

Code of Conduct Applied Research for Higher Professional Education

Code of Conduct for the preparation and execution
of applied research in Higher Professional Education
in the Netherlands

Opinion of the Code of Conduct Commission
Applied Research in Higher Professional Education

[logo HBO council of universities of applied sciences]

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Preamble

Background to Code of Conduct

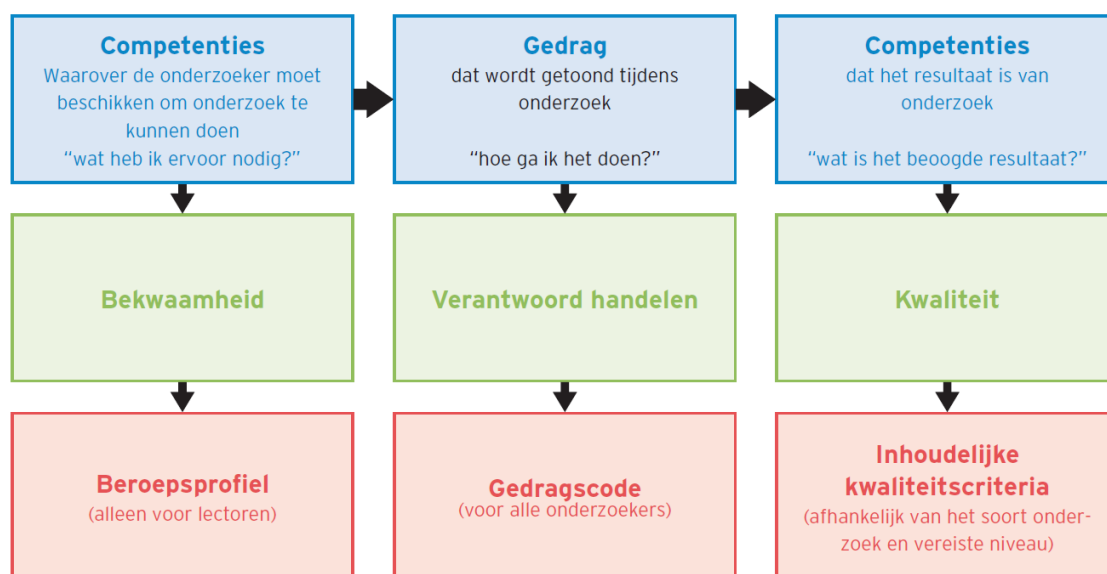
The Universities of Applied Sciences in the Netherlands conduct applied research, which is research rooted in professional practice and contributes to the improvement and innovation of that practice. This task is laid down in legislation (Article 1.3.2 of the *Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek* [Higher Education and Research Act]). Doing research at Universities of Applied Sciences is relatively new. It has been given a major boost by the introduction of professorships in 2001. Since then, a large number of initiatives have been taken to embed research well within these institutions and to improve and ensure quality of research. A code of conduct for applied research can make an important contribution to promoting research quality at universities of applied sciences. A code of conduct describes desired behaviour of a specific group of professionals in the performance of a particular task. This desired behaviour ultimately contributes to a higher quality of the end product.

Content of Code of Conduct

The code of conduct for applied research consists of five rules regarding responsible behaviour of staff and students whilst carrying out practical research in higher professional education in the Netherlands. The code describes the desired behaviour when executing the 'task' of doing research. The Code does not lay down what a high quality result of the research would be, but what accountable research - as activity - is and what this means for the conduct of the applied researcher.

Function of the code

Research in higher professional education in the Netherlands is developing rapidly. Because of the particular phase in which research in higher professional education currently takes place, the code of conduct is intended primarily as a development tool to help boost the quality of research. In this way, the code is linked to other ongoing initiatives to stimulate research quality in higher professional education, such as the design of a professional profile for professors, the establishing of substantive quality criteria for results of research, and the development of a healthy research organization with an inspiring research environment. The relationship between these three initiatives is shown in the following figure:



Een gezonde onderzoeksorganisatie met een inspirerend onderzoeksklimaat

Competences

That the researcher must have in order to carry out research

"What do I need for this?"

