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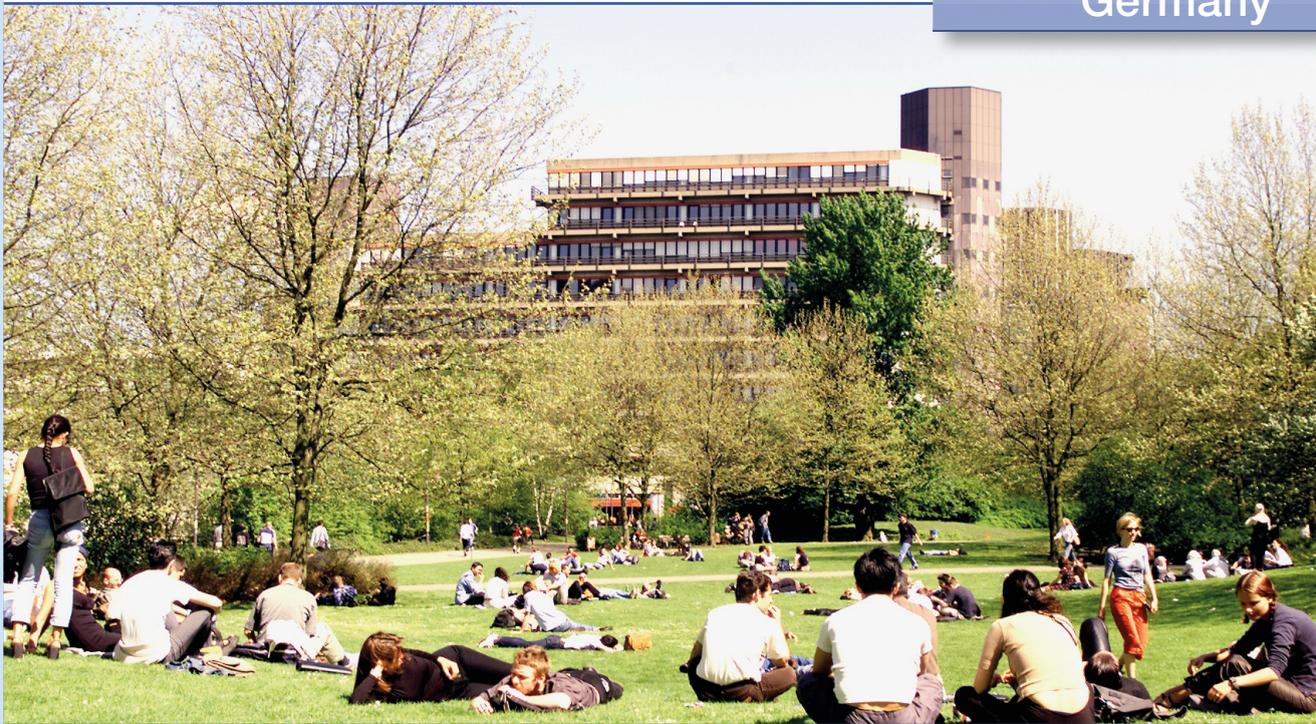
International Institute
for Educational Planning

From Tools to an Internal Quality Assurance System

University of Duisburg-Essen, Germany

Christian Ganseuer
and Petra Pistor

Germany



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Abbreviations

ACQUIN	Accreditation, Certification and Quality Assurance Institute
BA	bachelor's degree
CESR	Course evaluation via student representatives
CHEDQE	Centre for Higher Education Development and Quality Enhancement
DFG	German Research Foundation
DVC	deputy vice-chancellor
ECTS	European Credit Transfer and Accumulation System
ENQA	European Quality Assurance Agencies
EQA	external quality assurance
EQAF	European Quality Assurance Forum
ESG	European Standards and Guidelines for Quality Assurance in the European Higher Education Area
ESU	European Students Union
EUA	European University Association
EURASHE	European Association of Institutions in Higher Education
HEI	higher education institution
HRD	human resource development
HRK	German Rectors' Conference
INCHER	International Institute for Higher Education Research
IQA	internal quality assurance
KOAB	graduate survey cooperation project
KMK	Standing Conference of the Ministers of Education and Cultural Affairs of the Federal States
MA	master's degree
NPM	new public management
OECD	Organisation for Economic Co-operation and Development
QA	quality assurance
QM	quality management
TAP	teaching analysis poll
UAR	University Alliance Ruhr
UDE	University of Duisburg-Essen

Introduction

This introduction explains the rationale for the study, the intentions behind it, and the research methods used, before offering an overview of the scope of this case study.

Setting the stage: From external to internal quality assurance

In Europe, the establishment of quality assurance structures was, to a large extent, driven by the Bologna Process, which aimed to harmonize higher educational structures within the European Higher Education Area. By the early 2000s, external quality assurance (EQA) systems were established in nearly every country within the European region. In Germany, quality assurance (QA) agencies took over responsibility for the accreditation of study programmes from the federal state authorities, evaluating the degree to which programmes met pre-established standards. In the mid-2000s, a change was apparent from the old system, under which programmes were obliged to meet the pre-set standards of German federal states, to a new system in which outputs and outcomes were measured and evaluated afterwards (Altbach, Reisberg, and Rumbley, 2009: 52). As part of this process, universities were urged to develop internal quality assurance (IQA) processes.

Since that time, IQA processes have developed rapidly. One reason for this is that external quality assurance processes consumed time and effort, but rarely resulted in follow-up measures which improved the quality of study programmes. This led universities to develop their own quality assurance structures in order to ensure continuous improvement.

Although the term is now widely used, ‘internal quality assurance’ is not a clearly defined concept. Sanyal and Martin (2007: 5) contend that IQA comprises all the internal mechanisms, instruments, and systems for quality assurance within a higher education institution (HEI) which ensure that the institution is meeting its own general and programme-specific standards and objectives. Their definition places much emphasis on an HEI’s own vision for quality assurance. Since the authors of this paper consider that awareness of external requirements is also very important in IQA, the present study uses this working definition:

Internal quality assurance refers to the procedures, instruments, and measures a higher education institution applies autonomously to meet both external standards and criteria, as well as to reach its own development targets in its various fields of activity.

The University of Duisburg-Essen (UDE) was founded in 2003 as a result of the merger of two universities in the cities of Duisburg and Essen. This merger drastically changed old structures and thus provided fertile ground for the implementation of new internal quality assurance structures. Internal quality assurance emerged at the university in part as a continuation of earlier quality-related activities and in part as a response to new legal requirements for programme accreditation. From the beginning, the focus of the university’s IQA system was on development, with a particular emphasis on ensuring follow-up measures were put in place – in terms both of continuous improvement within the organisation and meeting external standards and requirements.

The evolution of quality assurance in higher education institutions often starts with the implementation of tools for collecting information and data (surveys, data warehouses, etc.). The development of processes to ensure the acquired data are properly followed up usually only happens as a second step. At UDE, however, IQA tools were developed with a defined follow-up process leading to internal discussion and decision-making. Whenever a new instrument is established, its interconnections to existing tools and follow-up

procedures are examined to avoid duplication and ensure that the new instrument contributes to the system as a whole.

This case study is part of an IIEP-UNESCO research project exploring innovative and effective methods of internal quality assurance in higher education and their effects on teaching and learning, employability, and management. It aims, first, to describe the IQA system at the University of Duisburg-Essen, and highlight its key principles and innovative elements. Second, the study asks the following research questions: (i) What is the level of awareness among university staff of the quality policy and their involvement in IQA tools? (ii) How do senior and middle-level management, academic and administrative staff, and students perceive the effects of UDE's internal quality assurance system? (iii) In their view, which factors facilitate, and which factors hinder, the effectiveness of the system?

In order to respond to these questions, the researchers adopted a multi-stakeholder approach to the collection of primary data. Stakeholders included academic and administrative staff, students, and academic and administrative leaders. The views of academic and administrative staff were investigated through two online surveys which, despite a relatively low response rate, provided useful insights for the qualitative interviews and focus group discussions, which were conducted during the second stage of the research. Semi-structured interviews were conducted with senior academic leaders, senior administrative leaders staff, and students, in order to capture the perceptions of different stakeholders in more depth. Official documents and literature on the German higher education system and UDE were also examined as secondary data sources, in order to capture the national and institutional contexts for the functioning of the IQA system at the university.

The research thus offered a welcome opportunity for the University of Duisburg-Essen to examine its IQA system and gather useful insights as to how internal stakeholders view it. The study allowed the university to map out its internal quality assurance activities and identify shortcomings and areas for improvement.

1. System overview and the development of IQA in Germany

The following system overview, which focuses on governance and external quality assurance in particular, describes the Bologna Process, the German higher education system, and its legal framework. It will also provide a short overview of the development of internal quality assurance (IQA) in German universities, including the legal and other external factors which have influenced this development.

1.1 The Bologna university: European universities in the 21st Century

The Bologna Process

The Bologna Process, which seeks to ensure comparability of standards and quality among European higher education, began at the end of the 1990s and continues to have a strong impact on the arrangement and development of teaching and learning in European higher education institutions (HEIs). In 2015, 48 states comprised the European Higher Education Area created by the Bologna Process, each committed to core targets, values, and procedures as part of an ongoing discourse.

Box 1.1 Key targets of the Bologna Process: A short summary*

The implementation and enhancement of a European Higher Education Area that could ensure the following:

- The mobility of students, alumni, and employees.
- International competitiveness.
- Mutual recognition of credits and degrees.
- The comparability of study structures and degrees (BA/MA model).
- Cooperation in quality assurance.
- The utilization of instruments that create transparency, such as the European Credit Transfer and Accumulation System (ECTS) and the diploma supplement, as well as a consistent qualifications framework.
- A culture of lifelong learning.
- A culture of student participation and a student-centred learning approach.
- The interlinkage of the European Higher Education Area with the European Research Area through to the inclusion of the doctoral phase as the third cycle.
- The integration of the social dimension in all named targets.

*More information about the Bologna Process can be found here: <http://www.eua.be/policy-representation/higher-education-policies/the-european-higher-education-area-and-the-bologna-process>

The governance structures (for teaching and learning) of European HEIs have changed significantly as a result of the Bologna Process. The introduction of higher education management areas, such as quality assurance, study programme planning, curriculum design, and institutional research, into modern 'Bologna' universities created new professional profiles and restructured the relationship between administration and faculties. New internal institutions separate from the main university administration – centres for quality assurance, institutes for higher education development, directorates for curriculum design, and so on – were created to provide academic services which would foster the changes and address the challenges generated by the Bologna Process.

The development of quality assurance in the European Higher Education Area was supported by various European initiatives, including, for example, the network of European Quality Assurance Agencies (ENQA) comprising the European bodies in charge of external quality assurance. In 2006, another initiative was launched by the European University Association (EUA), in cooperation with the European Association of Institutions in Higher Education (EURASHE), ENQA and European Students Union (ESU), initiating an annual meeting involving a network of universities, known as the European Quality Assurance Forum (EQAF).

ENQA, EUA, EURASHE, and ESU, sometimes referred to as 'E4', were invited jointly to develop an 'agreed set of standards, procedures and guidelines on quality assurance' and to 'explore ways of ensuring an adequate peer review system for quality assurance and/or accreditation agencies or bodies' (Berlin Communiqué, 2003). Consequently, the *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)* was published in 2005 and revised in 2015 (ENQA *et al.*, 2015). The ESG serves as a guiding document for both HEIs and external quality assurance agencies and covers guidelines for internal and external quality assurance as well as guidelines for the quality assurance of external quality assurance agencies.

Europe's universities under reform conditions

The Bologna Process is one of the most important political processes shaping the European higher education landscape. However, it is only one of a number of processes and policies that are creating the climate of institutional reform in higher education in Europe.

The first of these is the massification of higher education systems across Europe. The Organisation for Economic Co-operation and Development (OECD) reports that between 1995 and 2012 the proportion of students entering university-level education increased, on average, by more than 20 per cent across the OECD countries (OECD, 2014). However, a closer look at the data shows that not all higher education systems across Europe are growing. While the participation of non-traditional students in tertiary education is increasing in nearly every country, demographic change means that the total number of students on bachelor's and master's degree programmes is decreasing in Italy, Hungary, Lithuania, Latvia, and Romania. Stagnation can be observed in three big education systems: Poland, Finland, and the UK. The majority of systems, however, are still growing rapidly. The challenge for programmes of fundamental structural change such as the Bologna Process, in Europe and elsewhere, is to develop good quality structures and content for massive student numbers. The difficulty is due not only to the fact that structural and content-based changes are hard to implement under real-life conditions, which include a full everyday workload, but also to the failure of most national ministries to provide sufficient funding to support the exponential growth of universities over the last few years. The challenge, therefore, is to increase the quality of experience of a greater number of students in the context of budgets that are stagnating.

The second phenomenon shaping reform is the increased competition for financial resources resulting from budgetary stagnation and the tendency of governments to allocate additional funding in line with output orientation through competitive processes. In many European countries, ministries of education have used 'excellence competitions' to strengthen the research orientation of higher education institutions, thus encouraging HEIs to seek to differentiate themselves from their competitors by building stronger institutional profiles. At the same time, successful institutions must, increasingly, cooperate with other universities, especially in large-scale structural research projects. As a result, a climate of 'coopetition' is spreading across Europe, an awkward mixture of cooperation between institutions and competition for students and financial means.

A third trend, strongly linked to the Bologna agenda and the other developments already mentioned, is the ongoing discourse about the institutional autonomy of HEIs. National legal frameworks and policies have promoted the development of stronger university leadership in most Western European countries. Adherence to overarching legal regulations is now ensured through a contract-based relationship with bodies responsible for oversight.

Internal quality assurance plays an important role in the context of the previously mentioned discourses and developments. IQA contributes to institutional research by providing data for analysing and reorganizing structures, programmes, and ideas in order to bring them in line with the paradigm of effectiveness and efficiency. It creates evidence through qualitative and quantitative evaluation and helps to promote institutional development and enhancement by fostering a quality culture.

1.2 The German higher education system

Status and legal framework

The German higher education system is the biggest in Europe in terms of student numbers and budget. It consists of a total of 399 higher education institutions: 121 research universities, 220 universities of applied science, and 58 colleges of arts and music. Overall, there were 17,731 study programmes in 2015, on which some 2.7 million students were enrolled (HRK, 2015).

German universities traditionally offer a wide range of academic disciplines and, in line with the Humboldtian tradition, focus particularly on basic research. As a result, advanced stages of study have a mainly theoretical orientation with research-oriented components. Universities have the right to confer doctoral degrees and are responsible for the education and training of the next generation of academics. The average size of a student population in a German university is around 20,000. The biggest universities have around 60,000 students, the smallest around 10,000. Approximately two-thirds of German higher education students study at a research university.

Study programmes at universities of applied science usually concentrate on engineering and other technical disciplines, business-related studies, social work, and design. The common mission of applied research and development implies a distinct practice orientation and a focus on professional experience, including, for example, integrated and supervised work assignments in industry, enterprises, or other relevant institutions. Almost one-third of all German higher education students attend universities of applied science. These institutions do not have the right to offer PhD programmes.

The third main providers of higher education in Germany are colleges of art and/or music, which offer study programmes preparing students for careers in the fine arts, the performing arts, and music, as well as in design, architecture, media, and communication. These institutions are small in number, and most have the right to offer PhD courses.

Higher education institutions are either government-funded or government-accredited. In spite of the increased presence of private HEIs in other countries, in Germany public HEIs remain very much the majority, with 238 government-funded institutions of higher education compared to 161 private ones (HRK, 2015). Private HEIs tend to be small-scale, offering only a very limited range of subjects, for example business administration, media studies, and design. Almost 94 per cent of all students in colleges of art and/or music are enrolled at public higher education institutions.

Higher education in Germany is overseen by federal states rather than the federal government. The federal states are responsible for the basic funding and organization of HEIs (currently, no tuition fees are charged in any of the federal states of Germany)

and each state has its own laws governing higher education. Therefore, the structure and organization of higher education may differ from state to state in respect of, for example, management arrangements or regulations applying to the accreditation of degree programmes. There are essentially two university-level academic qualifications: a bachelor's degree (Level 6 of the European Qualifications Framework¹) and a master's degree (Level 7 of the European Qualifications Framework). In addition, there are some subject areas in which study programmes lead to state-certified exams; for example, medicine, law, and teacher training. Finally, there are some programmes that lead to a 'Diplom', a degree awarded for a nine-semester programme at Level 7 of the European Qualifications Framework. In total, there are approximately 9,500 different undergraduate programmes and around 6,800 postgraduate degree programmes offered at HEIs in Germany. To ensure all of these courses offer broadly the same conditions of study, and to facilitate mobility within Germany, certain basic principles have been agreed by federal state ministers within the framework of the Standing Conference of the Ministers of Education and Cultural Affairs. State governments must take these into account when formulating laws and regulations.

HEIs have traditionally had a degree of autonomy with regard to organization and decision-making on academic issues. However, over the last two decades this autonomy has been broadened to include, in particular, the management of budgets and human resources.

German higher education has recently received an increased financial commitment from federal government. However, this development is restricted by constitutional limitations which mean that the German government can only legislate on issues concerning access to higher education and academic qualifications.

Finally, it should be noted that in most of the 16 German federal states, the accreditation of study programmes is regulated by law. Student satisfaction surveys, for example, are usually a requirement of quality assurance. Accordingly, higher education institutions are obliged to survey their students on a regular basis and incorporate their students' opinions into their quality assurance activities.

Tendencies and actual challenges

Tertiary education in Germany and its German-speaking neighbouring countries has been undergoing far-reaching change since the late 1990s.

