

CvB stukken voor agenda Universiteitsraad

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Agendapunt : UT plan voor kwaliteitsafspraken
Bijgevoegde stukken : UT plan on Quality agreements


Betrokken concerndirectie: S&B

paraaf: _____

Secretaris: Wichman

paraaf: 

Portefeuillehouder: Palstra

paraaf: 

1. Status agendapunt:

Rol URaad:

x Ter instemming

2. Eerder behandeld in:

Naam gremium: UC.OW

Datum behandeling: 30 oktober 2018

Naam agendapunt: Conceptversie UT plan kwaliteitsafspraken

Beknopte conclusie: De UC.OW adviseert positief over de inhoud van de kwaliteitsafsprakenprogramma's. Verder adviseert de UC.OW om het plan beknopter te maken.

3. Toelichting/samenvatting:

In navolging van het sectorakkoord *Investeren in Onderwijskwaliteit* (april 2018) heeft de Universiteit Twente kwaliteitsafspraken opgesteld. De NVAO zal dit plan als trail van de instellingstoets kwaliteitszorg beoordelen (medio oktober / november). De criteria voor de planbeoordeling, zoals opgenomen in het NVAO protocol, worden in het UT plan geadresseerd. Conform het sectorakkoord en het UT projectplan kwaliteitsafspraken heeft de Universiteitsraad instemmingsrecht op het plan. De NVAO heeft aangegeven om de planvorming in december 2018 af te ronden omdat de kwaliteitsafspraken per 2019 ingaan. Het complete aanvraagdossier voor de Instellingstoets Kwaliteitszorg en de toetsing van de kwaliteitsafspraken dient de UT 6 weken voor het verkennende bezoek aan te leveren bij de NVAO (rond de zomervakantie).

In het UT plan voor kwaliteitsafspraken wordt toegelicht hoe de kwaliteitsafspraken het UT profiel versterken (hoofdstuk 2). Daarnaast staat beschreven hoe de kwaliteitsafspraken aansluiten op het staande (onderwijs)beleid (hoofdstuk 4, per programma). Het bijgevoegde UT plan voor kwaliteitsafspraken omvat de facultaire plannen voor kwaliteitsafspraken. Studenten zijn bij de totstandkoming van de facultaire plannen nauw betrokken geweest. Het UT plan voor kwaliteitsafspraken is opgebouwd volgens de 5 programma's zoals deze in juli zijn gedefinieerd op basis van input vanuit de faculteiten. Per programma is nagegaan wat, gezien de plannen van de faculteiten, de behoefte is aan instellingsbrede ondersteuning. Op basis van deze behoefte-analyse hebben diensten aangegeven wat hun inspanningen zullen zijn m.b.t. de kwaliteitsafspraken.

De sturing op de kwaliteitsafspraken is ingebed binnen de reguliere planning & control cyclus van de UT. Zoals beschreven staat in het UT plan voor kwaliteitsafspraken, zal jaarlijks nagegaan worden wat de gewenste vervolgcities zijn binnen de kwaliteitsafsprakenprogramma's. Op basis hiervan zal de begroting van de WSV-middelen voor het komende jaar vastgesteld worden. De facultaire en centrale medezeggenschap zullen in dit proces nauw betrokken worden.

Op het moment van aanleveren van het UT plan kwaliteitsafspraken aan de Universiteitsraad (9 november), heeft de faculteitsraad van TNW de facultaire kwaliteitsafspraken nog niet behandeld. De faculteitsraad van TNW wordt op 15 november gevraagd om in te stemmen met de facultaire kwaliteitsafspraken. Mochten naar aanleiding van deze behandeling nog aanpassingen gedaan worden in het plan van TNW, dan zal als gevolg hiervan ook het UT plan voor kwaliteitsafspraken bijgesteld worden. Het CvB levert het bijgevoegde plan aan onder voorbehoud dat de Faculteitsraad van TNW instemt.

In response to the request of the Ministry of Education, Culture and Science the University of Twente developed agreements on the quality of education that concern the years 2019 until 2024. The UT plan on Quality agreements will be assessed as a trail of the Institutional Audits in 2019 (approximately in October/ November). The extra income of the student loan system, or WSV-budget (Dutch abbreviation of Wet Studievoorschotmiddelen), is used to enforce the quality agreements.

The quality agreements are structured by 5 programmes. These quality agreements programmes are defined based on the input provided by students and staff within faculties. The UT plan on quality agreements encloses the faculty-specific quality agreements. Based on the faculty plans regarding the quality agreement programmes, an analysis is made about the required support per quality agreement programme. In consultation with service departments, agreements are made about the support they will deliver in 2019 as part of the quality agreements. Twenty percent of the WSV-budget is allocated to the UT's central budget in order to cover these costs.

The course of the quality agreement programmes for the coming years will be specified annually. Faculty councils and the university council will remain involved in this process. Each year, faculty councils and the university council have the right to approve how WSV-budget is spend for the next year.

The Executive Board asks the University Council for approval of the UT plan on Quality agreements.

4. Besluit CvB:

Het College van Bestuur neemt het voorgenomen besluit het UT plan voor kwaliteitsafspraken vast te stellen en ter instemming voor te leggen aan de universiteitsraad.

GRIFFIE URaad: (door griffie UR in te vullen) **Eerder in URaad aan de orde geweest?**

- Nee.
- Ja, op
Conclusie toen:

Nadere toelichting: (Voor als presidium/griffier vindt dat één van bovengenoemde punten nadere toelichting behoeft)

.....
.....



ENSCHEDA, 5 NOVEMBER 2018

QUALITY AGREEMENTS
2019 - 2024
Plan of University of Twente.

UNIVERSITY OF TWENTE.

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1. Development process

In response to the request of the Ministry of Education, Culture and Science (OCW) the University of Twente (UT) developed agreements on the quality of education. These quality agreements will be effective for a period of 6 years, from 2019 until 2024. The extra income of the student loan system, or WSV-budget (Dutch abbreviation of Wet Studievoorschotmiddelen), is used to enforce the quality agreements, thereby giving an impulse to the quality of education.

