









# in Supervision

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- A policy?
- An honor code?
- A lecture on academic integrity?
- A short course?

- A policy?
- A lecture for PhD students?
- A course for early career researchers?

Do only business students need to know something about business ethics?

Is there even any information on that?

AVOID EDUCATIONAL GAPS CONNECT
ACADEMIC
INTEGRITY WITH
OTHER ETHICS
TRAINING

TRANSFERABLE ETHICAL SKILLS



Master students



**Doctoral students** 



**Supervisors** 



# Bridging Integrity in Higher Education, Business, and Society (BRIDGE)

We seek to create a bridge between academic sphere, business and society in order to reach a broader understanding of interrelated aspects of integrity between these fields.









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#### Bridging Integrity in Higher Education, Business, and Society (BRIDGE)

#### Three bridges

- 1 Academic Integrity and Research Integrity
- 2 Academic Integrity and Business Ethics
- 3 Academic Integrity and Citizen Science Ethics







"Compliance with ethical and professional principles, standards, practices and consistent system of values, that serves as guidance for making decisions and taking actions in education, research and scholarship."



We need to focus on the preventive and pedagogical promotion of academic integrity.

WE HAVE TO TEACH
STUDENTS WHAT TO DO
BEFORE THEY ENGAGE IN MISCONDUCT



#### WHAT IS ACADEMIC INTEGRITY?

"The International Center for Academic Integrity defines academic integrity as a commitment, even in the face of adversity, to six fundamental values: honesty, trust, fairness, respect, responsibility, and courage."

Source:

https://academicintegrity.org/fundamental-values/



#### THE EUROPEAN CODE OF CONDUCT FOR RESEARCH INTEGRITY (ECCRI)

- REALIBILITY
- HONESTY
- RESPECT
- ACCOUNTABILITY

PRINCIPLES

#### CONTEXTS

- RESEARCH ENVIRONMENT
- TRAINING, SUPERVISION, & MENTORING
- RESEARCH PROCEDURES
- SAFEGUARDS
- DATA PRACTICES & MANAGEMENT
- COLLABORATIVE WORKING
- PUBLICATION & DISSEMINATION
- REVIEWING, EVALUATING & EDITING



# Fundamental principles of good research practice

- that one can be assured that research is of high quality
- that research is conducted and reported in a truthful way and with respect to important societal values
- that researchers take responsibility for their research and its consequences.

Source: https://www.uu.se/en/research/ethics/



#### RESPONSIBLE PROFESSIONAL BEHAVIOUR IN RESEARCH MEANS A RESPONSIBILITY TOWARDS



RESEARCH SUBJECTS/OBJECTS



THE CONSEQUENCES
OF THE RESEARCH ON
THE SOCIETY AT LARGE



THE RESEARCH SOCIETY / OTHER RESEARCHERS



# RESPONSIBLE PROFESSIONAL BEHAVIOUR IN RESEARCH MEANS A RESPONSIBILITY TOWARDS



Laws on ethical approval for research that concerns people / animals



# RESPONSIBLE PROFESSIONAL BEHAVIOUR IN RESEARCH MEANS A RESPONSIBILITY TOWARDS



Can my research be used to hurt someone?

How does my research influence:

- The society
- The environment
- Future generations?



#### RESPONSIBLE PROFESSIONAL BEHAVIOUR IN RESEARCH MEANS A RESPONSIBILITY TOWARDS



Deviations from good research practice



#### RESEARCH MISCONDUCT

- Plagiarism
- Falsification
- Fabrication

# OTHER DEVIATIONS FROM GOOD RESEARCH PRACTICE

Often connected to the publication ethics



As we expect students to already have the knowledge, we tend to just tell them what not to do – not to cheat, not to plagiarise etc.

We focus on prohibition and correction of students' behaviour.

We focus on detection, and punishment.

BUT WE NEVER TEACH THEM WHAT TO DO INSTEAD!



