

Academic integrity

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Compliance with ethical and professional principles, standards and practices by individuals or institutions in education, research and scholarship.

Tauginienė, Loretta, Inga Gaizauskaite, Irene Glendinning, Julius Kravjar, Milan Ojsteršek, Laura Ribeiro, Tatjana Odineca, Franca Marino, Marco Cosentino, and Shiva Sivasubramaniam. 2018. 'Glossary for Academic Integrity'. ENAI Report 3G. <http://rgdoi.net/10.13140/RG.2.2.34997.37608>.

Content outline

Audience

- Researchers
- Students
- Researchers professionally involved in publishing (as editors, editorial board members, peer-reviewers)

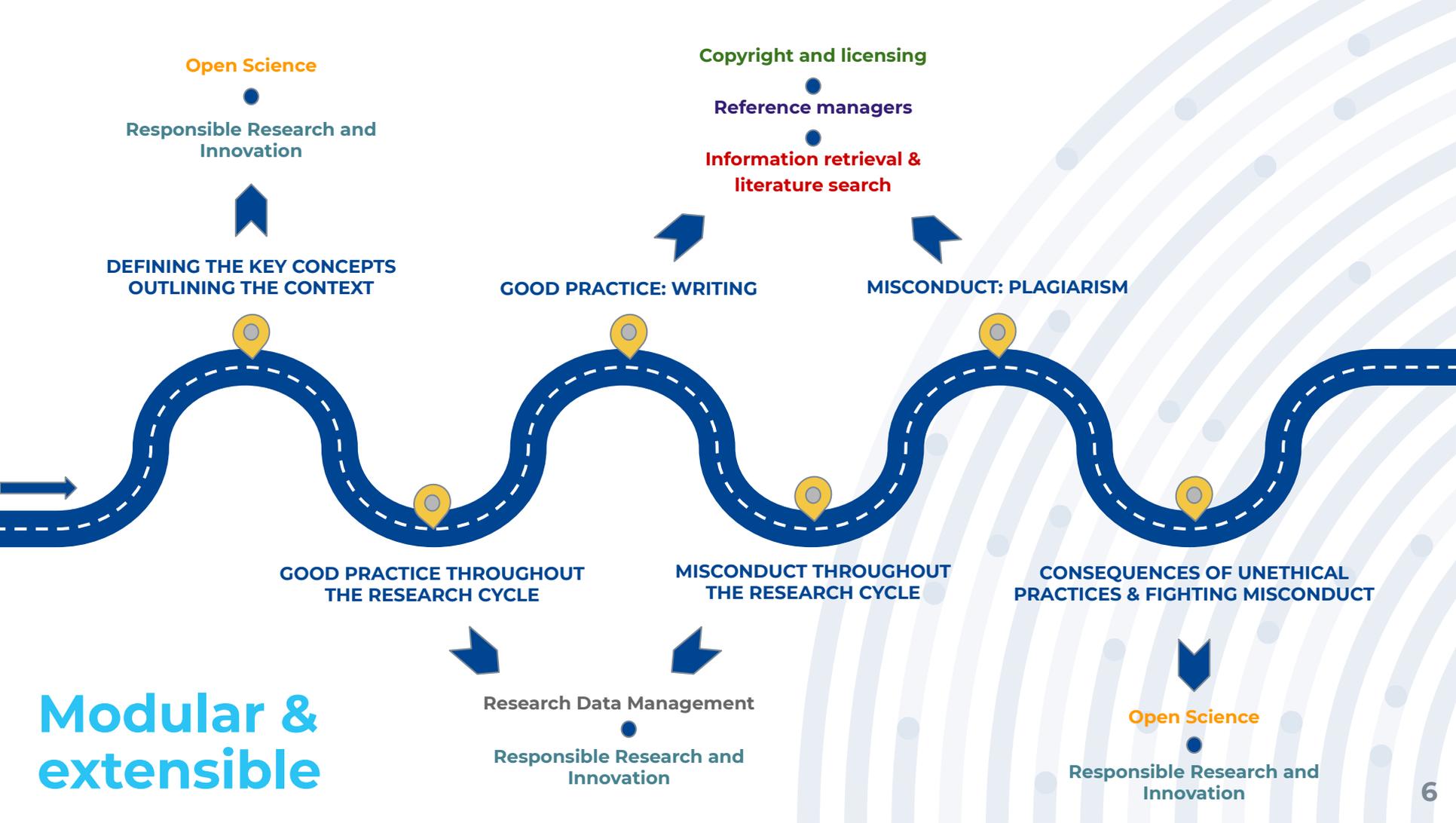
Context

Define a broader context.

Academic integrity is not only about writing.

Principles of academic integrity apply to the whole research cycle and to all participants in research.