Until the 2000s, higher education institutions were subordinate to regional ministries of science and education. They were not fully autonomous, stand-alone institutions, and were not responsible for designing their own objectives or for developmental planning. As autonomy increased, individual institutions developed their own strategic profiles, though with varying degrees of success and enthusiasm. This led to a period of intra-institutional differentiation and vertical stratification within German higher education. The most important elements of differentiation in tertiary education concern: (a) the increase in top-level research in Germany, fostered by the federal government's German Universities Excellence Initiative;² and (b) the development of universities of applied science and other different types of HEI.

Strengthening Germany's status as a top-ranking nation for cutting-edge research, particularly in the sciences, is the declared political objective of the Excellence Initiative. The initiative aims to increase stratification among German HEIs with the help of a competition-like promotion of excellence. Another fundamental idea is to enhance the competitiveness of the system as a whole by encouraging research excellence and the generation of structural innovations. The political will to stratify the system and create

1. For more information see: https://ec.europa.eu/ploteus/search/site?f%5B0%5D=im_field_entity_type%3A97

2. http://www.dfg.de/en/research_funding/programmes/excellence_initiative/index.html (last accessed on 23.10.15).

competition between universities broke with the higher education paradigms of the federal-republican post-war era, as well as with the Humboldtian university model and the egalitarian ideal that 'Anyone can study any subject anywhere equally well'. The 2005 and 2010 rounds of bids to the German Excellence Initiative proved to be immense structural drivers of change owing to the high level of interest they generated among elite providers of education. Between 2006 and 2012, a total of €1.9 billion was granted in funding, with another €2.7 billion earmarked for the period from 2012 to 2017.

In addition to the group of top-level research-leading universities, there is a group of cutting-edge universities of applied science which is calling for a relaxation of the rigid boundaries between the two systems. In particular, these universities are increasingly demanding the right to award doctorates, further blurring the lines between the different types of institutions. However, the German Science Council (Wissenschaftsrat), in its recommendations for diversifying higher education institutions, stressed the need for functional differentiation) and continues to make the case for maintaining it (Wissenschaftsrat, 2010).

Individual institutions are encouraged to develop their own strategic profiles by a higher education funding model that uses performance indicators to determine levels of government funding. Universities are also reliant on their success in acquiring funding from third parties. As German universities have become more competitive, a new management culture has emerged, underpinned by a shift from traditional public administration to a new public management (NPM) philosophy. NPM is a management system which takes ideas from the private sector and applies them to public sector organizations. It emphasizes competition, decentralisation, and output in order to enhance institutional performance. The application of NPM in higher education institutions is expected to contribute to an improved definition of institutional objectives and performance indicators as well as strengthening the link between funding and the accomplishment of key performance indicators.

In terms of internal quality assurance, the most important current developments in teaching and learning in the German higher education context are:

Strengthening competence-based professionalization

Competence-based professionalization is playing an increasingly important role in discussions of German higher education policy. This is due, in large part, to the framework specifications of European university reform, emerging qualifications frameworks, and the demands of the German Research Foundation (DFG), the economy, and industry. Students and doctoral candidates need multidisciplinary competences, which are an integral part of training, education, and qualification in both scientific and non-scientific disciplines. Important fields of action are the expansion of functional support for doctoral candidates, as well as the strengthening of teaching via more specialized higher education instruction for academic staff. Internal quality assurance comes into play in measuring: (i) the outputs of competence-based professionalization; and (ii) its acceptance by relevant stakeholders.

Bologna on the way - promoting curriculum development

The Bologna Process opens up an important opportunity for universities in the European Higher Education Area in the teaching and learning domain. Universities have a responsibility to transform their educational objectives, making use, in particular, of analyses of the student body and individual educational trajectories. The first steps towards this were unconvincing as many study programmes continued to follow former educational objectives, thus creating an excessive student workload. There was also a desire to give students more choice over their courses as well as greater space for

personalized development. In order to develop these areas, a deeper reform of curriculum was needed, focusing on the curriculum as a whole and creating study programmes which are competence-oriented. Internal quality assurance could make a contribution to this important development, providing data and ideas as to ways forward.

Flexibilization of study formats – teaching-oriented diversity management

The complex architecture of German universities and the diversity of the student body pose special challenges for teaching, consultation, and supervision. Flexibilization can be introduced at different levels; places of learning, timings of learning, and learning methods are crucial structural parameters. Alongside a growing consideration of these parameters comes an adaptation of teaching and learning processes at the structural level that reflects the heterogeneity of the student body. Higher education institutions worldwide, but especially in Germany, have increasingly taken this into account in the last five years. Blended learning models offer a possibility of change to the structural perspective in this context. Internal quality assurance could provide information on the social composition of students, their backgrounds, and their success, as well as the success of measures taken to date.

Higher education expansion – challenges for the course of study and critical stages in a course of study

The German higher education system faces a number of major challenges. One is the political objective to increase the academic participation rate to 50 per cent, with its consequent demands on levels of academic inclusion. Another lies in the fact that the required number of years for a student to graduate from high school fell from nine to eight in nearly all German regions during the 2000s, which meant that universities faced a double intake of school leavers. The response to this was *Hochschulpakt 2020*, a complex contract between universities and the German federal and state governments, aimed building the capacity of the higher education system.

The more students who enter the system, and the more heterogeneous their needs, the greater the challenge for each educational institution, in terms of its capacity to adapt to this heterogeneity, as well as its ability to develop appropriate supporting measures. This is particularly important for those beginning their studies, since the introductory phase is the most critical stage in the higher study process.

Through accompanying actions and targeted interventions at other critical stages, it is possible for German HEIs to achieve a qualitative expansion of the system within the framework of the quantitative promotion approach of *Hochschulpakt 2020*. One such action is the bundling and coordination of pre-course systems, mentoring systems, and course progress analyses.

1.3 Quality assurance in the German higher education system

Quality assurance was first introduced into the German higher education system following the 1968 student protests, and was used to develop evaluation structures in universities amenable to reform. The student movement, which brought teaching and learning to wider attention, prompted the emergence of the field of higher education didactics, as well as an evaluative approach to the enhancement of structures and content in German higher education. The idea was to contribute to the modernization of higher education and society. The ‘reform universities’, which were founded after 1968, put evaluation practices in place as tools for continuous improvement. However, despite the initial enthusiasm, these ideas fell out of fashion in the 1980s, before being revived as part of the Bologna agenda.

In the mid-1990s, the evaluative approaches of the reform universities were linked with the ideas of new public management, resulting in the foundation of the Accreditation Council at a 1998 conference of federal state ministers. A system of external quality assurance was established in the early 2000s, in response to the Bologna agenda, with a focus on the accreditation of study programmes.

In a parallel development, in 1998, the German Rector's Conference established Project Q, which aimed to help German universities develop structures and procedures for quality assurance in preparation for Bologna. At that time, project members acted as consultants in universities and helped to launch IQA activities. Since 2003, in most federal states, accreditation processes have progressively superseded applications to the state for the launch of study programmes. Most states have integrated obligatory programme accreditation into their higher education laws. Since 2005, most German universities have been building up units for internal quality assurance that should, theoretically, provide support both to meet the requirements of external quality assurance and to stimulate internal approaches to quality enhancement.

German external quality assurance system

The German external quality assurance system is based on accreditation; that is to say, the award of accreditation signifies that a university has permission to run a particular study programme or, if the IQA system of an HEI is accredited, to autonomously guarantee the good quality of all its study programmes. Unlike in many other countries, public universities in Germany do not have to be accredited by the state to run their study programmes. Private universities must be accredited by the Wissenschaftsrat, which advises the federal government and federal-states on the structural and content-based development of higher education institutions and research bodies.

The German higher education accreditation system was established in 1998. The system has two levels. The Accreditation Council is at the top and has the statutory task of organizing the system of quality assurance in teaching and learning through accreditation. Its main purpose is to contribute to the development of the quality of teaching and learning in Germany and, to this end, to contribute to the realization of the goals of the European Higher Education Area.³ The Accreditation Council is a foundation under public law. Its members are appointed for a period of four years by agreement of the Standing Conference of the Ministers of Education and Cultural Affairs of the Federal States (KMK) and the German Rectors' Conference (HRK).

The responsibilities assumed by the Accreditation Council on behalf of the federal states of Germany are set out in a law passed on 15 February 2005 and amended on 1 April 2008, which establishes a 'Foundation for the Accreditation of Study Programmes in Germany'.

The second level of the system is made up of accreditation agencies, which must themselves be accredited by the Accreditation Council before they can accredit degree programmes. These agencies do not necessarily have to be constituted by German law – foreign agencies can also be accredited for external quality assurance in Germany. Accreditation agencies (at least the German ones) are usually membership organizations or foundations, with members usually drawn from HEIs and sometimes from ministries. An HEI could be a member of a number of agencies, but is not obliged to be a member in order to be accredited. HEIs are free to choose the agency to which they apply for accreditation of their programmes. Usually, accreditation agencies have a specialist profile, formerly reflecting regional priorities. There are currently 10 accreditation agencies certified by the Accreditation Council (eight German, one Austrian, and one Swiss).

3. See: <http://www.akkreditierungsrat.de/index.php?id=44&L=1>

Box 1.2 Tasks of the Accreditation Council*

In contributing to the development of quality in teaching and learning, the foundation, on behalf of the German federal states, ensures that the agencies certified to carry out the accreditation of study programmes and IQA systems do this to the highest standards of quality, comparability, and transparency. The foundation is therefore responsible for the regulation of the requirements for accreditation procedures and for the fulfilment of the following tasks:

- accreditation of agencies,
- promotion of international cooperation,
- recognition of foreign accreditation decisions,
- monitoring of accreditations,
- ensuring fair competition,
- reporting.

*For more detailed information, see: <http://www.akkreditierungsrat.de/index.php?id=44&L=1>

By law (in those federal states where it is mandatory), only accreditations granted according to the criteria of the Accreditation Council are binding. The German Accreditation Council (Akkreditierungsrat, 2015) describes the accreditation process for study programmes as follows:

The accreditation procedure is a multistage procedure which is based upon the principle of peer review. If an institution of higher education applies to an agency for accreditation for one of its study programmes, the agency will appoint a group of experts which will reflect both the academic focus and also the specific profile of the study programme. The expert group will comprise representatives of all the relevant stakeholders. This will particularly include representatives of the higher education institutions - namely lecturers and students - and representatives from professional practice.

The assessment of the study programme by the expert group takes place in accordance with the rules for the accreditation of study programmes and for system accreditation. It generally includes an on-site visit to the higher education institution, as well as the analysis of the higher education institution's application rationale. In this context, the group of experts will conduct on-site interviews with the management of the higher education institution, teaching staff and students. Finally, the experts will prepare a report with a recommendation on the accreditation of the study programme.

Based upon the report and according to the rules for decisions stipulated by the Accreditation Council, the agency's relevant decision-making body will then decide upon the accreditation for the respective study programme, an accreditation with conditions, a suspension, or a refusal of accreditation.

Following the procedure, the agency will publish its decision, the expert's report and the names of the experts in the Accreditation Council database. If there is a negative decision, the Accreditation Council will receive the appropriate notification instead of the publication.

Cluster accreditation is an additional form of programme accreditation that gives universities the opportunity to have several similar study programmes accredited by the same commission. For example, one peer reviewers' group could accredit all teachers' education programmes in foreign language studies, thus saving the university time and money.

The implementation of programme accreditation not only changed the relationship between the state and HEIs, it also contributed – as an external incentive – to the development within institutions of structures and procedures to support programme accreditation. Commonly, preparation for programme accreditation is undertaken by academic and support staff within faculties. However, central administration can assist this process in two ways: (a) by double-checking the information given; and (b) by contributing to the required self-documentation, including the calculation of teaching capacity (does the programme have enough resources?) and the provision of essential chapters for inclusion in the document (e.g. description of the university, figures and facts, and description of the IQA system).

Certain conditions for accreditation imposed during the programme accreditation process have fostered the development of internal quality assurance structures. There are two main conditions which drive developments. First, institutions had to establish tools which would allow students to give feedback both during their studies and after graduation (student course evaluation and graduate tracer studies). Second, the conditions for accreditation often included the establishment of procedures to measure the workload of students – for a course, a module, or the whole study programme – and to contrast this with the workload calculated on the basis of the number of ECTS credits awarded for one teaching unit (course or module). Even if methods for measuring workload are still not very widespread, many programmes have had to meet conditions of this kind.

However, the most important impetus for the establishment of internal quality assurance systems was the modification of the accreditation system itself. In 2009, the German Accreditation Council decided to make it possible for HEIs to have their internal quality assurance system accredited, rather than each individual study programme. System accreditation attests that the HEI is capable of assuring the high quality of its own study programmes by means of its quality assurance system, thus making individual programme accreditation unnecessary.

In contrast to the procedure for programme accreditation described above, system accreditation focuses on the institutional quality assurance system. The major concern of the agency during the accreditation process is that HEIs are able to ensure the quality of their programmes by themselves.⁴ In principle, the procedure for system accreditation is quite similar to that of programme accreditation, but with a few essential differences, which are described below.

HEIs applying for system accreditation have their accreditation deadlines for study programmes postponed for up to two years. This exempts the university from having to meet two different sets of quality assurance requirements at the same time. The system accreditation process consists of a site visit by the agency and at least two by peer reviewers. The peer reviewers' group must have at least one international member. On the basis of the documentation on the university's quality assurance system and the site visits, the peer reviewers form an impression of how the IQA system works and whether it meets the 11 criteria applied in programme accreditation.

An institution must, in addition, meet another six criteria for system accreditation. These criteria frame the internal quality assurance systems of German higher education institutions.

To ensure the system works for each programme, the system accreditation procedure uses two additional tools. The first is the programme random sample, where peer reviewers pick a certain number of study programmes to be subject to additional peer review. The second is the so-called feature random sample, where peer reviewers select one of the

4. For detailed information about the procedure see the guidelines of the German accreditation agency. ACQUIN: https://www.acquin.org/wp-content/uploads/2013/07/Guide_System_EN_ACQUIN.pdf

seven criteria for system accreditation (e.g. having in place a well-functioning system for assessments) and assess, through in-depth-analysis, how this criterion is applied to all study programmes of the university. The HEI must prepare additional material for these two samples. Final system accreditation can be awarded with or without conditions or it can be withheld. System re-accreditation occurs after eight years.

Box 1.3 Criteria for system accreditation*

The higher education institution must have:

- defined and published an education profile for itself and its study programmes;
- implemented a system of internal quality assurance in teaching and learning;
- a data collection and reporting system;
- clearly defined responsibilities for teaching and learning;
- a system of documentation and information for the general public and the ministry in place;
- a process in place to ensure the quality of study programmes jointly offered with other HEIs.

*For more detailed information, see:

http://www.akkreditierungsrat.de/fileadmin/Seiteninhalte/AR/Beschluesse/en/AR_Regeln_Studiengaenge_en_aktuell.pdf

External and internal push factors for internal quality assurance in Germany

One of the most important external push factors for internal quality assurance was the workload generated by inefficient programme accreditation requirements. Universities did not feel programme accreditation had a positive effect on the quality of their study programmes, and, because programme accreditation was perceived to be arbitrary, many strengthened their units, offices, tools, and procedures for internal quality assurance and started developing coherent quality assurance systems to obtain system accreditation. In this context, an increased level of autonomy was a crucial factor in the rise of system accreditation.

The increasing number of competitive, third-party funded projects and initiatives, offered by private foundations or the federal Ministry of Education and Research, was another important push factor. The ministry, together with the ministries of the federal states, announced a €2 billion ‘quality pact for teaching and learning’ for the period from 2011 to 2020. Currently, 186 HEIs are working within this framework to enhance the quality of teaching and learning. The initiative has also led many universities to allocate project resources to conceptualize, strengthen, or expand tools and procedures for internal quality assurance.

A third important factor has been political pressure on institutions to take an internal interest in enhancing the quality of their study programmes in order to reduce student drop-out and improve retention. This was more than just political talk and was backed up, for example, in the performance-oriented budgeting for HEIs. One of the instruments often cited in policy discourse about quality is internal quality assurance.

The development of internal quality assurance was also supported by the growing prevalence within institutions of evidence-based decision-making, with its emphasis on measurable facts. The more powerful internal decision-making structures became in autonomous institutions, the more decision-makers required data on which to base these decisions (e.g. in terms of key performance indicators). The evidence-based paradigm influences the decision-making process in two ways: acting as a guide for decision-makers, while making the process itself more objective.

Another internal supporting factor is the stronger, more pragmatic voice of a new student generation. They demand indicators and measures, which help to monitor and increase the quality of their experience as students.

The need for institutions to promote their brand has also pushed internal quality assurance higher up the agenda of HEIs. The positive messages emerging from IQA can form part of institutional communication strategies.

2. Institutional environment

This chapter examines the institutional context for the development of the IQA system at UDE. It describes the historical development of UDE as well as its current status.

2.1 University of Duisburg-Essen

General information

Germany's newest university, the University of Duisburg-Essen (UDE) was founded as a result of the merger of the universities of Duisburg and Essen in 2003. Today, it is one of the 10 largest universities in the country. UDE offers a wide range of internationally oriented courses in the humanities and social sciences, economic sciences, engineering, and the natural sciences, including medical science. An estimated 40,000 students are enrolled on 172 degree study programmes (bachelor and master's courses). The university also offers a number of professional development courses.

