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QM Report

First Report on the
Quality Management
System of the University
of Siegen

CONTENTS

IMPRINT

FOREWORD

Dear colleagues, students and members of the university,

At the University of Siegen, quality is understood to be the specific relationship between the requirements and expectations of academia and society, as well as the standards we place on our actions in the area of research and teaching. Quality evolves within precisely this interplay between different often conflicting elements and is certainly not something that can be defined externally. We understand quality to be a process of discussion and reflection that takes into account externally imposed requirements and is continuously improved with a focus on contributing to the proactive shaping of academia and society. Accordingly, it is necessary to constantly reassess our understanding of what constitutes quality in our performance and our processes. And this requires us to question what currently exists and provide new impetus.

This approach places the focus, on the one hand, on continuously referencing externally imposed requirements in the areas of research, teaching and learning and, on the other hand, on a continual and self-critical approach to evaluating our own performance. In concrete terms, this means taking into account guidelines issued by the Standing Conference of the Ministers of Education and Cultural Affairs and the Accreditation Council, observing the needs of the job market and assessing evaluation processes as the basis for discussing the quality of research, teaching and learning. It is only within and through this continuous balancing act that our genuine and process-oriented understanding of quality is formed, which we develop and continuously improve against the background of the profile of the University of Siegen and the guiding principle of "Creating a Humane Future". The aim being to guarantee a high quality of teaching and learning, as well as research work.

To do this, the required framework conditions need to be created, discussed in the responsible committees, implemented on the basis of a common understanding and kept in motion in the form of a continuous cycle. These discussions and loops do not only serve to constantly guarantee a high level of quality but also to provide impetus for change and new developments.

Overall, a customised quality management system has been developed in this way at the University of Siegen that is comprehensively described for the first time in this report on quality development – with the goal of delivering an overview of the tools and processes used for quality assurance, as well as providing a first interim evaluation.

I hope you enjoy looking through this report and expressly request your feedback – not just about this report but also please on all aspects of quality management at our university.

Yours sincerely,

Holger Burckhart
Rector

1. INTRODUCTION

The University of Siegen has been developing a holistic quality management system since 2012. This work is based on broad experience, such as in the form of departmental evaluations, participation in audits and the regular use of surveys. The goal of establishing a holistic yet also lean system was formulated by the Rectorate and prepared by a working group. The function of this newly established system is to consistently orientate the tools to those goals formulated within the different performance areas at the university. Accordingly, the working group began to formulate goals at an early stage and these flowed into the definitions of quality at the university that were discussed in the Senate and the Rectorate. Although quality goals were also formulated for the performance areas of research, service and knowledge transfer, the contents of this report only deal with the development of quality in the area of teaching and learning and thus only the goals for this performance area are covered here.

Despite its holistic approach, the quality management (QM) system focussed on the area of teaching in the beginning. The faculties have been intensively involved in the development of the QMS since 2013. Decentralised systems for developing quality in teaching were successively established in the faculties and the Centre for Teaching and Educational Research (ZLB). These activities were supported in each case by the Q-Coordinators. At a university level, the Teaching Steering Group, the QM Steering Committee and the Quality Centre Siegen (QZS) were successively established from the summer of 2013 until April 2014. This report published by the QZS describes, on the one hand, the activities in the years 2013 to 2015 and, on the other hand, the QMS in its current form. Alongside the establishment of the structures at a faculty and university level between 2012 and 2013, a key aspect of the activities was preparing for system accreditation from 2014 onwards. Following a subsequent application, this accreditation was received by the University of Siegen in September 2015. At the same time, the University of Siegen participated in the call for proposals by the Accreditation Council for the trial clause. In early 2016, the Accreditation Council accepted a proposal formulated by the University of Siegen together with the University of Bremen and six other European Universities to develop a "European Quality Audit" and approval was given for the University of Siegen to complete a trial. According to statements issued by the Accreditation Council, the University of Siegen thus has the same rights as a system accredited university for the period of the trial. The work to prepare the applications for system accreditation and the trial clause were the defining features of the activities in 2015.

This report initially summarises the goals for the area of teaching. The second section describes the QMS. Finally, the committee work and the tools employed will be described to ultimately provide a more detailed overview of the developments as part of the trial clause. In contrast to reports published by other universities, this report will dispense with extensive statistics because these are available in the regular reports on the rectorate's activities issued by the Rectorate[1] and via the figures and data published by the University of Siegen[2].

[1] http://www.uni-siegen.de/start/die_universitaet/ueber_uns/hochschulentwicklung/?lang=de (09/09/2016).

[2] http://www.uni-siegen.de/start/die_universitaet/ueber_uns/daten/?lang=de (09/09/2016).

2.

GOALS FOR THE AREA OF TEACHING AND LEARNING

As already described in the University Development Plan, the declared goal of the University of Siegen is the targeted advancement of students and young academic talent.[3] Graduates should be prepared for future occupational challenges both inside and outside the university by providing them with specialist knowledge, promoting holistic personal growth and developing a pronounced capacity for reflection and the ability to innovate. In this process, the overriding goal must be to enable individual educational biographies and careers. All members of the university are responsible for implementing these goals.

The quality of the teaching and learning is measured based on the achievement of these goals. At the same time, this also means that these goals can only be achieved if the quality of the teaching and learning – in view of existing and future challenges – is guaranteed and continuously developed. The goals for developing quality in teaching and learning at the University of Siegen include:

[3] See here the University Development Plan for the University of Siegen, available online at: https://www.uni-siegen.de/start/ die_universitaet/ueber_uns/hochschulentwicklung/hochschulentwicklungsplan_web.pdf (20/06/2016).

The unity of research and teaching

Maintaining the unity of research and teaching. Research and teaching form an inseparable unit at the University of Siegen. On the one hand, results and processes from research constantly flow into academic teaching, while on the other hand, research receives new impetus from academic discussion with students. The aim is to combine research and teaching more closely by using concepts such as problem-based, case-specific, project-oriented and research-based learning.

Flexible study programmes

Every study programme aims to provide a predefined and yet specific qualification in each individual case for graduates. These programmes are described in detail by the relevant teaching units and faculties; their appropriateness and the methods used to implement them are regularly examined. The study programmes are, on the one hand, consistent with academic standards, the educational profile and current and future conditions on the job market and allow, on the other hand, free scope for individual educational trajectories. This includes the fact that interdisciplinary study should not only be enabled through the organisational framework but also promoted in a targeted manner.

Life-long learning

Life-long learning – which is increasingly relevant not only due to developments on the job market but also the professionalisation and academisation of the working environment – is a central task of the University of Siegen. The University of Siegen thus offers a suitable range of study to make this possible.

Effective organisation of teaching & diverse forms of teaching

The organisation of teaching productively incorporates various interests and talents. It enables individual learning and various paths for completing a course of study. It takes account of an increasing level of diversity, which is also reflected in the composition of students, and contains suitable measures for achieving it. Therefore, teaching and learning should be organised to guarantee a coherent range of courses that can be studied within a defined period of time.

Good teaching requires a diverse range of teaching formats, whereby the further development of teaching formats and concepts is expected and also encouraged amongst lecturers in a targeted manner e.g. with further education and training measures.

Internationally oriented study programmes

An international approach helps to advance academic and cultural discourse and makes an important contribution to the acquisition of personal skills and experience. The Rectorate and the faculties ensure that internationally oriented study programmes are offered and create corresponding framework conditions for implementing and further developing the goals of internationalisation.

Academic thought and working practices

A fundamental principle for study programmes at the University of Siegen is the use of academic thought and working practices. The ability to work academically also qualifies students for taking on challenging and responsible jobs outside of the university sector.

Promoting personal growth

Holistic personal growth is the basis for responsible and critically reflective action in all sociocultural and technology-based areas of society. Accordingly, teaching and learning are not only organised to provide specialist and methodological skills but also to promote personal competence.

Cooperative interaction

Direct contact and close collaboration between teachers and students is important for developing trust-based cooperation. The University of Siegen provides the required framework conditions for this to happen.

3.
STRUCTURE OF THE QM SYSTEM

Basic principles and procedures

The Quality Management System (QMS) at the University of Siegen works according to the following basic principles:
» Quality must be developed above all in the faculties and the ZLB themselves.
» Internal competence is utilised in the sense of an advisory approach.
» A problem-oriented approach avoids time-consuming and resource-intensive processes.

Standing Senate Commissions were established for central areas of action in which important stakeholders are advised on existing problem areas and any need for action. These commissions are responsible for quality assurance and development at the University of Siegen in their respective fields.

The QM Steering Committee (LAQ) is responsible for any action that is required on a cross-departmental basis. As well as focussing on any particularly relevant need for action, this steering committee is responsible for ensuring the structures of the entire QM system at the university.

In addition, there are also QM structures in the faculties and the ZLB, as well as in Central Administration. All QM processes are supported in an operational sense by the QZS.

Control loops

The QMS at the University of Siegen envisages two control loops that not only work separately but also in combination with one another. Problem-oriented quality assurance is carried out via an audit (problem audit). Standard-based quality assurance is based on statutory guidelines and the quality standards issued by the Rectorate, which are then supplemented by further standards in the faculties and the ZLB. Reporting ensures the necessary flow of information between the different levels of responsibility. Alongside data and information sourced from the QM tools, discussions, minutes of meetings and controlling data are also communicated.

