Basic Training in Responsible Research

Manual for trainers
Version 1.0 2021

Colophon

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FOREWORD

Dear researcher,

Welcome to the Basic Training in Responsible Research!

Whether you have years of experience or have only recently entered the research field, everyone can cite an example of a dilemma where you ask yourself, "What's the right thing to do? Option A, option B, or are there perhaps alternatives?" Especially in applied research at universities of applied sciences you work with stakeholders who all have their own interests. This can create challenging situations: should you focus on maintaining high-quality research standards, or do you prioritize gathering large amounts of data to meet project demands, for instance, to ensure funding?

Data fabrication, data falsification or plagiarism are well-known examples of irresponsible research. But how do you handle situations that are less obvious or in a gray area? What is the *right* thing to do? Is there such a thing as a "good" researcher? What knowledge and skills does a "good" researcher have? Before discussing these questions, it is important to have a clear understanding of the concept and scope of research integrity.

This training in responsible research contributes to the awareness of research integrity, the scope of the topic and the importance of safeguarding it. It also aims to activate you and provide you with tools to identify and discuss research integrity in your work.

We have written the course manual with care, taking into account as much as possible the wishes and needs of the researchers we spoke to from various fields and corners of the Netherlands. We hope the training will bring you inspiring conversations and insights.

TETRIAS Working Group
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> **Corona research appearing at lightning speed. Too fast perhaps?**
> "During this [covid-19] pandemic, scientific discoveries are falling on top of each other. Initial claims, like runners exhaling meters-high clouds of virus, later turned out to be overly simplistic. Or take the French study suggesting that the malaria drug chloroquine could treat covid-19. It was published in an official scientific journal, which made it world news. The professional association was stunned: the study "did not meet the expected standard" and the journal's quality control was inadequate. Shoddy work, but that did not stop French President Emmanuel Macron from praising the drug, nor US President Donald Trump."
> (Veldhuizen, 2020)

§1 Introduction

The Netherlands Code of Conduct for Research Integrity (KNAW *et al*., 2018) has been in force since October 2018. It applies to all research institutions, including universities of applied sciences. Signing this code obliges universities of applied sciences to provide their researchers with training in the conduct of responsible research. Until now, universities of applied sciences have not systematically provided such training themselves.

In cooperation with the Netherlands Association of Universities of Applied Sciences, seven universities of applied sciences took the initiative to develop a training course on responsible research. To determine the topics and objectives of the training, researchers from about seven universities of applied sciences were interviewed about practical examples of integrity issues and moral dilemmas in their work.

Eventually, these examples and experiences from various domains were translated into the final objectives of a basic training course and a team training. The basic training emphasizes individual competencies related to responsible research and can therefore be taken by individual researchers. The team training, on the other hand, is aimed at research groups and other collaborations that would like to work promoting research integrity in their own research culture.

If you would like to know more about this research project see our [research article](#)[1] and/or check our website [Training verantwoord onderzoek op het hbo](#)

Certificate of participation
If the conditions below are met, you will receive a certificate of participation.
- ✓ Present at all three sessions
- ✓ All assignments completed (incl. the reflection after Session 3)

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[1] Blom F, Berentsen SMJ, & van der Sande, R. How to set the agenda for training in responsible conduct of research using the target audience as a narrative guide. FACETS. 2022;7:1258-1275. https://doi.org/10.1139/facets-2021-0048

§2 Learning objectives

On completion of this Training in Responsible Research, the participant will be able to:

1. Illustrate the scope of research integrity with examples of violations and good practices of research integrity at universities of applied sciences, and explain the importance of research integrity for research, researchers and society

2. Name risk and facilitating factors for research integrity at universities of applied sciences and identify those factors in case studies and in their own research practice

3. Translate the concept of research integrity into values of good research at universities of applied sciences, a moral compass, and demonstrate this in a dialogue

4. Determine responsibilities for research integrity of those involved in research at universities of applied sciences and select examples of ways to monitor research integrity among those involved

5. Reflect on their own skills and responsibilities for research integrity and devise appropriate actions, involving relevant facilities such as guidelines and advisory bodies, and start the conversation about research integrity.

§3 Structure and content of basic training

This course consists of three 3-hour sessions. Before each session you prepare assignments in a digital portfolio. After Session 3 you complete your portfolio. Therefore, you should allow for one hour of preparation per session and enough time after Session 3 to complete your portfolio.

Each session focuses on a theme:
- Session 1: Basic knowledge
- Session 2: Attitude & responsibilities
- Session 3: Research climate & translating values into actions

Table 1, on the next page, summarizes the assignments and session content.

Table 1. Program Overview: Basic Training in Responsible Research

Program Overview: Basic Training in Responsible Research		
Session 1		
Learning objective 1	*Assignments* Read the syllabus Sign and return confidentiality agreement 1.1 Mind map 1.2 Online module 1 1.3 View code of conduct 1.4 Personal learning objectives	*During the session* Introduction, discussing expectations (1.4) 1.5 Mind map 2.0 1.6 Knowledge quiz about module 1 1.7 Dilemma game about examples and consequences of violations
Session 2		
Learning objective 3, 4	*Assignments* 2.1 Good researcher 2.2 Responsibilities	*During the session* 2.3 Word cloud (2.1 review) 2.4 Fictional case study: identify values of good research and moral compass and discuss how to make issues surrounding research integrity more open to discussion (do's and don'ts). 2.5 Case from your own work practice on responsibilities in subgroups
Session 3		
Learning objective 2, 5	*Assignments* 3.1 Online module 2 3.2 Draft reflection report*	*During the session* 3.3 Research climate 3.4 Mind map 3.0 3.2 Reflection (iceberg) + discussion 3.5 Take-home messages

*Finalize reflection report after Session 3.