- Social responsibility
- Responsible Research and Innovation
- Open Science



Content: Definitions

Principles of academic integrity

honesty, accountability, professionalism, and stewardship ([Singapore Statement on Research Integrity](#), 2010)

Misconduct

“Any action or attempted action that undermines academic integrity and may result in an unfair academic advantage or disadvantage for any member of the academic community or wider society.” ([‘Glossary for Academic Integrity’](#))

Questionable research practices (QRP)

Not responsible research, but not misconduct (autoship issues, conflict of interest, selective reporting, lack of transparency, etc. ([‘Questionable Research Practices: Definition, Detect, and Recommendations for Better Practices’](#). Replicability-Index, 24 January 2015))

* Instead of misconduct and QRP, we may speak about unethical practices.

Content: Legal framework

- Code of ethics (values and general principles)
- Codes of conduct (norms, rules, responsibilities, proper practices)
- Codes of practice and procedure
- Policies (statement of intent, general concepts, responsibilities)
- Rules on procedures
- Copyright legislation and other relevant laws

A very brief
overview of
relevant
documents with
links for further
reading

Content: Topics

Good practice first!

Data collection

Data interpretation

Writing

Include hints on checking the validity of sources and identifying unreliable information and fake news.

General audience: a brief explanation with a 1-2 easily understandable examples.

Discipline-specific audience: more detailed explanations (librarian as a trainer).

Recommended: additional training in collaboration with experts in the field (librarian as a facilitator).

More detailed. Strong focus on good practice.

Writing

- Encouraging students/researchers to develop writing skills (logical structure, clarity, coherent style, foreign language proficiency)
- Crediting sources (when to cite?)
- Which sources are relevant (what to cite?)
- Checking sources to be cited:
 - Identifying retracted publications (Retractions Database, Zotero feature)
 - Identifying disputed publications (post-publication peer-review platforms, esp. Pub-Peer)

A complex issue, since learning outcomes depend on students' ability to think critically, the overall disciplinary knowledge, linguistic proficiency... New approaches required.

Required: hands-on training

Recommended: additional training on literature search, finding data, information literacy

Writing

- Quotation
- Citations
- References
- Citation styles

Required: additional hands-on training

Recommended: training on reference managers (Zotero, Mendeley, etc.)

- Crediting images
- Finding images under free licenses
- Obtaining permission to reuse images

Required: additional training on copyright, licensing, reuse permissions, [RightsLink](#), finding images under free licenses ([Google Image Search](#), [Wikimedia Commons](#), [Creative Commons Search](#))

Recommended: one-on-one assistance

Content: Topics

Then misconduct!

Falsification

Fabrication

Questionable research practices

Plagiarism

General audience: a brief explanation with a 1-2 easily understandable examples. Highlight misconduct types that are particularly frequent in your community.

Discipline-specific audience: more detailed explanations (librarian as a trainer).
Recommended: additional training in collaboration with experts in the field (librarian as a facilitator).

More detailed.
Recommended: additional hands-on training and one-on-one assistance

Plagiarism

- Definition
 - Types of plagiarism (verbatim plagiarism, self-plagiarism, redundant publication, patchwork plagiarism, etc.)
 - Misconceptions about plagiarism
 - Paraphrasing (acceptable and unacceptable)
 - Copyright concerns
 - Operation and limitations of software tools used in plagiarism detection
 - Automated similarity checking vs. plagiarism detection
- Avoid oversimplifications!
 - Call things what they are: make it clear that a wide adoption does not make a practice legitimate.
 - Examples adjusted to the audience.
 - Explain the operation (and limitations) of professional similarity checking tools even if they are not available in your community.

Content: Consequences of unethical practices

- Crisis of peer-review
 - Replication crisis
 - Compromised trust in science
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- Cite and explain a few striking examples,
 - A good starting point for a follow-up discussion and training on Responsible Research and Innovation and Open Science,

Content: Actions against misconduct

- Reporting misconduct
 - Investigation
 - Sanctions
 - Legal action
 - Public discussion
 - Developing methods for misconduct detection
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- Mention rules and procedures in place.
 - Cite notable examples of punished misconduct.
 - Explain the complexity of whistleblowing.
 - Explain the role of post-publication peer-review platforms.
 - A good starting point for a follow-up discussion.

Training tips: methods, formats, tools

Modularity and scalability

- The same structure can be adjusted to various formats (one-time presentation, a course, individual consultations) and technical resources
- The scope can be expanded by including new topics.
- Various approaches (lectures, hands-on sessions, homework assignments) and media (videos, podcasts) can be combined.
- The concept can be translated into an online environment.

Requirement: The trainer must have a comprehensive understanding of the research cycle

If you have resources...

- Use various (all available!) media (videos, podcasts, live online sessions, in-person training).
- Engage professional designers, filmmakers, etc.
- Design a (certified) course.
- Involve experts, university professors, senior researchers to develop discipline specific training.
- Focus on developing critical thinking.
- Support hands-on training.
- Provide individual consultations.
- Design a social media campaign (sharing tips, useful readings, and resources).

