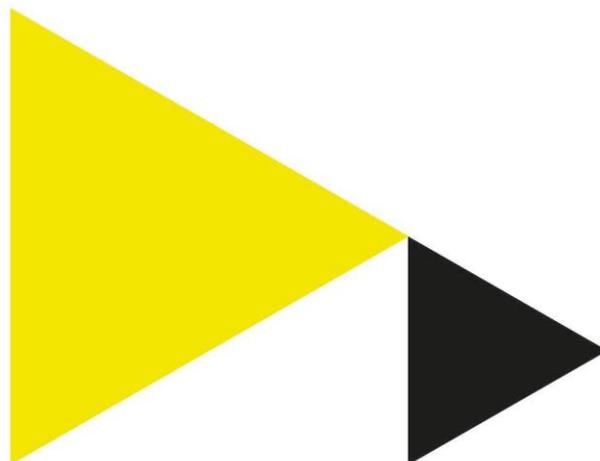


Netherlands Code of Conduct for Research Integrity Guide

For supervisors of student research

Education & Research central
policy department / central staff
2020 - 2021



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Date

23-Feb-21

Project type

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Version

1

This guide is based on the University of Applied Sciences Utrecht, Janneke Vader and Saxion University of Applied Sciences, Natasch van Hattum - Janssen versions.

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1. Why this document?

The AUAS is committed to the Netherlands Code of Conduct for Research Integrity (in Dutch: Nederlandse Gedragscode voor Wetenschappelijke Integriteit, hereinafter: NGWI) [NGWI](#). This is a normative framework that is the guiding principle for all research activities, both within research groups (Dutch: 'Lectoraten') and educational curricula. Many lecturer-researchers are already familiar with it. A large number of the principles and standards from the NGWI also apply to the supervision of student research. This guide therefore focuses on what the NGWI means to lecturer-researchers that supervise student research.

The primary objective of this guide is to raise awareness among lecturer-researchers of the importance of the principles and standards from the NGWI when supervising student research. This document also offers lecturer-researchers and educational programme teams concrete tools for guiding students in the (graduation) research process. The application of these principles and standards in all forms of student research within the educational programmes helps to develop students' research competences. This guide could also play a part in teaching research skills. This guide serves as a basis for translation to one's own educational circumstances.

There are several other legal regulations and codes of conduct that border on or partially correspond to the NGWI such as the GDPR (Dutch: AVG). A summary of those regulations has been included in the appendix of the NGWI.

1.1 For whom?

This guide assists **lecturer-researchers** in supervising their **students** in the application of the principles and standards for the integrity and quality of student research¹. It concerns all the student research that occurs within the educational curricula; from the first exercises through to graduation research. Students may also conduct research under the responsibility of *research groups*. Research groups are *fully* included within the scope (as well as the complaints procedure) of the NGWI. This guide is *not* directed at research groups.

For **lecturer-researchers, educational programme teams and education management**, NGWI Chapters 2 and 3 (on the principles and standards of research integrity, respectively) are relevant. Also important to education management is NGWI Chapter 4 (Responsibilities of the institution). A summary of these chapters follows below. The appendices 'Implementation in the education' and 'Checklist for programmes' to this guide are intended for programme teams and education management.

For the sake of readability, when a student or lecturer-researcher is referred to as he, it shall at all times mean he or she. For information on ethics and integrity and further support before, during and after research, please visit onderzoek.mijnhva.nl

¹ The NGWI complaints procedure does not apply to students and lecturer-researchers with research that takes place within education programmes: "" (...) as long as that research is carried out only within an educational context and does not result in publications other than a thesis made public, non-compliance with the norms of this code cannot lead to a complaints procedure (...) or the imposition of sanctions (NGWI, Chapter 1, Scope and transitional provisions, 1.3)

2. Summary of NGWI

The contents of each chapter of the NGWI are summarised below.

2.1 NGWI Chapter 1 Scope and transitional provisions

This defines the activities to which the code applies and who is bound by this code. This code concerns fundamental as well as applied and practice-oriented research. Universities of Applied Sciences endorse this code, which indicates that it is also relevant to student research.

2.2 NGWI Chapter 2 Principles

The five principles of the NGWI form the basis for research integrity. The principles we are referring to are as follows:

- Honesty
- Scrupulousness
- Transparency
- Independence
- Responsibility

These principles serve as a guide for all parties involved with research.

