Strategy & Policy, Susanne Wichman

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Date of EB Decision: 1 December 2014 Author and Department: Susanne Wichman

Strategy & Policy

Secretary's initials:

UT POLICY FRAMEWORK FOR EDUCATIONAL QUALITY ASSURANCE

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INTRODUCTION

In 2008 various quality assurance initiatives were set in motion at institutional level. These resulted in a memorandum – <u>UT Institutional Quality Assurance System, September 2010</u> – outlining the various approaches to educational quality assurance. This memorandum served as the basis for diverse measures and actions in the field of management information (MISUT), examination policy, teacher professionalization and student guidance.

In autumn 2013 UT underwent the educational quality assurance audit at institutional level. <u>The Critical Reflection, dated 23 September 2013</u> provided an account of the situation at that time and identified points for improvement in this area at institutional level, as delivered to the audit committee of the NVAO (Accreditation Organization of the Netherlands and Flanders).

The NVAO decided in May 2014 that UT had passed the audit. The NVAO adopted the audit committee's recommendations in full (see Appendix 4).

The present UT policy framework for educational quality assurance aims to be an update of the September 2010 memorandum and describes the educational quality assurance system as also set out in the Critical Reflection.

The framework includes the NVAO recommendations, plus an indication of the extent to which these recommendations have been adopted and translated into action points.

This UT policy framework for educational quality assurance provides an overview of the key elements of educational quality assurance as a connected and coherent whole. The NVAO recommendations and action points are included here instead of being presented in a separate action plan. The reason for this is to achieve greater clarity and coherence.

The description of the design of educational quality assurance at UT contains references to policy documents that deal with specific key elements in more detail. These appendices (some of which are still being developed) belong to this UT framework.

These policy documents are revised more often than the framework and indicate the actions/action points for improvement that have been set in motion in response to monitoring/evaluations in the relevant field. The intention is to make this policy framework plus the accompanying policy documents digitally available, so that the most up-to-date documents belonging to this policy framework are always easy to find.

Update January 2017: The relevant policy documents have been available in JOIN since November 2015. JOIN is the digital archive system of the University.

This policy framework also outlines the instruments used to monitor the initiated policy. A brief sketch of the educational organization is also given.

The totality of the policy framework, policy documents, (measurement) instruments, organization and action points shows how the PDCA cycle is applied within UT in order to promote educational quality assurance.

This UT policy framework for educational quality assurance adheres as closely as possible to the 5 NVAO standards for educational quality assurance at institutional level (vision, policy, measurement instruments, improvement policy, governance/organization).

The main elements of UT's vision and policy on educational quality and educational quality assurance are listed in key words in the diagram below.

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- •high tech, human touch
- •T-shaped professional
- •roles: researcher, designer, organizer
- •entrepreneurial attitude

- student intake
- •attainment targets for each programme
- •interaction between research and education
- multidisciplinarity
- excellence
- •embedment of entrepreneurship and societal relevance
- internationalization
- graduates

quality culture

- •quality of the academic staff (teacher professionalization, career paths in education)
- student involvement (student as partner)
- student guidance policy
- •study accessibility for students with disabilities
- examination policy/examination framework
- adequate support processes and funding system
- •overall quality assurance organization: PDCA cycles at 4 levels
- •up-to-date management information (MISUT)
- •agreement on evaluations is necessary: UT evaluation policy
- •uniform use of measurement instruments (adequate support processes)

1 VISION ON EDUCATION AND QUALITY

The vision on educational quality at the University of Twente is founded on the institution's profile and its ensuing vision on and mission in education. This applies both to the educational content and didactic approach as well as to our organization and governance. For this reason, our profile and educational vision are set out in this first chapter, before looking in greater depth at our vision on the quality of education.

1.1 PROFILE OF THE UNIVERSITY OF TWENTE: HIGH TECH, HUMAN TOUCH

The University of Twente is a young entrepreneurial research university dedicated to the development of new and relevant technological knowledge and applications. UT does not approach technology as an isolated discipline, but places it in the context of human and social sciences.

Education and research at UT have long been driven by a strong focus on practical applications and entrepreneurship. As an enterprising university, UT encourages both researchers and students to seek ways of developing ideas with a high and beneficial impact on society.

The combination of high tech and human touch, excellence in research and a focus on practical application are key characteristics that shine through in UT's vision on education.

1.2 EDUCATIONAL VISION

The coming generations of students will be required to fulfil more diverse roles in their professional lives than earlier generations. The issues and challenges that will come their way are still unknown and we cannot predict the technological and other knowledge they will need to conceive and deliver the solutions that society demands. Against this uncertain and everchanging background, UT must strive to offer its students relevant educational experience. It is self-evident that teaching students to acquire and combine knowledge on their own initiative and to step across disciplinary boundaries is central to this endeavour.

Drawing on this idea, UT started in 2010 to organize and deliver its educational offerings along new lines. The aim is to substantially improve the pass rates of the various programmes, concentrate student drop-out in the first year of study, and create space and opportunities to help talented students develop their knowledge and competences to meet the needs of future employers.

Education at UT centres on *learning*, not on instruction. UT has a clear and compact vision on what this learning process must bring to the student. This approach encompasses three dimensions: knowledge, competence and attitude. These dimensions are explained below.

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1.2.1 KNOWLEDGE: T-SHAPED PROFESSIONALS

Specialization is necessary to achieve depth of understanding and thus acquire intellectual skills that are also useful outside the student's specific domain of specialization. To this end, the student must also see how his knowledge fits into the wider context.

In line with its profile, UT aims to help technical and science students understand that the impact of technological innovations depends largely on the social context. Vice versa, modern technology has become indispensable in societal interventions to promote the well-being of society at large as well as that of individuals – in other words, in such diverse fields as public administration and medicine.

