

## **Quality Assurance Procedures in Research<sup>1</sup>**

These guidelines were finalised by the Vice-Chancellor on 16-06-2020 and take effect on the same date

Registration number HS 2021/28

 $<sup>^{\</sup>rm 1}$  This is a translation of the Swedish version (Riktlinjer för kvalitetsarbete inom forskning, registration number HS 2020/544). In the event of any discrepancy, the Swedish version of this document shall prevail.

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## 1 Introduction

The University of Skövde (the University) is active in its quality assurance procedures in research. The procedures form part of the University's quality system, which applies to all operations. The quality system is outlined in "Quality Policy for the University of Skövde" (the quality policy).

In terms of structure, there are three levels to the quality system (figure 1). Level 1 is the collective system, which is outlined in the quality policy. On level 2, the quality system is implemented in different parts of the operations: education, research, support and management services and university-wide management and governance. Specific guidelines apply to quality assurance procedures in these areas. Activities to ensure and develop quality are performed in each area (level 3).



This document outlines quality assurance procedures in research.

Figure 1: Structure of the quality assurance system at the University of Skövde

On a general level, the term quality is defined in the quality policy. Translated to the research area, quality is defined as all collective qualities of the research that provide its ability to satisfy various parties' explicit requirements or expectations, to a high enough degree. The to a high enough degree part means that the degree of goals and requirements being met can vary, as not all parts of research can be prioritised at the same time. All parts of research should, however, be of high quality. Very high quality, or excellence, is something that is strived for, as is clear from the development plan for the University of Skövde "Our Vision: 2017 - 2022" [Utvecklingsplan för Högskolan i Skövde 2017-2022].

## 2 Quality Assurance Procedures in Research

Quality assurance procedures in research cover all research that takes place at the University. The included activities are those that aim to contribute to quality assurance and development of research, education environments and collaboration. Quality assurance procedures in research are a concern for the whole University.

Quality assurance includes both proactive work with creating conditions for research of a very high quality, and follow-up of ongoing research through annual follow-up and six-year follow-up. The activities that are performed within the framework of quality assurance procedures are based on four focus areas, as per the below figure:



Figure 2: Four focus areas of quality assurance procedures in research at the University of Skövde

The four focus areas for quality assurance procedures in research are outlined below:

- Quality Assurance of Research Applications and Ongoing Projects
   This area includes support operations and infrastructure for research to provide good conditions for the development and renewal of research and research environments.
   The area also includes colleague operations such as peer reviews and learning from colleagues, thus contributing to quality assurance. Additionally, annual follow-up of research projects and processes that promote equality in the conditions and implementation of research is included.
- **Research Building the Research and Education Environment** The area includes activities that contribute to strengthening the connection between research and education, and the contribution of research to creating complete environments at the University. This also includes six-year follow-up of research quality.

- **Staff Recruitment, Career Paths, and Competence Development** This area includes processes for long-term competence supply, staff recruitment, and competence development. Furthermore, clear academic career paths with well-working career support for researchers at all stages of their career, regardless of their form of employment, are included.

 Research Ethical Questions, and the Responsibility for Societal Development Held by Research

The area includes support for researchers regarding the use of good research practice, and systematic follow-up of suspected cases of misconduct and other serious deviations from good research practice, with appropriate measures<sup>2</sup>. The area also includes systematic processes for promoting the benefits of research, in a broad sense, and processes for strengthening the quality and relevance of research through collaboration and mutual learning.

<sup>&</sup>lt;sup>2</sup> See the University's "Guidelines for Handling Suspected Misconduct in Research or Other Serious Deviations from Good Research Practice" [Riktlinjer för hantering av misstanke om oredlighet i forskning eller andra allvarliga avvikelser från god forskningssed]

At the University, research should take place in selected and excellent environments. The quality of the research shall be very high, and it should have a clear and strong connection to education at the University. Quality assurance procedures in research and quality assurance procedures in education do, therefore, have a close connection in issues concerning education's connection to research, and the connection of research to education.