My approach

- Extremely user-oriented.
- Low or zero budget training models relying on crowdsourcing
- Training adjusted to minimal technical requirements.
- Encouraging feedback during and after training.
- Improving the training concept based on participants' response and feedback.
- Preference for semi-structured conversation over conventional tasks, quizzes, etc.
- Preference for real-life examples.
- Presentations designed to be reusable by colleagues.
- Sharing training materials (<http://www.itn.sanu.ac.rs/sekcija/index.php/edukacija>).
- Reluctant when it comes to (pre)recorded sessions 😞

Formats

Format	Methods	Topics
Lecture (60 min, 90 min, 120 min)	<ul style="list-style-type: none">• Intro: an icebreaker task or a brief informal conversation about the previous experience with this type of training• Verbal presentation + PowerPoint; a polemic tone; with many examples.• The participants are free to interrupt and ask any questions they may have.• Questions to the participants after each subsection.• Q&A	Full range
Semi-structured conversation in a very small group or one-on-one	<ul style="list-style-type: none">• Verbal presentation• Q&A• In-depth analysis of relevant examples	Usually selected only, but sometimes the full range
Individual consultations	<ul style="list-style-type: none">• Informal conversation to establish what the user doesn't know• Q&A• In-depth analysis of relevant examples• Practical assistance with specific issues	Selected

Tips

- Be flexible.
- Have an alternative plan if something goes wrong.
- Training in the local language is usually more efficient.
- Prepare materials in the local language.
- Avoid recycled examples (find your own in the literature, blogs, social media).
- Adjust content to the audience.
- Use less complex examples when working with students but avoid oversimplification.
- Share links in the chat during online sessions.

Tricky issues

- Bias among the audience in support of widely accepted bad practice (e.g. tolerance to self-plagiarism, problematic citation practices).
- Permitted similarity percentage?
- Simple examples may create a wrong impression that everything is clear and understood (while it's not).

Presentation

- Detailed and informative [presentation that can be used in its own right](#), even if other materials (guides, videos are already available on the web).
- In case you plan a live demo, cover the whole procedure in the presentation using screenshots (useful when there is no internet connection during in-person training, or the participants are using small screen devices).
- Provide further reading and interactive links to support the main ideas
- Convert it to PDF and optimize for fast web viewing
- Make it available as soon as possible – preferably immediately after the training; sometimes, it is good to share it in advance.
- If you do not have a dedicated website, create a Zenodo community and upload your materials there. This is a good idea even if you have a website.

Interaction

- Encourage questions (both during and after training)
- Tasks and assignments
- Always provide feedback

Online environment:

- Polls
- Collaborative notes on Google Drive 👍
- Jamboard or other whiteboard applications (more engaging and visually appealing but outputs can only be exported as images)

Exercises

Pick up a researcher found proven of misconduct (but not too famous) and ask participants to find information about him/her in various sources of information

a) participants work individually and it is up to them to choose where to search for information;

b) participants work in three groups instructed to search scholarly databases only, social media only, and anywhere they want.

Checking information about journals, publishers or companies using Internet search engines, [Who.is](#) and other sources (e.g. business registers)

Take a short excerpt from a scholarly publication, remove citations, and ask the participants to:

- identify places in the text where citations are needed;
- indicate the kind of sources they would cite.

Finding reusable images under free licenses using Google Image Search, Wikimedia Commons, Creative Commons Search.

Analyzing proven examples of plagiarism in a group.

Ask the participants to trace back a selected piece of fake news using Internet search engines

Tracing back images using Google Image Search (esp. In the context of fake news).

Find a paper containing or reflecting elements of questionable research practices and ask the participants to read it before the training session; analyze the paper in a group.

(Advanced, discipline-specific, to be done in collaboration with an expert)

If you like games

Academic Integrity Board Game



The image is a screenshot of a YouTube video. At the top, the channel name 'AmandaLovesToAudit' is visible with 47.9K subscribers. The video title is 'How to set up the game'. Below the title, there are icons for 'SUBSCRIBE', 'Watch later', and 'Share'. The main content of the video is a diagram of the 'Academic Integrity Board Game'. The diagram shows a board with four teams (Team 1, Team 2, Team 3, Team 4) and a central 'Home' icon. There are four numbered steps: 1. Everyone starts. 2. To move forward - answer a Question card correctly. Then it is the next team's turn. 3. When it is your turn and you are on this spot - read a Scenario card out loud to the group, then flip a coin to determine your fate. 4. Keep taking turns and moving across the board, answering more. The video is hosted on YouTube, as indicated by the 'Watch on YouTube' logo at the bottom.

Board game

Online game, in PowerPoint, under the CC BY-NC license

White, Amanda. 2020. 'Interactive Approaches to Learning about Academic Integrity: The Role of Fun and Games'. In *Chapters*, 86–99. Edward Elgar Publishing.

https://ideas.repec.org/h/elg/eechap/19100_7.html.

Working in an online environment

- Depends on the network speed and stability;
- the performance of the participant's devices can be a limitation, just like small screen sizes;
- some participants may not have an appropriate working environment

...

- but generally not bad at all!

My worst nightmares:

- full screen mode in Zoom
- talking to the silence when everybody is muted 🤖

Plans for the future

- Introducing multimedia;
- Building a more complex structure;
- Exploring new tools and formats;
- Designing a genuinely online training concept;
- Crowdsourced shared bibliographies...feel free to use and contribute:
https://www.zotero.org/groups/2888253/academicresearch_integrity

Questions?

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