1.2.2 COMPETENCE: THE ROLES OF AN 'ENGINEERING ACADEMIC'

An understanding of technology *and* society is a key characteristic of Twente graduates. Diverse competences are necessary to operationalize this understanding. These have been translated into three 'roles' that an 'engineering academic' must master.

- **1. Investigate:** Critically examine existing knowledge and contribute towards the development of new knowledge;
- **2. Design:** Integrate scientific knowledge into new solutions to complex problems;
- 3. Organize: Implement new solutions in a complex globalized social environment.

During the Bachelor's programme, the student discovers where his own strengths lie. During the Master's programme, the student can specialize further in one of the three roles. Moreover, the three roles offer students an opportunity to align themselves for appropriate follow-up programmes: the PhD programme for research talents, a designer programme that leads to a Professional Doctorate in Engineering (PDEng), and management and



entrepreneurship programmes that can be followed alongside a professional career.

1.2.3 ATTITUDE: ENTREPRENEURIAL

In addition to knowledge and skills, UT invests in fostering an entrepreneurial attitude in its students. Entrepreneurial in the sense of: daring to step out of the box and look for new ways of harnessing knowledge so as to have a beneficial and sustainable impact with respect for people and planet. Besides being an integral aspect of our study programmes, entrepreneurship is also intensively nurtured in the campus with its bustling student community and the Twente Knowledge Park. These jointly form a fertile ecosystem where budding engineering entrepreneurs can grow and thrive. The DesignLab initiative builds on this existing tradition.

1.3 VISION ON EDUCATIONAL QUALITY

Educational quality is determined by several aspects (pillars) which are described below.

1.3.1 QUALITY OF STUDENT INTAKE

We pursue our vision along diverse tracks: via direct acquisition and matching, through partnerships with the institutions supplying the students (particularly secondary education and

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higher professional education) and by providing guidance, coaching and advice, notably in the first phase of the study programme.

Prior assessment of the suitability of previous qualifications for Master's programmes has long been standard practice. The Teaching and Examination Regulations for Master's programmes contain admission requirements and each Master's programme has its own Admission Board that is responsible for the quality of student intake into that programme.

Relevant policy documents:

CvB-214 Nota Studiekeuzecheck UT def, May 19th 2015 (in Dutch)

Strategic Plan for Master's acquisition 2012-2014 (M&C) (in Dutch)

1.3.2 PROGRAMME AIMS AND CAREER RELEVANCE

In addition to our vision on educational content, we use the Dublin descriptors and the 'Academic Criteria for BA/MA curricula' (also known as the 'Meijers criteria') to define and determine the programme aims. The Meijers criteria, drawn up in the 3TU context, offer us several advantages, such as explicit attention for designing solutions and an academic interpretation of application-oriented research.

The adequacy of these programme aims is measured partly on the basis of student experiences after graduation. The scores in the WO (University Education) Monitor and the National Student Survey (NSS) indicate that our students are well-prepared for a career in the professional field of their choice.

Several study programmes have set up professional field committees or practitioner or advisory councils consisting of employers and professional practitioners. These meet periodically to discuss the content and design of the curriculum and relevant developments in professional practice.

Besides setting up such committees or councils, programmes sometimes conduct written or oral surveys among representatives of the professional field. Input about the required level of knowledge and skills is also obtained via graduation internships. Finally, student performance in Master's programmes provides useful information on the quality of the preceding Bachelor's programme.

NVAO Recommendation: Separate memorandum on the professional field committees/advisory councils is necessary.

The NVAO recommends (recommendation 2) systematic institution-wide documentation of the policy on the interaction between education and the (international) professional field. Concrete actions on this recommendation have yet to be defined.

1.3.3 INTERACTION BETWEEN EDUCATION AND RESEARCH

Research skills and methods - alongside design skills - have traditionally been at the heart of all UT programmes. The interaction between education and research is furthermore assured by incorporating relevant research into the educational offerings and through the active involvement of teachers in research.

Research skills, like design skills, form part of the attainment aims of our programmes. Broadly speaking, Bachelor's students write a thesis demonstrating their ability to draft a research proposal and/or independently assess the relevance of scientific research results. Master's students go a level deeper. In their Master's thesis, they demonstrate their ability to

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analyse and creatively apply acquired knowledge to a research question that they have formulated themselves. The Master's thesis draws on independent research and/or design work, often also involving participation in current research within a specific department. Regular joint publications and/or new product developments by students and teachers testify to the success of this approach.

1.3.4 MULTIDISCIPLINARITY

The motto High Tech, Human Touch (HTHT) succinctly expresses UT's profile as a university where technical and social sciences are approached as cross-fertilizing disciplines.

The Twente Educational Model centres on modularization and project-led education in order to encourage students to question and challenge disciplinary boundaries. In line with our educational vision, which recognizes that a rapidly-evolving society requires our alumni to deliver creative solutions for new problems, multidisciplinarity must become a more intrinsic feature of all curricula.

Relevant policy documents:

Policy Memorandum on TOM principles 2012 (in Dutch)

Online documentation on TOM principles

Monitoring and realisation of TOM principles (Het bewaken èn verder realiseren van de TOMuitgangspunten) June 2016 (in Dutch)

Multidisciplinarity is also promoted by enabling students to tailor their degree profile to their own needs or interests (formerly known as 'minor' specialization). In the third year of the Bachelor's programme, students can deepen or broaden the scope of their study via optional modules of (2x15) 30 EC. The only restriction on the options for broadening the scope of study is the expected prior knowledge for the optional programme and the extent of overlap between the optional module and the student's own programme. To reinforce the multidisciplinarity and the HTHT profile, an HTHT module is being developed that will be available to all Bachelor's students.