Ethical values and knowledge of the law and regulations

#### Skills:

- Referencing, citation, paraphrasing
- Reading skills
- Academic writing
- Digital literacy
- Analytical skills
- Critical thinking
- Research skills

#### Where to Apply Ethics in Research Cycle?





#### Checklists for the Academic and Research Integrity







Checklists for Doctoral Students



#### Checklists for Master Students









#### **Checklists for Doctoral Students**

Publish your research work with academic and research integrity

#### Before you start

- The aim of this checklist is to assist doctoral students in writing their thesis and in publishing in accordance with the norms and values of academic and research integrity.
- The checklist helps guide students to prepare their thesis and research articles in line with the best research practices, uphold responsible research conduct, and avoid questionable research practices.
- The checklist is to be used throughout the process of thesis preparation and publication.
- Be aware that the list might need to be adapted to your own needs depending on the research field, your past experience, and in accordance with institutional research policies.

Name:	
- Tunite	

#### **General tips**

- Keep a research diary to help you save all important information.
- Use appropriate tools for working with literature sources, for example, reference management software.
- If possible, choose a topic that interests you and that you understand (or want to understand).
- It is advised that you share your experiences with fellow doctoral students, in both your own field of studies and those of others.
- It is important for you to enculturate yourself in your field of study.
- Be sure to interact with the research community, exchange ideas, and participate in academic events relevant to your work or field of study.
- Be aware of your limits and do not be afraid to say where they are to prevent burn-out.







