad)
>>> How to engage quiet participants?
>>> Feedback strategies
>>> Icebreaker

https://www.teachthought.com/pedagogy/20-simple-assessment-strategies-can-use-every-day/

> Let participants truly engage, be the facilitator of dialogue and exchange and not the teacher

Be transparent & share

> **Be GDPR compliant**
>> What happens to participants data?

> **Share materials**
>> Use proper licenses
>> Ask for permission in advance
>> What can be shared? (slides, exercises, videos, tweets etc.)

Be sustainable

> ## With resources

> > Use of materials, food, travel etc.

> > > Plastic free, what really needs to be printed, public transport, vegetarian/vegan food

> ## With your resources

> > Re-use materials that already exist and have been tested by others, you don't need to reinvent the wheel

> > > Training materials from FOSTER portal www.fosteropenscience.eu

FIT4RRI

Re-Usable Materials

FOSTER Courses

What is Open Science?
Spanish version available
This introductory course will help you to understand what open science is and why it is something you should care about.

Best Practices
Spanish version available
This course introduces some practical steps for opening up your research practices and how to meet expectations relating to openness from funders, publishers and peers.

Data Protection and Ethics
Spanish version available
This course helps you to get to grips with responsible data sharing.

Open Licensing
Spanish version available
This course helps you to find the best open license for your open research outputs.

Open Peer Review (OPR)
Spanish version available
This course will introduce you to OPR and let you know how you can get started with it.

Open Science and Innovation
This course will show you how Responsible Research and Innovation is accelerated through Open Science.

www.fosteropenscience.eu/toolkit

Managing and Sharing Research Data
Spanish version available
In this course, you'll focus on which data you can share and how you can go about doing this most effectively.

OSS and Workflows
Spanish version available
This course introduces Open Source Software (OSS) and workflows as an emerging but critical component of Open Science.

Open Access Publishing
Spanish version available
This course will help you become skilled in making your publications openly accessible in line with funders' requirements and in the wider context of Open Science.

Sharing Preprints
Spanish version available
This course introduces the practice of sharing preprints and helps you to see how it can support your research.

Use Open Data in Teaching
This course shows you how you can use open data in your teaching and improve the research data management literacy of your students.

Assessing the FAIRness of data
This course shows you how to go about assessing the findability, accessibility, interoperability and reusability (FAIRness) of research data.

FIT4RRI

www.fosteropenscience.eu/toolkit

RRI Tools
Fostering Responsible
Research and Innovation

Training modules

Our RRI training is based on a series of modules. To deliver your own training, download the modules and info on how to use them below.

EXPLAINING THE RRI CONCEPT

This module builds understanding and confidence in using the term through a presentation and an interactive activity. Recommended starting point for any training on RRI.

WHY IS RRI IMPORTANT?

This module helps trainees understand why RRI is relevant to their own work through a discussion-based activity. It works as a follow-up to Explaining the RRI concept and can act as an introduction to Using the RRI Toolkit.

USING THE RRI TOOLKIT

This module makes trainees work around the Toolkit and gives them the chance to identify resources of use to them and to add new material.

https://www.rri-tools.eu/training/resources

Additional training materials

according to your profile

Policy Makers
Research Community
Education Community
Business & Industry
Civil Society Organisations

according to your interests

Ethics
Gender Equality
Governance
Open Access
Public Engagement
Science Education

FIT4RRI

Open science trainer's corner

Do you organise Open Science trainings yourself or are planning to do so? On this page you can find a set of materials that offer some inspiration or help you to get started in the first place. Take a look and adapt or re-use the resources for your own trainings.

The Open Science Training Handbook

This handbook brings together methods, techniques and practices, to support educators of Open Science to create high quality and engaging trainings. It is available under Creative Commons Public Domain Dedication (CC0 1.0 Universal). You do not have to ask our permission to re-use and copy information from this handbook.

- Access the Open Science training handbook here.
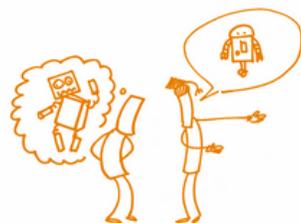
Illustrations, icons & cartoons

https://www.fosteropenscience.eu/trainers-materials

During the book sprint the artist Patrick Hochstenbach draw more than 100 icons and cartoons to illustrate the Open Science training handbook. They are now for you available under Creative Commons Public Domain Dedication (CC0 1.0 Universal) to re-use.

- Download the large set of small icons such as a book, coffee, researcher, megaphone etc. here: Large ZIP archive of PNG graphics (1.5Mb)
- Download the 16 cartoons, e.g. fundamental rules of open science here: ZIP archive of 16 PNG illustrations (15Mb)

FIT4RRI
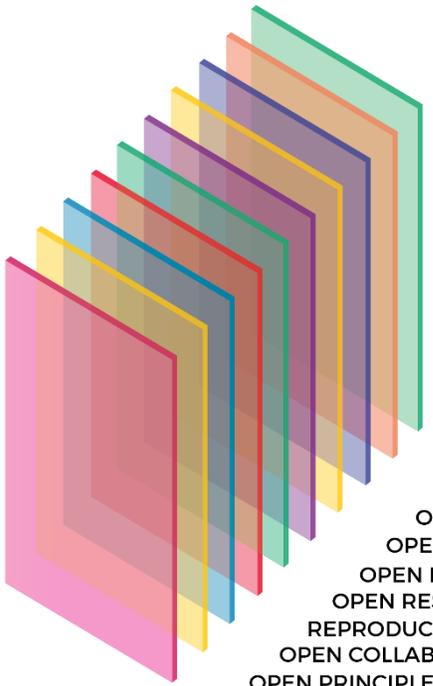
OPEN SCIENCE MOOC

FREE | OPEN | LEARNING

OPEN ADVOCACY
OPEN EDUCATIONAL RESOURCES
PUBLIC ENGAGEMENT WITH SCIENCE
OPEN EVALUATION
OPEN ACCESS TO RESEARCH PAPERS
OPEN RESEARCH SOFTWARE & OPEN SOURCE
OPEN RESEARCH DATA
REPRODUCIBLE RESEARCH & DATA ANALYSIS
OPEN COLLABORATION
OPEN PRINCIPLES