1.3.5 EYE FOR EXCELLENCE

UT has entered into a performance commitment with the Ministry of Education, Culture and Science (OCW) to ensure that 7% of UT students take part in excellence tracks during the Bachelor's phase in 2015. In line with this commitment, UT is expanding its range of excellence programmes based on **a newly developed Excellence Vision**. In this vision, existing and newly proposed excellence tracks are given substance as a coherent whole, including the operational and organizational detailing. In the Bachelor's phase, the excellence instruments are mainly aimed at academic development. Students who have something extra to offer are encouraged to seek out additional challenges in order to broaden or deepen their regular curriculum. Inter-curricular honours programmes are offered to give students the possibility of broadening the scope of their studies. And starting from 2013-2014, new excellence tracks will be organized around the three engineering roles (Investigate, Design, Organize).

This approach was validated as a whole in 2013 by the Sirius programme and is being implemented under the supervision of a newly appointed Honours Dean. The quality of the

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excellence tracks is assured by the 'Excellence Council', in which representatives of several faculties have taken it upon themselves to coordinate the various types of excellence tracks.

Relevant documents:

Excellentie@UT, September 2013 (in Dutch)

Honours@UT evaluation honours programmes 2016 & beyond, February 2016

1.3.6 ENTREPRENEURSHIP AND SOCIATAL RELEVANCE

UT strives to foster an entrepreneurial attitude among its students; not only in the narrow sense of economic activity, but also in the broader meaning of proactively seeking out opportunities and challenges, both on and off the beaten path. Project-led education and internships are important instruments for this purpose.

In addition, UT actively helps its students to launch their own enterprise or business by offering support in the form of facilities and coaching. In exceptional cases, it can even provide start-up funding. UT and Twente Knowledge Park work closely together in this connection.

Students are encouraged to take part in board leadership roles and other activities in order to widen their range of experience. To this end, we offer a minor in public management and skills certificates in recognition of participation in such activities.

1.3.7 INTERNATIONAL FOCUS

An international focus is of great importance to highly-qualified professionals. Internationalization also raises UT's international profile and helps our university to keep growing and improving. The ITC Faculty is the most international faculty of UT. This faculty almost exclusively serves international students.

UT wants to encourage all Dutch students to gain international experience during their studies. To this end, all our Master's programmes and an increasing number of our Bachelor's programmes are offered in English. In addition, we are setting up international joint and double degree programmes and are working on international exchange arrangements and developing profile-raising exchange packages. International accreditation, alongside national accreditation, is also being sought for more and more degree programmes.

Relevant policy document:

Internationalization Vision 2015-2020: ambition, strategy and implementation, January 2015 This is recommendation 2 of the NVAO, see appendix 4.

1.3.8 QUALITY OF GRADUATES

UT students must leave the university with a recognized high-value qualification. We are currently succeeding in this aim. To sustain this success into the future, it is imperative for UT to maintain intensive relationships with the future employers of our students. This is done through guest lectureships, professional field committees/practitioner councils and external internships and graduation placements (via our study programmes and the contacts that our staff maintain with public and private organizations and institutions through their participation in projects and research activities). Additional sounding board information is obtained through alumni relations, post-initial education and valorization activities. See also the action point at section 3.1.2.

2 VISION AND POLICY ON EDUCATIONAL QUALITY ASSURANCE

2.1 VISION ON EDUCATIONAL QUALITY ASSURANCE

Responsibility for assuring the quality of the education lies in the first instance with the involved academic and support staff. The staff formulate, deliver and monitor the programmes in terms of content, aims, didactics and examinations. The quality, intrinsic motivation and professional pride of these staff members form the foundations of our quality assurance. This takes place in diverse roles: teacher, tutor, study advisor and support staff, but also in the informal roles of sounding board, motivator and inspirer.

In the second place, UT gives its students great responsibility in shaping and designing their own learning process. Far from being a passive consumer of education, the student is encouraged to actively acquire knowledge and skills and develop a professional attitude. The student is therefore closely involved in determining the content and direction of his or her education.

2.2 QUALITY CULTURE

One key characteristic of UT is the direct sense of responsibility for the quality of education that is felt throughout every level of the organization. The relatively small size of the organization is key to this sense of shared responsibility. Teachers and students have a lot of direct influence.

The staff is highly qualified and, partly for this reason, accustomed to a large degree of professional autonomy.

Students say they greatly appreciate the easy access to staff. Thresholds are low and students participate actively in shaping the educational offerings and assuring the quality of their education.

Sometimes tensions arise between local variations in programmes, which result from the high degree of autonomy, and the ambition to use resources efficiently for the achievement of the institution's objectives. Usually, however, the lines of communication are short enough to defuse any tensions that arise.

The exchange of decentralized practices, the sharing of good practices and the joint definition of common standards – combined with the ample scope for pursuing professional excellence – promote a quality-centred culture within UT. The University Education Committee plays a central role in this respect in facilitating periodic scheduled consultation between the faculty education/programme directors and the immediately involved services.

Ingredients for quality culture Cooperation and dialogue Information is Openness, safety. broadly shared freedom to mistakes No separation Strengthening between "thinking" networks, platforms en "doing" Recognition of each Weighing up person's role in the decisions based on organization joint arrangements

2.3 HR POLICY TO PROMOTE QUALITY OF ACADEMIC STAFF

Staff quality is maintained through investments in training and HR policy, but also through the promotion of an informal quality culture.

To make the transition to project-led education, an extensive set of measures have been put in place with funding from the institution's own educational resources and, crucially, also from the 3TU educational resources.

Our teachers find inspiration in the attention and appreciation they receive as well as in the available opportunities for developing their own potential and improving the overall quality of education at UT. The programmes, the faculty and the institution all contribute to this in various ways.