2.3 NGWI Chapter 3 Standards

The principles have been developed into 61 further concrete standards. These indicate what the researcher should adhere to in his research. They have been formulated per research phase: design, conduct, reporting, assessment, peer review, and communication. The standards are a reflection of existing practices in research. Prior to the NGWI's publication, researchers also largely operated in accordance with these standards. Not all standards are relevant to student research within educational context.

2.4 NGWI Chapter 4 Duties of care for the institution

There are duties of care included in this code which the institution must fulfil to promote researchers' adherence to the principles and standards of proper research practices. They entail obligations at various levels of the organisation, especially for supervisors, project leaders, research directors, managers and directors. In total there are 21 duties of care. The complaints procedure excludes duties of care. The duties of care have been classified into 5 main categories, which are also often interrelated. These main categories are:

1. Training and supervision
2. Research culture
3. Data management
4. Publication and dissemination
5. Ethical standards and procedures.

Universities of Applied Sciences had been given until 1 January 2020 to fulfil the duties of care. AUAS was and remains active in all categories. A portion of the duties of care are already standard practice.

2.5 NGWI Chapter 5 Measures and sanctions

The NGWI provides institution boards and the Scientific Integrity Committee (Dutch: CWI) in case of complaints with guidelines and weighting criteria for determining the severity of violations of the standards. Potential measures and sanctions are also described.

Violations by students of the NGWI principles and standards cannot lead to a complaints procedure and potential sanctions as long as the student's research is carried out within educational context and does not result in publications other than a published thesis. Sanctions may, however, be imposed on students by the programme's examination board in the case of fraud or plagiarism. This is governed by the Teaching and Examination Regulation (OER).

3. Significance of the NGWI for student research

3.1 Principles

When conducting research as part of their studies, students must work in accordance with the principles and standards of the code of conduct. The lecturer-researcher plays a guiding role here. In the following, some indications relevant to student research have been provided for each **principle**.

Honesty

- Do not make any unfounded claims.
- Do not fabricate data or sources.
- Take alternative visions and counterarguments seriously.
- Be open about uncertainties in your research.
- Inform respondents of the research objective and what participation means for them.

Scrupulousness

- Work methodically and securely on collecting, processing, and analysing data.
- Make sure that you do not violate respondents' privacy and interests.
- Work with precision when designing, conducting, reporting and disseminating your research.

Transparency

- Be transparent about the data you have obtained, its origin, collection method and analysis.
- It must be evident, at least to peers, how the research was conducted and what the various phases of the research process were.
- Arguments must be clear and the steps in the process verifiable.
- Be open about the limitations of your research.

Independence

- When choosing the method, assessing the data and interpreting your results, do not be tempted to draw conclusions that are socially, commercially, or politically desirable.
- Consider to what extent you have been objective as a researcher.

Responsibility

- Take the interests of those involved in your research into account. If persons or animals are the subject or respondent of your research, you must take extra care to ensure that they do not suffer from your research. For example, by ensuring that results and conclusions in your reporting cannot be traced back to people you have interviewed/observed/filmed etc. (anonymise/pseudonymise).

3.2 Standards

For a complete overview of the 61 standards see pages 16 to 18 of the [NGWI](#). The supervising lecturer-researcher can select the standards relevant to the student research in question (customisation) from this list. Below there is a selection of the standards that are most relevant in student research, ranked by research phase.

Design

- The subject of the research must be relevant to issues in the professional field and therefore to professional practice or society.
- Use the latest insights in the discipline.
- If the research is commissioned, for example in the context of an internship, always clarify who the client is.
- Provide a research design that can answer the question.
- Choose a suitable method for what you want to investigate.
- Describe how the collected data is organised and categorised so that it is verifiable and can be reused.
- Share the research data with the professional field as much as possible after the research. Lay down the valid reasons as soon as you cannot make research data available.
- Ensure that the required consents are obtained (consent form) and that, where necessary, ethical review takes place (see below, under Preconditions).