Behaviour

That is shown during research

"How am I going to do this?"

Competences

That is the result of research

"What is the desired result?"

Aptitude

Acting responsibly

Quality

Professional profile

(only for professors)

Code of Conduct

(for all researchers)

Substantive quality criteria

(depending on the type of research and required level)

A healthy research organization with an inspiring research environment

The professional profile describes the competences required for the position of professor. The Code of Conduct then describes what behaviour the researcher should aim for whilst conducting research. Substantive quality criteria demonstrate what the product of the research has to satisfy. All this is best done within a healthy research organization with an inspiring research environment.

To what extent the rules for behaviour work well in practice can be examined once higher professional education has gained experience in applying the Code of Conduct for applied research. Then it may be possible to consider making the Code binding and to create a system for enforcement and for dealing with complaints. The Commission believes that it is too early for this "strict" variant, but recommends that the Council for Higher Professional Education issue a statement that we in higher professional education perform research in the manner described in this Code. The Code is not optional.

Code of Conduct target group

This Code applies to the behaviour of employees and students whilst carrying out applied research in the context of higher professional education in the Netherlands. Employees include professors as well as teachers and other staff members. It should be borne in mind that students are still in training to become professional. It cannot be expected of students during the training that they are already able to fully adhere to the Code of Conduct, but that they do act according to the spirit of the Code. Teachers and professors are responsible for translating the Code into learning outcomes for students and they should enable students to act accordingly. They are also ultimately responsible for the conduct and safety of their students while doing research.

Code of Conduct structure

The Code comprises five general rules of conduct, and is supplemented by explanations providing concrete details for each step in the research process.

Code of Conduct principles

The Code of Conduct is based on the following principles:

- Researchers in higher professional education assume responsibility in respect of the professional field for which they develop knowledge, the people and matters they research and for society as a whole. They also have a responsibility as researchers to conduct research according to the methodological rules and the research and professional ethics and values that apply in the field.
- Their research has often consequences for the professional field for which they develop knowledge, for the people and matters they research and for society as a whole. Research should therefore take place in a responsible manner.
- Rules of conduct describe what responsible research conduct is. They are based on the values and standards for research set out in similar national and international codes as well as the principles of research that have been described in policy documents of the Higher Education Board over the course of the years.
- Rules of conduct are intended to contribute to the quality of research in higher professional education. The rules of conduct support the substantive reflection of everyone who performs research in higher professional education, and increase the transparency of the thoughts and actions of the individual researcher. In this way, how researchers take into consideration the profession for which they develop knowledge, the people and matters they research and society as a whole can be monitored. This helps to encourage confidence in the research amongst the parties concerned, and to increase quality.
- The 'comply or explain' applies to the Code. The five rules of conduct are generally applicable. These may be waived, provided that this is explicitly supported. In cases like these, no damage or harm may be caused to the subjects of the research in any way whatsoever. Researchers must account for the implementation of the five rules of conduct in the accountability part of their research report.

Implementing the Code of Conduct

There is a risk that the Code of Conduct remains a 'paper tiger'. The document entitled 'Accountability Commission Research Code of Conduct for Higher Professional Education' contains recommendations as to how this may be prevented.

Code of Conduct for Applied Research in Higher Professional Education

1. Researchers in higher professional education serve professional and societal interests.

They contribute to the profession and the relevant professional field and are committed to public interests. They focus on relevant themes and problems in professional practice and on creative, innovative and applicable solutions in practice. They contribute to knowledge and theory development, stimulate circulation of knowledge towards practice and education and strive to make results accessible according to the principles of 'Open Access'¹.

¹ Open Access (OA) to research results means that research results are available digitally, online, for free and free from most copyright restrictions.

2. Researchers in higher professional education are respectful.

They take into account the rights, interests, privacy, views, opinions, theories and methods of the parties involved and of fellow researchers. They follow the regulations and protocols that apply in their discipline of research performance. If research with people or animals poses any risk, the importance of the research must justify the taking of such risk. In such case, external experts will be consulted.