https://opensciencemooc.eu

OpenLearn create

Create and publish your own free courses

Search for free courses and collections

Home | Get started | Create a course | Free courses | Collections

Sign up / Sign in

Courses ▸ OER ▸ ORION_MOOC

Course
ORION MOOC for Open Science in the Life Sciences

Free statement of participation on completion

About this course

🕐 12 hours study

1️⃣ Level 1: Introductory

🏅 Gain a digital badge

Ratings ★★★★☆
3.8 out of 5 stars

https://www.open.edu/openlearncreate/course/view.php?id=3980

TUDelft   FIND COURSES   ABOUT ▸   OUR LEARNERS   HELP & SUPPORT   LOGIN   Search...

Open Science: Sharing Your Research with the World

Home / Find courses / Open Science: Sharing Your Research with the World

About this online course

OVERVIEW   DETAILS   ADMISSION

ENROLL ON EDX   edX

https://online-learning.tudelft.nl/courses/open-science-sharing-your-research-with-the-world/

FITARRI

https://tess.elixir-europe.org/materials

https://www.cessda.eu/Research-Infrastructure/Training/Expert-Tour-Guide-on-Data-Management

15 min coffee break

Copyright & Licenses

Elke Brehm

Legal Affairs NTM, Data Protection Officer of TIB

12:30-13:30
Lunch Break

How to Design and Give Training

Angelika Thielsch

Exercise - What works and what doesn't?

What methods do you, and could you, use to boost your training activities?

30 min Coffee Break

Design your own mini-training

Train-the-trainer card game by Gwen Franck

Design your own training

TOPIC(s): choose per group

Pick a Card:

TRAINING TYPE
AUDIENCE SIZE
AUDIENCE TYPE
KNOWLEDGE LEVEL

Create a PERSONA

Create a training (1h)
Structure
Materials
Exercise
...

Design your own training

Present your plans to the other groups (5 mins):
(note: you don't have to give the training, just describe what you will do!)
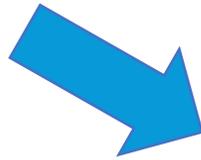
Troubleshooting:
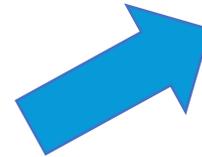
AUDIENCE MOOD
DISTURBING FACTORS

EVALUATION
Is the proposed training appropriate for audience size, type and level of knowledge?
Are the training materials adequate, understandable and accessible?

BIO

Occupation:

Age:

Education:

Personality in 3 words:

SKILLS

(1=none, 5 = very skilled)

Job experience: 1 2 3 4 5

Open Science   1 2 3 4 5

Training experience   1 2 3 4 5

Technology: 1 2 3 4 5

Name:

MOTIVATION/GOALS

# FRUSTRATION

Training Type

Audience SIZE

Audience TYPE

Knowledge Level

Show & Tell + Evaluation: 1 Tip – 1 Top

> For each presentation, write down one aspect you think was top and one tip you have for the group
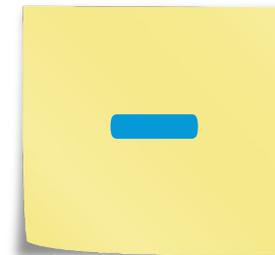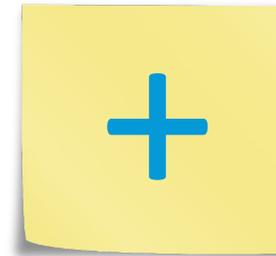
The Unpredictable: Audience Mood

The Unpredictable: External factors

Feedback round – 3-2-1

Go to **www.menti.com** and use the code **52 63 6**
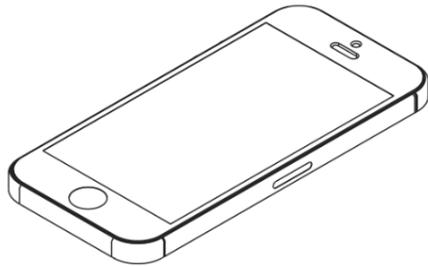
1 Grab your phone

2 Go to www.menti.com
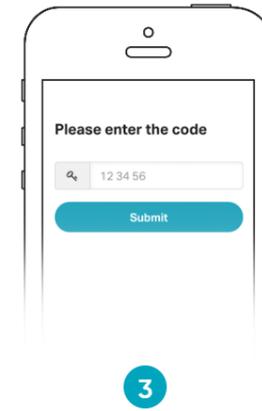
3 Enter the code 52 63 6 and vote!

> ## Feedback for the organizers
> > 1 aspect you liked
> > 1 aspect to improve
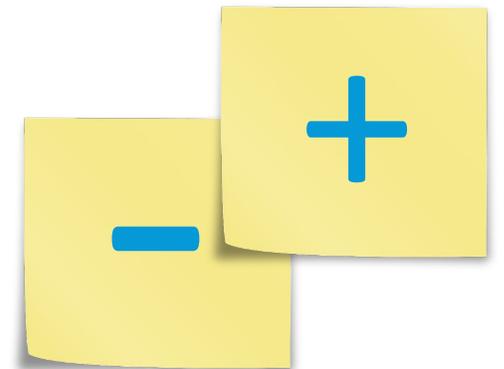
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