The UT applied a bottom-up approach for the development of the quality agreements. To structure the development process of the quality agreements, the UT made two leading principles explicit right from the start:

- Quality of education is assured by means of the plan-do-check-act cycles that operate on course level, programme level, faculty level, and institutional level. These layered PDCA-cycles were utilized to develop the quality agreements.
- Students are partner in achieving high-quality education. Students were enabled and stimulated to contribute to formulating the quality agreements.

The University Council was involved in the decision to apply a bottom-up approach. The University Council advised positively on the project plan regarding the process of developing the quality agreements. Also the Supervisory Board was involved in an early stage. The leading principles for the development process were discussed with the Commission Education of the Supervisory Board and the Supervisory board was kept informed during the process.

The Rector and the Chair of the University Council hosted a general meeting on quality agreements in April to inform the academic community about the broad context of quality agreements and the approach of the university to develop quality agreements. Furthermore, ideas were gathered about ways to involve students and teachers in improving the quality of education. Members of Programme Committees, Faculty Councils, Programme Directors, and Vice-Deans of Education were invited for this meeting.

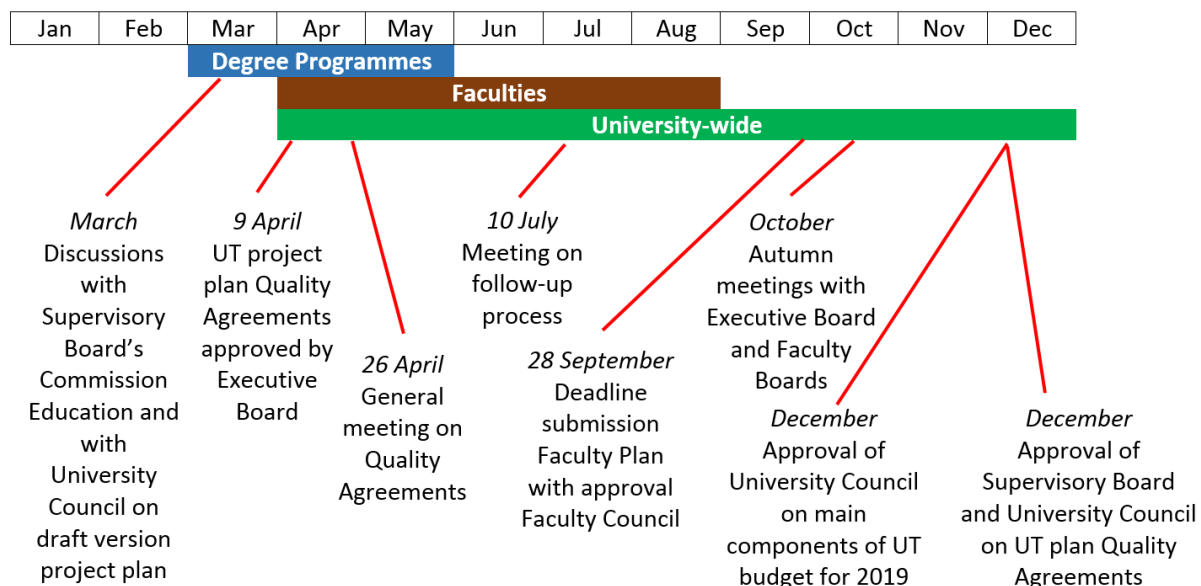


Figure 1. Timeline of development process UT plan on quality agreements

The reason to start at programme level is that quality of education is first and primarily experienced within the context of a degree programme. The perspective of degree programmes thereby could be considered while developing quality agreements of faculties and the UT. Because Programme

Committees represent the staff and students of degree programmes, they were invited to make a substantial contribution in developing quality agreements.

The Vice-Deans of Education, as part of each Faculty Board were responsible to develop faculty-specific quality agreements. They took care that Programme Committees and Faculty Councils were involved in this process. Faculties involved degree programmes by asking to develop a long-term quality agenda. The plans of degree programmes to improve educational quality were input for the faculty to define quality agreements. As quality agreements were made at university level as well as at faculty level, these plans were translated into common ambitions that are relevant for the faculty as a whole. Some faculties organized a general meeting with representatives of Programme Committees, Study Associations, and the Faculty Council to get input for the faculty-specific quality agreements. Faculty-specific quality agreements and, related to this, the investment of faculty-specific WSV-budget were co-created with the Faculty Councils.

Draft versions of the faculty plans were provided to the Executive Board before the first of July. Based on this preliminary input, five university-wide programmes were defined by Vice-Deans of Education, a Student-Assessor, Managing Directors of the faculties, the Rector, and the Vice President. The UT quality agreement programmes are:

1. Learning facilities,
2. Community building,
3. Teaching professionalization,
4. Talent development of students,
5. Global citizens.

As explained above these programmes encompass the ideas and suggestions from students and staff to improve quality of education. The faculties structured their plans according to the five quality agreement programmes. Faculties were able to motivate their choice to prioritize programmes, which could, for example, mean that a faculty decides to first invest in community building and teaching professionalization and later invest in talent development of students.

The university-wide quality agreements are a sum of the faculty-specific quality agreements. Next to this, also elements are added that concern university-wide support or which are valuable for the university as a whole. The Vice-Deans of Education advised on the university-wide quality agreements. The UT plan for quality agreements was approved by the University Council and the Supervisory Board before the Executive Board submitted the plan to the Accreditation Organisation of the Netherlands and Flanders (Dutch acronym: NVAO).

The bottom-up development process of 2018, which operates according to the layered PDCA-cycles, will also be applied in the coming years to decide on follow-up actions (more information on governance of the quality agreements is provided in chapter 10). During the spring meetings between the Executive Board and the Faculty Boards, the specific goals of the faculties regarding the quality agreement programmes will be discussed. The outcomes of these discussions provide input for the spring memorandum (the multi-annual plan of the UT) and subsequently for the annual plans of the faculties for 2020 onwards. During the autumn meetings between the Executive Board and the Faculty Boards the specific plans for 2020 and corresponding WSV-budget will be discussed. The expert panel that carries out the institutional audit, will be informed about these developments.