3. Researchers in higher professional education are careful.

They consider several scientific concepts and related forms of research, and the available research methods and methodological rules that apply to these, as well as the professional and research ethics and values that apply within the discipline. They make use of existing knowledge from practice and science. They report in an accurate, complete, precise and comprehensible manner. They take into consideration the desirability to preserve the data carefully and ensure the intellectual property rights pertaining to data, results and innovations are arranged properly.

4. Researchers in higher professional education have integrity.

They are critical with regards to the ideas and problem definitions followed in the practice, independent in their methodological choices, and honest about the sources they use. They are accountable for their behaviour while conducting research, autonomous in their analyses and impartial in their reporting.

5. Researchers in higher professional education justify their choices and behaviour.

They justify themselves regarding the relevance of the chosen theme, the choice of research design, the choice of method followed and the limitations thereof, the care taken in execution, the substantiation of the conclusions, the sources used, the implementation in practice and the effect on education.

Explanatory Notes to Code of Conduct

The five rules of behaviour are illustrated in the table below for each research step. The division into steps is not based on a specific model but is grafted onto formats that are common when doing research and are found in research handbooks.

Activity/Rule

1.
Serving professional and societal interests
2.
Being respectful
3.
Being careful
4.
Having integrity
5.
Justifying choices and behaviour

I focus on:

I take into account:

I take into consideration:

I am: I hold myself accountable towards others for:

a. Developing problem definition and research question

- 1a. Relevant topics and issues from the field.
- 2a. Different interests and perspectives that exist within the professional practice on this theme.
- 3a. The possible side effects of the research on the chosen problem definition/research question.
- 4a. Critical with respect to the views and problem definitions maintained in the practice.
- 5a. The relevance of the chosen theme, as well as the way the problem definition and research question has been established in interaction with the practice.

b. Making a plan of action

- 1b. A workable plan that can yield concrete results.
- 2b. The interests of the client, one's own institution and the research subjects.
- 3b. Available, usable, suitable and high-quality research methods in relation to the research questions.
- 4b. Independent in the choice of methods for research, and I ensure that the research question and the plan of action are not controlled by desired outcomes in line with the agenda of this or that commercial or political group.
- 5b. The choice of research design, research method, research subject, timing, feasibility and financing, the limitations of the research as well as the sponsor of the study and the relationship between me and the sponsor.

c. Exploring literature

- 1c. Documented knowledge from science and practice.
- 2c. Different perspectives that exist within the literature on this theme.
- 3c. Existing knowledge and research results that are available nationally and internationally on this theme, as well as available, documented practical knowledge.
- 4c. Honest about the sources I use.
- 5c. The search strategy and selection of sources used as well as the actual sources themselves.

d. Conducting research generally

- 1d. The research in and of professional practice in all its unpredictability and complexity.

2d. The interests of those involved, the influence that various interest groups may have on the performance of the research method, and the influence that I as researcher have on the research methods while conducting the research. I live by the regulations and protocols that apply for conducting research in my field. If the research poses any risk whatsoever on people or animals, then the need to conduct such research must justify that risk. In such case, external experts will be consulted, such as a medical-ethics assessment committee.

3d. Several scientific concepts and the forms of research related to these concepts, the methodological rules that apply to the research methods followed, as well as the methodological rules, the professional and research ethics and values that apply within the field.

4d. Accountable for my actions whilst performing research.

5d. The manner in which the research is conducted.

e. Collecting data

1e. Collecting the data as efficiently and effectively as possible.

2e. The privacy and interests of the respondents and stakeholders.

3e. The methodological rules for data collection that match the chosen research methodology, as well as the desirability to carefully preserve the data.

4e. Exercising caution by ensuring that the collected data is only used for research purposes.

5e. The way in which data is collected, and how various interests groups are involved in the data collection.

f. Data analysis and formulation of innovations, alternatives and solutions

1f. Developing creative, innovative and applicable solutions in practice.

2f. The insights that various methods of analysis can give.

3f. The methodological rules for data analysis that apply to the research method followed.

4f. Autonomous in the analysis and ensuring that this is not driven by desired outcomes in line with the agenda of this or that commercial or political group.

5f. The way in which data are analysed, as well as the way in which various interest groups are involved in the validation of data analysis.

g. Reporting results

1g. The practical usability and readability of the results, taking into account the knowledge level of the target group(s), as well as the contribution the results make to knowledge and theory development.