Conduct

- Be precise and accurate when conducting the research.
- Use recognised methods from practice-oriented research.
- Determine the research method yourself and do not allow this choice to be influenced by commercial or political interests (e.g. of the client).
- Do not fabricate data or research results.
- Do justice to all research results obtained.
- Do not delete or modify results without explicit, sound justification.
- Ensure that sources are verifiable.
- Describe the data honestly, scrupulously, and transparently.
- Process and manage the collected data carefully and store both raw and processed versions for an appropriate period of time. For this please see: Preconditions, data collection, page 10.
- Ensure that data is findable, accessible, interoperable and reusable (the 'FAIR' principles): Findable, Accessible, Interoperable, Reusable).
- Take the interests of people, animals (research objects) and the safety of the researchers into account.

Reporting

- The reporting does justice to everyone who contributed to the study.
- In group work, a fair allocation and order of authorship is made.
- All authors must have made a substantial contribution to at least one of the following: design, data collection, data analysis or the interpretation of the findings.
- All authors must have approved the final version.
- All authors are fully responsible for the content of the final product, unless otherwise stated therein.
- Carefully present sources, data, and arguments.
- Make sure that in the report, respondents' identity cannot be directly or indirectly traced (anonymity).
- Be transparent about the method and procedure followed and record them in logbooks and reports where relevant. The argumentation must be clear and the steps in the process verifiable. The research must be described in sufficient detail to allow the data collection to be replicated and the data analysis to be repeated.
- Be explicit about relevant unreported data that were collected according to the study design but could lead to different conclusions than those reported.

3.3 Preconditions

In addition to the aforementioned standards, there are some preconditions for research that also apply to student research:

(Ethical) consent

- If a student collects data for which ethical consent is required, for example, observations for medical research, observations with minors or with incapacitated persons, then consent from the appropriate authorities is required. When in doubt as to whether a study falls under the Medical Research Involving Human Subjects Act (WMO), the lecturer-researcher can apply to a [recognised Medical Ethics Review Committee \(METC\)](#)
- For advice on how to approach respondents and handle personal data in an ethical manner, lecturer-researchers can contact the [Research Ethics Committee \(ECO\) of AUAS](#). Students themselves cannot turn to the ECO. Please note: the ECO of the AUAS currently only accepts official requests for advice concerning student research if this research takes place under the responsibility of a research group.
- The lecturer-researcher gives the student permission for data collection. If it concerns the collection of personal data, or other sensitive information (e.g. from minors, competitor sensitive information, company secrets), the lecturer can put their questions to the [contact person for privacy of his own faculty](#).

Informed consent

- When collecting data from people, it must be explained to them what the research entails, what is expected of them, what data is collected, who has access to it, where and how long the data is stored. Furthermore, respondents need to know whether the data is to be processed anonymously and whether it will be used again in the future. The explanation should be clear to respondents and there should be an opportunity to ask questions. Respondents then give their consent in writing (by means of a consent form) or orally (by means of an audio recording). The researcher must be able to prove that consent has been given. Respondents must know who they can turn to with questions or complaints and that they can withdraw their consent at any time without stating their reasons.

Data collection

- Do not collect and store more data than necessary for the research.
- Do not store the data unnecessarily. Choose a retention period suitable for the research. A period of 5 years (the nominal study duration + 1 year) is recommended for research solely within the educational context of the For more information see [RDM UvA HvA](#).
- When collecting data with and about people, the General Data Protection Regulation (GDPR/AVG) applies. See [Research: privacy](#)
- All lecturer-researchers of the AUAS have access to [UvA/HvA figshare](#); a system for the secure storage, controlled sharing and publication of data. Students do not have access to figshare. If necessary (e.g. for follow-up research and provided that respondents have given their consent), the lecturer-researcher places the student's data in figshare. Students manage their own data according to the principles and standards of this guide, for example in AUAS-OneDrive.
- Without respondents' consent, data from student research may not be transferred to the AUAS. For more info see: [RDM UvA HvA](#)
- In order to securely collect data, software provided by the AUAS is used (e.g. Qualtrics). Applications such as GoogleForms, SurveyMonkey, Survio, etc. are not secure.
- If data is used that was collected by someone else, for example from previous research, it must be ensured that the conditions agreed at the time continue to apply. There should still be no data traceable to respondents

in the new report.