The central axis along which both the control measures and also the reporting for standard-based quality assurance run in a bidirectional fashion is provided by the tools of course evaluations, annual appraisal meetings and processes for internal certification according to which new study programmes are examined when they are introduced and existing study programmes are appraised as part of the review process (see Fig. 3). This structure ensures that the decentralised QMS in the faculties and ZLB are linked from an operational perspective with the central QMS to form a complete system.

The Rectorate responds to the results of the problem-oriented and standard-based quality assurance processes during six-monthly meetings and target and performance agreements with the faculties, as well as in its internal certification decisions to conclude the review processes. Six-monthly meetings, target and performance agreements and the review processes are thus central QM tools that provide vital support to both the Rectorate and also the Dean's Offices in their thematic and strategic control measures.

Level	Tool	Responsibility
University	Review	Rectorate Senate Commission for Teaching and learning
Faculty	Target/performance agreements Six-monthly meetings between Rectorate and Dean's Office	Faculty Board/Dean's Office QM Committee
Study programme	Annual Appraisal meetings	Vice-Dean for Teaching Person responsible for study programme
Course	Course evaluations	Lecturers Students

Figure 1: Quality assurance tools in the area of teaching and learning based on the four levels

Standard-based quality assurance

Standard-based quality assurance ensures the quality of individual study programmes through to courses. The various levels are systematically linked as follows:

Completing the course evaluations is the responsibility of the faculties. The lecturers have the main responsibility here. They involve the students in the course evaluations and use course surveys as the main tool for carrying out this work. Teachers and students together attempt to identify the strengths and weakness of a course and develop improvements. The lecturers are free to use other methods for evaluating the courses. The University Didactics Department at the University of Siegen offers training courses and coaching sessions. In addition, corresponding courses and services are available to teachers in the State of North Rhine Westphalia (University Didactics Certificate NRW) and throughout Germany.

The Rectorate stipulates that an obligatory annual appraisal meeting must be regularly completed for the study programmes. It is the most important decentralised tool for quality assurance and control within the study programmes. The annual appraisal meetings are carried out independently in the relevant faculty. The person responsible for the study programme is responsible for organising, calling and carrying out the annual appraisal meeting, whereby they can receive support from the Q-Coordinator in the faculty and in important cases from the Dean of Studies. Alongside these officials, teachers and students also take part in the appraisal meetings. The faculties utilise various structures for carrying out the annual appraisal meetings such as the Day of Teaching, a retreat or a departmental, group or institute meeting. The annual appraisal meetings have been organised in the faculties since 2015 and all study programmes are due to have completed an annual appraisal meeting by the end of 2016.

The goal of the annual appraisal meeting is to analyse the strengths and weaknesses of the study programme and to keep track of already defined follow-up measures. In addition, strategies for further developing the study programmes are developed. In particular, the following additional quality assurance tools are integrated into the process:
- » A report from the person responsible for the study programme
- » A report from the students
- » Practical experiences with the organisation and completion of the study programmes
- » Data and information from the course assessments
- » Data from the course survey (faculty-specific)
- » Data from the student survey (full survey of all students twice a year)
- » Data from the graduate survey (cooperation project with INCHER Kassel)
- » Data from the lecturer survey (full survey of all lecturers twice a year)
- » Targets set by the Rectorate and the faculties
- » Targets from the target and performance agreements
- » Targets from the six-monthly meetings between the Dean's Offices and the Rectorate
- » Key figures

Those people responsible for the study programmes introduce follow-up measures and are responsible for realising them in the sense of a PDCA cycle (control model: Plan-Do-Check-Act). In principle, any need for action is handled by the relevant department themselves. If this is not possible in an appropriate form, a solution is then sought in the QM Committee at a faculty level. If it is still not possible to find any proposed solution, the Dean of Studies and the Senate Commission for Teaching and Learning (KSL) are then involved in the process. This process documents the systematic character of the QM approach.

Department	Date
Chemistry/Biology	17/06/2015 - 02/07/2015
Mathematics	07/09/2015
Construction engineering	15/07/2015 - 18/11/2015
Mechanical engineering	17/02/2016
Electrical technology	20/04/2016
Computer sciences	27/04/2016

Figure 2: Overview of the annual appraisal meetings in Faculty IV

As a measure within the central QM system, a review process is carried out at six year intervals for every study programme offered by the University of Siegen to analyse their strengths and weaknesses and they are subjected to an external audit. The review is the responsibility of the Rectorate, who also makes the decision about certification. The Dean's Offices are responsible for the implementation of any instructions or recommendations issued, in cooperation with the ZLB when it comes to teaching. Students are involved in the process both in the faculties and also in the ZLB and the KSL.

The processes were trialled in the study programmes offered by the Chemistry Department and in the Bachelors degree "Social Sciences in Europe" in 2015. A review timetable has now been developed. This envisages that the teacher training programmes will be subject to a review in 2017 and the study programmes in the faculties will be reviewed in 2018.
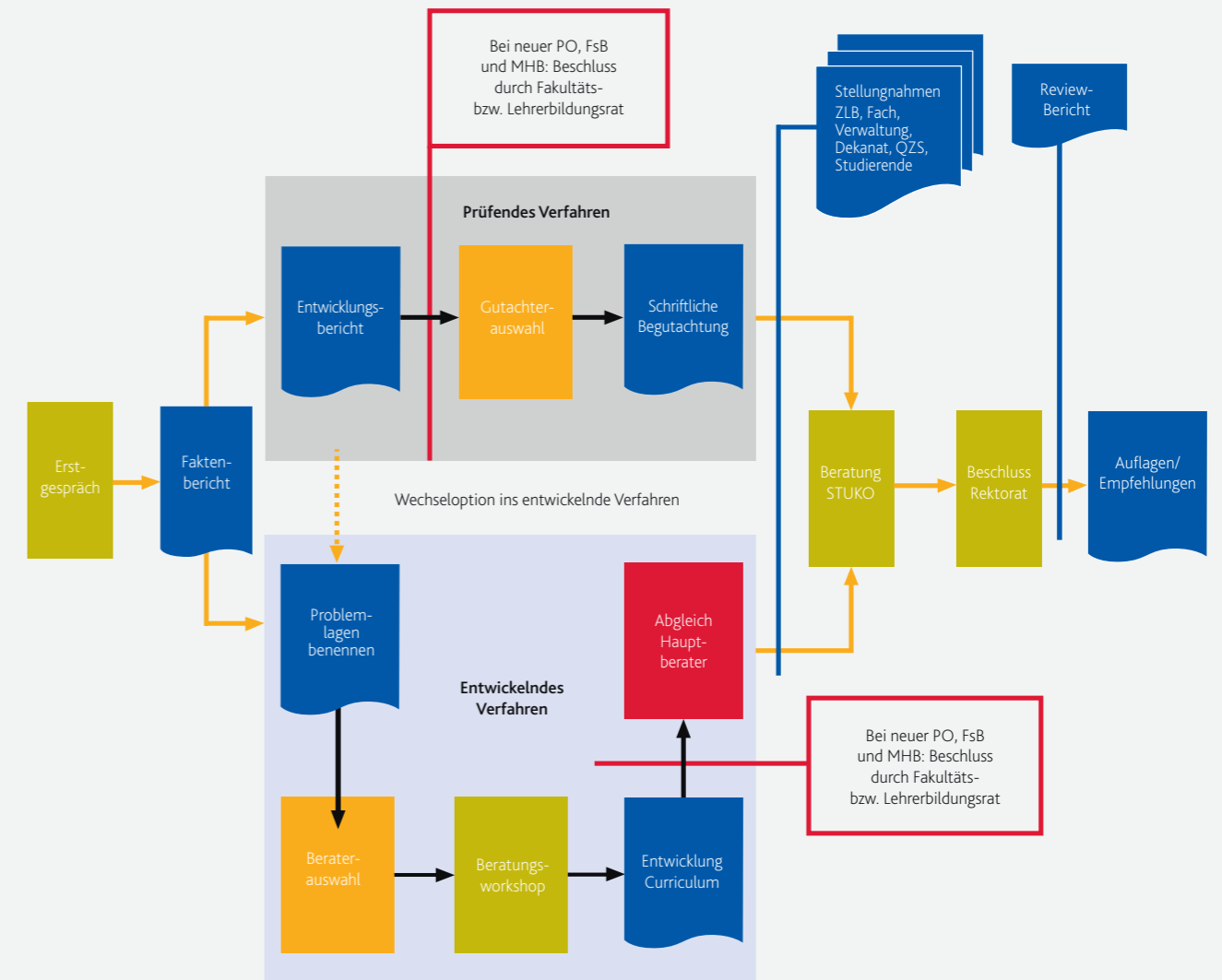

Figure 3: Overview of the review process – structure and process

The review process has two variants: 1) a purely test-based process and 2) a developmental process. The completion of the review is managed by the QZS. Both variants start with an initial interview. The QZS then conducts interviews with students who are able to evaluate the study programme in the now elapsed certification period. The results of the interviews are documented and together with a factual report from the Administration Department act as the basis for the rest of the process.

