



Researchers, research institutions and organisations ensure appropriate data practices and management!

(cf. ECoC 2017, p. 6)

Description and background

This learning unit:

- Introduces researchers to appropriate data management and protection*
- Enables an understanding of the relationship between research infrastructure and good data practices*
- Challenges researchers to use (and demand) proper institutional infrastructure on data practices*
- Emphasises the importance of policies procedures and infrastructure supporting responsible data management and protection*



An advocate for research integrity

Tymon Zieliński

Keywords

Institutional infrastructure; policies and procedures; data management; data protection; responsible conduct of research

This unit has been prepared for interdisciplinary learning groups.

Learning objectives

- 1 Explain rules of data management and protection in research*
- 2 Depict a research code and explain procedures and infrastructure in which your rule is embedded*
- 3 Justify your procedure of data management and protection*
- 4 Request that other disciplines follow your procedure of data management and protection*

Learning stages

- 1 Become familiar with the topic*
- 2 Dive into an interesting story*
- 3 Use data management and protection guidelines*
- 4 Engage in storytelling*
- 5 Reflect on appropriate data practices and management*

“Reliable data must first be collected, then processed accurately in order to draw reliable conclusions and present them fairly.”
(Tymon Zieliński, an advocate for research integrity)





1 Become familiar with the topic:

Homework (before the unit starts) or reading session

Find and read a guideline or policy from your institution, discipline or country regarding data management and protection in research and in research institutions. Think about a data management or protection issue you encountered recently and how you solved it. Find a corresponding rule in the guideline or policy for your solution. Discuss the meanings of any unknown words.

2 Dive into an interesting story:

Read or recall Hannah's protocol and briefly flesh out what happened in the conference meeting. Now read the following short story out loud. Use your imagination and describe the situation that Hannah is in.

Again Hannah just wanted to disappear. "Data protection. Are you serious?", asked her colleague. "Nowadays everyone's saying data protection this, data protection that....but nobody really knows what needs to be done! Do you?" Her colleague's eyes looked directly into hers as she spoke. "What now?", Hannah thought, exhaling. She knew a bit about data protection, but not enough to explain which procedure was appropriate.

3 Use data management and protection guidelines:

Get into groups of three or four from different disciplines. Share within your group...

- to which what data management or protection questions you have been able to find an answer recently,
- which data management and protection guidelines you have found and
- which procedure you used to manage and protect data.

Make sure you understand each other by asking back. Take turns!

4 Engage in storytelling:

Write speeches in which you create heroes.

Let your heroes explain your data management or protection issue, outline the appropriate guideline and highlight procedures on how to manage and protect the data.

Outline the data management or protection rule of your chosen story by writing it on a chalk board or flip chart.

Together, make any final changes to your chosen story, and describe the infrastructure in it as clearly as possible:

1. Explain which issue of data management or protection is being addressed.
2. Depict which research code or policy guides this issue.
3. Describe which procedure helps you to manage and protect data.
4. Justify this data management and protection procedure.
5. Let your story end with requesting the audience to follow this procedure of data management and protection.

Read the stories aloud!

Data protection

Data protection is a broad field. Secondary data, big data, photographs, audio and video recordings or stakeholder data play an important role in research. Data protection includes procedures such as handling data storage in a secure way e.g. via cloud storage, transferral of data, use of informed consent forms or notice forms, depersonalisation of data etc.

5 Reflect on appropriate data practices and management:

Discuss the following questions in class:

Which of your colleagues' rules, procedure or infrastructure will you use in future to manage and protect data?

Are there any data management or protection issues you cannot solve due to the absence of clear institutional infrastructure? What infrastructure do you need to be able to solve it?

Review which data management and protection rules, procedures and infrastructure were discussed in this session that supported responsible conduct of research.