2. University's profile

The UT is focused on societal impact, driven by synergy, entrepreneurial and international. These values are part of university's DNA and will remain undiminished relevant during the period of the quality agreements. Here, it is concisely explained what the UT means with this and how this shapes university's educational profile.

High Tech - Human Touch

The UT pioneered the concept of the entrepreneurial university, bringing together ten thousand students and three thousand employees whom share the drive to innovate, experiment, pioneer, test the limits and reach for the sky. By means of education, research, and commercial knowledge transfer the UT generates societal impact and contributes to solving the global grand challenges. Continuous interaction with society is fundamental in order to respond adequately to the demands of the future. Because technology is needed to solve many challenges the society faces, the interplay between the two is an important topic in research and education at the UT. It is reflected in the university's profiling research themes: Engineering the digitalization of society; Designing intelligent manufacturing systems; Improving healthcare by personalized technology; Increasing global resilience & sustainable development; and Engineering smart materials for society. To emphasize the university's approach to seek synergy between social and technological disciplines, university's motto is: High Tech – Human Touch.

Crossing borders

The UT aims to educate the global citizens of tomorrow. The field of operation becomes increasingly international. The UT's international network is expanding and many research programmes are performed in an international context. Moreover, the community of staff and students becomes increasingly international. Therefore, the UT needs to prepare its students for this.

However, crossing borders is more than internationalization. In its education, the UT places great emphasis on a multi- and interdisciplinary approach. The Bachelor's curriculum was redesigned in 2013 by introducing thematic modules with project-led education. In these modules students are confronted with complex problems the society faces. This requires creative and inter-disciplinary thinking and students often work in multidisciplinary teams to design a solution. Next to this, reflection on science, technology, and society is integrated as a learning line in all Bachelor's Programmes. This broad development is followed by a Master's phase where students deepen their disciplinary knowledge and skills.

UT's graduates are thus considered T-shaped professionals with an international outlook, thorough knowledge of their discipline and the ability to apply their knowledge intelligently and usefully, fully aware of the interdependence between technology, humans and society. This is what the UT means with the global citizens of tomorrow.

Entrepreneurial mindset

As the most entrepreneurial university in the Netherlands, the UT stimulates an entrepreneurial mindset among all staff and students. The UT sees this as a mindset of someone who would like to make an impact in society in the broadest sense of the word. Given the drive to have an impact on society, this mindset encompasses that students and staff seek and create opportunities for value creation. The UT is convinced that this entrepreneurial mindset is necessary in a world that is rapidly changing. Students should to be able to deal with uncertainty and they should be flexible, bold, and creative to respond to new situations. In education students are stimulated to become self-directing and proactive and to develop problem-solving and design competences.

Stimulating the entrepreneurial mindset has similarities with UT's principle of Student-Driven Learning. The UT wants to educate and encourage its students to become professionals who are capable of steering their own career development, by giving them greater control over their own learning process. In addition to preparing students for the future, giving them more autonomy over their own learning also increases their motivation. The University College Twente, the Bachelor's programme in Technology and Liberal Arts & Sciences (ATLAS), is a great example of how students approach challenges that they are passionate about and become equipped to gather knowledge and support they need inside and outside of the UT ecosystem. The new Master's programme Spatial Engineering is another example of a degree programme with a student-centred approach and a solid mentoring system that support students in making comprehensive choices that are important for their future career.

Inclusive campus as stimulating learning environment

Besides an entrepreneurial university, the UT is at its core a real campus university. The UT campus is an area of 156 hectares, where people live, learn, do research, and start new businesses. Students highly value the small-scale character of the campus which enables them to collaborate beyond the classroom. Specifically, personal contact between students and staff, small group sizes, and the general atmosphere within the degree programmes are highly appreciated by students (National Student Survey 2018). The campus is an environment where students and staff work together on real-life cases. The UT's student run DesignLab is a distinct example of this. In DesignLab, new and unexpected connections between students and staff from the university and society are realized by linking academic research and education to societal issues and challenges. Students and researchers with various backgrounds and from different disciplines are actively engaged in this process, thereby having an interdisciplinary community in which new solutions are made to the challenges in the society in a way we never expected.

Students are seen as partners. Many students employ activities next to their study and/or are member of an association. The Student Union is responsible and has the mandate to develop policy on culture and sports and to organize student events. The 'More Than A Degree Programme' of the Student Union is exemplary for its mission. The Student Union stimulates and facilitates students to develop relevant competences next to their degree programme, for example regarding leadership and entrepreneurship. The Student Union, run by and for students, is a direct partner of the Executive Board. Besides, students are also partners in shaping the quality assurance of degree programmes. Study associations are closely involved in discussions about a programme's curriculum and concerning facilities and activities that are related to the programme. By having this ecosystem, students' perspective is interwoven in plans that are developed to improve education.

Summarizing University's educational profile

The UT-profile is visualised in figure 2. The circle of Crossing Borders symbolises that boundaries between scientific disciplines are overstepped and synergy is sought. It also refers to cultural boundaries, the drive to bring different worlds together at one campus, and the ambition to expand international partnerships. At last, it refers to crossing boundaries between the university and society in order to have a real impact. The entrepreneurial mindset of students and staff explains the innovative power of the UT. This mindset is recognised and developed in a learning environment that is characterised by its small-scale nature. There is intensive contact between students and staff at the campus. The campus is an expressive ecosystem where the academic community learns, conducts experiments, and interacts with each other and with society.

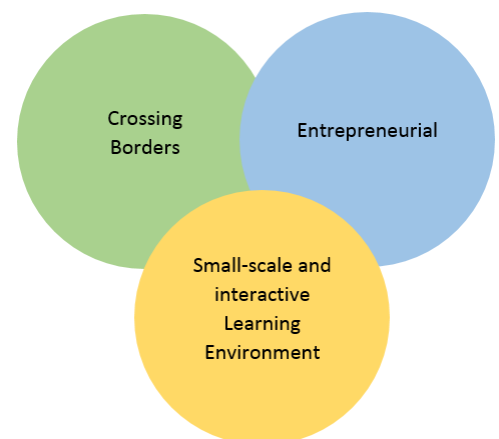


Figure 2. Main components of UT's educational profile

3. Developments in education

Building on the presented values (see figure 2), it is now explained how each of these values will develop in the next six years. Drivers behind this evolution are identified. Directions of development for education will be linked to these drivers, identifying what they mean for the degree programmes, staff and students.