The factual report contains, amongst other things, the following qualitative and quantitative information, as well as data on the study programme:

- » Study progress analyses
- » Utilisation calculations
- » Other key figures
- » Data and information from the course assessments
- » Data and information from the annual appraisal meetings
- » Data from the course survey (faculty-specific)
- » Data from the student survey (full survey of all students twice a year)
- » Data from the graduate survey (cooperation project with INCHER Kassel)
- » Data from the lecturer survey (full survey of all lecturers twice a year)
- » Targets set by the Rectorate and the faculties
- » Targets from the target and performance agreements
- » Targets from the six-monthly meetings between the Dean's Offices and the Rectorate

In the test-based process, the department creates a strategy report that describes any desired changes and illustrates the perspectives for further developing the study programme. Changes are documented in module guides and examination regulations. The strategy report and the planned changes to the examination regulations and the curriculum are submitted to students and the Dean's Office for their comments. In coordination with the person responsible for the relevant study programme, the QZS also organises:

- » A capacity review of resources by the University Planning/Controlling Department
- » A legal review by the Legal Department, examining in particular the guidelines issued by the Standing Conference of the Ministers of Education and Cultural Affairs and the guidelines issued by the Accreditation Council
- » A legal review that guarantees that the guidelines issued by the Accreditation Council for the accreditation of teacher training programmes are fulfilled by the teacher training programmes
- » In the case of teacher training programmes, a review by the Centre for Teaching and Educational Research
- » A review of the internal and external quality standards by the QZS
- » Commissioning of auditors to assess the further development of the content of the study programme in the following areas: academic feasibility, curriculum, specialist knowledge, occupational field(s), student's perspectives

The selection and also commissioning of external auditors is the responsibility of the QZS. The QZS is accountable to the Rectorate for the selection of the auditors.

The QZS makes the results of the tests, the statement and the audit available to the department. The department is given the opportunity to derive follow-up measures, whereby a decentralised and subsidiary approach is emphasised. Finally, a meeting is held between the department, Dean's Office, Rectorate, QZS and the Administration Department in which any need for action is indicated and defined.

In coordination with the Legal Department, the QZS uses this as the basis for formulating a proposal document for the Rectorate that is submitted to the Senate Commission for Teaching and Learning for evaluation. Either the KSL recommends that the document is approved by the Rectorate or it requests changes from the QZS. In addition, the KSL is informed regularly about current processes and can request that it is kept informed about the status of individual processes.

The Rectorate makes a decision about certification on the basis of the examined proposal document. Any follow-up measures that are considered necessary are expressed in the form of instructions and recommendations. The time period allowed for the implementation of these instructions and recommendations is generally six to nine months. In urgent cases, the Rectorate can specify a shorter time period. The QZS checks that the instructions and recommendations have been implemented and reports on competed processes in a regularly published QM Report. The department is responsible for implementing the instructions and recommendations.

The developmental process differs from the process described above to the extent that the stakeholders are asked to identify any need for change – which then becomes the subject of a corresponding workshop. The aim of the workshop is for those involved to develop proposed solutions with the aid of external advice. On the basis of these recommendations, the department adapts the curriculum and, following a comparison with the recommendations from the workshop, it is certified by the Rectorate after receiving advice from the Senate Commission for Teaching and Learning. This certification can also include instructions and recommendations. The certification includes comments from the Legal Department about resources and from the QZS. In the case of teacher training programmes, the certification includes comments from the ZLB and the Ministry of Education.

Problem-oriented quality assurance

The problem audit control loop has not only been established for the area of teaching and learning but also for the whole university. The problem audit comprises four fundamental steps:

- » Identification of the problem
- » Evaluation of the problem
- » Allocation of the problem
- » Creation of work plans

Problems or any need for action identified in the university institutions can be reported to all QM committees that have been established in the faculties and the ZLB or to the Quality Centre Siegen (identification of the problem). Problem areas can be reported using an online form on the QZS website or via direct contact. In particular, students have a diverse range of options for reporting problems:

- » Directly via the QZS
- » Via the AStA
- » Via the student representatives
- » Via the student representative on the QM committees in the faculties and departments
- » Via the student representative on the Senate Commission for Teaching and Learning and the QM Steering Committee
- » Via the person responsible for the study programme
- » Via the Academic Advisers
- » Via the Dean of Studies

The QZS assumes the "triage" function for those problems reported to it and prepares – if necessary – information material to assess the criticised problem area (evaluation of the problem). In the case of already available and defined solutions, the problem is passed on to the appropriate university institution (e.g. Administration Department, faculties). If no solution is currently available, the problem is passed on to the appropriate committee – meaning the KSL or the LAQ, the QM committees in the faculties or the ZLB. The allocation of the problem can also run in the opposite direction if members of the QM committees in the faculties and the ZLB cannot find any solutions themselves for problems that have been identified. In this case, the problem is passed on to the KSL or the LAQ via the QZS (allocation of the problem).

The QZS provides support for the development of appropriate work plans (creation of work plans) and ensures prompt handling and the practicality and sustainability of the implemented measures. These steps are carried out according to the principle of the PDCA cycle until a satisfactory solution has been developed.

In the problem audit control loop, reporting is carried out based on the provision of the minutes from the university-wide committees to the Dean's Office and through inspection of the minutes from the QM committees in the faculties by the QZS. The purpose of this approach is to create a central storage location in database form for the long-term documentation of solutions for different problems.

Stakeholders/committees

Responsibility for controlling in teaching and learning

The University of Siegen has established a QMS for the area of teaching and learning whose influence stretches down to the level of study programmes and courses. Controlling functions are distributed across four levels to the relevant person responsible:

Controlling level	Person responsible
University Management	Rector, Prorector for Teaching and Learning
Faculty	Dean, Dean of Studies
Study programme	Person responsible for study programme
Course	Lecturer

Figure 4: Overview of control levels and control responsibilities

The levels are thus organised in a hierarchical manner, meaning that the subordinate levels are accountable and report to the relevant level above them. The Rector and Prorector for Teaching and Learning have the main controlling responsibility for the QMS.

Quality standards for teaching and learning have been produced for the different levels that are constantly discussed and developed (guiding principles for teaching, goals of the faculty, profile of the study programme). The faculties, those responsible for the study programmes and the lecturers all also define their own relevant quality standards. Quality standards are understood here to mean quality targets and the use of certain tools for the purposes of quality assurance. In order to implement the quality guidelines, PDCA cycles are established at all levels that are linked with one another via reporting and which guarantee the systematic character.

Description of the committees

There are committees at all levels via which the control loops for the problem-oriented quality assurance and the standard-based quality assurance operate. The members of these committees are responsible for ensuring that the work of the committees is oriented to a PDCA cycle and that the results of this work satisfy the criteria of practicality and sustainability (see Fig. 4).

QM Steering Committee (LAQ)

The QM Steering Committee is the highest QM committee and has been established as a Rectorate Commission so that it can remain as independent as possible. It is not a decision-making committee but rather an advisory one and develops recommendations for the Rectorate. It generally meets once a semester but can meet more frequently where required. Its functions include:

- » Updating the university's guiding principles, quality goals and quality strategies
- » Accompanying the development of recommendations for action for overarching problems in the area of teaching and learning
- » Developing recommended solutions relating to those problems where a successful solution could not be developed in the Senate Commission for Teaching and Learning (process assurance)
- » Ensuring the structure of the QMS in the faculties
- » Ensuring the structure of the QMS in the ZLB
- » Quality assurance in the sense of a process of self-reflection about the internal structures, processes and results
- » Introducing a mixed audit for the overall QMS at the University of Siegen

The members of the QM Steering Committee are:

- » Rector (Deputy: Prorector for Strategic Development of the University) (1) advisory
- » Prorector for Strategic Development of the University (1) advisory
- » Chancellor (1) advisory
- » Dean Faculty I (1) advisory
- » Dean Faculty II (1) advisory
- » Dean Faculty III (1) advisory
- » Dean Faculty IV (1) advisory
- » Director of the ZLB (1) advisory
- » Representative from the professorial staff (4) entitled to vote
- » Representative from the non-professorial teaching staff (1) entitled to vote
- » Representative from the students (1) entitled to vote
- » Chairperson of the AStA (1) entitled to vote
- » QZS (Chairperson) (1) advisory
- » QZS (Member) (1) agenda, minutes
- » External advisers advisory
- » Parties invited for specific subjects advisory

The chairman is the Rector. The members should meet the following requirement profile:

- » Prominent personality
- » Complete overview of the university
- » High level of acceptance in the university
- » Assertiveness
- » Willingness and flexibility to familiarise themselves with various subject matter

The QM Steering Committee currently works in accordance with the rules of procedure found in the annex. Rules are currently being produced.

Senate Commission for Teaching and Learning (formerly the Teaching Steering Group (SGL))

The Teaching Steering Group previously worked on need for action in the area of teaching and learning as an advisory and recommendatory body. It existed as a specialist committee from June 2013 until December 2015 and was merged into the Senate Commission for Teaching and Life-Long Learning in January 2016. It generally meets once a month but can meet more frequently where required.

Its functions include:

» Updating, editing and organising the hierarchical structure of the catalogue of goals and tasks for "teaching and learning" for the whole university, the faculties and teacher training
» Implementing the developed recommendations for action/solutions
» Ensuring sustainability in the implementation of the recommendations for action/solutions
» In the case of unsolvable goal and task issues, involving the QM Steering Committee and developing process assurance
» Introducing measures to ensure its own structures via the QM Steering Committee (possibly also with external expertise)
» Quality assurance in the sense of a process of self-reflection about the internal structures, processes and results of the steering group

Since the merger of the Teaching Steering Group into the corresponding Senate commission, the joint commission has been responsible for the tasks performed by both the former steering group and also those of the Senate commission. The members of the commission are:

» Representative from the group of university lecturers	(3)	entitled to vote
» Representative from the academic staff	(2)	entitled to vote
» Representative from the technical and administrative staff	(1)	entitled to vote
» Representative from the students	(3)	entitled to vote
» Prorector for Teaching and Learning	(1)	advisory
» Dean of Studies Faculty I	(1)	advisory
» Dean of Studies Faculty II	(1)	advisory
» Dean of Studies Faculty III	(1)	advisory
» Dean of Studies Faculty IV	(1)	advisory
» Director of the Centre for Teaching and Educational Research	(1)	advisory

Article 14 of the rules of procedure for the Senate states that "deviating opinions from advisory members […] must be recorded in the minutes on their request and passed on to other committees dealing with the matter." As the committee is only advisory when it comes to issues of quality management, the vote of the Dean of Studies, the Prorector and the Director of the ZLB must be specially noted in the minutes.