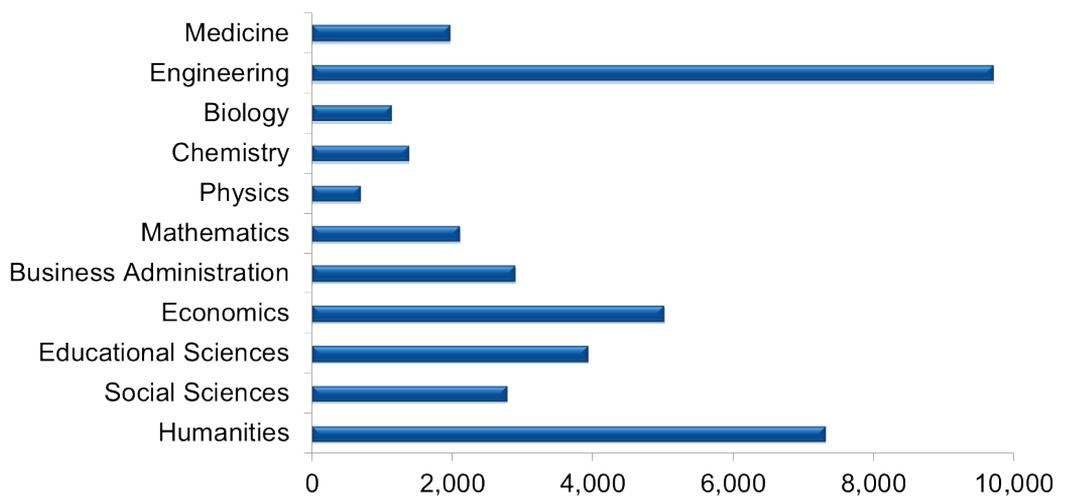
UDE is located across the two cities of Duisburg and Essen. Each city has its own fully equipped campus on which the faculties are mostly concentrated. Both campuses house parts of the university's central administration and middle and senior leadership staff have to commute between the two cities. Essen and Duisburg are located in the metropole-area of Rhine-Ruhr, a region with a long tradition in the steel and mining industries. In the 1990s the region underwent major structural change. Most of the old industry closed down or underwent modernization. Between 1980 and 2002 more than half of the region's 1 million industrial jobs were lost, while 300,000 new ones in the service sector were created. Today, some 5.1 million people live in the Ruhr area.

UDE is a fully fledged research university, with 11 faculties ranging from the humanities to the sciences, including economics, engineering, and medicine.

With an annual budget of round about €549 million (2015), of which €109.4 million is third-party funding, UDE employs 440 professors, 2,860 scientific staff members, and 1,410 technical and administrative staff members.

Half of UDE's 40,000 students study disciplines in either engineering or the humanities. Figure 2.1 shows the distribution between faculties.

Figure 2.1 Student population of UDE by faculty (2013)



It is important to mention that more than half of UDE's students (52 per cent or 60 per cent, depending on the survey used) are non-traditional students whose parents did not enter higher education. Furthermore, a quarter of the student population is either a first or second generation migrant. This makes the student population of UDE distinct, even in a country in which universities commonly welcome a large proportion of first-generation students. Consequently, many of UDE's students have particular needs, in terms, for example, of language qualifications or their preparedness for academic study.

The challenge presented by UDE's heterogeneous student population resulted in the establishment of Germany's first deputy vice-chancellor (DVC) position for diversity management in 2009. Other measures, including the government's previously mentioned 'quality pact' teaching programme, which invested more than €22 million in mentoring and guidance structures, have since been put in place to support the socialization of first-generation students at the university.

In terms of its research activities, UDE concentrates on four main interdisciplinary research areas, which are supported by additional funding from the rectorate in order to foster research cooperation across disciplines and increase UDE's success in raising third-party funding. These areas are nano-sciences, biomedical sciences, urban systems and metropolis research, and change in contemporary societies.

With Ruhr University Bochum and the Technical University in Dortmund, UDE founded the University Alliance Ruhr (UAR), a strategic institutional alliance aimed at strengthening national and international visibility. The UAR has a budget of over €1 billion, involving more than 100,000 students and more than 1,000 professors. It has strategic cooperation offices in Moscow, New York, and Rio de Janeiro.

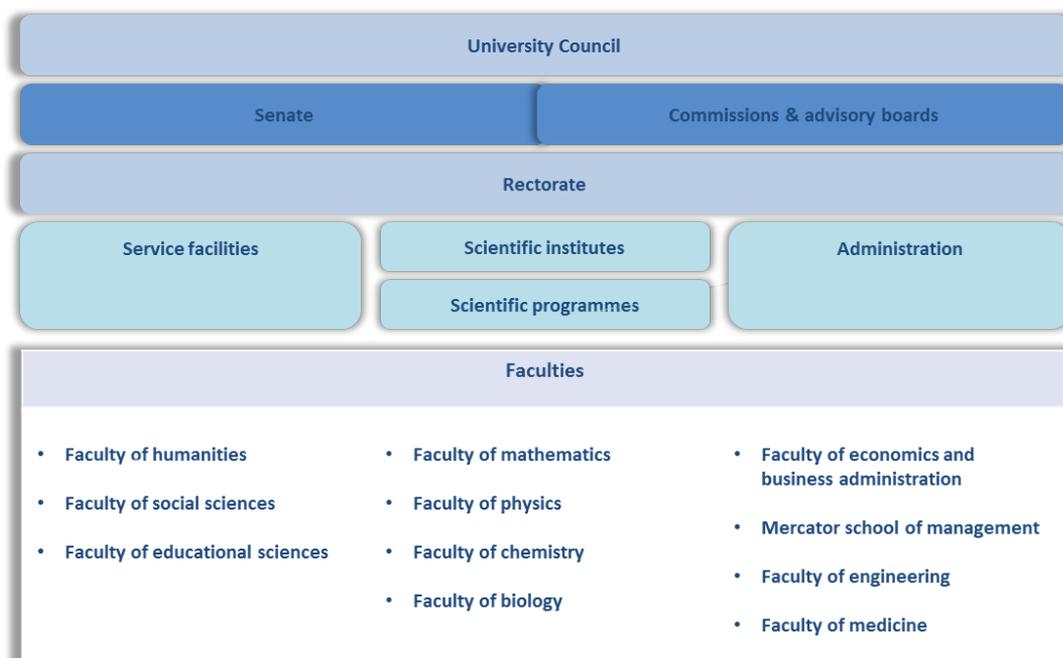
Governance system of UDE

UDE is a university incorporated under public law in the federal state of North Rhine-Westphalia. By law, the executive organ of the university is the rectorate, which consists of a vice-chancellor, a number of DVCs with responsibilities for specific areas, such as teaching and learning or research, and a DVC for administration. The vice-chancellor supervises the academic staff while the DVC for administration supervises the administrative staff. Most of the members of the rectorate are full-time managers who are no longer active in teaching and research.

The rector is nominated and elected by the university council and the senate. He, in turn, nominates the DVCs, including the DVC for administration, for election by the council. Following higher education legislation assigning more executive power to the rectorate, the senate has been reduced to more of a counselling role, while the university council takes care of normative questions regarding the development of the institution, and receives reports from the rectorate. University commissions also counsel the rectorate and the senate in their daily business. *Figure 2.2* shows the organizational structure of UDE.

The faculties and faculty councils are chaired by deans elected with a four-year mandate by the faculty council. They can be supported by up to four vice-deans (typically responsible for different areas, such as teaching and learning, research, diversity management, etc.). The deaneries have quite a powerful role at UDE. According to the university's constitution, deaneries are responsible for writing the development plan of the faculty, in accordance with the university-wide development plan, and for the autonomous management of financial and human resources. To guarantee this autonomy, faculties of UDE have an annual budget which they govern themselves.

Figure 2.2 Organizational structure of UDE



Students, as well as technical and administrative staff and scientific staff, have representatives in all bodies of the university except the university council and the rectorate.

A DVC for institutional planning and resources is responsible for quality assurance at the central university level, while at faculty level it is the responsibility of the deanery. Both central and faculty levels are supported by a central service unit, the Centre for Higher Education Development and Quality Enhancement (CHEDQE), in fulfilling the requirements of internal quality assurance. This structure is presented in more detail in Section 2.2.

Strategic guidelines of the university

The university’s development plan sets out its main guidelines and strategies, as well as its future aims and objectives. Its development plans for the period from 2016 to 2020 aim to maintain previously successful structures in the fields of research, education, and governance while simultaneously developing new strategies and perspectives. These plans are intended to shape UDE’s profile as a modern, cosmopolitan place of higher education, further developing its size and strengths and increasing its visibility, both nationally and internationally. The university sees itself as a homogenous entity inclusive of all subjects and members, and therefore strives to establish and maintain an interdisciplinary network and engage all academics, employees, and students in the challenge of shaping the future of UDE. The following guidelines frame the development of the university:

- UDE adheres to the traditional university unity of research and education.
- UDE creates the best possible study and work conditions in all subjects and at all levels in order to offer an academic education based on science and research, striking out in new directions to do so. In designing its undergraduate and postgraduate degree programmes, UDE is guided by various individual and societal requirements within the context of lifelong learning.

- The ongoing development of teacher training in the research and education sectors is a significant aspect of UDE's profile. In the process of changing over to bachelor/master's courses of study, UDE is rigorously pursuing a policy of quality standard conformance and aims to create the best possible conditions for study.
- The university considers the heterogeneity of its students and employees as a unique opportunity and promotes diversity via select management measures. UDE understands 'diversity' as a contribution to educational equality and academic excellence. Gender equality is an integral part of these endeavours.
- Within the framework of the university management system, UDE aims to maintain an appropriate balance between a central profile and a decentralized system of self-governance and self-responsibility. The instruments of target and performance agreements, budget management, cost control, and staff development all contribute to its stringent quality assurance policies.
- As a member of the UAR, UDE works together with Ruhr University Bochum and the Technical University of Dortmund to coordinate its efforts to develop the Ruhr as a science region, creating a unique profile, setting priorities, and establishing scientific and organizational networks.

2.2 Responsible for QA: The Centre of Higher Education Development and Quality Enhancement

In March 2004, the rectorate formally decided to establish an internal quality assurance centre at the university. This centre was designed as a service unit for all academic and non-academic sub-units of the university, taking into account the organizational culture at UDE, which is characterized by a high degree of autonomy at faculty level. Faculties and other organizational sub-units are responsible for their own strategic development and receive a budget for this purpose.

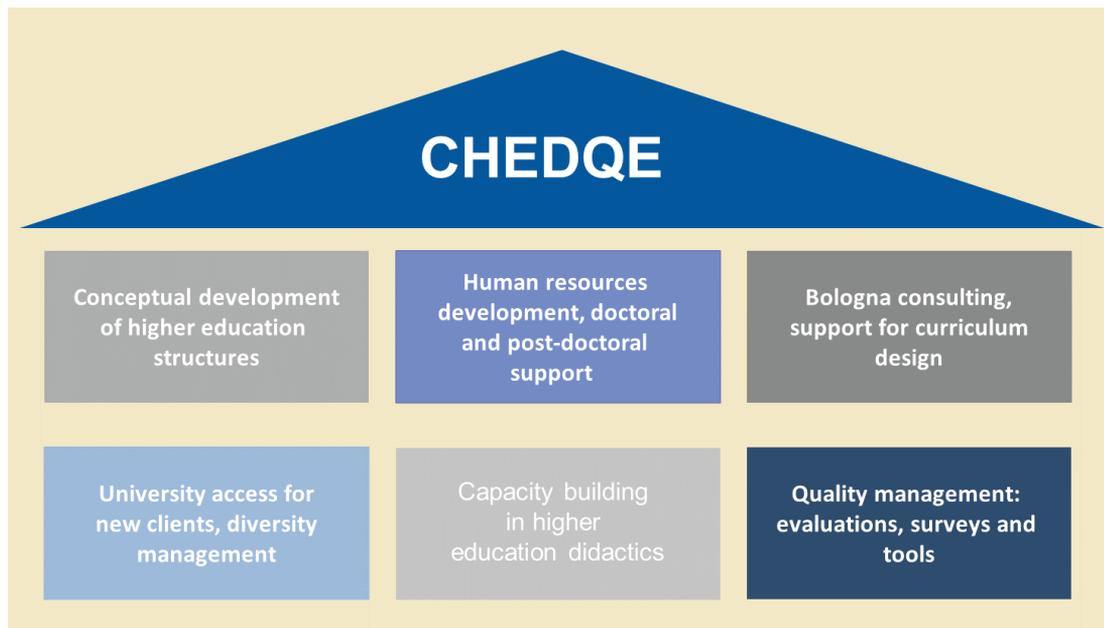
In early 2005, the rectorate decided to expand the existing Centre for University Didactics, creating the Centre for University Development (later renamed the Centre for Higher Education Development and Quality Enhancement) where quality assurance was to find its organizational anchor. The strengthening of provisions for quality enhancement was motivated by a desire to become a 'model university' for quality assurance and undergo system accreditation. This would allow the university to practice internal quality assurance and assume responsibility for accreditation of its own study programmes.

Since its launch, the goal of the CHEDQE has been to support the university in attaining high standards in research, teaching, and the qualification of young researchers. A combination of quality assurance, evaluation, academic career development, higher education and media didactics, and measures to improve gender balance and diversity, as well as the opening up of the university to non-traditional students, were necessary for the quality development of the institution. This centre, to which the university leadership could assign tasks and challenges in the field of organizational development, became a source of critical and expert opinion in the areas identified for development.

Following evaluation by an external agency, the centre went through a restructuring process in 2010. Its tasks are now divided equally between standard services, which are offered continuously and thus require tenured staff, and temporary third-party funded projects.

Today, CHEDQE's tasks can be grouped into six main interest areas, which together form a holistic approach to quality enhancement. *Figure 2.3* illustrates the key issues:

Figure 2.3 CHEDQE's fields of activity



Today, the centre has around 40 employees working on continuous standard tasks, such as recurring evaluations, as well as different projects in the fields of higher education development and quality enhancement. Since 2010, the number of third-party funded projects has increased significantly. To date, more than €40 million has been spent on projects to enhance the quality of teaching and learning at UDE.

CHEDQE is responsible for the quality assurance system at the UDE and views comprehensive quality development as an interface between classical quality assurance, higher education didactics, and academic staff development. It receives central support from the administration department responsible for university development planning and the financial control department. UDE's broader approach to quality assurance is reflected in CHEDQE's activities in the field of curriculum design. Here, potential shortcomings are identified on the basis of higher education statistics. Experts on curriculum development discuss the shortcomings with colleagues responsible for the study programme in question and make recommendations as to how the study programme can be adapted and future shortcomings avoided. Higher education didactical qualification programmes are offered to faculty and other personnel, to equip them in the field of academic curriculum design.

Two teams have specific responsibility for quality assurance and quality enhancement: the data management team and the evaluation team. There is also a consultant to the managing director who is responsible for the implementation of system accreditation at UDE. In 2015, the data management team comprised three scientific staff members (responsible for quantitative and qualitative tools), one administrative staff member (responsible for questionnaire programming and server hosting), and one student assistant. Two scientific staff members (responsible for the processes of internal institutional evaluation) are based in the evaluation team. The teams also comprise temporary staff members, who administer international projects in the field of higher education development and quality enhancement. The composition of CHEDQE's teams is flexible, depending on which staff members are working on the different tasks and projects.

3. The IQA system, its principles, and innovative elements

This chapter offers an overview of UDE's IQA system and its most important tools, highlighting salient features and giving detailed descriptions of system processes. It considers the development of the system, UDE's policy, and its structures and tools, as well as planned enhancements and further steps. The discussion will emphasize, in particular, how IQA at the university aims to enhance the employability of graduates. It also discusses how the structure of IQA strives to maintain a balance between central university and faculty-level activities and responsibilities.

3.1 Quality policy and handbook at UDE

UDE's quality policy is based on recognition of the importance of a balanced relationship between central and decentralized responsibilities for assurance and development of quality. Quality in research and teaching, service, and management can only be achieved through the active engagement of the parties concerned. Therefore, responsibility for ensuring quality in these areas is devolved to the particular organizational sub-unit (faculties, administrative departments, etc.). Development processes take place at a decentralized level and are incentivized centrally through respective target and performance agreements. Quality assurance tools and procedures support these processes by providing relevant information.

The most distinctive quality-assurance activities can be observed in the teaching and learning units. The faculties are responsible for, and also practise, quality assurance for individual study programmes. Their activity is underpinned by the university's commitment to extending decentralized responsibility, including creative freedom within the core processes of teaching and learning, and supported by a culture of mutual trust in the drive to enhance quality. The framework for quality development was established in the university's strategy for developing teaching and learning, which was published in 2012. The document set out key principles for quality teaching and learning at UDE.

In 2013, the decision-making bodies of UDE developed a quality handbook to inform members about the tools, procedures, and structures for internal quality assurance within the university, and to prepare them for active participation within its framework. The handbook, which is updated continuously, describes the profile and structure of the university, as well as the responsible actors, using steering instruments and communication tools to show the linkages between internal quality assurance and the strategic mission of the institution. The main body of the handbook sets out:

- procedures for implementing, modifying, and terminating a study programme, using flowcharts and written descriptions;
- tools for internal quality assurance and their application in study programmes, departments, and faculties.

Finally, it provides a glossary of key terms in quality assurance to help establish a common language of quality assurance and to avoid misunderstandings.

Box 3.1 University of potential: Strategy for the development of teaching and learning at UDE*

Throughout the university, it is understood that good teaching is based on six key principles.

1. Integration of teaching and research

UDE aims at an integration of research and teaching. This guarantees a high professional standard of study programmes and the integration of research questions into their content.

2. Based in disciplines, but open-mindedness for inter- and trans-disciplinarity

At a first qualification level, a broad variety of disciplinary knowledge and methodology is taught. The liberal arts approach to study programmes aims to strengthen students' awareness of inter- and trans-disciplinarity. At the master's level, the study programmes will therefore be based in inter- and trans-disciplinarity.