Small-scale and interactive learning environment

The Twente Education Model (TOM) of UT has been fine-tuned by teacher teams over the years, leading to higher student appreciation. Further improvements and developments that the UT envisages are in the areas of improved formative feedback, well-organised interdisciplinarity and increased options for students to pursue their own interests within the context of their programme (Student-Driven Learning). These aspects are relevant for both Bachelor's and Master's programmes. As higher education will be an international market even more, students will be eager to find the added value of offered programmes. Also, technological solutions now allow for flexible, personalised learning routes through basic content and skills trajectories. This allows for teachers to spend more time on the small-scale and expert elements in the degree programmes. The UT expects that a more individualised approach will require more support at intake and via coaching throughout the programme.

The UT and its staff have shown huge commitment when implementing the Twente Educational Model throughout all Bachelor's programmes. A logical next step is that the UT will increase the career incentives for those that excel in innovating education or take a leadership role in large educational innovations. Professional development with respect to education is also being strengthened. University's teacher teams are at the core of designing new education. Teams will be supported, in particular via their module coordinators. Two groups of educational frontrunners have pioneered with the Senior University Teaching Qualification (SUTQ). Together with the participants in the educational leadership programs they will be key to new educational developments. In connection with an international group of universities this approach of rewarding and supporting teaching excellence has been developed and will now be implemented and monitored¹.

As part of the long-term Strategy plan on Housing, adequate measures will be taken to have enough space to accommodate the expected growth of the student population. The quality agreement programme regarding community building involves students in the design and development process of home basis inclusive learning environments. In the coming years, extra staff will be attracted to maintain the small scale and interactive learning environment. This desired growth of teaching staff will be a result of two developments. Firstly, the UT has the ambition to expand its research portfolio, thereby increasing the number of academic staff. Secondly, the 'Sector Agreements on Science and Engineering' will give an impulse to research in the Science, Engineering, and Information Technology domains. With these funds, extra staff can be attracted. Next to research, this new staff will also be involved in education. Altogether, the growth in research will lead to an increase in staff. This will be the solution to cope with the expected growth of the student population and to keep the small-scale character.

Crossing borders

International students are selecting UT's campus-based university in increasing numbers also due to bachelor programmes now being taught in English. The UT will have to increase efforts to keep the small-scale character. Also, when the student population becomes more diverse, it is important that

¹ <http://www.evaluatingteaching.com>

every student feels welcome. The UT intends to make diversity a positive aspect of living and studying on campus.

The UT expects enhanced synergy from crossing borders in both research and education. The societal and technological drivers connect well with UT's expertise areas such as robotics, artificial intelligence, energy transition, nanotechnology, (bio)medical technology, sustainability, and resilience of urban and rural areas including water-related issues. This will lead to new routes through existing programmes and new educational initiatives. The UT teacher team approach, with staff from different disciplines working together, is well-suited for implementing new border-crossing types of education. As new expertise is required at a fast pace, UT's alumni and their colleagues will be eager to upgrade their expertise and skills. The UT will develop a series of long-term partnerships with alumni and the businesses and organisations they work for. Lifelong learning can and will take place both in these professional settings as well as at the campus. Joint endeavours with other parties, both academic and professional, will enable new educational combinations in for example the energy transition, nanotechnology and technical medicine domains. UT's small-scale eco-system will also serve as a hub where ad hoc and longtime partners can work together on innovation and related research and development with opportunities for students and alumni to bring their creativity and inspiration while learning with and from experts and peers.

Entrepreneurial

UT's mission is to interact with society, and by doing so, to have impact. Every degree programme therefore has connections with society, nearby and worldwide. Students and staff will be supported in developing and applying their entrepreneurial skills and ambitions. The university offers a wide variety of interfaculty programmes and initiatives in which technology-inspired solutions are designed for real life challenges. These initiatives and the aforementioned ad hoc and long-term partnerships can use the DesignLab facilities as well as excellent start-up facilities. Across the programmes entrepreneurial skills will be incorporated for a wider group of students.

4. Programmatic approach

To direct the aspired and required development of education, five programmes are formulated. The programmes are defined based on the input provided by students and staff within faculties. This input clustered around a number of themes, such as Community building, Tailored education, and Coaching. The programmes and the main elements per programme are presented in figure 3 and explained in detail in chapter 5. This figure also shows how the programmes match with university's educational profile.