General preparations

Academic and research integrity

Preparations for the research work

#### In process:

 Formulating research questions and the study design

#### Research:

- Data collection
- Data processing and analysis

#### Academic reading and writing

- Academic reading
- Ethical work with sources
- Structure, form, and language

When your work is a part of a collaborative research project

Ethical publishing

Final considerations









Bild: "My friend" by John Drysdale, 1986





Bild: "Skott" av Fredrik Brynolf, flickr.com



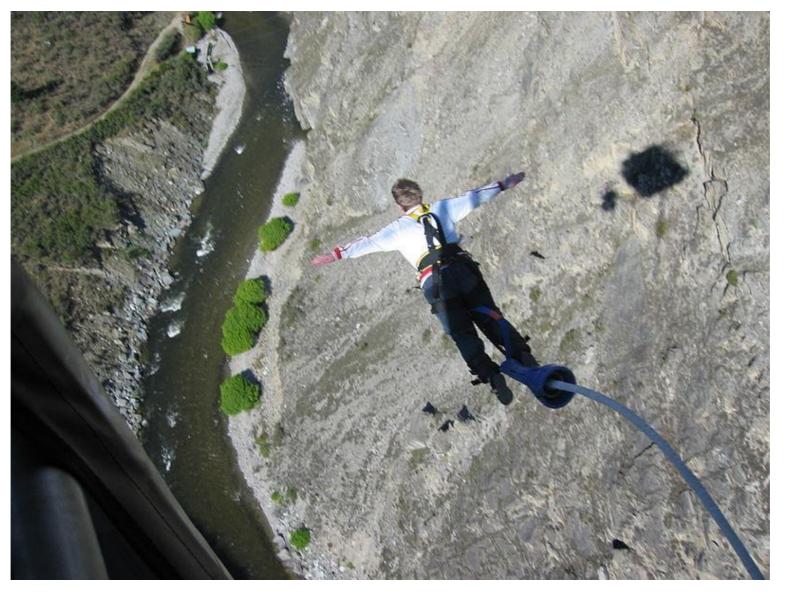


Bild: Jump from Nevis Bungee Platform near Queenstown, New Zealand



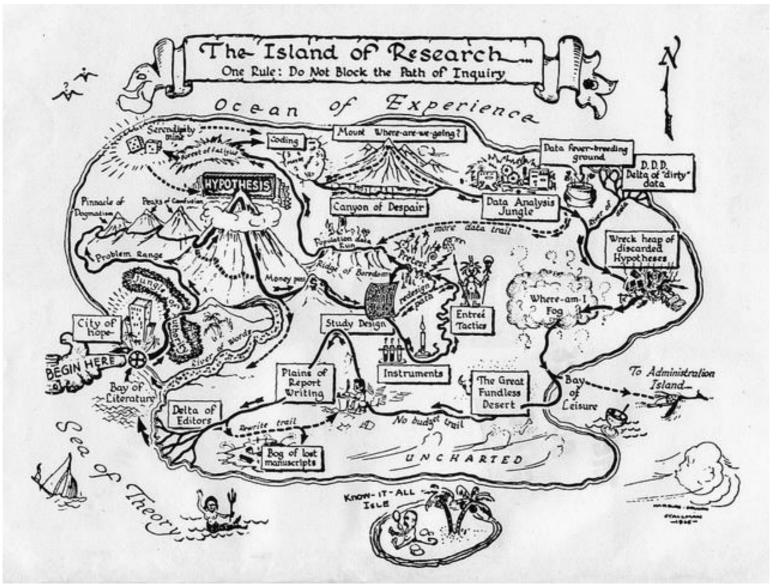


Bild: Harburg, Ernest. (1966). Research Map. American Scientist, 54, 470





Discuss together your perceptions of what good supervision is by relating to the questions:

- What?
- Why?
- How?
- What should characterize a good supervisor?
- Conditions to be able to become a good supervisor?
- Is it a necessity and a right for researchers to gain merit through supervision? Because in that case, who is the supervision for?



# The task of the supervisor differs depending on the discipline and the needs of the student.

- Clarify the demands and expectations that the student and supervisor have of each other at an early stage
- Review the manuscript and other material
- Recommend relevant literature
- Teach research ethics to the student



## The task of the supervisor

#### **GOOD RESEARCH PRACTICE**



 "Through discussions, teaching and their own example, good supervisors transfer knowledge, skills and experience to their doctoral students, and guide the research which they are undertaking."

Source: Good Research Practice, 2017, 59 <a href="https://www.vr.se/english/analysis/reports/our-reports/2017-08-31-good-research-practice.html">https://www.vr.se/english/analysis/reports/our-reports/2017-08-31-good-research-practice.html</a>

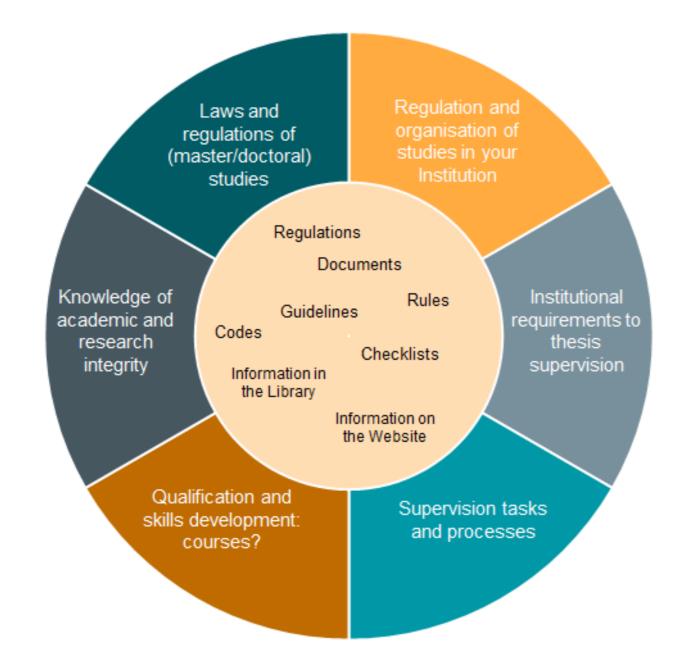


### The task of the supervisor

- Enculturating: school the PhD student in the academic environment
- The supervisor is responsible for the ethical aspects of the doctoral student's project:
  - explain the rules, ensure that the PhD student becomes aware of the academic fairness and academic integrity
  - make sure that the doctoral student has all the necessary permits for his research

IF YOU ARE NOT SURE: TALK TO YOUR COLLEAGUES!