3. Quality of supervising students

Throughout the teaching/learning process, students receive ongoing advice regarding their subject knowledge and personal skills. In addition, a variety of general and subject-related advisory and supervisory support is available, as well as specific support for students with special needs.

4. Competence orientation

Study programmes aim at personal development, the transmission of scientific knowledge, and preparation for a profession. At UDE, the study programmes are strongly competence-oriented, based on action-oriented learning goals and competence-oriented examination formats.

5. Diversity awareness and educational equality

UDE values the diversity of its student and staff as having a positive effect on learning and personal development. The university promotes and benefits from the diversity of its members, in terms of age, family background, or national origin. The integration of heterogeneity into study programmes with regard to content, structure and pedagogy is intentional. The scope, quality, and the degree of innovation of study programmes offered at UDE are exemplary. Study success is measured in all cases in terms of performance.

6. Quality orientation

All study programmes and their organizing units are subject to a continuous cycle of quality assurance which closely examines their content and structure with a view to possible further development. Central instruments, such as student evaluations, surveys of teachers, tracer studies, and institutional evaluations inform the process. The understanding, throughout the university, of the importance of quality content and processes, strengthens UDE study programmes and ensures a living quality culture.

* Universität der Potenziale: Strategielinien zur Entwicklung der Lehre an der UDE: https://www.uni-due.de/imperia/md/content/qualitaet-der-lehre/ude_strategiepapier_lehre.pdf

3.2 Roadmap to quality: Formation of quality assurance at UDE since 2003

The strategic importance of quality assurance has been recognized within the university since it was founded in 2003. With the establishment of a comprehensive quality assurance system, the core of which was to combine regular institutional evaluations with goals for development, the UDE has set a very good example within the German university sector. Over this period, all the university's study programmes have been converted to a bachelor/master's degree structure and accredited.

In 2008, system accreditation was introduced in Germany, presenting an opportunity for UDE to have its quality assurance system accredited. A project, 'Further development of the QM system: UDE on its way to system accreditation', was initiated to ensure the systematic enhancement of existing instruments and the establishment of an efficient balance between centrally administered quality assurance instruments and the interests and activities of the faculties.

The following chronology highlights the most important steps in the establishment of internal quality assurance at UDE:

- **2003–2010:** In 2003, UDE undertook the first accreditation of all its 172 study programmes, with four of the nine German accreditation agencies. The re-accreditation of all study programmes, which occurs every six or seven years (with the exception of medicine), was ongoing throughout the period. Despite the fact that UDE is one of the 10 largest German universities, it is one of only a few to be fully programme-accredited. Programme accreditation is quite a comprehensive experience, which may explain why support for system accreditation within the institution was quite high. The newly introduced format of system accreditation was seen as a better alternative in view of the high number of UDE members who perceived programme accreditation to be ineffective.
- **2005:** Two years after the first accreditation process, a quality assurance unit was launched at UDE. CHEDQE began with the development of tools for quality assurance, namely institutional evaluation, target and performance agreements, and student course evaluations. In parallel, a data management system ('SuperX') was created in which quality-relevant data could be stored and collated. Initiating the cycle of institutional evaluation and target and performance agreements, in 2006 the rectorate subjected itself to evaluation by external peer-review. Support processes for programme accreditation were put in place at central administrative level to provide services to faculties undergoing programme accreditation and to pave the way for the implementation of a standard procedure across the university.
- **2007:** Two years later, it was possible to evaluate the outcomes of the first use of the tools introduced by CHEDQE. They proved to be popular among university staff, and the detailed feedback received generated more or less permanent improvement cycles, particularly in the case of student course evaluations. In 2007 another tool was added. Graduate tracer studies were conducted among UDE's first graduate cohort. This was done using the framework of the graduate tracer studies cooperation project, led by the International Institute for Higher Education Research (INCHER), Kassel, which is a source of data collection and analysis for many German universities and universities of applied science.
- **2010:** This year saw the introduction of system accreditation as an alternative to study programme accreditation. UDE wanted to be one of the first universities to embark on this new process. A two-year project to prepare UDE for accreditation

was conducted under the supervision of the Ministry for Science, Technology and Research of the federal state of North Rhine-Westphalia, which also funded the project. The implementation of a reporting system was outlined and a training plan for UDE personnel in the field of IQA was drafted. In order to reflect on the progress of the evolving QA system with members of other universities, UDE became a member of the consortium involved in the Promoting Quality Culture project,⁵ led by the European University Association.

- **2011/2012:** During the course of the ministry-funded project, it became clear that the number of tools in use had to be reduced so as to ensure that only data genuinely useful in closing the quality loop were generated. Processes were adapted to close the gap between data acquisition and the deduction of improvement measures, which resulted in greater efficiency. Moreover, in order to get more information about the characteristics of UDE's students, a student survey panel was established, providing the chance to survey one cohort of students at different stages of their course of study. A system of evaluating study modules and student workload was developed, prompted by feedback from study programme accreditations, and was consequently linked to the process of course evaluation. In these years, the task of preparing UDE for system accreditation involved communication about the adjustments and the newly developed tools, and implementation of the necessary changes. An advisory board, comprising members of all faculties, was established to take this work forward. Finally, a handbook for quality assurance at UDE was developed and a guiding strategy for teaching and learning at the university came into being.
- **2013:** After reaching consensus that system accreditation should be implemented in 2012 (all university bodies voted unanimously for it), UDE chose the German Accreditation, Certification, and Quality Assurance Institute (ACQUIN) to start the system accreditation process. It aims to be accredited in early 2016.

3.3 Quality assurance system: The main tools

In 2015, the internal quality assurance system at UDE consisted of three core elements:

1. institutional evaluation of all faculties, research, and service units resulting in target and performance agreements in a fixed cycle;
2. decentralized data-supported discussion of the quality of study programmes, followed by the development of improvement measures;
3. permanent and case-oriented provision of counselling, moderation, and support on the core processes, such as through support for curriculum development, capacity building in higher education didactics, and so on, and institutional planning by the CHEDQE, the administration department, and the legal department.

Figure 3.1 illustrates the interconnections of the system components.

UDE's quality assurance system has evolved over time, from the implementation of tools for information gathering (e.g. course evaluation), through to processes for quality analysis based on the information collated (e.g. quality conferences), and, finally, to procedures to ensure QM results are fed into planning and decision-making (e.g. within the process of developing target agreements). The underlying rationale of UDE's quality assurance system is to ensure the balanced interconnection of decentralized and central governance, while generating evidence on which to base informed decisions.

5. For more information see: <http://www.eua.be/activities-services/projects/past-projects/quality-assurance-and-transparency/PQC.aspx>

Figure 3.1 The quality assurance system of UDE

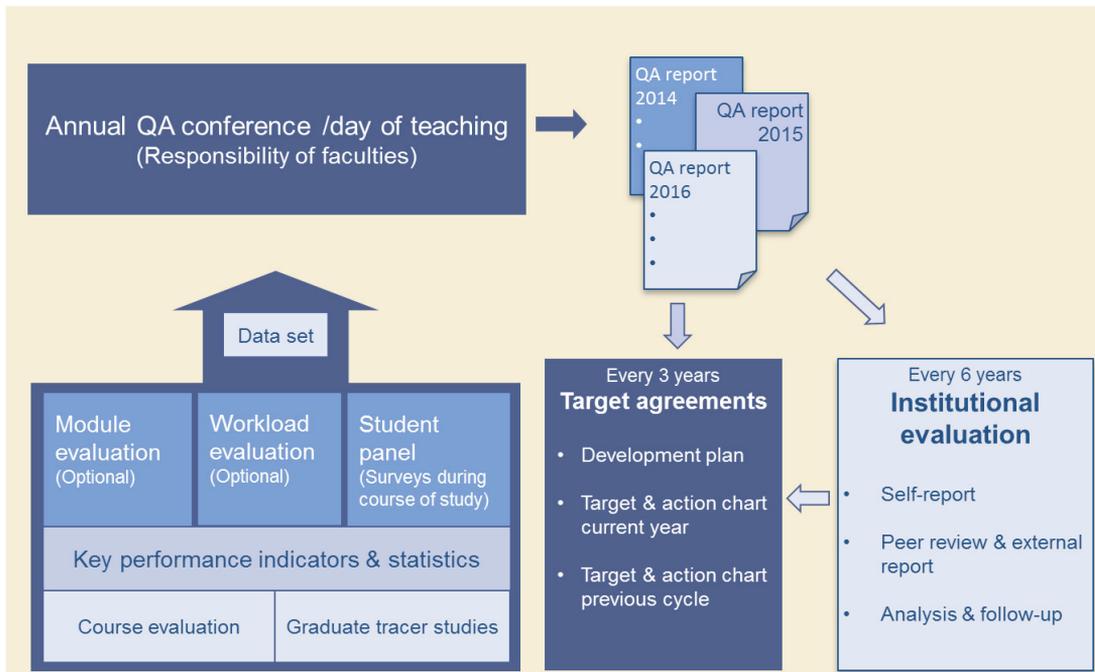
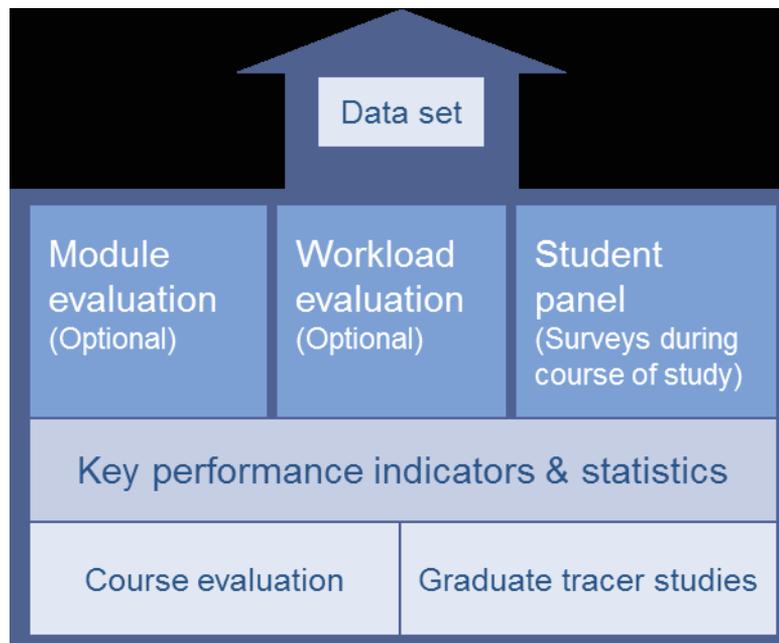


Figure 3.2 Components of the data set for quality conferences at UDE



Quantitative evaluation tools contributing to a data set

Within UDE’s quality assurance system, the tools for data collection and collation fulfil two functions. First, selected data contribute to an annual data set, which is the basis for the developmental activities carried out within the framework of annual quality conferences and faculty evaluations. Second, each tool is itself part of a quality loop, in which results are analysed and interpreted. For example, the UDE-wide results of graduate tracer studies are presented to the central university bodies annually. Similarly, the results of student course evaluations are provided to the deaneries so they can be used as a basis for staff appraisal. The IQA tools are described in detail below.

Student course evaluation

Student course evaluation surveys have been used since 2004. In this process, students are asked about their level of satisfaction with their courses via paper-based questionnaires. The surveys are analysed using special software, which is capable of processing the paper-based questionnaires automatically. The surveys function as an instrument for exchanging feedback and enable students and teachers to improve their teaching and learning interactions on a particular course.

Once CHEDQE have processed the questionnaires, teachers receive an automatically generated report of their results via email. The report is presented to the students by the teacher and discussed in class. Advice on how to interpret the results and prepare for the class discussion is available on CHEDQE's website.

When the surveys are complete, CHEDQE produces aggregated reports for each teaching unit and faculty. These are sent to the deanery, together with a summary of the evaluated classes, the individual reports, the raw data, and a comparison of the teachers' individual results against the faculty mean. If necessary, the deanery conducts follow-up talks with teachers whose results indicate a need for improvement. The comparison of the teachers' individual results against the faculty mean is also sent to the teachers.

Module evaluation

Module evaluation began in 2013. It is an optional tool in the internal quality assurance system, and is only applied where the course evaluation results indicate problems in a particular module. In such cases, the make-up and structure of the module, the modalities and organization of the module examinations, and the targeted qualifications and learning outcomes achieved by the students are assessed. This information, which, in effect, summarizes the academic feasibility of the module, can be used to develop the study programme further, for example within the framework of an institutional evaluation or quality conference.

The faculty/department and CHEDQE jointly decide which modules are suitable for evaluation. Suitable modules might be composed of several parts (e.g. teaching events) or be subject to a final examination (i.e. when examination results are not cumulatively acquired). CHEDQE and the faculty/department agree an appropriate follow-up measure, for example a module conference organized by the faculty.

Workload recording

A tool for the recording of workload was established in 2013. Workload recording is similar to module evaluation in that it is an optional tool used whenever the results of student course evaluation indicate the need for a thorough check of the students' academic workload.

To get the best possible results from workload recording it is necessary to collect study-related workload data over an entire semester, including lecture-free periods. UDE uses a simple online survey to avoid distortions due to memory, estimation, and/or calculation errors, while keeping to a minimum the number of forms students have to complete. Workload is recorded using three surveys: a screening survey, actual workload recording, and a final survey at the end of the examination period. This last survey records the learning outcomes and performances achieved over the course of the semester, with regards to the module handbook and in relation to other classes.

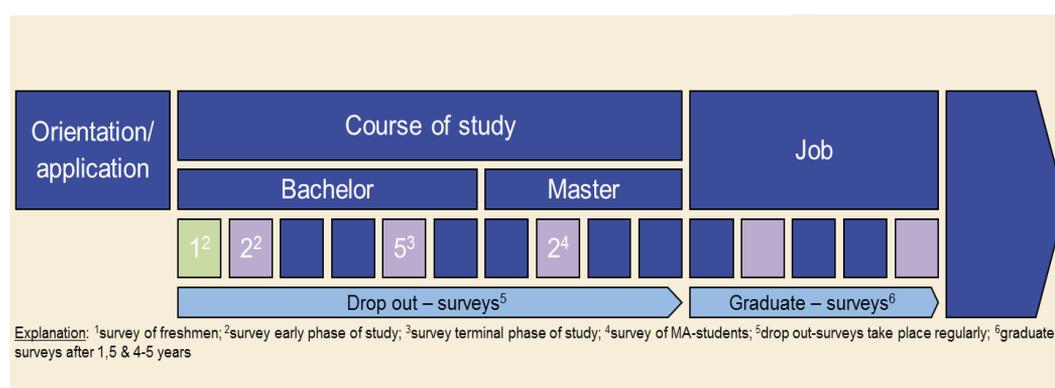
CHEDQE aggregates the survey data, and distributes them to the faculty/department. At the start of the survey, a follow-up measure, such as an analysis discussion, is agreed with the faculty, which can request support from CHEDQE, if desired.

UDE student panel

A longitudinal, cross-sectional student study – UDE’s student panel – has been conducted since 2011, in response to demand for valid data about critical phases in the study cycle. Special attention is paid to individual and institutional determinants of study success. This information serves to improve study conditions and, in the long run, helps create an environment which enables more students, whatever their personal circumstances, to attain university graduation.

The students who participate in the panel are questioned several times with an aim of tracking their individual study progress, as well as to analyse the specific problems of particular student cohorts. Students are questioned up to six times from the time they begin their studies up to the fifth year after graduation. Figure 3.3 shows the different surveys in which UDE student panelists take part:

Figure 3.3 UDE’s student panel



The survey collects not only information related to study programmes but also socio-demographic data which are used in the elaboration of specific sub-group surveys. The survey conducted during the various phases of a typical study cycle pays particular attention to the daily study routine, study conditions, and the problems and needs of the students. In the two post-graduation surveys, special attention is paid to graduates’ transition into the job market.

Analysis of the data from the panel surveys is conducted annually. An analysis of selected questions from the data sets is carried out in February each year, and a report is compiled for the rectorate and central committees each July. Additionally, the data are analysed in the context of diversity monitoring, with findings presented to UDE’s decision-making bodies.

Graduate tracer studies

Graduate tracer studies have been conducted annually at UDE since 2009. Since 2012, graduate tracer studies have been part of the performance agreement between the university and the federal state, and are mandatory for all universities in North Rhine-Westphalia.

Graduate tracer studies are used to obtain information about the subsequent life and career trajectories of UDE graduates. The information gathered is used in the ongoing development of the university’s study programmes.

Graduate tracer studies are conducted as part of the INCHER cooperation project, in which around 60 universities in Germany and Austria participated in 2015. The project survey is based on a common questionnaire which is used in all universities, but which can, if necessary, be complemented by several optional and/or university-specific questions. The survey targets students who completed their final degree 18 months or two years earlier.

CHEDQE checks the quality of the data within the framework of the annual data sets prepared for the annual quality assurance reports discussed in the quality conferences, and prepares a graphical illustration of selected items at departmental and study-programme levels. It also prepares a comprehensive report for the rectorate.

Qualitative evaluation tools

Alongside its use of essential quantitative tools, UDE is experimenting with a number of qualitative tools that could be included as obligatory features of the internal quality assurance framework in the future. These tools have been developed as part of a project and are not officially part of the system. Staff and student feedback, however, suggests that they find them very helpful in stimulating a quality culture within the institution.