As part of its HR policy, UT invests in the following three pillars that contribute to the quality and positioning of the education:

Teacher professionalization;

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- Career prospects & career paths;
- Appraisal and recognition of teaching performance.

Relevant policy documents: (all in Dutch)

Plan Senior Kwalificatie Onderwijs (SKO) voor UT, May 2016

Final- Evaluatie Tenure Track definitieve versie, 24 August 2015

Basic Teaching Qualification (BKO) policy University of Twente, 7 January 2014

Professionalization and Career Prospects in Education, Discussion Memorandum April 2013

Professionalization and Career Prospects in Education, Draft Memorandum July 2013

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Tenure Track in UT practice, August 2012

2.4 STUDENT INVOLVEMENT

The student is approached as a partner within all UT programmes. He/she is therefore involved in the design and delivery of the education. This is not only the case in the institutional bodies stipulated by the Higher Education and Research Act (WHW), such as the Faculty Council and Programme Committee. Students also sit on various evaluation committees for the degree programmes and are represented in the University Education Committee.

The education committees of the student associations are also important partners in the Programme Boards. They play an important part in the evaluation of the education and provide input for improvements.

In addition, senior-year students have a key role to play in the educational process, such as in coaching younger students and organizing extra-curricular activities.

2.5 STUDENT GUIDANCE

UT is committed to providing all students with guidance and coaching tailored to their individual needs. The monitoring and coaching of students (or groups of students) and the identification of education-related problems contributes to the overall quality of education. Study advisors and student counsellors increasingly provide input for processes in the field of educational support and innovation.

Study and career guidance are provided at programme level by study advisors and mentors and at central level by staff of the various CES units: the Student Psychologist Office, Student Counsellor Office, Study & Career Service and Language Coordination Point/Writing Centre. The International Office and the Student Pastoral Care Office also fulfil a role in this framework.

Clearly, tutors, graduation supervisors, and internship coordinators and supervisors are also closely involved in providing students with any assistance they need throughout their journey at UT. Student guidance takes place in a coherent chain.

Relevant documents:

Policy memorandum, CvB-83 Studieloopbaanbegeleiding aan de UT, December 2014 (in Dutch)

Implementatie Beroepskwalificatie Studieloopbaanbegeleiding BKS, Nov 2015 (in Dutch)

2.6 ACCESIBILITY OF EDUCATION FOR STUDENTS WITH DISABILITIES

The University of Twente recognizes and values the diversity in the student population and pursues a policy aimed at giving students with disabilities the same opportunities to have a successful study as other students. The fundamental aim is to ensure the effective and sustainable utilization of the talents of all students, taking account of mutual differences and similarities. In daily practice, this means that, partly thanks to the small scale of our education, there is ample scope for an individual and personalized approach. This is also evident from the good and above-average opinion that this group of students has about the provision of facilities relevant to their needs at UT.

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In this connection, the University of Twente is currently evolving from a personalized tailor-made approach to a proactive target group policy. The rights of students with disabilities are set out in the Student Charter. A guideline has been drawn up for the provision of coaching and facilities to students with disabilities in order to prevent any form of arbitrary treatment. Facilities are awarded in accordance with agreed conditions.

Relevant document:

University Action Plan for Studying with a Disability (Instellingsactieplan studeren met een functiebeperking), 22 February 2016 (in Dutch)

This document reflects recommendation 2 of the NVAO, see appendix 4.

2.7 STUDENT ASSESSMENT POLICY

Student assessment is an important focus of attention – not just because of the reinforcement of the controlling role of Examination Boards and new accreditation requirements, but also because meaningful exam results are vital for giving suitable course recommendations as well as for referral purposes, self-selection and selection (e.g. student progress evaluation). To promote the quality of assessments and (final) examinations, UT has adhered to an assessment framework since the summer of 2011. This assessment framework defines conditions for student assessments, ranging from the subject of examination to the design of the quality assurance system at programme level, including the functioning of the Examination Boards. The assessment framework also contains overviews of the formal division of tasks in relation to examinations, examination documents and best practices.

Relevant documents:

UT Assessment framework (UT Toetskader), September 2013. (in Dutch)

Quality Assurance Framework for Student Assessment UT, December 2016

2.8 EVALUATION POLICY

At institutional level, the overall evaluation process within the institution is still not systematic enough. Improvements are necessary and possible.

A UT evaluation framework must be developed in line with the various educational quality and educational quality assurance aspects as identified in the preceding chapters.

An evaluation framework sets out guidelines for the organization of the quality assurance systems in the programmes, with a view to making the following improvements at faculty and institutional level to these systems:

- greater transparency for teachers and students, leading to a more recognizable evaluation approach,
- greater transparency for the management, leading at educational and central level to better insight into the effectiveness of the local quality assurance systems,
- greater efficiency in various areas.

Improvement point in response to Critical Reflection Separate memorandum on UT evaluation framework

Relevant documents:

Evaluation framework for TOM modules (UT-kader module-evaluaties TOM) 23 May 2013 (in Dutch).

Policy on Educational Evaluation (Beleid voor onderwijsevaluaties, 1e versie vastgesteld door UCO) 21 May 2015 (in Dutch)

2.9 SUPPORT PROCESSES AND FUNDING

Education support processes cannot be viewed separately from the educational quality. These processes largely determine the quality as perceived by the student. Their primary purpose is to unburden teachers and students, leaving them free to concentrate on teaching and learning. Staff, students and support are jointly responsible for the educational process and must therefore be able to find each other easily.

Over the past years, UT has invested heavily in modern buildings, educational spaces, laboratories and study landscapes with plenty of student workplaces. The library helps students trace relevant scientific information with a set of powerful search instruments, varying from a discovery tool for starting students to specialized subject-specific databases for advanced students. A large collection of digital resources is accessible to all students. Information specialists assist with the training of information skills.