# **Checklists for Supervisors**

Help your students write and publish with academic and research integrity

I have read the institutional requirements relevant to thesis supervision and, if applicable, have taken the required courses in supervision. I know where to find information at my institution on supervision tasks and processes.

I know what the thesis quality requirements are at my institution.

I have knowledge of academic and research integrity, including regarding various breaches such as contract cheating, paper mills, gift authorship, plagiarism, and data management issues.

**Bridging Integrity in Higher** 



# The importance of having a conversation with the student about academic and research integrity

Be aware that you are a role model.





As a supervisor you must help your students complete theses and publish while upholding ethical standards and avoiding professional misconduct.

Academic and research integrity topics can be discussed in groups of two or more students.





You can use a variety of gamified educational materials to raise students' awareness of academic and research integrity.

Talking to students about academic and research integrity can never be too much.



## **Checklists for Supervisors**

Help your students write and publish with academic and research integrity

I have discussed with my student the values of academic and research integrity and why it is important to foster responsible academic and research practices.

We have agreed that the student's thesis and publication work will be done with respect for academic and research integrity.

If your students have not previously taken courses in academic and research integrity, you could direct them to institutional resources or reliable such as those at resources https://www.academicintegrity.eu/wp/all-materials/.

www.academicintegrity.eu/wp/bridge/

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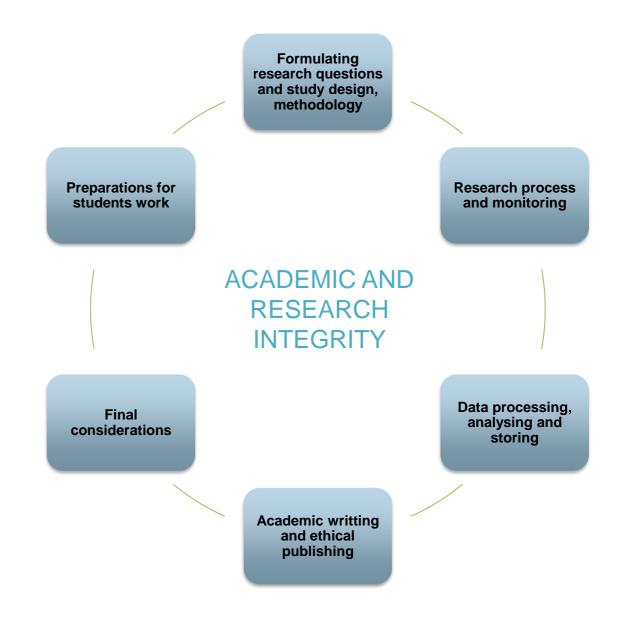
I have checked that the student has received appropriate training in academic and research integrity.

I have explained to my student the consequences of dishonesty in research (e.g., plagiarism, data fabrication, and other violations of academic ethics and procedures).

I have guided my students on how to find all the relevant documents, such as the code of ethics.



Supervisors' responsibility in the process of ...





#### Preparations for students work

#### Set the rules of ",the game":

- Time and frequency of meetings
- Student`s study/work plan and timetable
- Communication
- Need for ethical approval





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Help your students write and publish with academic and research integrity

The student and I have agreed on regular individual or group meetings and we are following the schedule.

I have set up a suitable work schedule with the student and we have agreed on the timeline that he/she will follow.

Before data collection began, I checked whether my student's research needs ethical approval and helped her/him with the procedure.

The student and I have agreed to respect each other's working hours and avoid contacting each other on weekends and during vacation time.

I am here to support my students and they know that I will do my best to help them; they also know how and when to reach me.