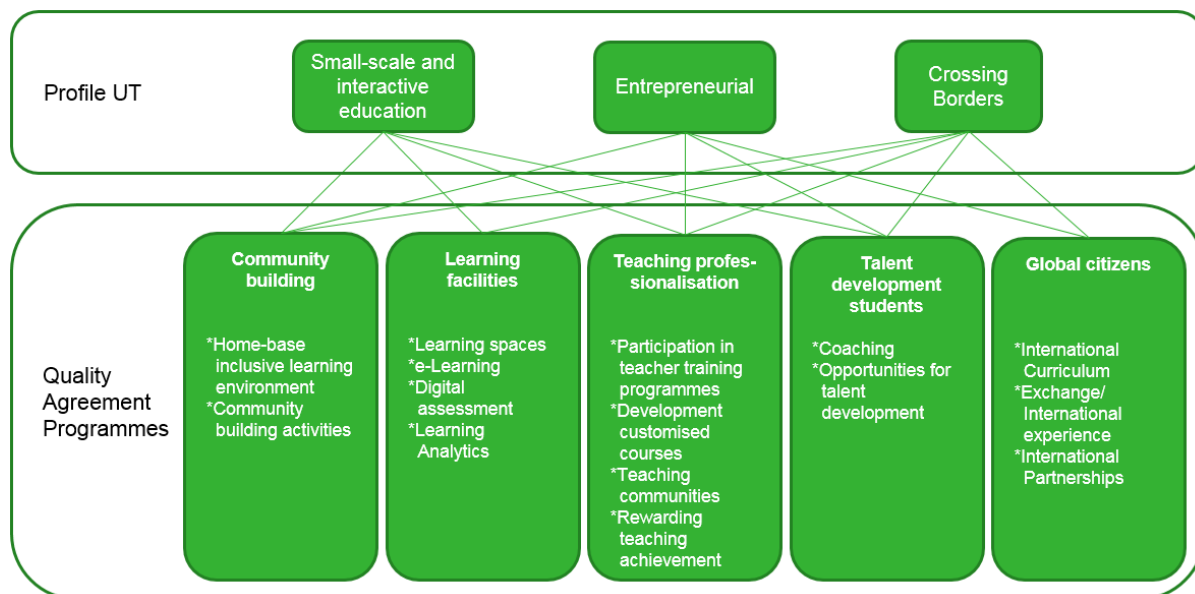


Figure 3. Relationship between UT's educational profile and UT quality agreement programmes

Each programme has a long-term ambition in order to consolidate action plans and to focus the efforts that the UT will take in order to improve education and to foster innovation. The results that the UT will deliver in the coming years will strengthen the profile of the UT, for example small scale and intensive education.

Improvement and change are dynamical processes and by means of a programmatic approach the UT supports mutual learning and stimulates that education continuously develops. For each programme the balance was sought between the right ambition level and focus on the one hand and sufficient flexibility on the other hand in order to determine with participatory bodies on annual basis what follow-up is desirable within a programme. Because the duration of the quality agreements is long (six years), the programmatic approach provides enough room to respond adequately to new situations and to incorporate unforeseen opportunities.

The activities within a programme are worked out in more detail for the first couple of years. Especially for 2019, it's clear what the UT in general, and the faculties in particular, will do within the programmes. The intentions for the second half of the quality agreements (2022 - 2024) are described in more general terms. Based on new insights the course of a programme will be further defined coming years, again in close consultation with relevant participatory bodies.

The UT quality agreement programmes are related to the quality themes that the Ministry of Education, Culture and Science (Dutch acronym: OCW) has defined. The matrix below shows how the programmes cover the Quality Themes that are described in the Sector Agreement *Investing in Quality of Education* (April 2018).

		Quality themes Sector Agreement					Facilities
		Intensity	Study success	Differentiation	Teacher quality	Guidance	
UT Quality agreement programmes	<i>Learning facilities</i>		=+				++
	<i>Community building</i>	+	=+				+
	<i>Teaching professionalization</i>	+	=+	+	++	+	
	<i>Talent development of students</i>		=+	++		+	
	<i>Developing global citizens</i>		=+	++	+		

Figure 4. Overview on how UT quality agreement programmes map on the quality themes that presented in the Sector Agreement. (Legend: ++ very strong relationship, + strong relationship, =+ indirect relationship)

The relationship between the quality agreement programmes of the university and the quality themes of the Sector Agreement is explained for each quality theme:

- **Intensity.** The university wants to maintain its small scale character. The quality agreements are used to invest in the quality of personal contacts within the academic community. This community consists of both students and staff. Within the UT quality agreement programme Community Building, the university has the ambition to ensure that each student feels part of a community, which supports the students in their learning process and contributes to their well-being.
Next to community building, the UT will pay extra attention to the coaching of students. Because students are responsible for their own learning process, teachers will, to a greater extent, have the role as tutors who support students in this process. This means that the type of contact between students and teachers will gradually change and will focus on the personal development of each student.
- **Study Success.** The university defines study success by the commonly known parameters such as drop-out rates and graduation rates. The quality agreements are expected to have an effect on study success. The UT quality agreement programmes improve the learning environment of students and the support they receive from the academic community. The university expects that this will positively influence study success.
- **Differentiation.** One of the UT quality agreement programmes aims at talent development of students. The ambition of the university is that students are stimulated and have the possibility to create their own learning experiences. This means that differentiation within study programmes will increase, for example by creating flexible trajectories and learning paths, and by using a variety of learning methods. Next to differentiation within the context of a study programme, the university will inquire whether current extracurricular programmes, like the honours programmes, Student Teams, and DesignLab, sufficiently meet the need of students to develop themselves in a broader way.
Because the university is becoming increasingly international, one of the UT quality agreement programmes focusses on developing global citizens. Having an international community of students and staff requires that study programmes pay extra attention to intercultural aspects. Concerning continuous professionalization of teachers, the university offers training programmes that learn how to deal with intercultural differences and that help teachers to support students in their learning process. The quality agreements are also used to invest extra in continuous professionalization of teachers.

- Teacher quality. The University will have a specific UT quality agreement programme on Teaching Professionalisation.
- Guidance. As part of UT quality agreement programme on Talent Development of Student, the university wants, in addition to current efforts of study advisors and teachers, extra invest in coaching of students so that students are stimulated and supported to shape their personal development. The principle of student-driven learning requires that teachers are able to support students in their learning process. That is why training of these competences will be included in the UT quality agreement programme on Teaching Professionalization.
- Learning facilities. The University will have a specific programme on learning facilities. This programme concerns both utilizing digital technologies to support the learning process as well as physical facilities.

5. Quality agreement programmes

The quality agreement programme that the UT has defined, are described in the following paragraphs. For each programme the overarching ambition is described, the programme's components are explained, and the aspired development is presented.

5.1 Programme Community building

Current policy

Community building has been an essential part of the philosophy of the University of since its foundation in 1961. This is expressed in the form of small-scale and interactive learning environments. The importance of being able to collaborate and interact with people from other disciplines is still strongly emphasized, for example in project-led education of bachelor modules. Next to that, mentoring, tutoring, and coaching have always been crucial aspects of education. The importance of community building is also expressed in the form of the campus, which offers a small scale residential system with student housing to promote social interaction.

The UT distinguishes two types of communities: 1) Communities within the context of degree programmes and 2) Interfaculty communities based on a common mission and/or similar interests. Examples of the latter are the student teams (e.g. Solar Team, the Dream Team, the Pre-U Team) and the Honours Community. These communities help to bring university's core values into practice (Entrepreneurship, Global citizenship, Synergy, and Societal Impact).