Data management

- For students, the AUAS-OneDrive is a secure environment for storing and sharing data.
- USB sticks and Dropbox are not secure environments for storing and sharing data, are not in accordance with the GDPR, and are therefore not allowed.
- Always send large files via SurfFileSender and not, for example, with We Transfer or other free online tools.

Communication

- Use the AUAS e-mail address when communicating with students, lecturer-researchers, professors, companies, institutions and respondents (so no Gmail, Hotmail or other private e-mail addresses). However, do not send any data via email.

Publishing results

- When publishing the research results, take into account the interests of both the respondents and the client.
- Anonymise consistently and do not disclose information that could harm the client or others.

4. What does this mean for lecturers and educational programmes?

Supervising student research requires that lecturer-researchers have organised their supervision in such a way that compliance with the principles and standards of the NGWI for design, conduct and reporting is monitored in any case and that this takes place within the preconditions. This means that:

- All lecturer-researchers involved in student research are aware of the principles and standards of the NGWI and the elaboration thereof.
- Lecturer-researchers are aware of the principles of the GDPR.
- Throughout the entire research cycle, lecturer-researchers monitor whether there is any (risk of) violation of the NGWI or the GDPR.
- Lecturer-researchers should be aware of the tools made available by the AUAS for data collection, data management and data communication and should inform their students of the use of these tools rather than alternatives that are less safe.

This requires the **programme teams and educational management** to:

- lay down relevant principles and standards from the NGWI and GDPR in the learning objectives of the curricula, for example in modules on research skills.
- Attention is paid to and provisions are made for (ethical) assessment prior to student research.
- The examination board is aware of the NGWI.
- The curriculum committee is aware of the NGWI.

Appendix A: Educational implementation

To ensure that students apply the principles and standards of scientific integrity during their research activities, it is important that these principles and standards are well embedded in the programmes' curricula. The following advices are directed thereto:

Discuss this guide in the team meeting

Because research activities are usually not limited to specific research modules or graduation, it is important that all lecturer-researchers within a team are aware of the principles and standards of scientific integrity.

Put this guide on the agenda of the curriculum committee

The curriculum committee can look at where principles and standards for design, conduct and reporting and preconditions of research are addressed in the programme, starting from year 1.

If necessary adapt the research skills modules

Based on the aforementioned analysis of the curriculum committee, there may be grounds to adapt the research skills modules, or other forms of research education in the curriculum to ensure that all relevant principles, standards and preconditions are addressed in the curriculum.

Discuss this guide in the assessment committee (Dutch: Toetscommissie) and with the assessment experts of the programme

The principles, standards, and preconditions for scientific integrity may affect the assessment of students. This can be in the interim, when there is a go/no go moment prior to data collection, during ethical review, or when consent is given, as well as at the end of the research during the final assessment. The assessment committee and the assessment experts can supervise the translation of the principles and standards into relevant assessment criteria.

Discuss this guide in the graduation committee

The principles, standards, and preconditions for scientific integrity are especially important for graduation, where there is usually a clear research component (defined student research or supporting research activities for a professional product). The graduation coordinator(s) and the graduation supervisors play an important role in the scrupulous implementation of the principles, standards, and preconditions.

Put this guide on the agenda of the examination board

In case of fraud and plagiarism, the Teaching and Examination Regulations (OER) touch upon the principles of scrupulous examination. The examination board enters the fray when students act contrary to the OER. See OER 2020-2021, Articles 4.3 through 4.7. Students are not covered by the complaints procedure established by the NGWI code of conduct for researchers.

Appendix B: Check list for programmes

- Does the curriculum address principles and standards of scientific integrity in research?
- Where?
- In what way?

- Are the principles and standards for designing, conducting and reporting student research integrated into the programme?
- In what way?

- Does the programme ensure that (ethical) consent is sought by the student prior to data collection?
- In what way?

- Is there a check on behalf of the programme on any kind of data collection by students?

- Does the programme ensure the correct use of information letters and consent forms?
- In what way?

- Are the facilities for data collection being made available and communicated?
- In what way?

- Are the data management facilities being communicated?
- In what way?

- Are the communication facilities being communicated?
- In what way?

- Does the programme ensure scrupulous data collection, management, and communication? Especially when it comes to privacy and/or otherwise sensitive information about persons, companies or institutions?
- In what way?

- Does the programme ensure diligent publication of research results?
- In what way?