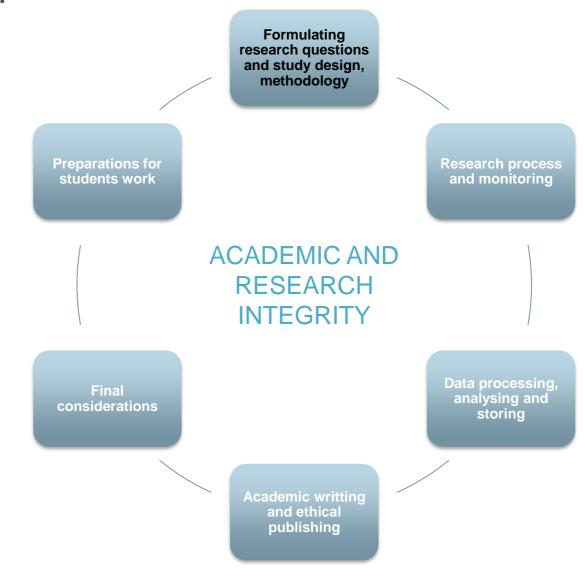


## Formulating research questions and the study design

Be actively involved in the whole thesis preparation process, from the beginning to the end.

Guide your student in formulating the research questions, research design, methodology.

Advise students to keep a research diary as a useful way to save all important information in one place.





Help your students write and publish with academic and research integrity

The student and I have discussed literature searches and how to find relevant research literature.

The student and I have discussed and agreed on research questions, study design, methodology of the thesis work, and how the research process will be monitored.

If needed, I advised the student to have an additional/external consultant for a planned research topic.

The student and I have discussed what type of contribution their thesis will make to existing research in our field.

The student and I have discussed and agreed on her/his scope of research and knowledge and/or skills are needed to implement the research design. If needed, I guided my using relevant resources, training opportunities, and/or consultation.



## Data processing and analyzing

Check data management policy and procedures in your institution.

Guide students to prepare a data management plan (DMP).





Help your students write and publish with academic and research integrity

The student and I have agreed on the methods of data processing and analysis that she/he will be using.

I have instructed the student that all potential limitations, biases, and conflicts of interest must be clearly declared in her/his work.

I have talked to my student about the possibility of outliers and of why and how they should not be omitted from the dataset.

I have talked with my student about factors that might influence objectivity in data analysis, such as various forms of bias or conflicts of interest.

student have discussed and requirements for properly storing research data and have agreed on how and where the thesis data will be stored.

I have talked to my student about the importance of anonymizing the research participants (if relevant).



## Collaborative work

If the student's work is part of a larger research project, discuss with your student potential ethical challenges that may arise in collaboration process.

Topics recommended for discussion in the context of academic and research integrity:

authorship, contributorship, conflict of interest, intellectual property rights etc.

**Formulating** research questions and study design, methodology **Preparations for** Research process students work and monitoring **ACADEMIC AND** RESEARCH INTEGRITY Data processing. **Final** analysing and considerations storing **Academic writting** and ethical publishing



Help your students write and publish with academic and research integrity

My supervised students and I have discussed and agreed on the authors' contributions to the joint article/paper.

If the student's work is part of a larger research project, we have discussed, agreed on, and formalised the relationship between the project and the student's work in terms of data use. If the student's work is part of a larger research project, we have discussed, agreed on, and formalised the relationship between the project and the student's work in terms of authorship.

If the student's work is part of a larger research project, we have discussed, agreed on, and formalised the relationship between the project and the student's work in terms of intellectual property rights.



# Supervisor's role in guiding students to academic writing and ethical publishing

Formulating research questions and study design, methodology

Make sure you have a sufficient knowledge of academic writing.

If you see that your student has gaps in academic writing, help him/her to fill them.

Have a conversation with your student about ethical publishing. Discuss topics such as authorship, contributorship, guide your student how to identify predatory journals.

Preparations for students work

Research process and monitoring

ACADEMIC AND RESEARCH INTEGRITY

Final considerations

Data processing, analysing and storing

Academic writing and ethical publishing



Help your students write and publish with academic and research integrity

I have directed the student to examples of good academic writing in my discipline.

I have regularly reviewed the thesis and made sure that the student is aware of how to cite properly.

I have advised my student to properly use reference management software.