Quality Centre Siegen (QZS)

In order to guarantee that the QZS is as independent as possible within the university, it has been established as a department reporting directly to the Rectorate.

The QZS is responsible for the entire operational and administrative requirements of the QMS. It also relieves the workload on the faculties, especially the Dean's Office, who due to the work of the centre should be faced with the lowest possible operational and administrative workload relating to the QMS.

The specific functions of the QZS are:

» Accompanying the problem audits
» Operational and administrative support for the QM Steering Committee
» Operational and administrative support for the former Teaching Steering Group
» Coordination of the certification of the study programmes after system accreditation has been acquired
» Preparing the selection of auditors for the "Peer Review" process
» Cooperation with the QM Coordinators in the faculties and the ZLB
» Further development of the QM tools
» Further development of the modelled processes
» Internal training at the university on the modelled processes
» Internal and external reporting

4. Committee work

The following meetings were held in the reporting period:

Steering Committee

Meeting	Date	Subjects
1	18/06/2014	Presentation of the committee; rules of procedure for the steering committee; overview of the committee's future areas of activity
2	20/10/2014	Discussion with external experts about the QM system in Siegen
3	28/01/2015	Rules of procedure; discussion about the guiding principles and the quality definitions based on the STEP paper
4	17/11/2015	QM regulation (evaluation regulation); auditor spectrum and profile as part of the internal certification

Teaching Steering Group

Meeting	Date	Subjects
1	02/07/2013	Work of the steering group; introductory lecture on the QM system at the university; identification of problems in the faculties; rules of procedure; meeting dates and further action
2	16/07/2013	Rules of procedure for the steering group; discussion, agreement and hierarchical structuring of the goal perspectives for the faculties; prioritisation of the problems from the 1st meeting; presentation of the QM structures in Faculties I and III: rules for participation in courses
3	05/09/2013	Discussion about the rules of procedure for the steering group; presentation of the process of system accreditation
4	30/10/2013	Goals for the Teaching Steering Group; presentation of the available tools by Department 2; work plan for system accreditation; election of a representative
5	18/11/2013	Work plan for "The Internal University Accreditation Process after Receiving System Accreditation"; modelling of the process for managing study programmes in the event of changes to the examination regulations and the module guides
6	09/12/2013	Quality assurance for teacher training programmes; revising the QM tools, especially suspending them until their revision
7	29/01/2014	System accreditation: invitation of possible agencies to present themselves; report on the results of the Student Survey 2013; progress of the revision of the QM tools
8	18/02/2014	Progress in selecting an agency for system accreditation; report on the results of the Student Survey 2013 and progress of the revision of the QM tools; forced removal of students from the university register after failing three times
9	26/03/2014	Development of a form for setting up study programmes; feedback from discussions with the agencies; cooperation between the committees in the self-accreditation process
10	30/04/2014	Criteria for selecting an accreditation agency for system accreditation; revision of the QM tools, here: defining the surveys to be used in future
11	28/05/2014	Discussion on the central range of study programmes offered at the University of Siegen; selection of auditors as part of the self-accreditation process; setting up a new study programme – application structure
12	23/06/2014	Discussion on modelling the process for managing study programmes; developing a recommended review process; handling film and photographs in courses
13	14/07/2014	Adopting the process for managing study programmes; auditing and naming possible areas for action relating to the processes; electronic examinations, time period for documenting courses in the LSF
14	24/09/2014	Auditing, here: composition of the working groups and defining the subject areas; electronic examinations
15	26/11/2014	Status of the system accreditation process; rules for the accreditation of study programmes in the transition period; self-accreditation process for the BA and MA "Social Sciences in Europe" degrees
16	18/12/2014	Printing the German names for study programmes on English-language graduation documents; design of the student and lecture surveys; brainstorming for the LINUS follow-up application on the teaching quality package
17	28/01/2015	Continuation of discussion on LINUS; use of film and photographs in courses
18	25/02/2015	Study structure at the University of Siegen: Presentation of recommendations from the ZLB and Faculty I
19	25/03/2015	Process changes for examination regulations and module guides; presentation of the results of the graduate survey
20	30/04/2015	Clarification of the QM Committee for the Study Council in the faculties; review process for teacher training programmes; framework examination regulations
21	24/06/2015	Independent teaching of young academic talent; change to the process for internal accreditation; equipment renewable programme, here: CIP Pool
22	30/09/2015	Annual appraisal meetings in the faculties; advice on "credit points for social engagement"
23	28/10/2015	Time schedule for system accreditation; revision of the internal accreditation process
24	19/01/2016	Study structure; early warning system for student drop-outs
25	24/02/2016	Inaugural meeting of the merged Teaching Steering Group and Senate Commission for Teaching

In addition, the steering group established three different working groups for the following subjects:

- » Modelling of processes for managing study programmes (internal accreditation processes and introduction of study programmes, changing examination regulations, changing module manuals)
- » Developing a harmonised study structure at the University of Siegen, as well as the framework examination regulations
- » Handling themes relating to the examination offices

The first working group developed corresponding process that were then adopted by the Rectorate in September 2014. The processes are currently being revised.

The Study Structure Working Group has discussed numerous drafts since October 2014. The Examination Working Group is headed by Department 3 and was active twice up to now.

QM Committees at a faculty level

PHIL
Die Philosophische Fakultät

Faculty I

Quality management in this faculty is based on the fundamental difference between curricular and administrative processes. This fundamental difference is reflected in the organisation of quality management in the faculty.

The curricular discussion and development processes are organised in the Didactive Salons for the various departments. Members of the Didactive Salons include all lecturers for a department, as well as student representatives. The Didactive Salons for the departments select a speaker. Together with the student representatives, these speakers form the Faculty Salon where curricular and strategy issues relating to teaching at a faculty level are discussed.

The administrative processes in the context of teaching in the faculties are organised in Quality Circles: The following Quality Circles have been established:

- » Strategic planning of study programmes
- » Curriculum planning
- » Auditing
- » IT and PR
- » Study advisory services
- » Evaluation
- » Secretariat/Administration

The relevant speakers from these administrative quality circles form the Administration Quality Circle at a faculty level. All Administrative Quality Circles generally operate across the faculty, whereas the Didactive Salons are limited to the individual departments.

Level of the faculty

There are two general quality management tools at the level of the faculty:

- » The Faculty Salon
- » The Administration Quality Circle.

The chairperson of both committees is the Dean of Studies. These Quality Circles discuss and make decisions about problems relating to teaching in the faculty as a whole. The speakers for all Administrative Quality Circles in the faculties are also the people responsible for the modelled processes in their areas of responsibility. In principle, the Didactic Salons are not formalised but are based on open discussion about problems that arise in the area of teaching. However, they can issue instructions to the Administrative Quality Circles for them to formalise and model processes.

The meetings for the administrative and curricular areas are held at different intervals. The Didactic Salons meet at least once a semester, the Faculty Salon three times a semester and the Administration Quality Circle generally every month, although more frequently if required.

Information flow

Documentation of the QMS is organised via a filing system in SharePoint. Documentation of the modelling and implementation of processes is carried out in separate systems.

In terms of documenting the discussions within the QMS in the faculty, minutes are taken about the results of the discussions in the Faculty Salon and the Administration Quality Circle and the other administrative quality circles and are made available to all members of the relevant quality circle in each case via SharePoint. Proposals for discussion and drafts are only available to the members of the relevant quality circle.

The Didactic Salons determine the type of documentation themselves and also decide on the input that is provided to the Faculty Salon by their speaker. Conversely, the Faculty Salon can pass on information, suggestions and tasks for the Didactic Salons which they will then discuss in each case.

Task management in the QM system for the Faculty of Arts and Humanities is organised using the calender function in SharePoint for the administrative quality circles and the Faculty Salon. The members of the Administration Quality Circle can access all tasks and dates for the administrative quality circles in the faculty, while the members of the individual quality circles can only access their own dates and tasks.