Third-cycle education has a special relationship with quality assurance procedures in research. The University has, like other higher education institutions, chosen to place followup and quality assurance of third-cycle education within the framework of quality assurance procedures in education. The part of the education that consists of research, however, is included in quality assurance procedures in research, covering issues of publication, for instance. Competence supply is another link, as this aspect, put together with research career paths, should also relate to the need for supervisor competence for third-cycle education.

Quality assurance procedures in research shall contribute to increasing researchers' and research groups' opportunities to acquire external means, and increase the benefit and visibility of research taking place at the University. It also shows how research and collaboration are supported at the University, on an overarching management level.

#### 2.1 Conditions

The conditions for reaching high quality or very high quality in research are made up of the following parts:

# - Requirements and Goals for the Design, Implementation and Quality of Research

Some requirements can be found in the Higher Education Act and the Higher Education Ordinance, and in national and international documents for research standards and quality. Other requirements are locally formulated. The requirements constitute a foundation for the follow-up of research. Goals for the University's research are formulated in the University's development plan.

#### - Basic Conditions

Ensuring good basic conditions for research is the foundation for reaching high quality. Among them are financial resources, the competence of teaching staff (scientific/artistic/vocational) and other conditions for work performance, as well as infrastructure and officeholders that support research.

#### - Responsibilities

The division of responsibilities is regulated in the University's Rules of Procedure, the Vice-Chancellor's Delegation Order, and supplementary organisation and delegation documents. A description of the division of responsibilities for quality assurance procedures in education is provided in part 3.

#### - Standardised Processes and Routines

To ensure that activities that concern research are performed in accordance with the set requirements, standardised and documented processes, routines and schedules are needed. These also provide support for the operations.

#### 2.2 Improvement Cycles

The work with quality assurance and quality development of research takes place within the framework of improvement cycles. The University works according to a model of four clear

and connected phases, namely planning, implementation, follow-up and development (see figure 3). The improvement cycles always have operational development as their purpose.



The University's model of four clear and connected phases in the improvement cycle, namely planning, implementation, follow-up and development, is used in quality assurance procedures in research. The different phases are outlined below:

#### • Planning

In this phase, planning for the performance of research, such as research projects, development of the research environment, support operations and infrastructure for research, research communication, etc., is performed. An important starting point of the planning is what has come up in the preceding follow-up. Experiences and results from follow-up should be utilised in the shape of improvements of research and/or its conditions.

#### Implementation

In this phase, research and related processes are performed as planned. The implementation takes place according to set processes and routines, such as routines for publication and handling of research data.

#### • Follow-up

In the follow-up phase, research and its related processes are followed up in different ways, both in terms of results and implementation. Reflection concerning various aspects is included, such as whether the conditions were sufficient, whether the implementation took place in a way that way appropriate and efficient, etc. For follow-up of research projects and research environments, for instance, quality criteria that apply to certain state or private research funding bodies, national guidelines, or guidelines that have been developed locally, are used.

#### Development

In the development phase, it's decided which measures are to be taken, based on the follow-up and reflection that has taken place. It may mean that new directions for the research, new routines for support operations and infrastructure for the research are to be established, or that existing ones should be developed or phased out. Changes to conditions and modi operandi may also be needed. Planned measures are to be communicated to the relevant parties.

The development phase is followed by a new planning phase, see above.

Figure 3: The improvement cycle of the quality assurance system at the University of Skövde - use in research

Work in the improvement cycles often takes place in collaboration with the Vice-Chancellor, the Faculty board, School management, teachers/researchers (including officeholders with special academic tasks), support and management services, and doctoral students.

#### Improvement Cycles in Day-to-Day Work

Improvement cycles are also used in day-to-day work, i.e. in the work that forms part- or subprocesses of overarching research processes. Making improvement cycles visible on different levels, and in different units and offices, stimulates a culture of quality in the University's operations.