The university applies the home base concept to foster community building. Based on an extensive qualitative research among students and staff, the following elements turn out to be important for a successful home base.²:

- Work and relaxation. The most important element for a home base of students is the possibility for them to have a mutual place for both work and relaxation.
- Connection to the study program and to fellow students. It starts with the connection of freshman students to this home base. The presence of different cohorts at this location is important so that students can exchange experiences. Regarding interfaculty communities, it is also important that students have a place where they can meet for cooperation or bonding.
- Recognition. A student should feel at home and part of the community. It must be a recognizable place but still accessible to all students.
- Location. Regarding a home base that is related to a study programme, the environment is ideally in the vicinity of the study association and the teaching staff.

Relevant policy in view of the above also includes the long-term Strategy plan on Housing (LTSH). In this plan all the real estate developments are calculated as a prognosis for the next five years. The latest version, still in progress, will reflect the housing from 2018-2023, taking into account the importance of developing home bases.

Programme's ambition

The UT aims at having students feel part of a community, consisting of staff and fellow students, which supports individual members in their learning process and contributes to their well-being.

Relevance of programme in terms of quality improvement education

Being part of a community is an important psychological need, contributing to overall well-being. Experiencing "a fit" in academic life strongly correlates with lower sense of adversity and distress, thus a better fit promotes resilience. Taking measures to enhance the feeling of belonging and sense of

² Lindemann, M., Vollenbroek, W., Oude Vrielink, R. (2018) Rapportage onderzoek thuisbasis. University of Twente.

community are therefore expected to have a positive effect on both student wellbeing and study success.

Especially for new / incoming students it is important that this supporting community is visible and accessible. The learning environment is an important factor to promote this for both majority and minority students, which is important since we have an increasingly diverse student population. From interviews with students, that were conducted as part of the aforementioned research on home base, the vast majority confirm the importance of a physical home base.

As part of university’s vision of education, the university promotes cross-overs and an interdisciplinary approach. The university aims to deliver graduates that can transcend the borders of specific scientific disciplines and promote students to tackle problems that challenge them to both cooperate with other disciplines as well as developing disciplinary depth. Crossover communities promote interaction between disciplines and cooperation between different student groups. The DesignLab is an example of an interfaculty home base, a place where students and staff are part of a community outside of their ‘degree programme related’ community, which enriches their experience at the university. Another example of an excellent home base, is the University College Twente.

A home base, which is related to a degree programme, simulates quality culture. Students, teaching staff, and study advisors can discuss quality of education at a low-key level. An association like the Student Union can use that input to find out how to further improve the atmosphere at the UT.

Measures and deliverables in relation to programme’s ambition

The programme community building consists of two elements:

- home bases,
- activities that support community building

An overview of the activities concerning Community building is presented in figure 5.

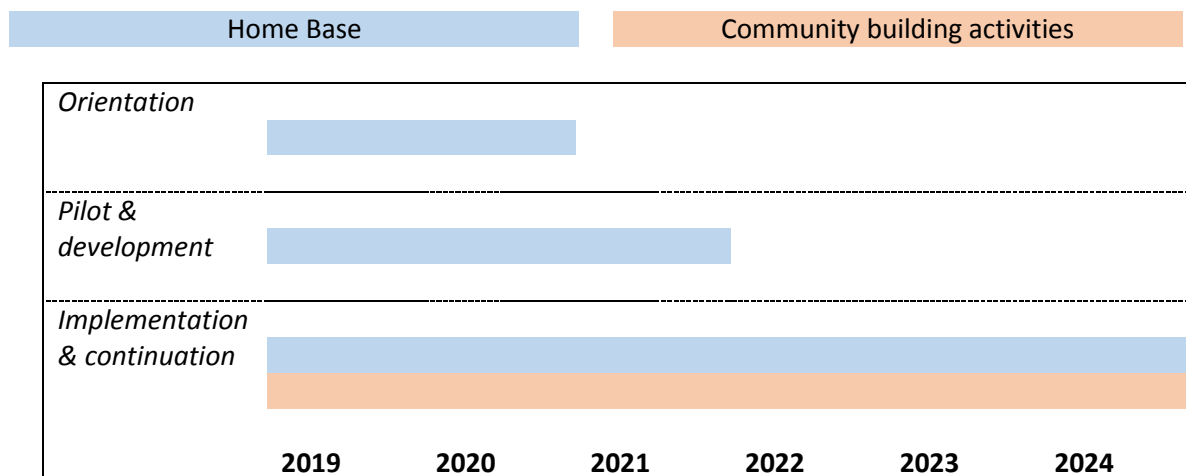


Figure 5. Overview on how UT quality agreement programme ‘Community building’ develops in time.

Needs and requirements analysis home base

The report on home base describes four elements of a successful home base. However, specific information on the needs and possibilities regarding a home base per programme are not available yet. Therefore, a needs and requirements analysis will be performed in 2019. Campus Facility and Management and Center for Educational Studies (service departments) will assess what the consequences are of the requirements for housing and timetables, because scheduling near a home base has effect on usage of class rooms and the capacity of the Central Education Facilities.

Developing home base

One of the main motives to have a home base is that it facilitates interactions of students and teaching staff. That is why both groups should have a say in how a home base should be developed. Concerning home bases in the context of degree programmes, study associations are important stakeholders. Study associations have a crucial role for programmes, not only with regard to community building but also in the quality monitoring of the programme. Study associations can provide students with a location where they can easily go to for a short relaxation or for a longer period to study / work together. An environment that is accessible to visit, a place to get information. Because of this, the needs of study associations have to be considered while developing a home base area.

In accordance with the long term housing plan of the UT, some degree programmes and the ITC faculty will move to (another location at) the campus. This is the reason why the faculties TNW and ITC plan to develop new home bases. The ET faculty will develop a comprehensive plan for community building that will answer the question what (type of) facilities, personnel and actions are required to stimulate community building and how this can be realized over time. The home base concept will be incorporated in this plan. The EWI faculty intends to set-up a Data Science Lab, where master students deal with real world problems under professional supervision. This intention concerns both the Community Building programme and the Learning Facility programme (paragraph 5.2). The BMS faculty plans to continue its home base in the Cubicus, which was developed recently.