If problems within the QMS for the faculty cannot be resolved, the Dean of Studies can discuss the issue with the University Administration Department or, if it is a general problem affecting the university as a whole or other faculties, refer it to the Teaching Steering Group who will then work in an advisory capacity on finding a solution. If the steering group is also unable to develop an adequate solution, it is then refereed to the QM Steering Committee for resolution.
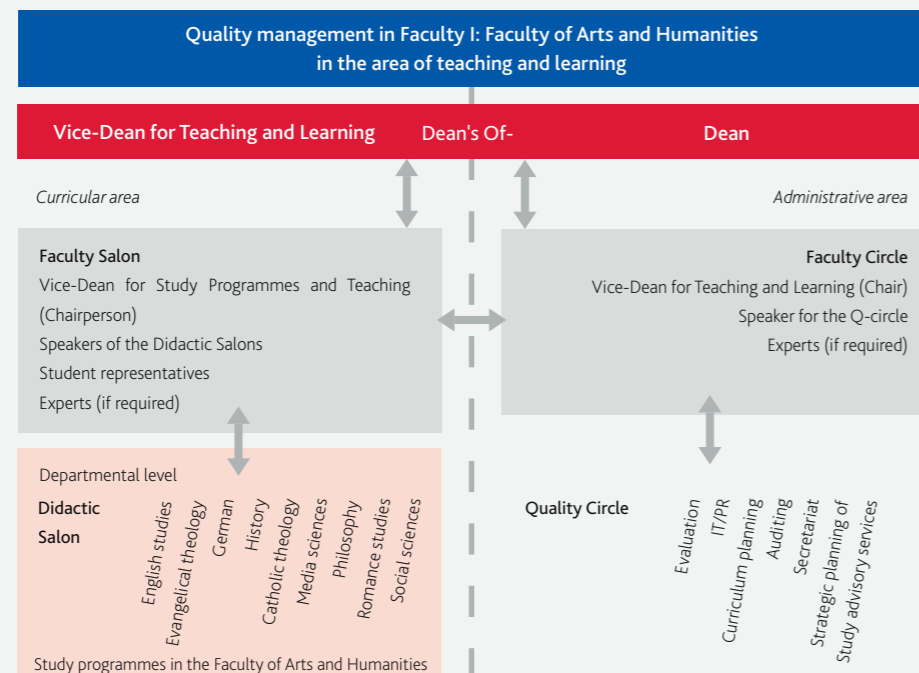

Figure 5: QM Organisation Faculty I

Faculty II

Faculty II pursues a dialogue-oriented QM system in which the focus is placed on the exchange of ideas and integration of all participants into the process. In particular, it provides information and opportunities for participation at all levels, as well as defining processes and responsibilities. Quality management in Faculty II seeks to take a holistic approach and is established above all in the operational base (Departmental/Study Programme Conferences).

QM at the level of the study programmes

With the exception of the Art and Music Departments, all of the study programmes offered by Faculty II are supervised by Study Programme Coordinators. They are responsible, in particular, for the organisation of the courses and the coordination of the study programmes. They identify any need for action relating to the quantity and quality of teaching and prepare recommendations for improving them. The Study Programme Coordinators meet at least once a semester, although more often if required.

QM at the level of the departments

Every department has a Departmental/Study Programme Conference (§ 16 Faculty Regulations for Faculty II – hereinafter referred to as: FO FAK II). It comprises all of the professors, all of the full-time academic staff and students. The Departmental/Study Programme Conference meets at least once a semester on the invitation of the chairperson (§ 16 VIII FO FAK II). An agenda item for QM is included for these meetings. The chairpeople of the Departmental Conferences or a representative elected by the Departmental Conference also takes on the role of "QM Officer". They regularly report to the QM Committee for the faculty about problems and measures relating to good teaching in the study programmes for which they are responsible.

QM at the level of the faculty

The Dean's Office coordinates the QMS in the faculty, which is why a "QM Committee" is established at the level of the faculty. The members of the committee entitled to vote are the seven QM Officers (= chairperson of the relevant Departmental or Study Programme Conference for Architecture, Social Work, Psychology, Art, Music, Development and Inclusion, and Educational Sciences) or the representatives elected by the Departmental Conferences, seven students, the Dean (Chairperson of the QM Committee) and the Vice-Dean for Teaching. Other experts can be included in an advisory capacity if required to deal with specific subject matter. The student representatives in the Departmental Conferences propose a member entitled to vote and also a deputy member. The Departmental Conferences pass on the proposals to the Faculty Board. The Faculty Board confirms the student representatives. The re-election of student representatives is possible.

Similar to the Teaching Steering Group, the QM Committee identifies any need for action in the area of teaching. These issues can be raised and submitted by all members of the faculty, especially the QM Officers or the selected representative, those responsible for the study programmes and students. The meetings are held once a semester. If there is an acute need for action, the Dean or the Vice-Dean for Teaching can convene additional meetings. The Vice-Dean for Teaching regularly reports to the QM Committee especially on decisions taken at the level of the Senate Commission for Teaching and Learning at the university. Conversely, the Vice Dean for Teaching also informs the steering group about problems, need for action, proposed solutions, work results, etc.

The QM Committee is responsible for dealing with the prioritised problems in the sense of the university-wide PDCA cycle. The first stage involves setting goals, developing a strategy and process planning (Plan) including an analysis of the current situation and identification of potential for improvement, as well as developing new concepts or measures for optimising the current situation. In a second stage, the developed measures are then implemented in pilots/tests using basic means and on a small scale (Do). In the third stage (Check), the processes implemented on a small scale and their results are evaluated and monitored. If successful, they are approved as a new standard for implementation on a broader scale. In the final stage (Act), the newly implemented standard is introduced and formalised on a broader scale and compliance with this standard is regularly checked (Audit). Improvement of the standard begins once again with the phase plan.

Information flow

Problems that cannot be solved at the level of the study programmes are referred by the Departmental Conferences to the QM Committee at a faculty level. If the QM Committee is also unable to solve the problem, the Vice-Dean for Teaching refers the issue to the Teaching Steering Group at a university level who will then work in an advisory capacity on finding a solution. If the steering group is also unable to develop an adequate solution, the Dean then refers the problem to the QM Steering Committee for resolution.

Cooperation with central bodies

In the case of teacher training programmes, such as those offered by the Educational Sciences or Art and Music Departments, the Centre for Teaching and Educational Research (ZLB) also acts as a contact partner on a cross-faculty basis. Interdisciplinary evaluations completed here are provided to Faculty II as aggregated and anonymous reports.
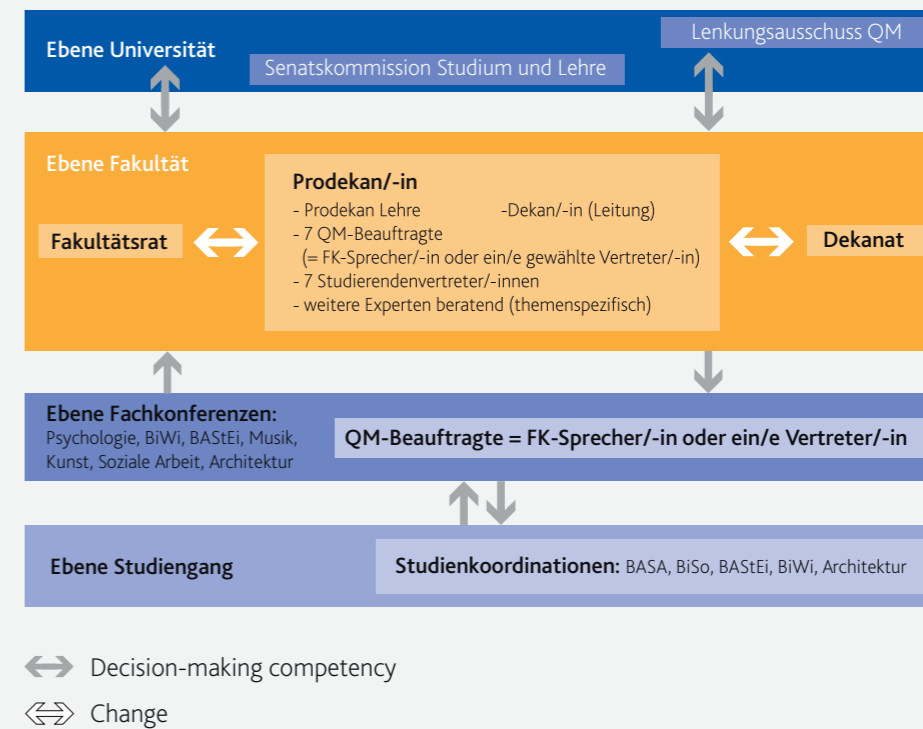

Decision-making competency

Change

Figure 6: QM Organisation Faculty II

WIRTSCHAFTSWISSENSCHAFTEN
WIRTSCHAFTSINFORMATIK | WIRTSCHAFTSRECHT

Faculty III

Level of study programmes

Faculty III currently offers 16 study programmes that are managed by the person responsible for the relevant study programme.

Level of the courses

The four speakers for the departmental groups of Business Administration, Economics, German and European Economic Law and Business Information Systems take on the role of "QM Officers".

Level of the faculty

The faculty has established a QM Committee whose chairperson is the Vice-Dean for Teaching. The members of the committee are the four speakers for the departmental groups as QM Officers, six student representatives, a staff representative and also additional experts if required to deal with specific subject matter. Similar to the Teaching Steering Group, this committee identifies any need for action in the area of teaching. These issues can be raised and submitted to the QM Committee by all members of the faculty, especially the QM Officers, those responsible for the study programmes, students and staff. The QM Committee is responsible for dealing with the prioritised problems in accordance with the PDCA cycle. Meetings are held every quarter. If there is an acute need for action, the Vice-Dean can also convene additional meetings. If there is deadlock in voting within the committee, the Vice-Dean for Teaching receives double voting rights.

Information flow

The Vice-Dean for Teaching regularly reports to other bodies (Faculty Board, Dean's Office) about the subjects handled and also informs the Teaching Steering Group and the QM Committee about problems, need for action, proposed solutions, work results, etc. The QM Committee informs the Dean's Office and the Faculty Board at regular intervals about the solutions developed to resolve the problems (Follow-up). An agenda item is included for this purpose in the meetings. If the committee is unable to solve the problem, the Vice-Dean refers the issue to the Teaching Steering Group who will then work in an advisory capacity on finding a solution. If the steering group is also unable to develop an adequate solution, the problem is then refereed to the QM Steering Committee for resolution.