2g. The interests and privacy of those involved and their organisations, as well as other authors' copyright.

3g. That reporting should give an accurate picture that is complete, precise and comprehensible, whereby the research results are formulated in a precise manner.

4g. Impartial in my reporting whereby I do not omit research results selectively without proper argumentation, do not adjust formulations according to the desires of the stakeholders, and do not present conclusions that are not based on the data.

5g. The substantiation of the conclusions, in relation to the research question, as well as information that may contradict the conclusions.

h. Dissemination of the results, knowledge transfer and the effect on the professionalization of the staff

1h. Documented knowledge from science and practice.

2h. Making the research results accessible via Open Access.

3h. That research results must be carefully communicated, and that intellectual property rights of data, results and innovations must be arranged properly.

5h. The way in which the research results are implemented in professional practice.

i. Application of research in education

1i. The usefulness of the results for education.

2i. The level of quality of the teachers, students and the training's curriculum.

3i. That research results are translated well into education.

5i. The way in which the effect in education takes place.

Regel	1. Professionele en maatschappelijke belang dienen	2. Respectvol zijn	3. Zorgvuldig zijn	4. Integer zijn	5. Keuzes en gedrag verantwoorden
Activiteit	Ik richt mij op:	Ik houd rekening met:	Ik neem in overweging:	Ik ben:	Ik verantwoord mij over:
a. Ontwikkelen van probleemstelling en vraagstelling	1a. Relevante thema's en problemen uit de beroepspraktijk.	2a. Verschillende belangen en zienswijzen die binnen de professionele praktijk rond dit thema bestaan.	3a. De mogelijke neveneffecten van het onderzoek naar de gekozen probleemstelling/vraagstelling.	4a. Kritisch ten aanzien van de in de praktijk gehanteerde opvattingen en probleemdefinities.	5a. De relevantie van het gekozen thema, alsmede de wijze waarop de probleemstelling en vraagstelling in interactie met de praktijk tot stand is gekomen.
b. Maken Plan van Aanpak	1b. Een uitvoerbaar plan dat concreet resultaat kan opleveren.	2b. De belangen van de opdrachtgever, de eigen instelling en de onderzoeks-subjecten.	3b. Beschikbare, bruikbare, passende en kwalitatief hoogwaardige onderzoeksmethoden in relatie tot de vraagstelling.	4b. Onafhankelijk in de keuze van methoden voor het onderzoek en ik zorg dat de vraagstelling en het plan van aanpak niet gestuurd worden door gewenste uitkomsten conform de agenda van deze of gene commerciële of politieke groepering.	5b. De keuze van het onderzoeksontwerp, de onderzoeksmethode, de onderzoekssubjecten, de tijdsplanning, haalbaarheid en financiering, de beperkingen van het onderzoek alsmede de opdrachtgever van het onderzoek en de verhouding van mij tot de opdrachtgever.

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c. Verkennen van literatuur	1c. Gedocumenteerde kennis uit wetenschap en praktijk.	2c. Verschillende zienswijzen die binnen de literatuur rond dit thema bestaan.	3c. Bestaande kennis en onderzoeksresultaten die nationaal en internationaal over het thema beschikbaar zijn, alsmede beschikbare gedocumenteerde praktijkkennis.	4c. Eerlijk over de bronnen die ik gebruik.	5c. De zoekstrategie en selectie van gebruikte bronnen alsmede de gebruikte bronnen zelf.
d. Uitvoeren van onderzoek algemeen	1d. Het onderzoeken in en van de beroepspraktijk in al haar grilligheid en complexiteit.	2d. De belangen van de betrokkenen, de invloed die diverse belangengroepen tijdens het uitvoeren op de onderzoeksmethode kunnen hebben, en de invloed die ik als onderzoeker tijdens het uitvoeren van het onderzoek op de praktijk heb. Ik leef de regelgeving en protocollen na die in mijn vakgebied gelden voor het doen van onderzoek. Als onderzoek met mensen of dieren enig risico oplevert, moet het belang van het onderzoek het nemen van dat risico rechtvaardigen. In dat geval wordt externe deskundigen om advies gevraagd, zoals bijvoorbeeld een medisch-ethische toetsingscommissie.	3d. Meerdere wetenschapsopvattingen en daarmee samenhangende vormen van onderzoek, de methodologische regels die voor de gehanteerde onderzoeksmethoden gelden, alsook de methodologische regels, de onderzoeken beroepsethiek en de waarden die binnen het vakgebied gelden.	4d. Aanspreekbaar op mijn doen en laten tijdens het uitvoeren van het onderzoek.	5d. De manier waarop het onderzoek is uitgevoerd.