Implementation & continuation home base

After a plan phase, a home base will be implemented. This requires funding to build or refurbish a physical location. Next to this, the implementation might also imply that lectures and tutorials will be scheduled more often close to the physical home base.

The programmatic approach gives room to incorporate activities that are yet unforeseen but turn out to be important to support community building. Decisions to adjust plans and budget will be taken as part of the Planning & Control cycle. After a home base is realized, it will be evaluated in consultation with its users, and adjusted if necessary and possible.

Community building activities

The experience of belongingness with the study program and with fellow students is an important result of a community building. The first important opportunity to do so is the introduction period. The introduction for new students should stimulate the formation of a community of student cohorts. Especially because the student population becomes increasingly diverse as a result of internationalization, the introduction period is important to make every student feel welcome. Next to the introduction period, faculties organize other activities that stimulate community. For example, the BMS faculty plans to annually organize a BMS Master Day. The study association will play an important role to stimulate integration of students with different nationalities during this day.

5.2 Programme Learning facilities

Current policy

The Twente Educational Model (TOM) forms the basis for bachelor education at the UT. Characteristics of this model: project-led education, large coherent educational modules, with a project at the heart, interaction with peer students and teachers on campus in project teams, and active learning. The UT vision on ICT in education, "Learning 2020: Student Driven & Technology Enhanced", supports the educational model. Key concepts in Learning 2020: student driven learning, blended learning, flipped classroom, interactive lectures, guidance of the learning process by formative feedback. Most of the concepts in TOM and Learning 2020 also apply to the master education. The learning facilities should be in line with this vision.

Programme's ambition

The programme aims to increase the quality, availability and usage of learning facilities, physical as well as digital. The actions will be based on practice-oriented research with and for teaching staff and students. To accommodate this, the UT will use experimental learning spaces to experiment and test, under guidance of technical and educational experts.

Firstly the UT wants to **increase the quality, quantity and usage of learning spaces for individual study as well as teamwork** (student projects). The UT also wants to enhance regular lecture rooms for more interactive learning. The learning spaces will be designed in close cooperation with students and educators. The UT aims to apply adaptive scheduling, in order to make more effective and efficient use of all of the physical learning spaces. As an intermediate step, the UT will improve the user-friendliness of the real-time booking system for project rooms, to better accommodate students.

Secondly, to guide the learning process of students better, the UT strives to **improve the availability and use of digital tooling**. The focus will be specifically on the different forms of digital assessment (summative and formative). Formative testing covers the broad spectrum of peer feedback, online discussions, quizzing and peer assessments. The UT also aims to scale up the physical facilities for digital summative testing and examinations.

Thirdly, the UT will **explore how learning analytics can help students to improve their learning process**. The focus will be on the students, although using data analytics for improving the activities of our teaching staff can be a welcome side-effect.

Proper usage of the learning facilities will not come naturally for most of our teaching staff. Therefore, this programme is closely linked to the Teacher professionalisation programme. The UT foresees to invest in resources providing ample opportunities for teachers to get trained in using the learning facilities to their best.

Relevance of programme in terms of quality improvement of education

Increased quality, quantity and usage of learning facilities improves the quality of the learning environment and thus the quality of education. For example, it is widely recognized that formative assessment helps the student in taking ownership of his/her own learning. Digital tooling that facilitates formative assessment thus supports in achieving this. Flipping the classroom, blended learning and learning analytics can similarly improve student learning. Investing in learning facilities thus contributes to quality improvement of education.

Measures and deliverables in relation to programme's ambition

The programme learning facilities consists of four elements: learning spaces, e-learning, digital assessment, and learning analytics.

Learning spaces

Currently, the number of learning spaces are: 1.500 self-study places, 100 project rooms, exam rooms with 280 places. The UT intends to grow to approximately 1.750 self-study places, 130 project rooms and additional 40-50 places for digital exams. Additional learning spaces will be designed with input from students and educators. The facilities within classrooms will be enhanced to support active learning, depending on the outcome of several experiments, pilot studies and practical / technical possibilities. The UT will create one or more experimental learning spaces on our campus. The (existing) Classroom of the Future is a perfect place to experiment with different setups and digital facilities.

All faculties strongly emphasize the importance of improving our learning spaces. However, they differ in their needs regarding learning spaces. The faculty of Engineering Technology will develop a comprehensive plan for ideal learning spaces in 2019. This plan will be an offspring of a strategic discussion about the 'Engineer of the Future' and the implications of this graduate profile for education. The faculty of Electrical Engineering, Mathematics and Computer Science requires more room for small project groups and an upgrade of student workspaces in labs of the research groups. The faculty of Science and Technology requires both an expansion and upgrade of lab facilities. The faculty of Behavioural, Management and Social Sciences wants to develop and exploit its BMS lab for study purposes. The faculty of Geo-information Science and Earth Observation specifically mentioned a need for learning spaces that allow for different types of learning.

Currently the students experience too low availability of learning spaces. The real-time booking system for project rooms will be improved, so students can easily find alternative spaces, preferably close to their home base. We will explore the possibilities of sensor techniques to free spaces with no-show or early leaves. In addition, we will further explore the possibilities of adaptive scheduling. Adaptive scheduling promises to allow for dynamic changes in the schedule depending on current demand for learning space (number of seats as well as desired facilities).