Central bodies

A member of staff is appointed as a central contact point within the faculty to focus on the coordination, logistics and support of operative QM tasks. This person also acts as a contact person for the "Quality Development Centre (ZQE)".

In addition, an Ombudsperson's Office for students is established for the purposes of complaint management. The student representatives on the QM Committee select a retired professor for this purpose. This trustworthy person should act as a neutral entity to resolve conflicts and complaints by amicable means. The person has the following functions: mediation, arbitration, negotiation. The ombudsperson provides information to the QM Committee in a suitable manner and produces an anonymous report annually.

Processes

In order to develop concrete proposals for improvement and measures in accordance with a PDCA cycle, the members of the QM Committee need to be given access to the results of the surveys (course evaluations, etc.). Based on the course evaluations, the QM Committee develops faculty-specific minimum standards that are approved by the Faculty Board. The committee investigates and scrutinises previous procedures and processes in the faculty. It develops – together with relevant experts where necessary – proposals for improvement and creates new or amended chains of responsibility if required. These are then

approved by the Faculty Board where necessary. The first processes and aspects to be investigated were, for example, the conference of the examination committees, information and support for study abroad, special support for students taking their third and last examination, importing and exporting examination modules, etc. The committee monitors the implementation of the "Goals of Faculty III in the area of the QMS for teaching".

Culture

The aim is to develop a culture of cooperation and reciprocal and mutual learning in research and teaching. There are samples and examples of interesting and varied teaching methods within the faculty and also beyond the boundaries of the faculty. Many lecturers already attempt to combine different methods of teaching during a series of lectures and are open to new didactic developments and approaches. The aim is to promote this to an even greater extent. Ideas for "learning from one another in teaching" could thus be discussed in the committee and introduced into the departmental groups.
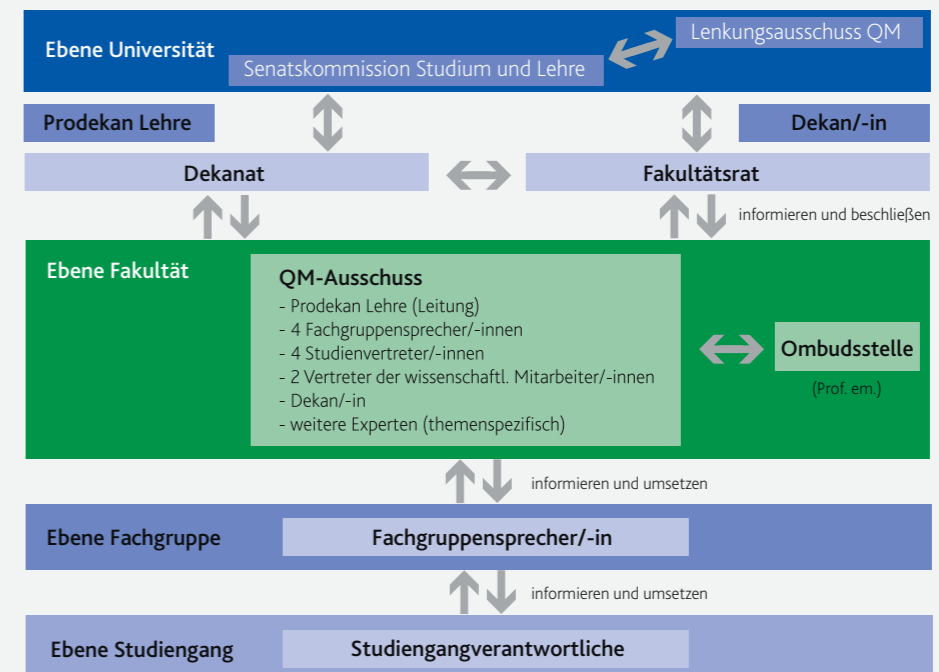

Figure 7: QM Organisation Faculty III

Naturwissenschaftlich Technische Fakultät

Faculty IV

In the area of teaching, the concept of "quality management" has both a strategic and an administrative branch. As part of the "quality management of teaching", the aim is to optimise the content and operation of both branches. The strategic branch is primarily the responsibility of the Dean's Office (allocation of resources, evaluations, structure of curricula, etc.) but is also the responsibility of university management in some cases (range of courses, facilitating individual teaching areas, restrictions on admissions). In contrast, responsibility for the administrative branch (organisation of examinations, room management, etc.) is distributed across various levels and organisations at the university. Therefore, a quality management system needs to develop mechanisms to enable high-quality teaching on a horizontal level, i.e. within the faculty (e.g. allocation of resources), and create incentives for improving teaching (e.g. evaluations with results that can be operationalised). On a vertical level, i.e. beyond the boundaries of the structural units, it needs to be ensured that the bodies established for quality assurance (advisory services, examination offices, complaints offices, etc.) work together effectively and congruently.

Level of the faculty

Quality management in Faculty IV is institutionally based in the Dean's Office (especially the Vice-Dean for Teaching or Quality Assurance), the Faculty Board as the decision-making body and a (still to be established) Commission for Quality Management (that could be identical to the already existing Central Examination Committee). The Dean's Office is responsible for distributing the funds and ensures here that courses offered by the faculty are within the scope defined in the accreditation. The Dean's Office gathers course verifications and thus supports the delivery of the range of courses offered. All courses are regularly evaluated. This evaluation process is monitored by the Dean's Office and measures based on its results are implemented by the Dean's Office.

In all areas relating to teaching, the Faculty Board and the Dean's Office are supported and advised by the Commission for Quality Management (QM Commission). The commission is comprised of equal numbers of students and university lecturers. It is chaired by the Vice-Dean for Quality Assurance. The commission supports e.g. the evaluations and agrees amendments to the examination regulations. Another important function is resolving problems relating to academic feasibility (overlaps, time management,

organisation of examinations) where required in cooperation with bodies from other institutions (corresponding institutions in other faculties, the Teaching Steering Group, central institutions; on a vertical level). The QM Commission regularly reports to the Faculty Board and the Dean's Office.

Departmental level

At a departmental level, at least one Quality Circle is established per department. It is responsible for identifying problems relating to academic feasibility and, in accordance with the principle of subsidiarity, either resolve them or refer them to the QM Commission for the Faculty. The department speaker for each department regularly checks the range of courses on offer in the next semester at an early stage and reports to the Dean's Office about their quality assurance.
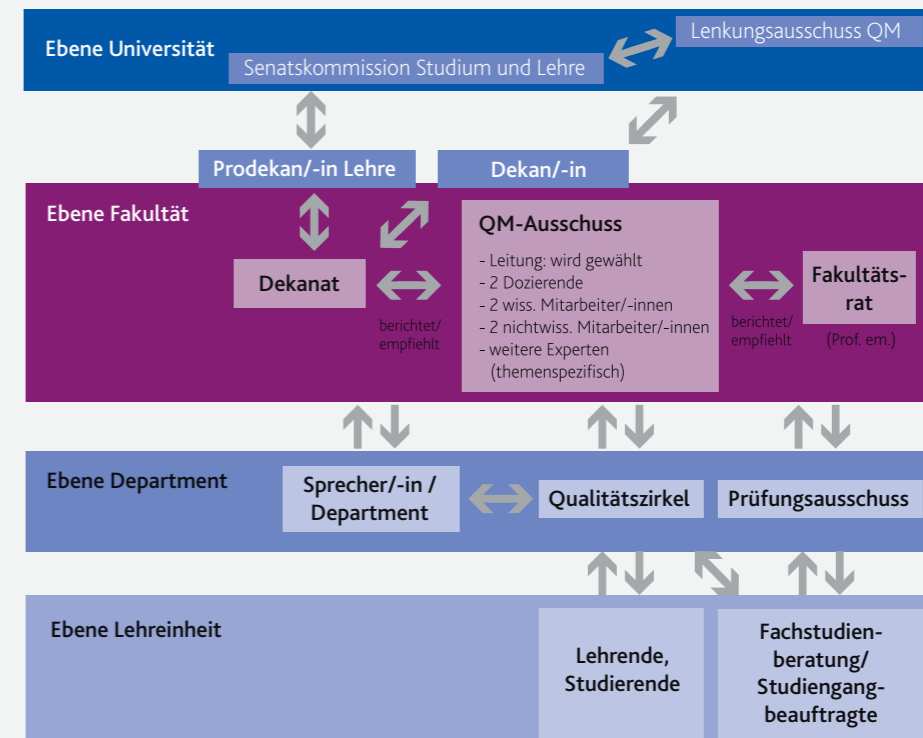

Figure 8: QM Organisation Faculty IV

5. Examples of successful QM measures in the faculties and the ZLB

Faculty I: Faculty of Arts and Humanities

Quality management in practice – using the example of the analysis, modelling and introduction of faculty-wide crediting processes

The analysis, modelling and introduction of faculty-wide processes for crediting study and examination achievements, as well as for the creation of learning agreements, will be presented as a representative example of the functionality of the quality management system in Faculty I. The selected example is particularly suitable for illustrating the functionality of the QMS in Faculty I for at least two reasons: On the one hand, a number of different quality assurance committees were involved in the development of the corresponding processes and this illustrates the communication and cooperation between the different committees, while on the other hand, the development of a uniform faculty-wide crediting process and processes for creating learning agreements provided a large number of faculty members with more transparency and certainty in their actions – namely lecturers, staff in the area of course administration e.g. the Examination Office or study advisory services and not least students. The sequence of events for introducing the processes will be briefly outlined below.