Teaching analysis poll

The teaching analysis poll (TAP) is a qualitative mid-term evaluation method that provides lecturers with detailed, activity-oriented feedback. In Germany, many universities are expanding their evaluation portfolios with new formative techniques such as the TAP. In contrast to student satisfaction surveys conducted at the end of the semester, this tool allows the lecturer to more effectively involve students in the feedback loop while a course is still running. Feedback obtained from a TAP can be used to enhance classroom interaction, student learning, and teaching strategies. TAPs thus contribute significantly to the creation of a collaborative and interactive learning environment. UDE has used this method since 2013 as a qualitative alternative to student satisfaction surveys.

The UDE polls are conducted by a TAP consultant, who, to preserve the anonymity of students, cannot be a member of faculty. CHEDQE, or another body, appoints a consultant who is trained in moderation techniques.

During the follow-up meeting, the TAP consultant presents a summary of the poll's results to the lecturer. The consultant clarifies which answers represent the opinion of the majority and which are individual opinions, and offers suggestions for responding.

Course evaluation via student representatives

Course evaluation via student representatives (CESR) has been available at UDE since 2013 as an alternative to student satisfaction surveys. Inspired by the concept of course evaluation used at Chalmers Tekniska Högskola (Chalmers University of Technology, in Gothenberg, Sweden), CESR was developed at UDE through a two-year project in which two faculties participated. Like TAP, CESR is not so much an assessment of quality, but rather aims to promote dialogue between lecturer and students as to how teaching can be developed and improved. It gives the lecturer the flexibility to concentrate on a particular area, the learning environment or the compatibility of modules, for example, but, compared to TAP, the method is quite time-consuming.

Student representatives have a significant influence on the success of this measure. Once the lecturer has explained the objectives and steps involved in this feedback method, a class meeting is held, during which between two and five representatives are elected by the students on the course.

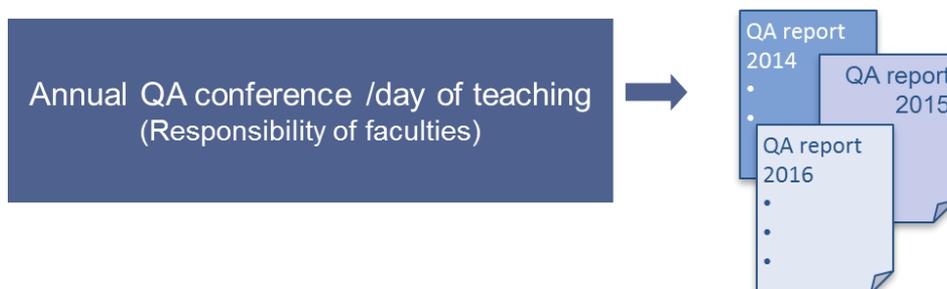
They meet the lecturer three times in the course of the semester, in 'feedback meetings' at which course content and the study environment are discussed and any potential problems highlighted. The third and final feedback meeting precedes a final class meeting.

During the feedback meeting, the student representatives and the lecturer look back over the semester and discuss whether the objectives of the course were fulfilled, how the lecturer dealt with any problems, and which changes should be implemented for the following course cycle.

Minutes are taken during all feedback meetings. At the end of the course, the student representatives write a 'letter to the next year', which includes their responses to a series of set questions, and recommendations for the development and improvement of the course. This letter is submitted to course participants and the lecturer to close the evaluation loop.

Reporting system and quality conferences

Figure 3.4 Quality conferences and quality reports



Quality reporting system and quality conferences

All data collected using course evaluations, the student and graduate tracer surveys, and the other instruments mentioned above are compiled by CHEDQE in a data set, which is supplemented by statistical data (including common key performance indicators such as student numbers, student to graduate ratios, etc.) provided by the financial control department. These data sets are made available to faculties and departments annually.

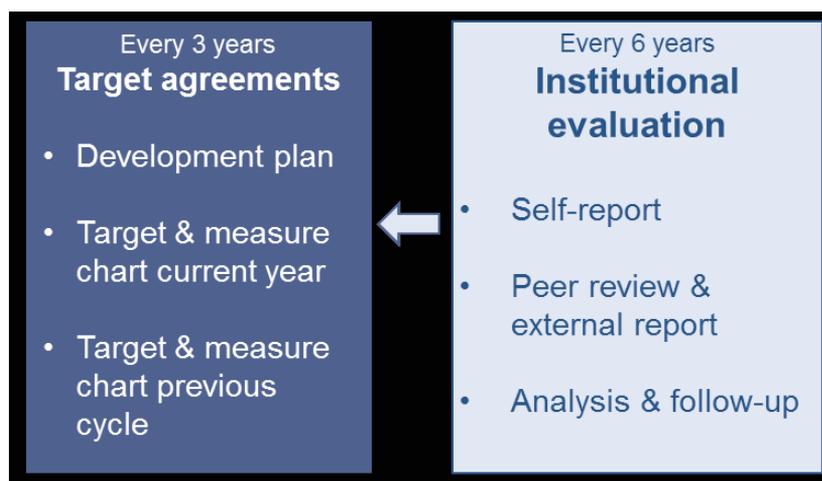
Every year, each faculty must conduct a 'quality conference', a forum at which invited participants reflect on the quality of teaching and learning at both department and study programme level. These conferences take place according to a six-year schedule provided by UDE, which indicates which study programmes must undergo in-depth quality assessment and at what point in time.

Faculties can use their own discretion in deciding the format of their quality conference. Some use a meeting of the faculty council, others organize a larger-scale 'day of teaching' event. CHEDQE is available to moderate, if requested by the faculties. Whatever format they choose, faculties must prepare a report once the quality conference has taken place. A short form is available for the use of faculties in drafting their report.

All quality reports for a given year are collected by the department for planning, and a summary is prepared for the DVC for academic affairs and the DVC for development and resource planning. In addition, the reports are discussed by the DVC for academic affairs and deans of faculties, with a view to agreeing appropriate development measures.

Finally, all the quality reports of a particular faculty are integrated into the process of institutional evaluation and target agreement, as described below.

Figure 3.5 Target agreements and institutional evaluation



Institutional evaluation and target agreements

Target agreements between all UDE's organizational sub-units and the rectorate are ratified every three years and are a well-established and widely accepted IQA tool at the university. Each second cycle of target agreements is prepared as a follow-up to an institutional evaluation that each faculty, research unit, or service unit of UDE undergoes in a six-year cycle. Both processes are described in more detail below.

*Institutional evaluation*⁶

The framework for institutional evaluation at UDE takes account of every functional area (teaching and learning, research, service, and management, where applicable) of the organizational units to be evaluated. These areas are assessed by stakeholders from the organizational unit itself and the results set out in a self-assessment report given to external experts, who, in turn, give their own assessment in an external report. Although institutional evaluations at the UDE are conducted at the level of organizational sub-units, there is also scope within the evaluation to address questions at study-programme level.

The process is guided by international standards in evaluation and quality management, for example the *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (see Section 1.1) or the standards of the German Association for Evaluation.⁷

UDE's institutional evaluations are coordinated by its quality assurance unit, CHEDQE. The standardized procedure for faculty evaluation is split into five phases.

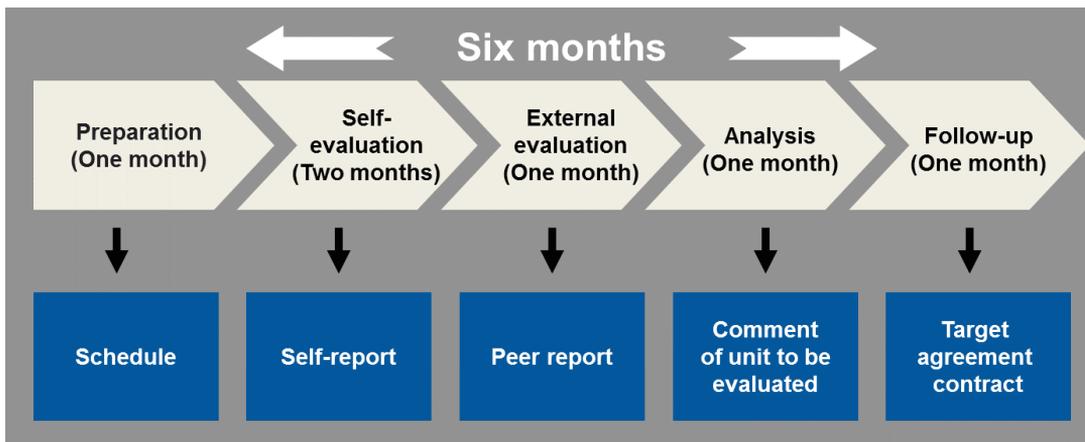
The organizational units receive the results of the evaluation, and begin reflecting on the outcomes. All faculties must summarize their reflection process and – more importantly – the measures that will be introduced as a result, in the form of a commentary appended to the external report.

A follow-up discussion between the rectorate and the evaluated unit will be held. Its results will be taken into account when preparing target agreements for the units, which will cover the implementation of agreed upon measures.

6. The term 'institutional evaluation' is used at UDE, and other German institutions with similar procedures in place, to describe a process that evaluates the whole portfolio and the organizational structure of a particular unit (that is, the whole institution). Internationally, 'institutional evaluation' usually refers to the evaluation of higher education institutions as a whole. However, in the present paper we use this term to refer to the evaluation of organizational sub-units.

7. The document can be found at: www.degeval.de/fileadmin/user_upload/Sonstiges/STANDARDS_2008-12_kurz_engl.pdf.

Figure 3.6 Institutional evaluation at UDE



Target and performance agreements

The overarching aim of internal target and performance agreements at UDE is to reconcile the development plans of the decentralized units with the university's overall strategic plan. While the procedure's main purpose is to assess the performance of the decentralized units, it is also a means of promoting innovation and change. To foster internal development, UDE's rectorate has an 'innovation budget' reserved for supporting the implementation of innovative practices. This resource is available to faculties and decentralized units in general for negotiated development or innovation projects. The department of development planning works with the decentralized units for the duration of the target and performance agreement process.

The decentralized unit is informed about the university's strategic objectives during preparatory talks involving representatives of the rectorate and the unit for institutional planning. The unit has to prepare a plan, which sets out: (a) the achievements and current status of the unit in each field; (b) its long-term strategic development plans; and (c) its mid-term plan. If an institutional evaluation precedes the target and performance agreements (as it does every second time), the self-evaluation report of the institutional evaluation can (if necessary, after revision) replace the development report of the target and performance agreements.

Negotiations take place between the organizational sub-units and the rectorate to agree the targets. They are based on four documents:

- the development report (see above);
- an overview chart comprising the respective measures in the different fields of the agreement, such as teaching and learning and research, and an indication of the resources needed for each measure;
- the corresponding document from the previous target and performance agreement cycle, indicating the level to which the measures agreed in the previous cycle were delivered;
- a data set that gives an overview of the units' performance using common higher education key performance indicators.

The results of the negotiations are formalized in a contract between the rectorate and the unit. All documents mentioned above, and the contract, are published on the internal webspace of UDE and are thus available to all UDE staff members.

3.4 Communication strategy

Communication concerning the tools, procedures, and follow-ups is an integral part of UDE's internal quality assurance system. During preparations for system accreditation, the communication process has been supervised by:

- a steering committee consisting of representatives of the rectorate, the administration, and the faculties, coordinated by CHEDQE;
- a project advisory body comprising deans, administrative directors of faculties, unions, and students together, which discusses the major steps and changes.

All major system changes are reported to and discussed by the senate and the university board. The deans' council (a regular assembly of all deans) discusses the IQA tools and the quality handbook, as well as any strategic decisions. Additionally, the deans of the student council engage in intensive evaluation of the procedures and tools.

To introduce the quality conferences and the new procedures for designing study programmes, all university faculty councils were visited twice: once in autumn 2012 and once in autumn 2013. Vibrant discussion, about the enhancement of quality and the factors which could potentially facilitate or hinder the process, accompanied the introduction of the new procedures and tools.

The next step in communicating the changes is to ensure that the information reaches a wider audience, in particular the remaining staff members who have no official function within the faculty. To this end, UDE is currently developing ideas for a workshop for teachers.

3.5 Employability in the context of internal quality assurance

The introduction of the Bologna qualification structure (comprising bachelor's, master's, and PhD degree courses) provoked new discussion in German higher education about the employability of graduates. In the past, graduates were considered automatically qualified for employment; a German higher education degree was seen as guaranteeing entry to the job market. Historically, there was no reason for universities to worry about their graduates' employability, with the exception of some more 'exotic' graduates from the humanities who needed more time to adapt. The changes introduced by the Bologna process led some to question whether a graduate with a bachelor's degree would be able to find a job, since, compared with the graduates of the former system, he or she would not be perceived as comprehensively trained (given the shorter timeframe of a bachelor's programme). This challenge made it necessary to think about the intended learning outcomes of programmes, what could be achieved within the framework of a bachelor's programme, and how it could prepare graduates to perform well in the labour market.

The increasingly strong focus on jobs market orientation and the employability of graduates is regarded sceptically by most German academics, who see it as having a negative impact on academic freedom and the wider development of students. However, the management of UDE is committed to preparing its students as best as possible for the jobs market, while simultaneously encouraging their academic development. The contribution of UDE's internal quality assurance system to strengthening employability has three strands:

- The implementation of graduate tracer studies provides data on employability. The kind of information that can be deduced from the collected data is described in the next chapter.
- Some faculties have already introduced employers' councils to factor employers' perspectives into study programme design and revision. Such councils are not mandatory, except in the case of teachers' education study programmes. In

teachers' education, representatives from schools, or 'centres for practical studies in schools', are involved in the process.

- The procedures for curriculum design at UDE ensure that the expected learning outcomes of its study programmes are oriented towards the demands and current developments of the jobs market, either by including jobs market analysis or involving employers in the curriculum design process.

3.6 Embedding IQA activities in other management processes

UDE's IQA system is interconnected with many other key management processes, the most important being curriculum design, human resource development, organizational development, institutional planning, and data management. These processes are an integral part of quality enhancement at UDE.

Curriculum design

Curriculum design deals with the processes of conceptualising and revising curricula. It concerns course content and methods of teaching and assessment, as well as the organizational and legal aspects of curriculum change. Study programmes at UDE must follow the paradigm of 'constructive alignment'. This means that they must be designed so as to align assessment and teaching methods with the expected learning outcomes of the programme and its component courses.

Standardized processes are in place to deal with the design, revision, and termination of study programmes at UDE. It is obligatory for faculties and heads of programme to adhere to these processes. This ensures that programme design observes the principle of constructive alignment and thus results in a well-designed programme outline, as well as the involvement of all relevant stakeholders.

Additionally, UDE has set up capacity-building programmes for heads of study programmes. During the training courses, participants are made familiar with the concept of constructive alignment and the respective tools with which to align teaching and assessment methods to expected learning outcomes. Ensuring curriculum design is an integral part of UDE's quality assurance system helps close the quality loop.

Human resource development

Human resource development (HRD) and quality enhancement are intrinsically linked in higher education institutions, which must manage a highly heterogeneous workforce. HRD poses particular challenges for HEIs as they are expert organizations where professionals have a high level of autonomy. At UDE, the interconnection between IQA, organizational development, and human resource development is very present and well recognized. Responsibility for human resource development and capacity building is shared. While the department for staff and organizational development is in charge of HRD for administrators, CHEDQE is responsible for the development of academic staff.

CHEDQE views academic staff as having multiple roles. Typical instruments of human resource development for teaching staff, within the specific context of internal quality assurance, are:

- qualification workshops,
- individual target and performance agreements,
- double-career options/consulting,
- mentoring systems,
- coaching.

Clearly, CHEDQE offers a broad variety of training courses for academic staff. The team for higher education didactics works with the team for curriculum design to offer certificates

at different levels. Staff have the opportunity to specialize in a particular area (with 60 additional contact hours), for example in the moderation of teaching and learning processes or in the field of diversity management in teaching and learning. Since UDE's rectorate sets individual target and performance agreements with each academic staff member, agreements can be made with an academic to attend particular courses, to improve their skills as teachers, for example. For some academics, peer coaching from colleagues is particularly useful. UDE is currently promoting one-to-one coaching and peer coaching programmes for academics to enhance their teaching capacity. The team for higher education didactics at CHEDQE offers these programmes on demand.

Organizational development

Data validated by an internal quality assurance system can be a trigger for organizational development and change. For instance, following the student surveys of 2009, UDE introduced programmes and structures to support students from migrant or non-academic families to address the tendency of these student to discontinue their studies. A project, Focus on Educational Justice, was developed to lead on various initiatives to support migrant and non-traditional students at UDE.

Discussions held within the framework of a quality conference led to the creation of a 'flex semester' in the Faculty of Engineering. This extra semester allows students to study the three main engineering subjects at their own pace, either by following the normal curriculum and course outline, or by following a course outline with additional supporting courses. Although students using a flex semester take a little longer to finish the study programme, their chances of succeeding are greatly enhanced.

Institutional planning

Institutional planning is about developing a vision for future development within a higher education institution. Many countries have placed a legal requirement on their HEIs to engage in planning activities, for example by formulating a vision and a mission statement and by preparing development plans. Ideally, evaluation conducted as part of a quality-assurance programme can serve both as a basis for institutional planning and as a follow-up to it.

At UDE, institutional planning for teaching and learning is organized in close conjunction with internal quality assurance. For example, UDE's strategy for teaching and learning was drafted by CHEDQE, taking into account fields of development in teaching and learning identified in previous quality assurance activities. The interconnection between quality assurance and institutional planning is a feature of UDE's quality assurance system. It is designed to close quality loops on microscopic (e.g. individual teaching performance), mesoscopic (e.g. study programme design), and macroscopic (strategic institutional planning) levels.