Clearly, all these facilities require a funding system that is adequate to finance the provision of education while also allowing for local customization. To support the introduction of TOM, UT decided to modify its educational funding allocation system. This change is being phased in from 2014 in analogy with the introduction of TOM. The new funding allocation model is aligned as closely as possible with the allocation of government funding.

Action point: multiple years UT allocation model related to development of TOM This is recommendation 1 of the NVAO, see appendix 4.

3 OVERALL QUALITY ASSURANCE ORGANIZATION

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The UT quality assurance system distinguishes four levels (study unit, programme, faculty and institution). Each of these levels applies its own improvement processes and instruments, with the next-higher level overseeing the implementation. The degree of detail therefore differs, depending on the level. The support services operate adjacent to this chain and report directly to the institutional administration.

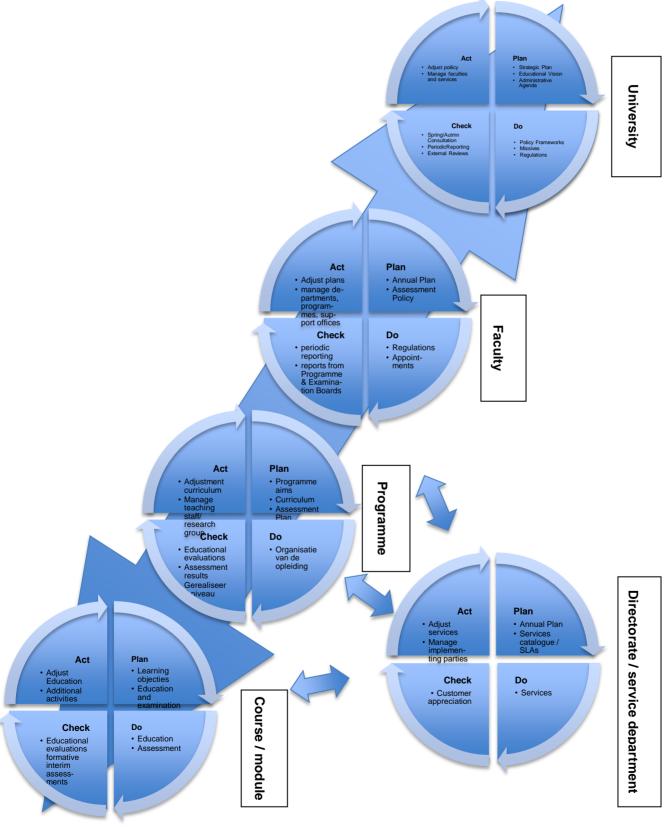
3.1 QUALITY ASSURANCE CYCLES

Quality improvement at UT is based on three key assumptions:

- 1. Quality assurance is a cyclical process (Plan-Do-Check-Act (PDCA) cycle);
- 2. This cyclical process is given shape at several levels: study unit, programme, faculty and institution. Each level has its own tasks and responsibilities;
- 3. Interaction within and between the various levels is key to a well-functioning system.

The quality of education receives intensive and structural attention at all levels. In PDCA terms, however, policy formulation and policy implementation (Plan & Do) are noticeably more formalized than monitoring and improvement (Check & Act). A second observation concerns the systematic attention that is given to the quality within the cycles in our organization. Horizontal links between the cycles (i.e. links at the same level) are usually maintained through meetings between colleagues and informal platforms of e.g. study advisors, quality assurance staff and internationalization coordinators. The **University Education Committee** has been reorganized to safeguard the vertical links (contacts between different levels) and horizontal links.

The figure below provides an overview of the quality cycles in the educational organization. The instruments are explained in more detail in appendix 6.



3.2 EDUCATIONAL GOVERNANCE

The **Executive Board** carries final responsibility for the development of the educational vision and the strategy of the institution. This responsibility encompasses the adoption of the educational offerings, the translation of these offerings into a Teaching and Examination Regulations (TER) guideline in order to achieve more uniformity, decision-making about new programmes and the adoption of self-evaluation reports in the context of (re)accreditations. Every six weeks or so, the Executive Board meets with the Faculty Deans ('**EB-D Consultative Committee'**) to discuss and coordinate the university education policy in more detail. In May 2013 the EB appointed an Education Innovation Dean, primarily for the overall coordination of the educational innovation within UT. This dean forms an additional link between the Executive Board, the EB-D Consultative Committee and the educational processes. The Education Innovation Dean operates within a mandate of the Rector Magnificus, with the latter remaining responsible, both within the Board and vis-à-vis the participation bodies, for the educational policy at institutional level.

Responsibility for assuring the quality of the programmes remains in the first instance with the Faculty Board (dean). In conformity with the Higher Education and Research Act (WHW), the programme directors are responsible for the quality of the content and aims of their respective programmes.

The responsibility for preparing and supporting the institution's educational policy rests with the Directorate for Strategy & Policy. This policy is given shape in conjunction with faculties, the other directorates and the service centres.

Further input for the educational quality (vision/policy) control process comes from the University Education Committee (UCO in Dutch), currently the most important advisory body for the Executive Board when it comes to educational processes and implementation. This is chaired by the Education Innovation Dean, operating on behalf of the Rector Magnificus. Besides providing the EB with advice, both on request and on its own initiative, the University Education Committee coordinates the UT education quality system. For instance, the committee accredits the minors/optional modules, on the basis of audits by the VAC (Validation and Accreditation Committee). The committee has also set up the Quality Assurance Platform, which has an advisory role. In areas where the responsibility for educational quality rests with faculties and programmes, the University Education Committee is entrusted with the task of ensuring agreement on and, where possible or necessary, harmonization of processes and rules. The Education Contact Persons Platform advises the University Education Committee on these issues. The Student Guidance Platform also plays an important role in this respect. Alignment with the institutional policy takes place through the Education Innovation Dean.

