

#### Good research is based on honesty! (cf. ECoC 2017, p. 4)



# **Description and background**

This learning unit:

Introduces (future) researchers to the process of producing reliable research results

Enables an understanding and usage of good research procedures

Challenges (future) researchers to comply with research codes and principles

**E**mphasises how important responsible conduct of research is for society



#### Keywords

Research practice; misconduct; honesty; reliability; accountability; respect in research; research and society

This unit has been prepared for all learning groups with a university degree.

Learning objectives	Learning stages
<b>1</b> Describe the values of a researcher	<b>1</b> Become familiar with the topic
<b>2</b> Outline reasons in favour of conducting reliable research	<ul><li>2 Collect your experience</li><li>3 Dive into an interesting story</li></ul>
<b>3</b> Argue in favour of the importance of reliable research results for both research and society	<b>4</b> Connect to your own life
<b>4</b> Realise consequences of research	<ul> <li>5 Engage in storytelling</li> <li>6 Reflect on reasons for reliable research in society</li> </ul>

#### "We are responsible to cultivate society's trust with integrity to ensure the best research possible." (Alexander Gerber, an advocate for research integrity)

This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824488.





1

## **Become familiar with the topic:**

Homework (before the unit starts) or reading session

#### Fill out the survey to evaluate the learning units.

Use this link: <u>https://path2integrity.eu/limesurvey/index.php/238122?newtest=Y&amp;lang=en</u> A two-digit group code is required to link relevant data in an anonymised manner. Before you begin, define this code together with the group and use it in the questionnaire. Keep a note of the code for later use. Note any interesting or challenging cases as well as any unknown words and bring these notes to your class.

#### 2 Collect your experience:

In your class, discuss how sure or unsure you were regarding your answers to the survey. Which cases from the survey were especially interesting to you?

## **3 Dive into an interesting story:**

Read Hannah's story aloud. Describe her by embellishing the story. Who is she in your imagination? Is she, for example, a motivated master student in the field of humanities or rather a doctoral candidate in chemistry? Does she have many friends and prefers spending time out rather than studying?

## 4 Connect to your own life:

Take a minute for yourselves, and think about someone in your environment who used research results to argue in favour of something. Write down a description of that person and what they argued in favour of.

#### **Research principles are...**

"Reliability in ensuring the quality of research, reflected in the design, the methodology, the analysis and the use of resources.

Honesty in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair, full and unbiased way.

Respect for colleagues, research participants, society, ecosystems, cultural heritage and the environment.

Accountability for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts." (ECoC 2017, p. 4)

# 5 Engage in storytelling:

**Introduce your character.** In pairs, introduce your character vividly to your partner. What did the person argue in favour of, using their research results? Explain whether this person is a researcher or whether they are working in another area of society.

**Imagine the worst.** In a co-creative process with your partner, pick one of the people you wrote about and imagine a scenario in which the research results turn out to be fraudulent because the researcher cheated. Build a story around the cheating researcher and your character. Include a person or part of society that is hurt by the fraudulent results. Write your storyline down in bullet points.

**Turn it to its best.** Now rewrite your story! Together, imagine that another researcher steps in to stop the cheating. Describe this researcher's values, as well as how your character is now able to use reliable research results to make their argument. Write a short story in which a person or part of society benefits from the reliable results.

#### Read some of these stories aloud!

# 6

## **Reflect on reasons for reliable research in society:**

As a class, brainstorm reasons for reliable research and write these on a chalk board or flip chart. Discuss why it is important that researchers follow good research practice! Pick four significant reasons from the board as to why researchers need to follow these principles. Write them in your notebook.

