

S9

A researcher is responsible for reliable conduct and trustworthy results!

Description and background

This learning unit:

Introduces students to commitments of responsible researchers

Enables students to demand research integrity

Challenges students to ask for and demand professional commitments

Emphasises how important research integrity is for science and society

Please ensure to obtain informed parental consent and informed assent from participants if required in your country or in your institution.

For insight into the learning progress after Path2Integrity sessions, please send an email with your two-letter group code to evaluation@path2integrity.uni-kiel.de.

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



An advocate for research integrity

Anna Wójcicka

Keywords

Professional commitment; responsible research; research integrity; self-declaration; reliability

Learning objectives

- 1** *Realise self-declarations to follow research integrity*
- 2** *Make a students' pledge of research integrity together with the dialogue group*
- 3** *Compare and prioritise solutions of research integrity issues*

Learning stages

- 1** *Reflect on what you have learned*
- 2** *Dive into an interesting story*
- 3** *Connect to your own life*
- 4** *Commit to academic integrity*

“Just as we, as researchers, introduce people to the world, they will see this world through our eyes. And it is crucial that we base everything we present on solid evidence that we gather in the course of our scientific work.”
(Anna Wójcicka, an advocate for research integrity)





1 Reflect on what you have learned:

Together with the rest of your class, go online and answer the questionnaire to evaluate the learning units, with everyone starting at the same time.

<https://path2integrity.eu/limesurvey/index.php/714871?newtest=Y&lang=en>

Your two-digit group code is required to link relevant data in an anonymised manner. Before you begin, repeat the group code you created earlier and use it in the questionnaire. How sure or unsure were you in answering this time? Discuss any interesting cases in class.

2 Dive into an interesting story:

Recall or read Emma's chat and then continue with the following story about Prof. Weis:

Prof. Weis' hands were sweating, but her thoughts were clear. After she had quit her job at LONA Science Centre and transferred to another university, she had felt a huge relief. In leaving her colleague and the research project, she had upheld her research principles.

Her back ached in this uncomfortable chair. She was sitting in the audience at a conference, and her former colleague was standing at the podium explaining the significant results that he claimed to have made in his research.

Prof. Weis waited tensely until his talk was over. Then she stood up and asked in front of the attentive research community: "Can you confirm that you followed good research practice for the duration of the project, and that all of the research results you have presented are reproducible and thus reliable?"

Discuss different endings of this story. What do the terms reproducible and reliable mean and what significance do they have for science and society? In which cases would you request such a self-declaration from a researcher?



An example of a researcher's pledge:

"By accepting my Doctor of Philosophy degree, I earnestly assert that I will apply my scientific skills and principles to benefit society; I will continue to practice and support a scientific process that is based on logic, intellectual rigor, personal integrity, and an uncompromising respect for truth; I will treat my colleagues' work with respect and objectivity; I will convey these scientific principles in my chosen profession, in Mentoring [sic], and in public debate; I will seek to increase public understanding of the principles of science and its humanitarian goals. These things I do promise." (Ravid, K., & Wolozin, B. (2013). The Scientist's Pledge. *Academic Medicine*, Vol. 88|6, p. 743.)

3 Connect to your own life:

In pairs, read and consider the following:

At school as well as in your studies you learn about research procedures and even do some research in class or as homework. You have probably already written a paper or conducted an experiment. Are you familiar with the standards of such research work? Maybe you are acquainted with a school policy or you already had to attach a signed self-declaration to a paper? However, you may still feel insecure about various research practices. Don't worry. You will succeed!

But even if you are familiar with good research practices, there may always be situations where certain incentives might open the door to fraud or misconduct. To succeed in the field of research, it is not only necessary to know how to do it, but also to understand and comply with the values of good research practice.

Draft a declaration in which you as a student can pledge to confirm your commitment to good research practice in your lives, for example when writing a thesis, conducting an experiment, making an interview, observing the work of others etc.

4 Commit to academic integrity:

Get back to class and read your pledges out loud. Decide which pledge best suits your class and write it in your notebooks. Conclude this session by reading the pledge out loud together.