The starting point was the realisation that the practices for crediting study and examination achievements and for the creation of a learning agreement were inconsistent within the faculty and that this could lead to some

uncertainty amongst stakeholders with regards to the information available to them and about how they should act. The goal was to introduce a uniform faculty-wide crediting process and a process for creating a learning agreement that were objective and legally compliant and thus to increase the level of transparency for stakeholders and provide them with greater certainty in their actions. At the suggestion of the Dean of Studies, a working group consisting of members of the quality circles for "examinations", "study advisory services and study coordination" and "IT & EDP" was formed for this purpose. The working group was ultimately tasked with developing a target process on the basis of an analysis of the current situation and ascertaining the legal framework conditions and the requirements of the faculty. This process was validated with the affected quality circles and other relevant stakeholders. In this process, the crediting process was aligned as far as possible with the process for crediting study and examination achievements in the teacher training programmes in order to achieve the greatest possible level of uniformity. A guide for these processes was developed that was made available to students, lecturers and staff in the areas of course administration on the website of the Examination Office for the Faculty of Arts and Humanities.

In the **Educational Sciences** Department, module manuals are revised and accreditation requirements implemented. There was a discussion and subsequent change to the PhD regulations. Quality controlling is continuously carried out.

The Departmental Conference commissioned Prof. Nonnenmacher to complete a course evaluation of the teacher training programmes which was discussed in the Departmental Conference and will serve as the basis for further discussion and measures. Due to the low level of participation by students, a follow-up evaluation should possibly be completed.

In the **Education and Social Work** Department, a problem was identified whereby many students did not attend courses for which they were registered. As a result, discussions with students on the theme of "compulsory attendance for courses" were held by posing the questions "What reasons are there to attend a course; what reasons are there not to attend?" This subject was also tackled in Faculty II as a whole and in the Departmental/Study Programme Conferences because the absence of students on courses represents a interdisciplinary problem. There was an intensive discussion about possible solutions. Overall, it was decided to also adopt the legally examined regulations for compulsory attendance used since 2011 in Faculty I and also to develop other possibilities for making courses and thus regular attendance in these courses more attractive for students.

In close cooperation with the Student Body and Academic Coordination Office, an integrated and complementary advice and support system for the study phase was developed. This model includes a) holding the initial induction week organised by the Student Body before the official start of the lecture period b) a introductory

seminar for the study programmes held by lecturers and c) workshops on key study-related skills.

The MOODLE platform for the introductory seminar for Bachelors degrees, in which all users for each annual student cohort are registered, serves as a message forum for communicating information on the available courses, examinations and deadlines, special events and free places in seminars, etc. not just in the first semester but also for the entire length of the student's standard period of study. This type of support opens up opportunities for even more efficient use of resources and is very popular amongst students.

In the case of *Master's students*, semester meetings are organised by the Academic Coordination Office that inform students about new developments (personnel, structural) and offer students a platform for reflection and critical feedback. The results are communicated internally within the study programme and are used to further develop the study programme.

In the **Music** Department, the focus is placed on assuring the quality of teaching, particularly in relation to the courses offered and curriculum planning. Good solutions have been developed here up to now to implement what was desired by students (e.g. in workshops) and to guarantee the academic feasibility of the courses. Changes are discussed in the Departmental Conference (e.g. changes to the orientation, module names, freedom of choice and the question of the proportion of courses covering classical or popular music). The space issues have now been improved because it was possible to set up the Music Department on the Psychology floor. More practice rooms are available on the upper floors. In addition, the department is currently striving to make the range of courses more attractive in order to combat low student numbers.

In the **Art** Department, the Departmental Conference

discussed space issues, the organisation of study programmes and course guidance services; these were combined in one agenda item for QM. The projects funded by the quality improvement funds (QVM) include: Collecting together activities, publications from the department for interested students, publications on conferences and excursions. In order to make the range of study programmes more attractive, conferences have been held to exchange ideas with schools and pupils have been invited to take part in workshops.

The Departmental Conference for **Architecture** is currently collecting information on student workloads using workload diaries that the students complete voluntarily for one year. These will be evaluated and should make a contribution to the further development of the curriculum. This process will take into account how the workload results relate to the workload categories. All important results were collected to see what the students had achieved, what they are capable of and whether their qualifications are sufficient. An app to record workload is currently being developed and adapted to the requirements of the Architecture Department.

A conference is held once a year that allows a review of five semesters over the two days in order to identify where problems exist. This type of conference has now been held for the second time.

A key focus of the **Psychology** Department in relation to QM is improving teaching, its methods and processes to enable students (Teaching/Social Work/Education) to gain a better understanding of diagnostic procedures. The design of courses in the form of teaching experiments, self-reflection assignments, motivational techniques, etc. thus differs from those given in the ed-

ucation department and has been very well received by students. Another key focal point in the future will be the theme of "digital media".

Following its successful re-accreditation, the study programme **BAStEI** is focusing on the conceptual realignment of the introductory semester and extending the student exchange programme UNIBRAL with the University of Campinas in Brazil that is funded by the DAAD (German Academic Exchange Service).

Course evaluations

Both students and lecturers have complained that the questionnaire previously used for course evaluations was not ideal and contained many flaws. For example, lecturers complained that many items provided little information, while information on other important and interesting aspects was not collected at all. In addition, the fact that the questions did not fit all affected study programmes/departments in Faculty II was criticised. Students also complained because they found some of the questions to be pointless or they could not answer them. A striking aspect was the low participation of students (especially for the online survey format).

Prof. Trautmann, Doris Paul, Prof. Nonnenmacher and the QM Coordinator Sonja Weber-Menges have developed a new questionnaire in a complex process that saw the document presented, discussed and modified numerous times following feedback in Faculty II. The new questionnaires are expected to be used for the first time for course evaluations for the winter semester 2016/2017.

In the QM Committee for Faculty III, need for action in the area of teaching is handled on an interdisciplinary basis and corresponding proposals for change and solutions are prepared that are then submitted to the Faculty Board for approval. Any need for action can be raised by all members of the faculty, but especially by the students. The QM Committee is a suitable platform for students to discuss general topics relating to the area of teaching above and beyond departmental boundaries with the Vice-Dean for Teaching and the representatives of the departmental groups around the same table. A significant advantage of the QM Committee is that, in contrast to the Faculty Board, it offers greater scope and time for discussion of this subject matter.

An example of the successful work carried out by the QM Committee is the introduction of a grade improvement trial for all study programmes in the faculty. The idea originated from the student representatives on the QM Committee who wanted to be given the opportunity to resit an already passed examination if the grade achieved was worse than expected. In general, it is only possible to resit a failed examination. Once the members of the committee had agreed on the basic parameters for the implementation of a grade improvement

trial, the representatives of the departmental groups and the Student Council were requested to gather the opinions of the departmental groups and the students. The thoroughly positive feedback from the departmental groups and the students led the QM Committee to establish a working group consisting of student representative and representatives from the Dean's Office and the Examination Office to discuss the technical and legal feasibility and develop the basic parameters for the design of the grade improvement trial. The working group presented its results to the QM Committee for discussion and a corresponding draft resolution was approved for presentation to the Faculty Board. The Faculty Board then finally approved the grade improvement trial for all study programmes in the faculty and it has since been successively integrated into the individual examination regulations so that it is expected that all students in Faculty III will have the possibility once during their studies of resitting an already passed examination for the purpose of improving the grade from the winter semester 2017/18 onwards.

Setting up training courses for student tutors

The annual appraisal meeting for the Mathematics Department was held on 7 September 2015 with 25 participants, of which 6 were students. Extensive discussions on improving the teaching quality were held. The subjects covered included, amongst other things, the deteriorating performance of students each year in line with the nationwide trend. There is a clear correlation between participation in tutorials and handing in exercises to teaching staff and the probability of passing an examination. Nevertheless, participation in the tutorials is low. In addition, students did not attend examinations for which they had registered.

Detailed discussions were held on how to improve the motivation of students. In this process, the question of how the around 100 student tutors who help students with their exercises could be better trained and prepared was posed. Moreover, the Student Body is also working on a training programme for student tutors.

In agreement with the department speakers, Examination Office, the QM Coordinators and the Competence Centre at the University of Siegen (KoSi), a one-day course held by a natural sciences lecturer that had been designed by KoSi was offered as an initial measure for the following semester.

In parallel, the subject was discussed at a separate meeting at departmental level with the Dean, Vice-Dean for Quality, Vice-Dean for Teaching and the KoSi. The need to better train student tutors was also confirmed at this meeting.

The evaluation of the one-day training course was very positive overall. However, the Student Body criticised the fact that the training course placed too little focus on working through the exercises, which accounted for 90% of the tutorial.

A new meeting was thus held on 14 July 2016 with the aim of further developing the training offered with the participation of the Vice-Dean for Quality, the Didactic Department for Mathematics, the Student Body and the QM Coordinators. Due to a lack of capacity, the Didactic Department for Mathematics was not able to design an additional tutor training course and train "multipliers". Instead, they proposed utilising the experiences gained by other universities who had successful resolved the problem and suggested the "Darmstadt Model" for tutor training that focuses on the provision of skills in tutorial teaching, aims to professionalise tutors and has already been practised since the 1980s. The result of the meeting was that the training course was expanded to two days and two groups. The first day with the natural sciences lecturer from the KoSi was retained and supplemented by a second day headed by a lecturer from TU Darmstadt who trains student tutors at the university. The Dean of Faculty IV provided the financing for the external lecturer.