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Activiteit	Ik richt mij op:	Ik houd rekening met:	Ik neem in overweging:	Ik ben:	Ik verantwoord mij over:
e. Verzamelen van data	1e. Het zo efficiënt en effectief mogelijk verzamelen van de data.	2e. De privacy en belangen van respondenten en stakeholders.	3e. De methodologische regels voor dataverzameling passend bij de gehanteerde onderzoeksmethode, alsmede de wenselijkheid de data zorgvuldig te bewaren.	4e. Behoedzaam door ervoor te zorgen dat de verzamelde data alleen worden gebruikt voor onderzoeksdoeleinden.	5e. De wijze waarop data zijn verzameld, alsmede de wijze waarop diverse belangengroepen bij de dataverzameling betrokken zijn.
f. Analyseren van data en formuleren van innovaties, alternatieven en oplossingen.	1f. Het ontwikkelen van creatieve, innovatieve en toepasbare oplossingen voor de praktijk.	2f. De inzichten die verschillende analysemethodes kunnen opleveren.	3f. De methodologische regels voor dataanalyse passend bij de gehanteerde onderzoeksmethode.	4f. Autonoom in de analyse en zorg dat deze niet gestuurd wordt door gewenste uitkomsten conform de agenda van deze of gene commerciële of politieke groepering.	5f. De wijze waarop data zijn geanalyseerd, alsmede de wijze waarop de diverse belangengroepen bij het valideren van de data-analyse betrokken zijn.
g. Rapporteren van resultaten	1g. De praktische bruikbaarheid en leesbaarheid van de resultaten, rekening houdend met het kennisniveau van de doelgroep(en), alsmede de bijdrage van de resultaten aan kennis- en theorieontwikkeling.	2g. De belangen en de privacy van de betrokkenen en hun organisaties, alsmede de auteursrechten van andere auteurs.	3g. Dat de rapportage een juist beeld moet schetsen dat compleet, nauwkeurig en navolgbaar is, waarbij de onderzoeksresultaten nauwkeurig zijn geformuleerd.	4g. Onpartijdig in mijn rapportage waarbij ik geen onderzoeksresultaten selectief weglaat zonder deugdelijke argumentatie, geen formuleringen aanpas aan de wensen van de stakeholders, en geen conclusies presenter die niet zijn gebaseerd op de data.	5g. De onderbouwing van de conclusies, in relatie tot de vraagstelling, alsmede informatie die de conclusies kan tegen spreken.

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Activiteit	Ik richt mij op:	Ik houd rekening met:	Ik neem in overweging:	Ik ben:	Ik verantwoord mij over:
h. Dissemineren van resultaten, kennis valorisatie en de doorwerking in de professionalisering van het personeel	1h. Gedocumenteerde kennis uit wetenschap en praktijk.	2h. Het beschikbaar maken van onderzoekresultaten via Open Access.	3h. Dat onderzoeksresultaten zorgvuldig gecommuniceerd dienen te worden, en dat de intellectuele eigendomsrechten van data, resultaten, en innovaties goed geregeld dienen te zijn.		5h. De manier waarop de resultaten in de professionele praktijk worden geïmplementeerd.
i. Benutten van onderzoek in onderwijs	1i. De bruikbaarheid van de resultaten voor het onderwijs.	2i. Het kwaliteitsniveau van de docenten, studenten en het curriculum van de opleiding.	3i. Dat onderzoeksresultaten goed worden vertaald naar het onderwijs.		5i. De manier waarop de doorwerking in het onderwijs plaatsvindt.

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