Data management

Establishing a well-functioning quality assurance system requires effective and efficient data management and strategic decision-making. To collate all the available data relevant to quality assurance and institutional planning, UDE has established a data warehouse system called SuperX. The software can be accessed by representatives of all relevant stakeholder groups (deans, administrators, heads of study programmes, etc.). SuperX not only provides common key performance indicators drawn from higher education statistics, but also is directly linked to UDE's system for financial management. The software is administered by the department of financial control within central administration. CHEDQE cooperates closely with the department, for example whenever data sets for the quality conferences have to be produced.

4. Empirical research and data analysis

This chapter presents the results of empirical research and data analysis. The description of the results will focus on questions concerning stakeholders' awareness and acceptance of UDE's IQA system, and their involvement in it. It will also consider the effects of IQA instruments on teaching and learning, employability, and management, and the internal and external factors that support or hinder internal quality assurance.

4.1 Research methods

The main aim of the study was to obtain information on different stakeholders' perceptions of UDE's IQA system and to identify potential shortcomings and areas for improvement. The following research questions were asked: (i) How aware are university staff of the quality policy and how involved are they in IQA tools? (ii) How do senior and middle-level management, academic and administrative staff, and students perceive the effects of UDE's IQA system? (iii) In their view, which factors facilitate, and which factors hinder, the effectiveness of the system?

In order to answer these questions, different data sources were triangulated. Two quantitative online surveys (one for administrative staff and one for academic staff) were conducted, alongside guided interviews and focus group discussions. While academics were asked about their perceptions of IQA tools as they related to teaching and learning and their contribution to students' employability, administrative staff were asked about their perceptions of IQA tools in relation to management.

The guided interviews and focus group discussions allowed for a more in-depth exploration of the effectiveness or otherwise of the different tools and procedures in place at UDE. They also allowed the researchers to obtain information about potential shortcomings and suggestions for improvement.

In order to allow for internal comparison among the different subject cultures, the researchers collected data from staff members and students in the humanities, the sciences, and the social sciences. The Department of Anglophone Studies (Faculty of Humanities), the Faculty of Physics (which has only one department), and the Department of Business Administration were the focus for the investigation. These three were chosen as they had implemented all of the tools and procedures used at UDE for internal quality assurance.

4.2 Limitations of the study

The aim of the study was to give an overview of UDE's internal quality assurance activities and to highlight possible shortcomings and potential areas for improvement.

Two online surveys were conducted in the three above-mentioned departments, in February and March 2015. Staff members drawn from the lists on UDE's website were sent an email inviting them to take part. However, the staff lists could be incomplete as they are not standardized and it is not obligatory for staff to figure on them.

Despite three email reminders at the end of March, in mid-April, and at the end of May, the response rate remained relatively low. For academic staff, a total response rate of 8.2 per cent was achieved, while 16.8 per cent of administrative staff who received an invitation had answered the questionnaire by the time the survey closed in mid-June.

The quantitative survey was not intended to collect information representative of the entire staff body at UDE, but it did yield data useful in preparing for the in-depth interviews and focus group discussions. In order to collect more detailed information regarding the perceptions of

different stakeholder groups at UDE, nine individual guided interviews and four focus group discussions were conducted by a member of the UDE research team in June 2015.

4.3 Survey populations

Table 4.1 shows the distribution of respondents by faculty. A total of 380 academic staff members from the faculties of Business and Management (168 in total), Humanities (66), and Natural Sciences (146) were invited to participate in the online survey. A total response rate of 8.2 per cent (31 participants) was achieved, distributed among the different academic areas as shown in Table 4.1:

Table 4.1 Distribution of academic survey respondents by faculty

Faculties	Number (percentage) of respondents
Humanities	19.4%
Natural Sciences	19.4%
Business and Management	61.3%
Total number of respondents	31
Total number of academic staff at UDE in the faculties investigated	380

Most of the academic survey participants (71 per cent) were academic assistants, 19.4 per cent were full professors, and 6.5 per cent held other academic position at UDE. Among the respondents, 12.7 per cent were deans (deputy deans) or heads (or deputy heads) of department. Approximately two-thirds of the participants had worked at UDE for less than five years, 16.1 per cent for between five and 10 years, and 19.4 per cent for more than 10 years.

A total of 131 administrative staff members were invited to participate in the survey, with a total response rate of 16.8 per cent (22 respondents). Table 4.2 shows the distribution of survey respondents among the different administrative areas.

Table 4.2 Distribution of administrative survey respondents by work area

Work area	Number (percentage) of respondents
Strategic/academic planning	13.6%
Human resource (administrative) management	22.7%
Student services (registration, assessment, counselling)	4.5%
IT services	22.7%
Library	27.3%
International relations	4.5%
Total number of respondents	22

All but one of the respondents held a higher education degree (diploma, bachelor's, or master's). Four respondents held the position of head (or deputy head) of an administrative department or sub-unit. None of the others had a leadership function. While 36.4 per cent had been working at UDE for less than five years, 36.4 per cent had been at UDE for between five and 10 years, and 22.7 per cent had been working there for more than 20 years. Only one of the respondents had been working at UDE for between 11 and 20 years.

The guided interviews were conducted with members of the university’s leadership, academic, and administrative staff holding different positions, and students. An overview of the interviews is given below. No additional socio-demographic information about the interviewees was collected.

Table 4.3 Overview of interviews conducted within the framework of the empirical study

Members of the rectorate		
Interviewed actor(s)	Type of interview	No.
Vice-President, Academic Affairs	Individual interview	I
Head of Administration	Individual interview	II
Member of UDE's governing board	Individual interview	III
Faculty of Physics		
Interviewed actor(s)	Type of interview	No.
Dean of Faculty of Physics	Individual interview	IV
Dean of Students/head of academic study programmes, Faculty of Physics	Individual interview	V
Student representatives, Faculty of Physics	Focus group interview	VI
Department of Anglophone Studies		
Interviewed actor(s)	Type of interview	No.
Dean of Students, Faculty of Humanities	Individual interview	VII
Head of Department of Anglophone Studies	Individual interview	VIII
Heads of Study Programmes	Group interview	VIII
Student representatives, Department of Anglophone Studies	Focus group interview	X
Department of Business Administration		
Interviewed actor(s)	Type of interview	No.
Head of Department of Business Administration (also substituting Dean of Faculty of Business Administration and Economics)	Individual interview	XI
Heads of Study Programmes, Department of Business Administration	Group interview	XII
Student representatives, Department of Business Administration	Focus group interview	XIII

4.4 Awareness and involvement of university stakeholders

Quality assurance activities in higher education institutions are intended, ultimately, to improve the daily work of staff members, and thus influence stakeholders in all areas and levels of the organization. Therefore, in order for quality assurance measures within an HEI to be effective, stakeholders must be informed and involved whenever this is practicable and makes sense. In order to ensure a continuous and organized flow of information within an organization, quality assurance systems assign roles and responsibilities.

As described in *Chapter 2*, the University of Duisburg-Essen is an organization in which much responsibility lies in the hands of the faculties themselves. The deaneries have overall responsibility for internal faculty QA activities, which should then flow down to heads of department, heads of programme, etc. While the flow of information about quality assurance policies and activities starts with UDE’s leadership, supported by CHEDQE, the heads of faculties are in charge of informing their staff and taking part in the organization of obligatory IQA procedures in their sub-units.

The results of the quantitative surveys and the qualitative interviews mirrored clearly the different developmental stages of certain tools and procedures for QA at UDE. While participants at all organizational levels, in all areas, were well aware of instruments which had been in place for some time, the newer the instrument, the lower the degree of awareness. This is demonstrated by the low level of staff awareness of the annual faculty quality conferences, which were first implemented in 2014. The survey results and the interviews also suggest a discontinuity in the flow of information flow somewhere between deanery level and lower-ranking positions within the faculties, as described below.

Survey data

Table 4.4 Awareness of quality policy and manual*

		Quality policy	Quality manual
Yes, this document exists and is useful for my work	Academic staff	13%	4.3%
	Administrative staff	23.5%	11.8%
Yes, but this document is not useful for my work	Academic staff	17.4%	8.7%
	Administrative staff	11.8%	17.6%
Yes, it exists but I do not have to deal with it	Academic staff	13%	17.4%
	Administrative staff	11.8%	17.6%
No, my university does not have such a document	Academic staff	0%	4.3%
	Administrative staff	11.8%	5.9%
I don't know	Academic staff	56.6%	65.2%
	Administrative staff	41.2%	47.1%
Total	Academic staff	100%	100%
	Administrative staff	100%	100%

*Note: Academics N = 23, Administrators N = 17

As noted above, UDE has a quality policy document as well as a handbook for the quality assurance of teaching and learning. Surprisingly, 56.5 per cent of academic staff surveyed (none of whom had a leadership function) were unaware of the existence of the quality policy document. Among administrative staff surveyed, 41.2 per cent did not know such a document existed. However, 23.5 per cent of administrative respondents said they found the document helpful in their work.

The question concerning awareness of the handbook for quality assurance of teaching and learning was put to administrative as well as to academic staff. It should be noted that not all sub-units of the central administration are involved in the quality assurance of teaching and learning and that UDE's handbook for quality assurance in teaching and learning was published only in 2013. In the framework of this process, the introduction of the handbook was discussed with deans and other relevant stakeholders in faculties and in administration.

The survey results show that 65.2 per cent of academics surveyed were not aware of the existence of such a document. Since 71 per cent of the survey respondents were scientific assistants, and not involved in the aforementioned discussions, the only way they could

obtain information about UDE's quality handbook would be through the university's website. Thus, the results can be interpreted as showing that most scientific assistants did not do so.

Among administrative staff, 53 per cent either did not know of the handbook for quality assurance in teaching and learning or thought it did not exist. When interpreting the results, one should bear in mind that not all administrative respondents are involved with quality in teaching and learning in a narrow sense. However, in its conception, the handbook for quality assurance in teaching and learning is geared to the common teaching person who wants to be informed about the philosophy and the concrete procedures of QA for courses, study programmes, and so on, as well as the contact people in charge of these processes.

Interview data

In the interviews with representatives of different stakeholder groups (academic staff and students), participants were first asked about their knowledge of the different IQA tools and procedures at UDE. The information collated from the interviews mirrors the impression evoked in the quantitative survey, that participants' level of knowledge reflects their degree of involvement in those tools and procedures. The quantitative and qualitative results of the study also clearly reflect the current status of UDE's IQA system, which is in a process of transition.

A select group of stakeholders were heavily involved in reformulating the internal QA structures at UDE. The rectorate was – and still is – leading the process of 'fine-tuning' UDE's QA system in preparation for system accreditation. The deputy vice-chancellor for academic affairs and the vice-rector for resource planning, who also heads the internal QA agency CHEDQE, are particularly closely involved. As noted in *Chapter 3*, this process is coordinated by CHEDQE and supported by a steering committee and an advisory board. Members of the steering committee and the advisory board are meant to function as knowledge multipliers within their own faculties or administrative departments.

The in-depth interviews shed further light on the level of awareness of academic staff about different IQA tools and procedures. The degree of knowledge stakeholders who are directly involved have about all IQA instruments is very high. As described above, the responsibility and the manner in which staff members are involved in quality assurance activities differs from faculty to faculty. The interviews were conducted with deans, heads of department, and heads of programme. At UDE, all these roles share responsibility for QA activities but in different areas. Deans, for example, are responsible for all overarching processes and their interconnections. This means that they are responsible for incorporating information from data collection tools, such as surveys, into overarching processes such as quality conferences or institutional evaluations. They are supported in this by faculty heads of administration, as well as by heads of programme when QA activities concern teaching and learning.

One of UDE's leaders summed up the current status and awareness of internal university stakeholders in this way: 'Although all process steps are laid out in the respective documents, there is a constant need for discussion and agreement. This is our daily business at the moment' (interview I, rectorate, translation by authors).

In the initial phase of the interviews, respondents were asked to enumerate the instruments of internal quality assurance which were known to them. Contrary to the survey data, where respondents indicated a lack of involvement in student course evaluation, all but one of the interviewees cited student course evaluations and indicated that they were familiar with the process from one perspective (as a teacher or process coordinator) or another (as a student). Interestingly, academic interviewees who do not occupy an administrative position (e.g. head of faculty administration) spoke about other topics first.

Rather than responding to the question's invitation to name IQA tools, they outlined the notion of research-led teaching and the problems they encounter with students who, in their view, are not qualified to pursue academic studies at a university.

The focus on 'employability' was highlighted as problematic by five out of eight academic interviewees. They were critical of the emphasis placed on qualifying students for employment rather than on an academic education which teaches students to engage with a particular subject matter in a research-oriented manner (see *Chapter 5*).

Respondents were presented with the following list of tools and procedures for internal quality assurance, identified by the authors of the study according to a narrow definition:

- student course evaluation (by questionnaire),
- teaching analysis poll (TAP),
- graduate tracer studies,
- workload evaluation,
- module evaluation,
- QA conferences and QA reporting,
- institutional evaluation,
- target and performance agreements.

Student course evaluation was known by all respondents in detail, while the other tools were known only by name.

In the following chapters we elaborate on the involvement of the stakeholders with the respective tools and their perceived effectiveness.

While the results of the quantitative survey showed that more than half of academic and administrative respondents were unfamiliar with UDE's IQA policy in teaching and learning, the qualitative information showed that most interviewees did perceive quality assurance to be part of the profile of the university, as demonstrated by the following statement by a member of the rectorate: 'UDE has the ambition to make evidence-based management decisions. This is our daily business and therefore IQA is also part of the profile of this university' (interview I, translation by authors).

The interviews highlighted a dilemma, inherent in quality assurance in higher education. On the one hand, stakeholders complain about the additional work generated and time consumed by IQA activities. On the other, the degree of information provided about these activities is felt to be quite low and stakeholders indicate their desire for more. Getting more information, however, would mean investing more time, for example in visiting information forums or participating in advisory boards.

All in all, the results suggest that it would be useful to conduct further research on the different perceptual patterns of academics, administrators, and higher education professionals providing scientific services for internal university stakeholders (such as the authors of this study). Results of such research could provide fruitful information for revising hypotheses and potentially give impetus to the revision of communication strategies and stakeholder involvement.

4.5 Effects on teaching and learning

At UDE, a variety of internal QA tools are in use. Some are explicitly focused on the core processes of teaching and learning, such as student course evaluations and quality conferences. Others contribute indirectly to the improvement of teaching and learning, such as institutional evaluation. Here, it must be acknowledged that different tools and procedures are designed to be effective at different levels. While student course evaluations can be effective at course level, quality conferences and graduate tracer studies are effective at study programme level. Institutional evaluations also can provide information, useful at study programme level, on a faculty's teaching and learning profile.

In the following section, the information obtained by IIEP's quantitative survey of academic staff members will be analysed according to dimensions which are relevant for UDE (insofar as the instrument evaluated was designed to be effective in that area/at that level) and about which the scarce data at least allow some basis for interpretation, which requires a deeper look at the qualitative results from the interviews. The qualitative interviews provide detailed information about the perceived nature and the effectiveness of the concrete tools and procedures in place at UDE.

Student course evaluation

The University of Duisburg-Essen has a variety of evaluative QA tools in place in the area of teaching and learning, as is described in *Chapter 3*. The most prominent and best-established tool is student course evaluation using paper-based surveys. This type of course evaluation is organized centrally by CHEDQE in a three-semester cycle. Teaching staff are obliged to participate in the process with at least one course every third semester. The deanery of a faculty decides which courses are to be evaluated each semester, but teaching staff can also contact CHEDQE to request questionnaires outside of the obligatory cycle. This tool is always (39 per cent) or often (44 per cent) used by a high percentage of academics at UDE.

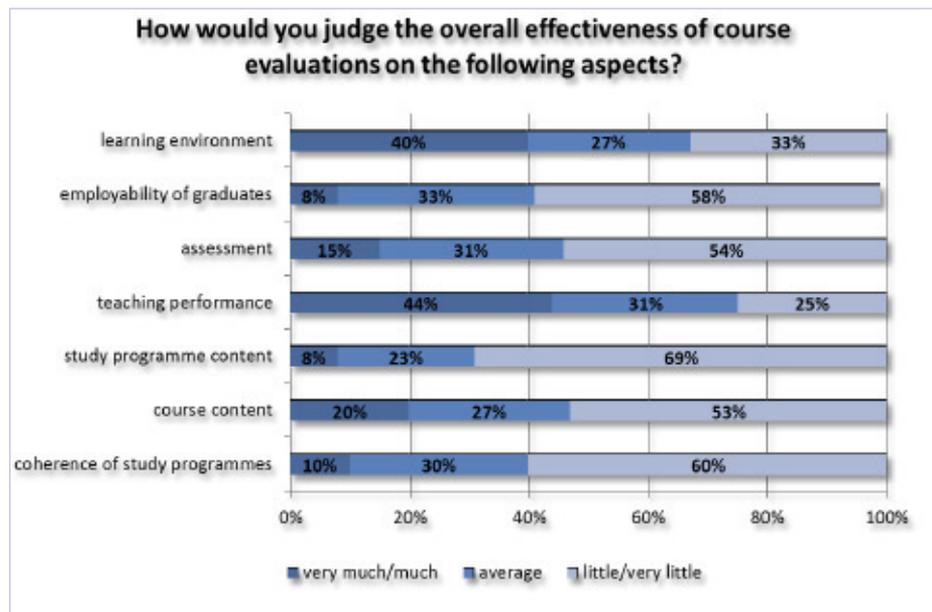
Student course evaluation was introduced at UDE in 2004. The results of both the quantitative survey and the interviews indicate that it is a well-established tool, which is accepted among academics and students. Its effectiveness on the quality of teaching and learning, however, is rated differently by different respondents.