Provided that participants respond positively, it is planned to further expand this system for training student tutors in the faculty.

The QM system for teaching at the ZLB

The ZLB coordinates teacher training throughout the faculties and thus contributes to guaranteeing the quality of these study programmes. In addition, the ZLB participates in the annual appraisal meetings for those departments with teacher training programmes in order to ensure that any relevant aspects from these departments are passed on to the committees of the ZLB and also that teaching concerns can be raised in the annual appraisal meetings.

Quality management for teacher training is the responsibility of the ZLB Board of Directors and assured by the QM Commission, where need for action, the implementation of solutions and other aspects of the QM system are discussed. As the Vice-Deans and QM Officers are members of the QM Commission of the ZLB, this ensures that relevant aspects can be passed on to both the QM Committees in the faculties and also to the Dean's Offices in the faculties and vice versa. The QM system at the ZLB strives to produce lean regulations. Its main tools are providing advise and information before centralised structures are established.

In terms of the structures and processes for quality management and quality assurance, various projects were initiated, implemented and concluded in the reporting period.

Successful reduction of overlaps in courses

The time window model for coordinating courses aims to ensure that a teacher training programme can be taken in major departments without any overlaps. If overlaps are identified, there is a reporting system available for initiating a process to resolve the problem. There are currently 10 to 15 reports made per semester that relate to overlaps within and outside (e.g. different semesters, uncoordinated departments) the time window model. It was possible to solve the problem through cooperation between the quality assurance group at the ZLB (coordination for the time window model), students and lecturers in almost all cases.

Optimising the processes for revising department-specific regulations (FsB)

Due to the fact that processes for revising the FsB were often carried out in a disorganised manner by bypassing the ZLB in the past and this resulted in a lower quality of the FsB, a longer approval period and subsequently an increased level of revision work, a longer and more clearly explained version of the existing process was developed in cooperation with the QZS. Explicit reference is now made to the role of the ZLB in the case of teacher training programmes. In cases of doubt, contacting the QM Officers at the ZLB is recommended (contact details are provided on the corresponding web pages). Following this change, the processes now run smoothly and efficiently.

Digitalisation and records of achievement

As part of the quality assurance process in examination offices for teaching courses, it was possible to significantly reduce or largely eliminate paper-based records of examination achievements ("certificates") over the last few semesters. Coordination of the registration periods with Faculties I and III and the creation of rules of procedure for missed deadlines proved helpful in this process. The rules of procedure stipulate a paperless booking process by defining a uniform procedure that excludes the recognition of certificates except in exceptional individual cases.

Setting up an overflow account for additional academic achievements

As there was a need to certify academic achievements that could not be credited as part of the study programme (e.g. additional language courses or courses for inclusive teaching and learning), setting up of a so-called "overflow account" for teaching programmes was already initiated in 2014. The technical implementation was completed in 2016 and now enables specific academic achievements even outside of the curriculum to be documented.

Coordination of examination dates by the ZLB (tested and rejected)

As part of the quality assurance process, the (potential) problem of overlapping examinations for teaching courses was raised and the possibility of coordinating the examination dates centrally by the ZLB investigated. This investigation revealed that the previous approval process (time window model during the lecture period and no coordination of dates outside the lecture period) was sufficient and the coordination of examination dates outside of the lecture period by the ZLB was not necessary.

Clarifying, communicating and improving the process for transferring from a specialist study programme to a teacher training programme

The question of transferring from a specialist study programme to a teacher training programme is often raised as part of the annual appraisal meetings. There is an increased interest especially in commercial-technical areas of teaching at the vocational college (also due to programmes offered by the state government). The possibility of transferring from these specialist subjects is politically desirable yet contradictory to the logic of the current study model at the University of Siegen. Advice is currently provided in each individual case and a generally applicable solution has been developed: The students will be registered in parallel for the specialist study programme and the Bachelors degree for teaching so that they can catch up on missing teaching-specific and specialist modules in accordance with the teaching model at the University of Siegen.

Alongside the changes listed above, there were other quality improvement measures that were not developed within the formal structure of the QM system due to their origins but were nevertheless discussed with the QM bodies:

Improved coordination of surveys

As part of the evaluation activities, efforts are currently being made to ensure greater coordination between the various surveys carried out at the University of Siegen. Elements of the General Student Survey have thus been integrated into the legally prescribed Teaching Student Survey to keep any duplicated questions to a minimum. The survey periods are also being coordinated to a greater extent.

Practical semester

In terms of the internal processes followed at the ZLB, a special focus of its efforts to improve quality has been the practical semester. A systematic evaluation of the practical semester has made it possible to quantify the significance of known problems (above all study projects and scheduling between learning facilities) and acts as the basis for the current comprehensive process for improving the practical semesters.

A model for flexible study days during the practical semester was developed and agreed with university and non-university partners. It will be introduced from the winter semester 2016/17. The reform of the contents of the practical semester (study projects) has been generally approved. Following the revision of the "Conceptual framework for the structure and content of the practical semester in teaching-related Master's degrees" (Rahmenkonzeption zur strukturellen und inhaltlichen Ausgestaltung des Praxissemesters im lehramtsbezogenen Masterstudiengang) during the course of 2016 between the state government and the teacher training universities in the state, this reform can now be implemented. To reduce the unequal distribution of students across semesters (so-called "wave motion"), a modified study model with accompanying information measures was agreed that will significantly alleviate this "wave motion" in the medium term.

6. Outlook

System Accreditation – European Quality Audit

The University of Siegen submitted an application for system accreditation to the Swiss Agency for Accreditation and Quality Assurance (AAQ) on 14 July 2015, which was subsequently accepted on 10 September 2015. The process was then started on 16 October 2015.

In parallel, the Accreditation Council published a call for proposals for the trial of new approaches to quality assurance and improvement in teaching and learning (trial clause) on 17 September 2014. The University of Siegen, in cooperation with the University of Bremen, submitted an application titled "European Quality Audit" on 27 October 2015 that was accepted by the Accreditation Council on 10 March 2016. As a result of this approval and acceptance of it by the University of Siegen on 6 May 2016, the University of Siegen has the same rights as a system accredited university for the period of the trial (three years). (The application for system accreditation has been on hold since then.) A report on the development and implementation of the project will be presented in the second QM Report. Irrespective of this fact, the Rectorate and the QZS will report on the progress of the project in the various committees at the university.

Holistic QM System

In a resolution passed on 28 April 2013, the Rectorate not only decided to establish a QMS at the University of Siegen but also to create a holistically designed system (teaching, research, administration/service, transfer, management). To ensure that the university was not overburdened and with a view to system accreditation, the initial focus was placed on the performance area of "teaching and learning". Following the reorientation towards the trial clause and the development of the "European Quality Audit" project, the focus was once again placed on a holistic QMS because the central pillars of the "European Quality Audit" are its holistic nature and European integration. The process of setting up the required committees for a holistic QMS at the University of Siegen has been ongoing since the winter semester 2015.

Successful conclusion of the "European Quality Audit" project demands a self-contained, completely installed and functioning QMS from all participating universities. For this reason, the QMS at the University of Siegen will be further developed and expanded as planned. At a cross-university QM level, the steering groups planned at the start will be replaced by Senate Commissions and the additional establishment of the "Governance Board" as a Rectorate Commission. These will form the management structures at the University of Siegen for the subject of QM (see Fig. 9).
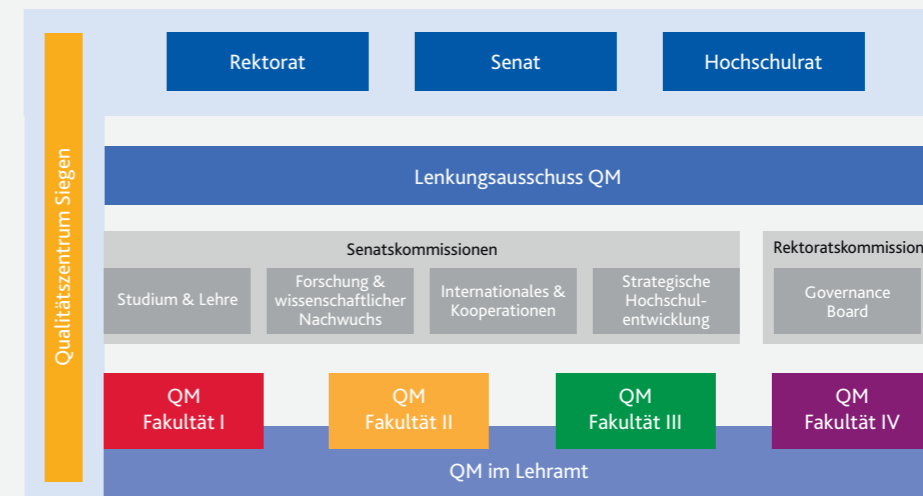

Figure 9: Overview of the QM system at the University of Siegen

The "QM structures" from a university level down to the faculties and courses have already been fully installed (Fig. 3). The required processes need to be better coordinated in future and more experience needs to be gained from the committees and tools established for quality management. In particular, the opportunities and advantages of the study programme-oriented QM system need to be clearly explained to teaching staff.

The QMS will be fully installed at the University of Siegen in 2017 and planning work will be carried out in accordance with this system. As part of the European Quality Audit, the University of Siegen will offer its QM system for teaching as a best practice example and present it for discussion.