Each faculty dean delegates the responsibility for the assurance of the educational quality and philosophy either fully or partially to the **programme director**. UT-wide implementation, organization and evaluation of the education takes place via the University Education Committee with support from the CES (Centre for Educational Support).

In many cases, the Programme Director is supported by an **education coordinator** (Bachelor's phase) **and track coordinators** (Master's phase). This officer is responsible for coordinating and aligning the educational organization, procedures and content in the relevant programme. Complaints about the programme, subjects or any other aspects are in the first instance also directed to the programme coordinator. If necessary, a confidential advisor (or student counsellor in the case of students) is enlisted. Finally, a quality assurance coordinator has been appointed for each programme or faculty. This coordinator sits on the previously mentioned Quality Assurance Platform.

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The new Bachelor's programmes are made up of modules consisting of multi-disciplinary content and a thematic project. These modules are coordinated by a **module coordinator**, a role that is entrusted to one of the teachers involved in the module. The module coordinator is first among equals of a group of teachers who jointly deliver the courses within a module. Acting on behalf of the Programme Director, this coordinator sees to the development and implementation of the module and ensures that the module is sufficiently coherent to meet the quality standards.

As required by law, we have a Programme Committee and Examination Board. Both fulfil a crucial role in safeguarding the quality of the programmes.

The Programme Committee is an important sounding board for the Programme Board and the primary advisor of the Faculty Councils. It is also a primary point of contact for students to discuss the quality and organization of the education.

The Higher Education Act (WHW in Dutch) has vested the Examination Board with a more responsible role. In response, various faculties are now giving the committees more senior-level support. External members also form part of the Examination Boards. The Examination Boards report on their work to the dean (annual report).

UT Policy to clarify the division of tasks between Programme Board and Examination Board is being developed.

Quality Assurance Framework for Student Assessment UT, December 2016

Action Point: An evaluation of the educational governance has taken place in 2016. This is recommendation 6 of the NVAO, see appendix 4. The educational governance will be adjusted in 2017.

Meanwhile, work has been under way since spring 2014 to achieve better alignment between platforms and the University Education Committee. To this end, a year calendar with recurring themes has been agreed on, enabling the platforms to fulfil their advisory role to the University Education Committee in a structured manner.

3.3 TOM EXPERT COMMITTEE

The Executive Board has appointed a TOM expert committee. This committee operates independently of the rest of the organization and monitors the implementation of TOM.

The purpose of the TOM Expert Monitoring Committee is to make a contribution to the successful introduction of TOM through periodic monitoring of the introduction process by means of a meta-evaluation in accordance with the assessment framework set out in the appendix to this document.

The position of the TOM Expert Monitoring Committee has been demarcated as follows:

- The Expert Committee takes up an independent position and formulates opinions and recommendations on the basis of its own insights and expertise.
- The Expert Committee has been appointed by the EB of UT and also reports directly to the EB.
- The task of the EB is to communicate the findings of the Expert Committee to the relevant bodies within UT, such as the U-Council, University Education Committee, deans, Scientific Directors, and Programme Directors.

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- The Expert Committee aligns its activities and working methods in the first instance with the Education Innovation Dean.
- The Expert Committee reaches its judgements primarily on the basis of secondary data analysis but, if necessary, can also gather its own data, for instance about the acceptance of TOM and the workload among teachers and students. Initiatives for gathering these data are not instigated by the Expert Committee itself, but are deployed via the Education Innovation Dean within the organization.

The appointment of this committee fulfils recommendation 4 of the NVAO, see appendix 4. Evaluation of the Expert Committee takes places in 2017.

4 QUALITY AND SHARING OF MANAGEMENT INFORMATION

4.1 MANAGEMENT INFORMATION VIA MISUT

In January 2008 UT started with the development of a Management Information System for UT (**Project MISUT**).

This system is now largely in place, providing the UT Board (EB and SB), the management of UT (MT members of the faculties, institutes, directorates and service centres) and the policy-preparing and policy support units with standardized management information on finance, education, research and staff.

MISUT has evolved into an important instrument in our quality assurance system. The starting point is an information pyramid, where information is made available from uniform sources at different levels of aggregation. MISUT makes (management) information available for various target groups. At the highest level, for instance, this concerns performance indicators for the Executive Board and the Supervisory Board. Lower down, information is supplied to deans and scientific directors at the level of the individual faculties and research institutes. This information can be broken down further into e.g. separate study programmes.

MISUT is effectively an Oracle database that is (automatically) supplied with relevant data from the various institutional systems. The database contains a large range of data on the functioning of UT. As the database also contains historical data, it is possible to analyse trends and generate tailor-made information in support of the management processes. Since the end of 2012, a large number of (standard) reports have been operational within MISUT, covering the following subjects: education, research, finance and staff. The management information on education contains, among other things, data about student intake, pass rates, drop-out rates and speed of graduation.

Strategy & Policy is continuously developing MISUT under the direction of a MISUT steering group.

This is recommendation 5 of the NVAO, see appendix 4.

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4.2 TOWARDS A COMMON EVALUATION INSTRUMENT IN EDUCATION

The introduction of TOM has increased the need for a more uniform approach to module evaluations. This has led to a pilot supported by Evasys, which had already been in use at GW for 5 years. Ahead of the 2013-2014 academic year, a common questionnaire was developed for the evaluation of modules in TOM.

This pilot broadly revealed the following:

- It is possible to implement a common questionnaire, but a strong need remains for programme-specific flexibility.
- The reports made with Evasys offer an overall view and insight up to a certain point, particularly at UT level. However, there is also a need for specific reports at programme level.

