

Researchers, research institutions, scientific journals, government and regulatory agencies, and funding agencies all safeguard good research and ensure reliable research results!

Description and background

This learning unit:

Introduces citizens and (future) researchers to the research environment

Challenges citizens and (future) researchers to value good research and reliable research results

Enables citizens and (future) researchers to acknowledge safekeepers in research

Emphasises that research is embedded in a broader research environment

Role Model

Keywords

This unit has been prepared for non-disciplinary learning groups.

Learning Objectives

- 1** *Identify, accept and actively use research rules*
- 2** *Acknowledge the existence of research codes and regulations and the structure of a broader research environment in detail*
- 3** *Review rules from clear research codes and regulations*
- 4** *Request that researchers follow research rules*

Learning Stages

- 1** *Introduce the topic*
- 2** *Motivate by presenting an interesting story*
- 3** *Engage in storytelling*
- 4** *Put the pieces together*
- 5** *Reflect on rules for researchers*

“Quote about Research Environment”



1 Introduce the topic:

Homework (before the unit starts) or reading session

Find out who in your region observes and helps in situations that jeopardise research. Search for the following words: ombudsperson (ombudsman), data management officer in research, or research ethics commission. Find out what they do, their contact information for your region and if possible their task description. Bring this information to your class.

2 Motivate by presenting an interesting story:

Review or look up the story from LONA Science Centre (video or text). Briefly flesh out what characteristics the students (Emma, Rebecca, and David) and two researchers (Prof. Weis and the head of the institution) have. Imagine the story continues as follows:

Mr. Liebling, the class teacher, starts a project week with his students called “Research Integrity” to analyse what happened at the research institution that some of his students had visited. He wants his students to understand why such incidents do not conform to the guidelines of good research.



Researchers with Research Integrity produce results that society can rely on. Researchers with Research Integrity are able to explain step by step how they arrived at their research results. Furthermore, the results should be reproducible by others. Researchers with Research Integrity use the standards of their research discipline as a guideline from the first idea for new research until the end of the research process.

Researchers are both supported by and observed within their research environment. Some people specialise in observing and advising to keep research reliable and trustworthy. Their tasks are outlined in research ethics commissions policies, codes for good scientific practice, task descriptions of ombudspersons, declarations of data protection etc.

3 Engage in storytelling:

Build groups of 3-4 persons. Imagine you are the students of Mr. Liebling. You plan to write one scene of a play telling Rebecca and Emma’s story.

Discuss the following topics before you start writing:

1. Who are the actors in your play?
2. Should Rebecca contact safekeepers of Research Integrity (such as an ombudsperson, a data management officer in research, or a research ethics committee)?
3. Which research policies exist in your region and can be used in the play? Are there institutional regulations your actors can refer to? Or national regulations? What about European regulations? Search for relevant documents and look them up.

Your scene should include a dialogue about good research. By putting honesty, respect, reliability and accountability first, your actors should emerge from the conflict and stand up for Research Integrity. Write your scene.

Read some of your stories aloud!

European Code of Conduct for Research Integrity:



4 Put the pieces together:

Take a short break from your stories. Come back together as a class. Collect your information about your research environment by showing your material on ombudspersons, research ethics commissions and data officers. Decide together what information is important for your region, and write it down in your notebook.

5 Reflect on rules for researchers:

Return to your stories with the groups you were working in earlier. Imagine that other students will watch your scene. Decide together which rules of research behaviour your fellow students should learn through your scene.

- Researchers should _____.
- Researchers should _____.
- Researchers should _____.
- Researchers should _____.

What does an ombudsperson do?

They can be called to enforce the rules of good research practice in the event of suspicion of misconduct. All enquiries and procedures will be treated confidentially and impartially. The support includes advice, assessment and recommendation (first advice also by telephone or e-mail).

What is a data management officer in research?

They ensure and monitor compliance with the research data management policy and provide technical support.

What are the tasks of a research ethics commission?

Research ethics commissions assess ethical issues in research projects, provide information and advice in compliance with legal requirements, professional rules and research standards. The support includes advice, assessment and recommendation.