#### 2.3 Activities for Quality Assurance and Quality Development

Activities for quality assurance and quality development in research take place both annually and through follow-up that is performed every six years.

#### 2.3.1 Annual Follow-Up of Research Projects

The purpose of this internal follow-up activity is to summarise the status of ongoing research projects, and contribute to the definition of any needs to adjust projects' implementation. The follow-up, which applies to all research projects, shall contribute to the research of the projects reaching higher quality, increased connection to education, and increased benefit and visibility.

#### 2.3.2 Six-Year Follow-Up of Research Environments

The purpose of the activity is to show the research environments' and research groups' strengths and development opportunities in relation to research, collaborations and benefit, in a wide sense of the word. All research at the University (research environments with associated research groups and research only connected to education) is followed up from a national and international perspective, with support from external peer reviews. Certain parts of support and management services' work concerning infrastructure for research are included in the follow-up.

The follow-up is based on the four focus areas (see figure 2), and is to provide a foundation for ongoing development of the conditions and quality of research, and for operational planning and development. The goal is to identify factors and strategies that provide good conditions for research environments of a high quality, and to give a joint assessment of the quality of the research. Collaboration is one component of the follow-up.

## 3 Division of Responsibilities

The Board of Governors and the Vice-Chancellor have an overall responsibility for the University's quality system, including quality assurance procedures in research. The Vice-Chancellor is supported by a special Quality Council, which acts in an advisory capacity in issues concerning quality assurance procedures.

Below the Board of Governors and Vice-Chancellor, the Faculty board has an overall responsibility for quality assurance in education and research. Below that level, Heads of School and Heads of Division have responsibility for the quality assurance procedures in education and research that relate to the School's/division's area of responsibility. Under the Faculty board, Head of School and Head of Division, there are also specific officeholders for

quality assurance and quality development of education and research, within the framework of academic remits. One example of such officeholders are heads of research groups.

As per the above, the division of responsibilities for quality assurance procedures in research follows the structure and the content stated in t Rules of Procedure at the University of Skövde [Arbetsordning vid Högskolan i Skövde], the Vice-Chancellor's Delegation of Authority [Rektors delegationsordning], and supplementary organisation and delegation documents.

Responsibility for an area always includes responsibility for quality assurance procedures in that area. The principle is also that responsibility for the quality assurance procedures in an area also includes responsibility for follow-up of the quality assurance procedures that are performed. Responsibility for the whole quality system – which includes quality assurance procedures in research – lies with the Board of Governors and Vice-Chancellor.

There are specific policy documents for the activities stated in part 2.3 that outline the implementation of the activities and the responsibilities that apply.

## 4 Communication

Quality assurance procedures in research are to be characterised by clarity and transparency. The results of the quality assurance procedures, mainly results from research follow-up, should therefore be communicated and made available to relevant parties in and outside of the organisation in an appropriate way. How communication is to take place is stated in the specific policy documents outlining the activities for quality assurance and quality development for research (see part 2.3).

## 5 Previous Quality Assurance Procedures in Research

The University of Skövde has had quality assurance procedures for its research for a long time. Research and education environment INFINIT (innovation-driven research in industry collaboration with support from IT), which is supported by the Knowledge Foundation, has a well-developed quality system. The system includes assessment of project applications and follow-up of ongoing research in the environment's projects. The projects are assessed based on strategic importance for the research and education environment, scientific quality, and collaboration aspects. Experiences from quality assurance procedures in INFINIT have contributed to the development of quality assurance procedures in parts of the University's research that aren't included in the environment too.

In 2013, a large-scale follow-up project of all research at the University was performed. The project, named ARC13 (Assessment of Research and Collaboration 2013) was an evaluation of the University's research and collaboration with external parties in research, performed by international expert panels.

## 6 Taking Effect

These guidelines take effect on 16-06-2020 and replace Guidelines for Quality Assurance Procedures in Research [Riktlinjer för kvalitetsarbete inom forskning] (registration number HS 2019/988).