§4 Course schedule

The table below lists the dates of the sessions and also the submission date for the assignments. Assignments may be emailed as .pdf, .doc or .docx to: ####

Date	Day	Activity	Location
		Submit portfolio	
		Session 1	
		Submit portfolio	
		Session 2	
		Submit portfolio	
		Session 3	
		Submit final portfolio	

Within 4 weeks of submitting the complete portfolio, you will receive a certificate of participation.

We want to tailor the training as closely as possible to the wishes and needs of the researchers. Consequently, at the end of the training we would like to hear about your experiences through a digital evaluation form.

GENERAL INFORMATION FOR TRAINERS

General
The basic training preferably takes place on-site; if this is not possible, an online alternative can be offered. This manual is primarily focused on on-site training. However, suggestions for an online training are also provided in this color in text brackets: [].

The basic training is led by two trainers. Getting to know each other in advance and understanding each other's areas of expertise can help in dividing the training assignments effectively.

Time investment trainer
Each trainer has approximately 2 hours per session (depending on the group size) to read the portfolios and prepare the session. You can split reading the portfolios with your co-trainer, but make sure you are both up to speed on questions or important issues during the session. Each session takes 3 hours. A total time investment for each trainer will be about 18h (including 9h of training, 6h of preparation, and 3h of reading the final portfolios and finishing).

Learning Objectives
Appendix I outlines the learning objectives and sub-objectives that participants are expected to achieve by the end of the basic training.

Train-the-trainer
The ambition is to organize a train-the-trainer session for new trainers once a year in the fall. In preparation for the train-the-trainer you are expected to have read this manual in general. Not all instructional formats will be covered in detail. Please indicate your preferences in advance: which instructional format is new to you? Which instructional format seems difficult to you and why? For more information, questions and/or to attend a train-the-trainer you can email to susan.berentsen@han.nl.

Follow-up training
A follow-up training will be organized annually. When scheduling permits, we aim to combine the follow-up training with the train-the-trainer session for new trainers. This way, participants can interact directly and new trainers can benefit from the experience of others.

The coordination team will create the agenda for the follow-up training based on evaluations and feedback from the trainers. If you would like to enhance your skills in a specific assignment, discuss challenging moments from the training, or have any other questions, please reach out to the course coordinator.

We value the continuous development of our training and trainers, and we hope to meet regularly to exchange experiences. For more information, questions and/or register, please email us to susan.berentsen@han.nl.

1. SESSION 1

The first session is on "What is Research Integrity?"

Session 1		
Learning objective 1	*Assignments* Read the syllabus Sign and return confidentiality agreement 1.1 Mind map 1.2 Online module 1 1.3 View Code of Conduct 1.4 Personal learning objectives	*During the session* Introduction, discussing expectations (1.4) 1.5 Mind map 2.0 1.6 Knowledge quiz about module 1 1.7 Dilemma game about examples and consequences of violations

Assignment

Create a digital portfolio titled "BasicTraining_Session 1_FirstName_Surname" and incorporate assignments 1.1 to 1.4. The submission instructions are in §4.

o **Read the syllabus:** Take a moment to read through this entire manual to get an idea of what the training looks like and what is expected of you. Mark relevant dates in your calendar. If anything is unclear to you or if you have any questions, make a note of them in your portfolio. Also take a look at the relevant resources and networks related to research integrity in Appendix A.

o **Sign and return the confidentiality agreement:** You will receive a confidentiality agreement. Fill it out completely (note that there are two places where you select "yes" or "no") and return the signed agreement before the start of the first session.

o **1.1 Mind map:** Write "Research Integrity" in the center of a blank piece of paper and write down the words that come to mind by using a tree structure. There are also online tools to create a mind map, such as this one. Include the mind map and any accompanying notes in your portfolio.

o **1.2 Online module 1:** Follow the module by clicking on this link.
  • Write a short reflection of approx. 200-300 words about this module in your portfolio. What surprised or interested you? Is there anything you would like to know more about?
  • Take another look at your mind map. If you like, add words in a different color to your mind map.

o **1.3 Code of conduct:** Take a look at the Dutch Code of Scientific Integrity.
  • Answer the following questions for yourself and write a brief description in your portfolio: What surprised or interested you? Did you notice anything? How does what is written in the code of conduct apply to your daily research practice? What do you think about the fact that there are duties of care in the code, and what do you think about those duties of care?

- o **1.4 Personal learning objectives:** You have read and/or refreshed your knowledge on various guidelines, codes of conduct and terms related to research integrity. You also have a clear overview of this course. Formulate at least one personal learning objective related to research integrity that you want to achieve by the end of this course. Make the objective(s) as specific as possible to increase your chances of success! Record the learning objectives in your portfolio.

- o **1.5 Install the Dilemma Game app:** To prepare for the session, install the Dilemma Game app on your phone beforehand. You can find the app in the appstore or on this website.

During the session

The portfolios are read by the trainer and serve as input for the session. The session begins with an informal *introduction*, followed by an exchange of expectations based on personal learning objectives. This is followed by a shared *mind map* to identify examples of violations, establish relationships to the research cycle and discuss the importance of research integrity for research, researchers and society. After a coffee and tea break there will be a *knowledge quiz* based on the theory from the assignments. Finally, the *Dilemma Game* app (Version 3.2.1) is introduced and a dilemma game is played.

During this first session, you will also make pairs to work together on some of the assignments for the following sessions.