I made the student aware that he/she must check the reference list and whether it is consistent with the references in the text (in-text citations or footnotes).

I have encouraged the student to read appropriate literature on academic writing.

I have talked to my student about the importance of using one reference style consistently.

I made my student aware that he/she must check that all materials (e.g., pictures, charts, and tables) are appropriately indicated, referenced, and acknowledged before submitting the thesis.



Help your students write and publish with academic and research integrity

The student and I have checked the potential publisher's requirements.

The student and I have talked about the importance of only listing all those who have made relevant contributions to the work as defined International authors. as by the Committee of Medical Journal Editors (ICMJE) and the Committee on Publication Ethics (COPE).

Make sure that the student is aware that contributors who do not qualify as authors should be properly acknowledged.

Make sure that the student is aware that the authorship order should reflect individuals' respective contributions.

The student and I have checked the quality of the journal and I have discussed predatory publishers with my student. In the case of doctoral students, I have explained that work published in such venues cannot be used as part of their thesis.

Make sure that the student is aware of the need to disclose conflicts of interest, if any, and to openly declare them in the publication.

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# The importance of communication and feedback

Stay in constant contact with your student.





#### General tips when communicating with students

- Enculturate your students in your discipline and help them cross the bridge from being a student to researching.
- Encourage your students to interact with the research community and participate in academic events.
- Encourage your students to self-reflect and help them develop critical thinking.
- Try to motivate your students, and ask them about their work and how it is going.
- · Show students that you are active and engaged in their thesis and publication work.
- If a problem arises, try to solve it for the benefit of the student, without coercion.
- Give a regular feedback to your students.



Help your students write and publish with academic and research integrity

I have regular consultations with my students and I follow their ongoing research

I am always clear and respectful in my communication

I am always trying to give constructive feedback and appreciate the positive aspects

I checked/reviewed whether my supervised student's data have been collected, recorded, and managed properly



#### Final considerations

Check the institutional requirements for the thesis submission and/or defence.

Check the submitted thesis with text-matching software to identify possible plagiarism and assess the text matches indicated.

Carefully read and analyse all the chapters of the thesis of the candidate before the final defence.

**Formulating** research questions and study design, methodology **Preparations for** Research process students work and monitoring **ACADEMIC AND** RESEARCH INTEGRITY Data processing. Final analysing and considerations storing **Academic writting** and ethical publishing

What tools and materials can be used when supervising your student or students' group?



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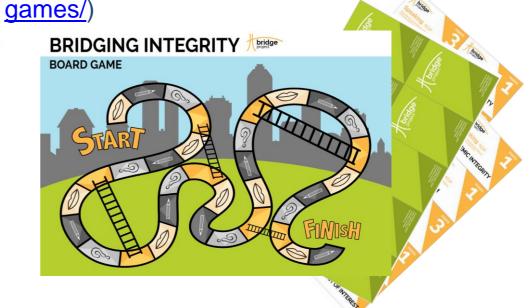
To assist students in writing their thesis and in publishing in accordance with the norms and values of academic and research integrity.

Checklists on academic integrity for doctoral and master students (Printed or online; Available at:
 https://www.academicintegrit y.eu/wp/bridge-checklists/)

For learning academic and research integrity concepts:

Board game "Bridging Integrity" (Printed;
 Available at:

https://www.academicintegrity.eu/wp/bridge-



#### For more extensive training:

- Module from Academic Integrity to Research Ethics
- Module on Authorship Ethics
- Module of Data Ethics



## PROJECT OUTPUTS

Co-funded by the Erasmus+ Programme of the European Union

2020-1-SE01-KA203-077

Bridging Integrity in Higher Education, Business and Society



https://dev.academicintegrity.eu/wp/bridge/

Checklists

Guidelines

Open educational resources

Gamified cases

Workshops

Webinars





How can we as supervisors prevent misconduct and create a culture of academic integrity?



### **THANK YOU!**

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Facebook: infobridgeproject



https://www.academicintegrity.eu/



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