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- For the purposes of the pilot, the timing of the survey was uniform for all
 programmes, namely at the end of the module; however, a need remains for
 interim surveys at local programme level during the module.
- There is a need for evaluations at other levels (i.e. not just subject/module evaluations).

This leads to the conclusion that the evaluation framework must be developed further for the implementation of a common evaluation instrument. This framework must cover usage, reporting, management and support. The evaluation policy must be drawn up first, after which Evasys can be set up and used as an institution-wide system.

The Evasys pilot has meanwhile been extended to 1 September 2015. In addition, CES is currently preparing UT-wide questionnaire service (with the aid of Evasys). This service must be implemented by 1 September 2015.

The evaluation instrument should support diverse levels.

- Subject and module level
- Semester level
- Bachelor's curriculum level
- Master's curriculum level

Relevant document:

Towards a UT-wide service for questionnaire-based surveys (QUEST), 6 May 2014, adopted by the University Education Committee on 15 May 2014. (Vragenlijstservice (VLS) vastgesteld door UCO) (in Dutch)

APPENDIX 1: PDCA CYCLES

Study Unit (Course / Module)

The smallest unit for a quality assurance cycle is the study unit. The teacher or module coordinator is responsible for the content, design and implementation of the study unit in the context of the overall curriculum. The quality of the education is assured through consultation with colleagues and evaluations.

In PDCA terms, this responsibility implies:

Plan: Formulate learning objectives, write an examination plan, design the study unit,

design the examinations using examination schedules;

Do: Teach and hold examinations;

Check: Educational evaluations and results of (formative) examinations;

Act: Adjust educational design.

Programme

The Programme Director is responsible for the structure, content and quality of the study programme as a whole. Since the introduction of TOM, organizational responsibilities (including quality assurance tasks) have been entrusted to an Education Director, who fulfils this task for a set of related programmes within a faculty. The service centres and directorates provide further support in this connection. One example is the implementation of the UT framework for the examination policy. To support this, Educational Services has developed and implemented three expert modules to promote the expertise of the Examination Boards as well as Examination Analysis Training for teachers.

In PDCA terms, this responsibility implies:

Plan: Draw up study programme/programme aims (including use of teachers,

organization of practical classes, examinations and timetables), write a

programme guide, plan evaluations, and draft programme-specific TER;

Do: Implement curriculum, including guidance/facilities;

Check: Subject and/or module and/or curriculum evaluations, quality assurance of

learning objectives/examinations, panel discussions, exit interviews, external

reviews, professional field committees/advisory councils, accreditation;

Act: Adjust curriculum, optionally on recommendations from programme committee.

A quality assurance system has been set up within all faculties and study programmes, sometimes more implicitly, sometimes mainly in alignment with the intrinsic motivation of the scientists. This system consists of systematic subject and module evaluations, panel discussions with students, annual programme improvement plans, and a quality manager or team. In addition, teaching forms an important part of the annual talks between individual teachers/scientists and their managers/supervisors.

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Faculty

An important part of the PDCA cycle/quality assurance at faculty level is the P&C cycle. Until recently, this was highly finance-driven. Recently, more emphasis is being placed on the relationship with quality objectives, including the performance objectives agreed with the Ministry of Education (OCW). By approaching the financial aspects and educational content aspects (planning and reporting) as a more joined-up whole, this cycle also helps to assure the quality.

Annual faculty plans lay down (quantitative) objectives with the EB concerning educational themes such as student intake, pass rates, teacher quality (Basic Teaching Qualification) and English language skills. This should serve to reinforce the typical UT characteristics in every programme.

In PDCA terms, this means:

Plan: Develop annual faculty plan, including frameworks for annual programme plans;

Do: Implement annual faculty plan, adopt programme-specific TER;

Check: Management info/faculty annual report (incl. KPIs), quarterly reports, outcomes

of various evaluations, surveys;

Act: Adjust policy, draw up annual plans.

The spring and autumn consultations in the Planning & Control Cycle are important instruments for making connections between the faculty level and the institution level. The spring consultation is mainly for monitoring purposes, while the autumn consultation centres on the plans for the coming year. Another instrument is the annual performance appraisal between the dean and EB chairman. The current issues and developments regarding the (quality of the) faculty education Is one of the most important topics.

Institution

At institutional level, UT has a multi-year strategy and a multi-year budget (adjusted annually in the framework-setting memorandum). In its pursuit of ongoing improvements, UT has put in place institution-wide arrangements and frameworks. Within these frameworks, there is scope for individual initiatives at decentralized level: unity in diversity.

Based on the administrative agenda, institution-wide improvement processes have been set in motion since 2010 in order to renew the educational offerings and education support systems, thus ensuring that UT lives up to the philosophy of the Twente Education Model and realizes the performance objectives agreed with the OCW.

As at faculty level, the P&C cycle is an important quality assurance instrument for the institution. The annual framework-setting memorandum, for instance, forms the basis for administrative arrangements between the EB and faculties and the discussions conducted in this respect with the Board during the spring and autumn consultations.

Since as early as 2007, arrangements are made in the autumn consultations between the faculty management and the EB about the following programme aspects:

- Quality assurance and student tracking system;
- New educational offerings;
- Further ICT integration into education;

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- Teacher quality;
- Student involvement;
- Recommendations or side letters from the external review committee.

Over the past years, pass rate data and other performance objectives agreed with OCW have been added to this list.

Translated into PDCA terms, this means:

Plan: Develop and draw up the strategic plan and educational vision;

Do: Develop the strategic plan into policy frameworks (annual framework-setting

memorandum);

Check: Spring and autumn consultations (= incl. annual plans and reports), quarterly

reports, Annual Performance Appraisal with Dean;

Act: Improve/Renew Strategic Plan and educational vision based on results/lessons

learned.