The results of student course evaluations are processed automatically and transferred to teaching staff via email. Almost two-thirds (65 per cent) of quantitative survey respondents said that they always received feedback from course evaluations. Surprisingly, 35 per cent answered that they did not always receive feedback, with 29 per cent answering that they received feedback often and one person (6 per cent) stating that feedback was sometimes given. In a few departments, results of student course evaluation are sent to the head of department or head of programme. Although some participants said that they did not always receive feedback, most respondents (64 per cent) indicated that they take into account the results they receive from course evaluation and use them to improve their teaching. Nearly half (47 per cent) of survey participants rated the benefit of student course evaluation as high or very high, while 24 per cent found it of moderate value, and a further 24 per cent judged it to be of very little or no use in their work.

In the interviews, heads of programme reported that answers to open questions were the most informative and useful for improving teaching performance. This has been reported to CHEDQE in previous years, leading to the development of qualitative formats at UDE (see *Chapter 3, Section 3.2*) within the framework of the project, 'Formative feedback methods for quality enhancement in teaching and learning'. Indeed, interviewees familiar with the new TAP method described it as being of very high value for improving teaching (interviews VII, IV). The reasons given for this assessment were that information about what to improve can be obtained mid-term (whereas results from the standardized surveys were often reported by the interviewees to be available too late), counselling is given by experts from CHEDQE as a follow-up to the information-collection process, and improvement measures can be discussed with students directly. The information which is provided by TAPs is also said to be more detailed and focused than the information collected by standardized questionnaires.

Both qualitative and quantitative student course evaluations are tools designed to enhance discourse between teachers and students at UDE and thus support the improvement of interaction within the course boundaries. As such, they were perceived to be very effective at course level, and rather effective for improving individual teaching performance.

Figure 4.1 Effects of student course evaluations (academic staff)



Both academic interviewees and students reported that the quality loop is usually, though not always, closed in terms of discussions between deans and students as well as deans and teachers, and in discussions between teachers and students, as determined by UDE's evaluation order. Two deanery members mentioned that discussions between deans and teachers on the basis of student course evaluation results were very sensitive, since deans are not hierarchically superior to their teaching colleagues and thus do not have any authority to give directives. Nevertheless, concrete examples were given of improvement measures implemented as a follow-up to these talks. For example, one dean reported that when follow-up measures had to be implemented concerning a teacher's performance, this could be done in a subtle and sensitive way (e.g. recommending qualification courses in higher education didactics or directing the teacher to another course format) that was not publicly linked to the results of the student course evaluation.

Only one student representative from the Faculty of Physics was familiar with the teaching analysis poll and reported that immediate measures were taken on the basis of its results and subsequent discussions with the teacher concerned – in this case, it resulted in a change in teaching personnel for the particular course. Apart from that, it was difficult for students to come up with concrete examples of improvements. This could be due to the fact that, given the character of the tool, improvements were usually only visible the following semester. However, students from the Faculty of Physics did report that the amount of background literature provided – something that had come up frequently in course evaluations as an area for potential improvement – seemed to have increased.

Deans, heads of programme, and faculty managers who participated in the interviews gave the following examples of improvements made to their own courses as a result of course evaluation:

- the regular provision of scripts and additional literature on a moodle platform,
- informing students more thoroughly about learning outcomes and corresponding course work at the beginning of the semester,
- reducing the number of student presentations and implementing interactive group work instead,
- putting more effort into finding a suitable room for the class.

Since teachers use the results of quantitative surveys to document their teaching activities and its quality, some interviewees suggested a return to a cycle of course evaluations each

semester. This suggestion was strongly supported by all student interviewees, who found the evaluations to be particularly helpful, although they reported that they are not always informed of the results. Some of the academic staff, however, were concerned that, as class attendance is no longer obligatory, the results of the evaluations would be invalid.

Finally, there are great expectations of the new TAP tool, both from students to whom the method was explained, and academic interviewees, such as deans and heads of programme, who believe it will have a very detailed and direct effect.

Graduate tracer studies and the UDE student survey panel

Graduate tracer studies are conducted annually at UDE, using the framework of the University of Kassel's INCHER cooperation project, KOAB (see *Chapter 3, Section 3.1*).

In its role as coordinator of the process, CHEDQE is responsible for compiling a report on the survey results each year. This is not only sent to the deaneries, but is also discussed by the academic senate, the assemblies of deans, and the rectorate. All reports can be found on CHEDQE's website for further consultation. It is the responsibility of the previously mentioned stakeholders to ensure that the information is passed down to those who need it, for example in the framework of study programme revision or in quality conferences.

The survey results reflect the fact that only a small number of academic staff are involved in the revision of study programmes, meaning that the results of graduate tracer studies are not automatically sent to all of them. Almost half (47 per cent) of the academic staff who took part in the survey did not know how often graduate tracer studies are conducted among graduates of the programmes they teach. The four out of seven people who were able to answer the question could not see any obvious effects on their own programme. The effect of the tool was thus mostly rated as average (43 per cent). Another 12 per cent of respondents were unaware of the existence of regular graduate tracer studies at UDE.

The interviews addressed only UDE staff with a direct role in internal QA procedures, such as heads of study programmes. The 'ordinary teaching person' (professors and academic assistants) were not part of the interviews. Thus, in the qualitative interviews, a more comprehensive picture was presented with regard to graduate tracer studies. The instrument was known by all but one interviewee among academic staff and by half of the student representatives. It was viewed as being very important to quality enhancement at the UDE. Within the framework of the interviews, rectorate members and deans stated that the results of graduate tracer studies provided a very good overview of a graduate's retrospective evaluation of their studies at UDE in general, their reasons for any delay in their studies, and their current status in terms of work. One senior leader and one dean emphasized that the format of CHEDQE's graduate tracer study report greatly facilitated their understanding of the complex information it provided.

However, all academic interview participants, from all three faculties/departments, reported that the results of a study of a single cohort of graduates would not usually provide useful information at the study programme level, since the response rate is too low. Thus, for the purposes of study programme self-evaluation and revision, only tendential information can be obtained. In order to make the results relevant at the study programme level, it would be necessary to combine the results of more than one cohort, which has not yet been done.

The UDE student survey panel also provides information on the characteristics of UDE's students, focusing, in this case, on students still enrolled in study programmes. This tool is, to an even greater extent, geared towards providing information to UDE's leadership rather than particular faculties or study programmes. The data generated by the panel on the particular features of UDE students can be used to improve teaching and learning and also support management decisions (see *Chapter 5*). When interviewed about the student survey panel, representatives of UDE's rectorate emphasized the importance of this tool,

because it provides fruitful information about the university's target group. For example, results from the panel's first cohorts confirmed that the typical UDE student has special needs when it comes to language qualifications, orientation in academic life, and so on, since most come from non-academic or migrant backgrounds.

Study programme self-assessment and revision/QA conferences

Systematic study programme self-assessment is conducted within the framework of the newly implemented quality conferences. As described in *Chapter 3, Section 3.3*, the evaluation of study programmes is based on selected results collected by the tools, such as course evaluation and graduate tracer studies, targeting different levels. In this section, the survey and interview participants' perceptions of quality conferences are analysed, along with their perceptions of the effectiveness of the contributing tools.

Quality conferences are currently being implemented at UDE. The first cycle of conferences took place during the 2014/15 winter semester. While the Department of Anglophone Studies and the Department of Business Administration have now had their first experience of conducting a quality conference, the Faculty of Physics has not, and thus could not provide any information as to their effectiveness. The quantitative survey can only provide biased information, because the questions included related only to the internal self-evaluation of study programmes. It is therefore not possible to determine whether the participants answered with quality conferences in mind, or whether they were thinking of other forms of self-assessment which were conducted within the faculties. Thus, the results of the quantitative survey must be discounted for these purposes.

In the qualitative interviews, however, all stakeholders were well-informed about the ongoing implementation of quality conferences, reflecting the extensive discussions with deans and faculty managers that have accompanied this process. Deans, heads of programme, and heads of faculty administration within the Department of Anglophone Studies and the Department of Business Administration reported that the first cycle of quality conferences had provided good ideas for the improvement of study programmes, such as the revision of module handbooks. In the Department of Anglophone Studies, a joint agreement was made during the quality conference for the BA Anglophone Studies programme to ensure that English language competence was achieved at an earlier stage. On the other hand, the Department of Business Administration's quality conference reached the conclusion that there was currently no need to implement any improvement measures at study programme level.

The implementation of the ideas generated through this process needs long-term planning so cannot, as yet, be properly evaluated. During 2015, information on the experiences of participants in the first cycle of quality conferences was collected and evaluated by UDE in order to identify avenues for improvement. However, at the time of writing, publishable results were not yet available.

Institutional evaluation

Similar to the quality conferences, which take place at study programme level, institutional evaluations at UDE provide the framework for assessing the information generated by different data-collecting tools. All three surveyed faculties/departments underwent the process of institutional evaluation in 2013 and 2014, as did UDE's central administration.

Institutional evaluation targets the different functions of the institution and is geared towards fostering the strategic development of the institution. The process is organized at the senior leadership level. As a result, the interviews which provided the most fruitful information about this tool were those with the deans and the chancellor of UDE, as head of central administration. This was particularly true when discussing the tool's effects.

The quantitative survey, however, cannot provide useable information on the process of institutional evaluation as this concept was not addressed in the questionnaire.

While all interviewees who held leadership positions in UDE's sub-units, as well as the faculty managers, were informed about the process and the results of institutional evaluation, around half of the heads of programme could not provide any further information on the institutional evaluation carried out in their organizational sub-unit. Only one interviewee among the students had good knowledge of the process, and this was due to the fact that he was part of the evaluation steering group in his faculty.

The representatives of UDE's leadership and all the deans interviewed described institutional evaluation as a well-established tool for quality enhancement at the organizational sub-unit level and considered it good preparation for the target agreements which follow from institutional evaluations. With regard to the effectiveness of this particular tool, the following are concrete examples of measures implemented in the area of teaching and learning which were derived from the evaluative procedure:

- revision of study programmes along the lines of recommendations by external experts,
- establishment of new joint degree programmes (interviews IV, VIII),
- extension of the faculty internal student support service, LUDI (Learning and Discussion Centre).

Other instruments at UDE: Workload recording, module evaluation, and staff satisfaction surveys

A number of other instruments for quality assurance play a significant part in the university's QA system, though they are voluntary and employed only at the request of the faculties. Since these specialized tools and procedures apply only to certain faculties and involve a limited number of stakeholders, no valid information could be extracted from the quantitative survey or the qualitative interviews.

4.6 Effects on employment orientation/employability of students

One of IIEP's research objectives was to shed light on the connection between internal quality assurance, the employment orientation of study programmes, and the employability of graduates. While it is true that IQA activities at UDE do leave room to enhance the employment orientation of study programmes, neither university education in general, nor internal quality assurance specifically, affect the employability of graduates in a strictly linear manner.

As mentioned in *Chapter 3*, UDE has a number of structures and activities in place to foster the employability of its graduates, which go far beyond the common narrow definition of internal quality assurance. These are based on a commitment to competence-orientation, as stated in the university's quality policy for teaching and learning. First, study programmes include courses which offer extensive possibilities for practical experience in the labour market. Second, mentoring services are offered by CHEDQE, and training courses are offered by the student counselling service, to help students apply for work and improve their transition from university to the jobs market.

Currently, the labour-market perspective is influential, for example in the framework of external programme accreditation. The views of representatives of the labour market are also collected through graduate tracer studies and within the framework of peer reviews, which are a regular feature of the institutional evaluation process (see *Chapter 3, Section 3.4*). This connection was made by interviewees at both leadership and faculty level.

The quantitative survey investigated whether there was a connection between quality assurance tools and procedures and the enhancement of graduate employability. It was found that UDE's IQA activities directly focus on the improvement of teaching and

learning, though this focus is within the context of adapting study programmes to labour-market demands.

The interviews with academic staff showed that respondents had difficulty establishing a direct link between internal quality assurance activities and their effects on the employment orientation on study programmes. The interviewees also noted that employment orientation and employability are important parts of university education, but should not be overemphasized (see also *Chapter 5*) at the expense of academic education. To all of the deans interviewed, academic education was a far more important element of university training than labour-market orientation.

However, tools and activities such as graduate tracer studies and the involvement of jobs market representatives in institutional evaluations were reported to be very helpful in supporting the employment orientation of teaching and learning at UDE. Feedback as to whether the profile of a particular study programmes meets the expectations of the labour market was considered to be very helpful by all interviewed deans and most of the heads of programme.

4.7 Effects on management

The underlying philosophy of UDE's IQA system is about striking a good balance between the autonomy of sub-units within the organization and its governance, while closing the quality loop (i.e. making use of generated data and knowledge for decision-making). To guarantee this, there must be a well-functioning connection between university management and its decentralized planning and governance units. This connection can be established by the provision of regular exchange processes between central and decentralized levels, for example a fixed cycle of target and performance agreements, to inform management decision-making. This section describes stakeholders' perceptions as to the existence and functionality of this connection.

Participants in the qualitative interviews had insight into management processes and could thus provide interesting and useful information on the effects of UDE's IQA activities on management decisions. Management decisions at UDE are meant to be grounded in evidence – that is, based on information which is collated from data generated by evaluations, higher education statistics, etc. UDE's IQA system is based on this assumption, as members of the university's rectorate clearly recognized (interviews I, II). These interviewees also stated that particular emphasis was given to the evidence base for internal IQA activities during the implementation of UDE's quality assurance system and, again, during the preparation phase for system accreditation. Piloting and revision for these processes are ongoing. For example, sets of statistics from quality conferences are currently being revised, following the first pilot round in 2014/15.

The information obtained by the present study indicates that IQA has had two different kinds of effect on management at UDE. First, there seems to be an indirect effect on management culture, caused by certain information and communication strategies used in the context of IQA. Second, there are some direct effects on specific management decisions, for example in the context of target agreements.

The first kind of effect was evoked both by members of the rectorate and by all the deans interviewed in the study. One member of the rectorate stated that the objectives of management and strategic planning are always implicitly included in internal quality assurance activities. In this context, 'it is not the aspect of control which dominates, but rather a paradigm of "push and pull" applies. It is very important to involve faculties, and to ask them where they need further support, different data, and so on' (interview I). In addition, target agreements provide regular opportunities for discussion of quality in all functions of the university (teaching and learning, research, service/support structures). According to the rectorate's representatives, this has a clear influence on management.

First, because talking about quality on a regular basis fosters an organizational attitude oriented towards quality, sometimes referred to as a ‘quality culture’. Second, codifying the management decision-making process (e.g. in the form of regular target agreements) makes the process more comprehensive for all stakeholders and further confirms the evidence-based character of management decisions.

The deans interviewed for the study agreed that UDE’s internal quality assurance activities influence management in the two previously mentioned ways. For example, as one interviewee put it, ‘speaking about quality in quality conferences also enhances the sense of responsibility for quality felt by the staff members’ (interview VII). Moreover, concrete examples were given of management decisions which were made as a follow-up to evaluative procedures. These include:

- changes in the organizational structure of a unit on the basis of an institutional evaluation;
- establishment of a good leadership policy following institutional evaluation (interview II);
- Implementation of qualifications for leadership personnel following institutional evaluation;
- implementation of innovative projects, such as e-learning course formats, newly established study programmes, and the establishment of a main research area, based on discussions in preparation for target and performance agreements.

Thus, institutional evaluation and target and performance agreements are perceived to be, above all, instruments that influence management, in terms of either management culture or decision-making.

4.8 Conditioning factors for IQA and the perceived character of UDE’s IQA activities

The success of internal quality assurance activities is influenced by a number of internal and external factors, such as organizational structure, the alignment of the quality assurance system to organizational culture, legal frameworks, and so on.

The quantitative survey gives an interesting overview of the importance of a variety of conditioning factors for the success of IQA activities and the degree to which these exist at UDE, as perceived by survey respondents.

As shown by *Figures 4.2 and 4.3*, the factors with the biggest influence on the success of internal quality assurance activities, according to the survey respondents, are the manageability of processes, support from leadership, and a strategy to ensure transparent information.

The survey of academic staff found that 79 per cent agree that IQA processes are sufficiently manageable, 64 per cent think that transparent information is given, and another 57 per cent think that support from leadership is in place.

Administrative staff respondents assigned even more importance to the three factors mentioned above (85 per cent each), but see two as being less well-established. While 85 per cent believed that the support of the leadership was in place (at least in part), only 62 per cent believed the same was true of the manageability of processes while 54 per cent believed it was true of the transparency of information.