APPENDIX 2: INTERNAL MEASUREMENT INSTRUMENTS

The tables below show the internal instruments for assuring the quality of our education at each level.

The Institution					
MISUT	MISUT is effectively an Oracle database that is (automatically) supplied with relevant data from the various institutional systems. The database contains a large range of data on the functioning of UT. As the database also contains historical data, it is possible to analyse trends and generate customized information in support of the management processes.				
Student Influx Survey	Conducted since 2013 by M&C. Currently mainly a marketing instrument.				
Employee Survey	Every two to three years, UT conducts an employee survey about the functioning of the organization, the organizational units, managers/supervisors as well as about the employees' personal chances and opportunities.				

Faculties

Faculties also use resources to gather opinions about their education. They do this (within the room available to them) in order to set up quality assurance processes in their own way. Their choices depend on the specific organization of the faculty.

The Programmes

Subject evaluations (standardized, supported by information system) Standardized subject evaluations among students are an important quality assurance element within all programmes. As discussed with standard 2, students complete a questionnaire at the end of almost each subject/module, in which they give their opinion on the content, level and examination as well as the quality of the teacher(s) delivering the subject or module. Each study programme currently does this in its own way. Since the end of 2012, the UT Quality Platform has worked on a format to achieve more consistency. This format was adopted in May 2013 by the EB and is now applicable to all TOM module evaluations. This makes it possible to obtain a more detailed UT-wide overview of the students' opinions on the quality of the education. Clearly, students reflect on only part of the quality of the education. Their opinions must therefore be viewed in the context of all quality assurance instruments. For years now, these evaluations have formed part of the quality assurance cycles within the programmes and faculties between the dean, programme directors, examination boards. programme committees and teachers.

Panel discussions

Within several programmes, panel discussions are conducted during the quarter between teachers and students under the chairmanship of the programme director and/or programme coordinator. This input can be used to adjust the timetable, content and study workload within a subject/module. It is worth considering introducing this practice in all programmes.

Programme committees

The programme committee advises the programme director and sees to all matters directly relating to the organization and quality of the education. Among other things, it discusses the evaluations of the subjects and advises, where necessary, on adjustments to subjects. The committee consists of several teachers and students.

Confidential advisor

In addition, every programme has a confidential advisor with whom staff and students can raise delicate issues. Students can always be independently assisted by a student counsellor (CES). A confidential advisor has also been appointed to deal with scientific integrity issues.

Work meetings

Work meetings are organized from time to time within the programmes in order to involve staff (and students) in the development and content of the programme. This takes place, for instance, in the programme committees, examination boards, 'team away days', teacher meetings and numerous informal meetings for teachers.

APPENDIX 3: EXTERNAL MEASUREMENT INSTRUMENTS

Name	Description
National Student Survey (NSS)	The National Student Survey is the large-scale government survey conducted among students in the Netherlands to measure the quality of study programmes at universities of applied sciences and universities. This annual survey comes under the responsibility of Studiekeuze123. It was formerly carried out by ResearchNed and, since 2013, by Intomart GfK.
Elsevier Study Selection Guide	Since the mid-1990s, Elsevier magazine annually publishes the opinions of students and teachers (professors) on study programmes.
The International Student Barometer (ISB)	The ISB is a global survey conducted among international students to measure their satisfaction with their education, facilities and accommodation. The study programmes are informed of the ISB results. This survey is carried out every two years.
The 'Studying with a Handicap 2012' User Survey (C.H.O.I.)	The C.H.O.I (Centre for Information on Higher Education) periodically measures the ratings given to programmes and institutions by students with disabilities. UT scores above average on four of the seven themes and average on three of the themes.
The National Alumni Survey (NAS)	UT takes part in this two-yearly survey among recently graduated Master's alumni. This survey asks alumni of Master's programmes roughly two years after graduation about their findings concerning their programme and their entry into the labour market and current employment.
Universum 2013	In 2013 UT took part in the Universum Student Survey for the first time: "Universum annually conducts quantitative and qualitative research with over 400,000 talented individuals to gather insights into their career preferences, communication habits and their perception of potential employers."

APPENDIX 4 NVAO RECOMMENDATIONS

From: Decision to award an institutional quality assurance audit to the University of Twente 2 May 2014.

Reference: NVAO/20141627/LL

- 1. The committee notes that the University of Twente has a clear view of the substantive milestones along which TOM shall be implemented in full, but also that these milestones are not linked to the financial objectives of the education innovation efforts. The recommendation, therefore, is to incorporate the financial milestones (in terms of costs and benefits) including the monitoring instrument into the Roadmap. The committee recommends the further systematic institution-wide development of interaction between its education and (international) employers and professional organizations.
- 2. The committee recommends the further systematic institution-wide development of the policy for students with disabilities.
- The committee recommends the further systematic institution-wide development of the internationalization policy and the interaction between education and (international) employers and professional organizations.
- 4. The committee recommends close monitoring of the actual workload of staff and implementation of measures to ensure the workload remains manageable during the multi-year transition.
- 5. The committee recommends revitalizing the discharged TOM Expert Committee or creating a comparable independent committee of experts to monitor the TOM roll-out.
- The committee recommends a further strengthening of the data-generating capability of MISUT so that aggregated information is available on all quality assurance aspects.
- 7. The matrixification of the governance structure and the dynamics of the transition programme have resulted in a proliferation of formal and informal consultative structures, leading to unnecessary administrative overload. The recommendation is that a critial review should be conducted in the short term to assess the added value and effectiveness of these consultative structures in a consolidated situation.
- 8. Advisory councils and professional field committees provide valuable hands-on input from practitioners, but have not been formed everywhere. The committee recommends that such contacts with the professional field should be institutionalized in all study programmes.