Figure 4.2 Importance and existence of conditioning factors for IQA (academic staff)

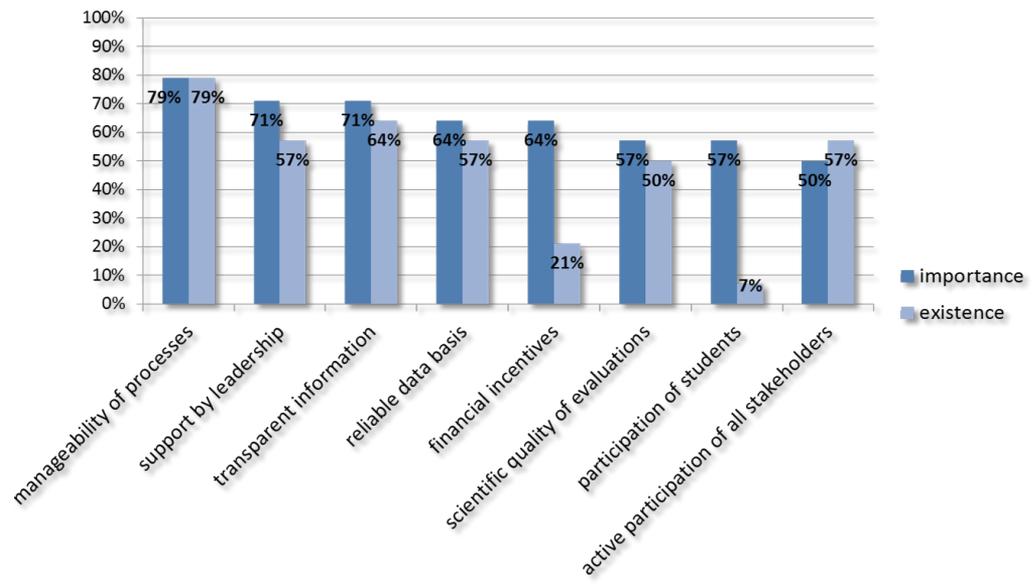
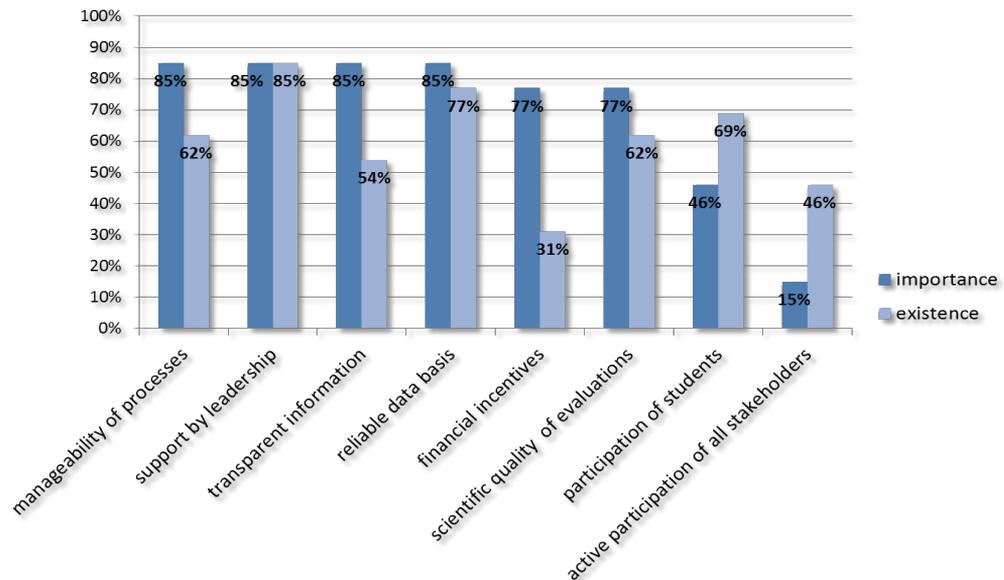


Figure 4.3 Importance and existence of conditioning factors for IQA (administrative staff)



All in all, administrative staff assigned more importance to all but one of the factors given in the survey questionnaire. While half the academic staff agreed that the active participation of all stakeholders was important for the success of internal quality assurance, only 15 per cent of administrative respondents thought so. Perhaps this may reflect a difference between the academic and administrative culture. As became further evident in the qualitative interviews, academics perceive quality as a feature inherent to a number of areas of academic life rather than connected to certain processes. Therefore, they perhaps perceive IQA less in terms of support and information, and more in terms of autonomy and freedom.

This was clearly expressed by most academic interviewees, at different levels, during the interviews. Autonomy was emphasized by academic interviewees as very important to the success of internal quality assurance. In particular, members of the rectorate and deans attributed great value to autonomy for the (quality) development of both institutional sub-units and the university as a whole. Autonomy, said a member of the

rectorate, 'is important for profile development, for positioning the university, and for taking responsibility. Consequently, autonomy and accountability lead to increasing self-assessment, which is a necessary condition for development' (interview I, rectorate, translation by authors).

Members of the rectorate particularly valued the autonomy of institutional sub-units, although they also mentioned the importance of a guiding framework in order to make the connection between centralized and decentralized strategic planning:

Autonomy is a key element for the governance of higher education institutions. To believe quality could be prescribed is wrong and dangerous. A certain degree of autonomy, combined with continuous efforts to communicate the quality spirit and the existence of cycles between autonomous areas and the overarching area, this, for me, is a formula for success (interview II, rectorate, translation by authors).

Similarly, the importance of autonomy at sub-unit level was recognized by all interviewed deans and the representative of the university governing board. In addition, the connection between democracy and democratic higher education governance and the notion of autonomy was noted, as in this comment from the governing board member:

In general, I can imagine democratic, pluralistic circumstances, which are balanced in terms of power, as being factors which could contribute to a well-functioning QA-system (interview III, governing board, translation by authors).

Interviewees also recognized that external quality assurance is an important driver of the development of higher education institutions and their organizational substructures. External quality assurance was perceived to be useful as a trigger for internal QA activities and in terms of accountability to the public. As one interviewee put it: 'The higher education institution needs information about its position. The external view is therefore very important. A university cannot be a self-referential system' (interview I, rectorate, translation by authors).

External quality assurance was, however, not thought of as intrinsically effective in any particular area. External quality assurance in the form of study programme accreditation was described as 'bureaucratic', 'pseudo-objective', and even 'absolute nonsense'. The process of accreditation was characterized by all heads of department and heads of study programmes, and by almost all deans, as a control mechanism, intended to ensure that programmes meet minimum standards. It was, therefore, not at all helpful to quality enhancement.

As in the survey, transparency was a leading theme of the interview discussions. The heads of programme, in particular, made demands for more transparency concerning the procedures and results of internal quality assurance tools. Two reported that they are not informed about the underlying philosophy and background of quality cycles at UDE. They felt that they were only involved in selected steps in the quality cycle (e.g. when asked to write reports for university target and performance agreements without knowing why and without receiving any feedback as to how the reports would be used).

Although deans and faculty managers also indicated an information gap, they seemed to be slightly better informed, probably because they were directly involved in the development process for programme-level QA tools.

The difference in perspectives of UDE's internal quality assurance can be ascertained from the response behaviour of academic and administrative staff concerning the perceived underlying paradigm of IQA. While 36 per cent of academic respondents perceived adherence to external standards as an underlying paradigm of internal QA at UDE, 33 per cent of administrative staff thought that control was the paradigm for UDE's internal QA.

Table 4.5 Main paradigm of IQA instruments and processes

	Compliance with external standards	Accountability towards stakeholders	Enhance organizational learning	Improvement	Control	Other
Academic staff	35.7%	14.3%	21.4%	7.1%	14.3%	7.1%
Administrative staff	16.7%	8.3%	16.7%	8.3%	33.3%	16.7%

4.9 Overall evaluation of IQA

Both survey participants and interviewees were asked for their overall evaluation of IQA at UDE.

The quantitative survey results have to be interpreted with caution because of the low response rate for both academic and administrative staff. Results will be used here to present only some indicative trends. A question was asked with regard to the perception of workload associated with IQA instruments and processes. A majority of both academic and administrative staff considered the workload to be more in the high and moderate area, though administrative staff perceived the workload as somewhat higher than did academic staff. It is to be noted also that a relatively high proportion of administrative staff answered ‘I do not know’ (25 per cent).

Table 4.6 Overall workload with IQA instruments and processes

	Very high	High	Moderate	Low	Very low	I do not know
Academic staff	7.1%	28.6%	35.7%	7.1%	7.1%	14.3%
Administrative staff	16.7%	25%	33.3%	0%	0%	25%

When it comes to assessing the overall benefits with IQA instruments and processes, the responses of both academic and administrative staff were spread across all response categories, with a majority of responses located in the high and moderate areas. Although administrative staff see the workload associated with IQA as somewhat higher than do academic staff, they also perceive the benefits to be higher.

Table 4.7 Overall benefits with IQA instruments and processes

	Very high	High	Moderate	Low	Very low	I do not know
Academic staff	0%	7.1%	42.9%	35.7%	7.1%	7.1%
Administrative staff	0%	25%	33.3%	8.3%	25%	8.3%

The qualitative interviews with UDE’s rectorate, deans, and programme heads showed that both university leaders and heads of study programmes recognize internal quality assurance as important for the development of UDE, though they assign different roles to IQA.

Members of the rectorate and deans considered that UDE’s internal quality assurance system was ‘a steering instrument adequate for higher education institutions’ (interview II, translation by authors). Members of UDE’s leadership team also emphasized the value of IQA for management purposes, providing data and information on which to make informed decisions.

One of the most important benefits of implementing an IQA system at UDE was reported to be the ongoing development of a culture of talking about quality. This culture grew out of initial opposition to IQA and the processes that were put into place to overcome it. It was observed that the process of gaining acceptance from the wider staff body was incomplete, though momentum increased whenever new changes were introduced into the system. One senior staff member said: 'In preparing for system accreditation it became evident that [the IQA system] was not completely thought out. We have therefore had to reinitiate dialogue with our staff members' (interview II, translation by authors). Deans and heads of study programmes also emphasized the role of IQA in fostering thought and discussion about quality development at UDE, reporting it to 'be a good basis for developing quality and thinking about improvement measures' (interview IV, translation by authors).

Heads of programme have consistently assessed the effectiveness of IQA at course and study programmes level. For them, it seemed difficult to assess the overall effectiveness of IQA at UDE. However, both UDE's leaders and deans, and the heads of study programmes, agreed that it is 'better to have IQA than not to have it, even if it means additional work to research and teaching' (interview VIII, translation by authors).

5. Conclusions

This chapter highlights some of the key findings of the study, deriving some lessons for the continued development of quality assurance at UDE, before, finally, presenting some recommendations for the development of quality assurance in higher education institutions in general.

The key findings of both the quantitative and qualitative surveys can be summarised briefly as follows:

- The degree of knowledge of stakeholders who took part in the survey and interviews about the existence, processes, and aims of particular instruments of internal quality assurance was in direct correlation with the length of time that these instruments had been in existence.
- Actors at UDE (e.g. deans, heads of programme) who, because of their position, were involved in the design and revision of particular IQA tools, knew more about the tools' characteristics and aims and were, perhaps, in a better position to assess their effectiveness. The 'ordinary teaching person', a group which was covered by the quantitative survey, was obviously not adequately informed of the existing IQA policy, manuals, and many of the tools.
- According to specific examples given by the stakeholders interviewed, the effectiveness of particular tools was more visible in the teaching and learning domain than in the area of employability and management. Qualitative instruments for course evaluation were reported to be working well by both students and academic staff members.
- The linkage of IQA and employability was viewed as problematic by academic managers. While it was well perceived that IQA at UDE uses a number of tools that are in direct relationship to employability, academic managers did not view the enhancement of employability as a prime responsibility for IQA.
- The actors interviewed reported that a high level of autonomy was very important to the success of internal quality assurance activities, both at the level of organizational sub-units and for the university as a whole.
- Despite this emphasis on autonomy, external quality assurance was reported to be a significant factor influencing the development of internal quality assurance and contributing to its advancement at the university. External quality assurance can provide a strong impetus for the encouragement of IQA development. When UDE began revising existing IQA tools and developing new ones (especially at study programme level) in order to establish a holistic and coherent quality assurance system, it turned out that all study programmes had previously undergone external accreditation, and that this had provided a good basis for the development of IQA. Indeed, external accreditation processes had helped to sensitize the institution and its staff to the demands of external stakeholders and prompted internal university discussion about the quality of its study programmes.

From these key findings, the following lessons are suggested for the development of IQA in universities.

Support the autonomy of organizational sub-units, especially faculties

As UDE is an institution with a democratic culture and highly autonomous organisational sub-units, it is no surprise that autonomy was emphasized – by all of the interviewees involved in management decisions, as well as by a number of survey participants – as one of the most important factors for the success of internal quality assurance activities. This supports UDE's and CHEDQE's decision to implement a quality assurance system which gives a significant amount of freedom to organizational sub-units to manage their own strategic development.

It is clear that the design and underlying paradigm of IQA activities and quality assurance systems are highly dependent on national circumstances and culture, as well as organizational circumstances and outlook. However, this study demonstrates that within the framework of these cultural determinants, IQA should leave space for the demands of decentralized levels (faculties and departments), be as adaptable as possible within the framework of a given organisational culture, and be only as standardized as is strictly necessary. This emerged strongly in the study, but especially in the feedback from the senior leaders who took part in the interviews.

Add flexible and qualitative tools to standardized quantitative instruments

This also means that the degree of standardization of IQA processes – both large and small scale – have to be thoroughly considered. For example, after more than 10 years of practice, CHEDQE is convinced that quantitative course evaluation has its limitations, in particular when it comes to inspiring improvement measures. The number of qualitative methods might, instead, be increased, with care taken to ensure that sanctions or rewards are based on course evaluation results.

Develop a communication concept for reaching all staff members

A policy of providing extensive and continuous information is essential when establishing within an organization IQA tools and procedures that have enough flexibility to reflect the diverse structures, demands, and cultures of its sub-units. The information flow concerning quality assurance activities, and, in particular, the revision of UDE's quality assurance system for system accreditation, was channelled through organizational roles and positions (the project steering committee and advisory board comprising deans and selected other stakeholders from the universities sub-units).

The study suggested that there was an interruption in the flow of information between the previously mentioned stakeholders when it came to academic and administrative staff working at grassroots level. Since quality assurance particularly affects staff members working in teaching and research, additional efforts should be made by the university's leadership and CHEDQE to inform staff who are not directly involved in strategic decision-making.

Integrate IQA with other management processes

UDE's IQA system tries specifically to link the perspective of internal quality assurance with other processes of organizational change. The linkages made with curriculum design, human resource development, organizational development, institutional planning, and data management are important for the creation of an interconnected and coherent system, geared towards continuous quality enhancement.

Favourable mention should also be made of UDE's recognition of the importance of establishing an institution which advocates the creation of internal quality assurance structures, supports the faculties in their quality work, and does the groundwork on quality development for the rectorate and faculties. To achieve this it is useful to support

interconnectivity by structuring a QA unit within an organization in such a way that it is able to serve a broad mandate.

Balance the objectives of quality enhancement and employability in IQA

Preparing students for the jobs market and making graduates employable is one of the main obligations of a university. Thus, one task of internal quality assurance is to ensure the involvement of stakeholders, such as students and representatives of the jobs market, in curriculum design procedures and other academic processes. Internal quality assurance tools can certainly foster the employment orientation of a given study programme, but it is very difficult to link internal quality assurance to employability of graduates in a linear manner.

In a research university, in particular, the permanent balance of employment orientation and research training as two seemingly different paradigms is a matter of continuous negotiation among stakeholders and should not be interpreted as a given in any way.

Evolution of internal quality assurance systems

Discussion with UDE's faculties took place in autumn 2012 and 2013 on the modification of the internal quality assurance system. During these discussions, the faculties insisted that the tools and procedures of IQA should be lean and effective and not impede teaching and research activities. In the development of tools and processes, three development phases could be observed at UDE.

- IQA 1.0:** Development of tools and processes, experimenting with them, comprehensive installation, and use of the tools and procedures. This phase produced a lot of data that remained unused.
- IQA 2.0:** Linking the tools and processes with management actions, i.e. embedding said tools in planning, decision-making, and budgetary processes, and supporting the rectorate with data and analyses.
- IQA 3.0:** Diminishing the quantity of data, reducing the number of procedures, and simultaneously focusing on follow-up at a decentralized level, by connecting IQA tools to centralized and decentralized management, and finally, creating a coherent system of data acquisition, analysis, and management.

UDE's internal quality assurance tools and procedures today aim to contribute to the university's effectiveness in three ways:

- effectiveness of institutional planning through institutional evaluation and target and performance agreements;
- effectiveness of assuring the high quality of study programmes by the implementation of a coherent internal quality assurance system that replaces the programme accreditation of all study programmes;
- effectiveness of data distribution, which is geared to the principle of transparency and access for all staff, is delivered as fast as possible, and allows different forms of aggregation for different purposes (e.g. data sets in the quality reporting cycle, reports of all assessed data at different levels, and access to the data warehouse system SuperX for representatives of all units).

Continuous communication is the underlying principle of the quality culture

The implementation of institutional change is dependent on the ability of the university actors to create spaces for continuous dialogue. Taking into account the concept of organizational culture, three levels have to be addressed: the *artefacts*, visible organizational processes and structures; the *exposed values*, formulated strategies, goals, and philosophies; and the *basic assumptions* of an organization, unconscious and taken-for-granted beliefs and perceptions and the feelings of the members of the organization. Only if internal quality assurance serves all three levels, and the members of the organization judge the activities not just as artefacts, will the system have a chance to contribute to a real quality culture. According to this understanding of the term 'quality culture', IQA professionals and university leaders still have a lot to do in order to cultivate their mission.

In this process, it is important to keep in mind that teaching staff and researchers often use a different definition of 'quality' in education from quality assurance officers. Combining the rather intuitive definition of quality used by academic staff members with the more professional definition of quality used by quality assurance officers demands a great deal of sensitivity. It is important to act with caution, so that the intuitive fundamentals of quality, and the corresponding desire to produce quality, are not overwhelmed by technocratic processes.

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The case study

The University of Duisburg-Essen (UDE) was founded in 2003 as a result of the merger of two universities. Bringing great changes to a venerable institution, the merger provided an opportunity to introduce new internal quality assurance (IQA) structures. Influenced in part by a continuation of earlier quality-related activities, and also by new legal requirements for programme accreditation by the German authorities, UDE has established an IQA system that interconnects existing tools and follow-up procedures in order to maximize its contribution to the system as a whole and feed evidence into decision-making and change.

Conducted within the framework of an international research project implemented by the UNESCO International Institute for Educational Planning (IIEP), this case study focuses on the challenges and limitations of systematizing IQA processes into a system, and the effects of IQA on the university.

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