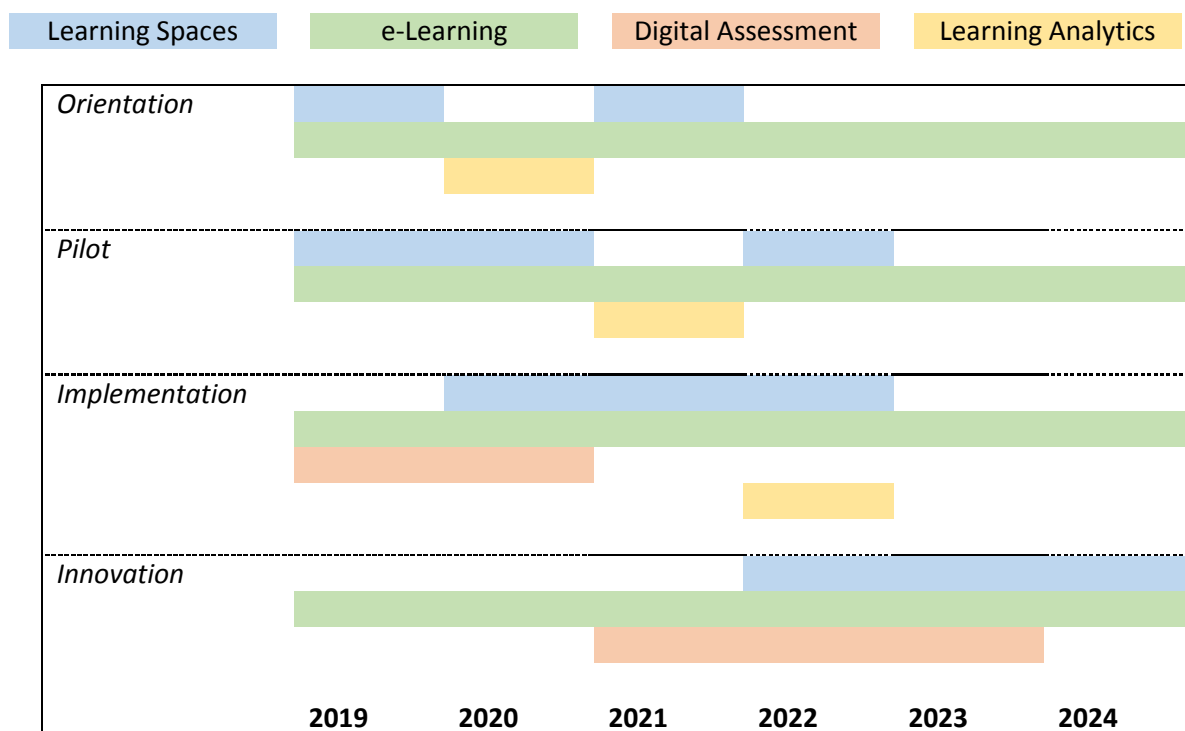


Figure 6. Overview on how UT quality agreement programme 'Learning facilities' develops in time.

Facilitate and stimulate use of e-learning

In the coming years, teaching staff will be facilitated to select and use the right digital tools for flipping their classroom, making use of blended learning and increase interactivity in the classroom. In 2018 the UT switched from Blackboard to Canvas, with the basic functions of Canvas. In 2019-2022 we plan to introduce advanced functions of Canvas, possibly connected to satellite systems.

Digital assessment

Currently, digital assessment is mostly used for summative assessment and by a limited number of courses. In addition, most of the digital assessments are with traditional types of questions (MC, etc.). In 2021, we aim to have digital assessment broadly available for all degree programmes of the UT, supported by professional staff. Not only for summative, but also formative assessment and not only

with traditional question types, but also with software based testing (in which the student performs tasks with discipline-specific software). In the years to come, we intend to further broaden the use of formative digital assessment: peer feedback, online discussion, etc.

Most of the faculties plan to invest in the use of e-learning and digital assessment. Some examples are: first pilots with digital technologies (ET), further develop and professionalize the use of e-learning and distance education programme (ITC), additional capacity for digital testing in programming education (EWI).

We see a growing interest of faculties and individual teachers to make use of e-learning and digital assessment. The demand for support in this area is growing rapidly.

Learning analytics

In 2020 the UT plans to explore the possibilities that learning analytics can offer. First steps of realization are to be expected in 2022, further development in the years up to 2024.

5.3 Programme Teaching professionalisation

Current policy

As sketched in previous chapters, the UT prides itself on the small-scale and interactive learning environment. The UT and its staff show huge commitment by implementing new ways to improve education, increase student learning and innovate their teaching. The UT recognizes the unequivocal interdependence between educational improvement and teacher development: teachers are crucial in delivering high quality education and implementing student-driven learning. Therefore, **policy concerning recognition and rewarding of teaching achievements** was recently adopted. In addition, the policy emphasizes academic career opportunities for scientists that show excellent impact on education, teaching and learning.

At the same time, several areas for improvement are known, most notably:

- *Time* for educational improvement is limited, causes that are mentioned are high work pressure and the current remuneration that covers costs of teaching enactment, and not the costs of reflecting on or revitalizing courses and programs.
- Access to *collegial expertise* (e.g. peers on education, digitalization, leadership) can be hindered by existing organizational structures and other barriers.
- In daily practice, teachers are still *rewarded* more for their research performance than for their teaching performance. The recently adopted policy concerning recognition and rewarding of teaching achievements is the first step toward change. The next step is the implementation and translation into daily practice.

Programme's ambition

The university as a whole aims to:

- Further **strengthen expertise on educational improvement**: By facilitating access to the expertise of colleagues both at the university level (CELT, CEE/ Center for Engineering Education, TELT, Leadership experts at HR, etc.) and within the faculties (peers, teacher communities).
- **Reward teaching achievement**: By embracing a culture of excellence that recognizes and appreciates investments in educational improvement, teaching quality and teacher development.

Regarding the first, the university specifically wants to increase the number of teaching staff that obtained a University Teaching Qualification (UTQ), SUTQ, and/or an Educational Leadership Programme certificate. The university will also facilitate teachers and students who have a role in education to further enhance their competences on small scale and interactive education by developing customized courses. Initiatives regarding teacher communities will be supported and facilitated by the university so that teaching staff is stimulated to learn from and with each other.

To accommodate variety and recognize success, the university has endorsed the use of a framework³ that articulates four levels of university teacher development. This framework is used to structure career development of teachers and is used as an inspiration for structuring **training and coaching activities concerning teacher development** at our university. (Like the UTQ, SUTQ, Educational Leadership Program-LOL, etc.)

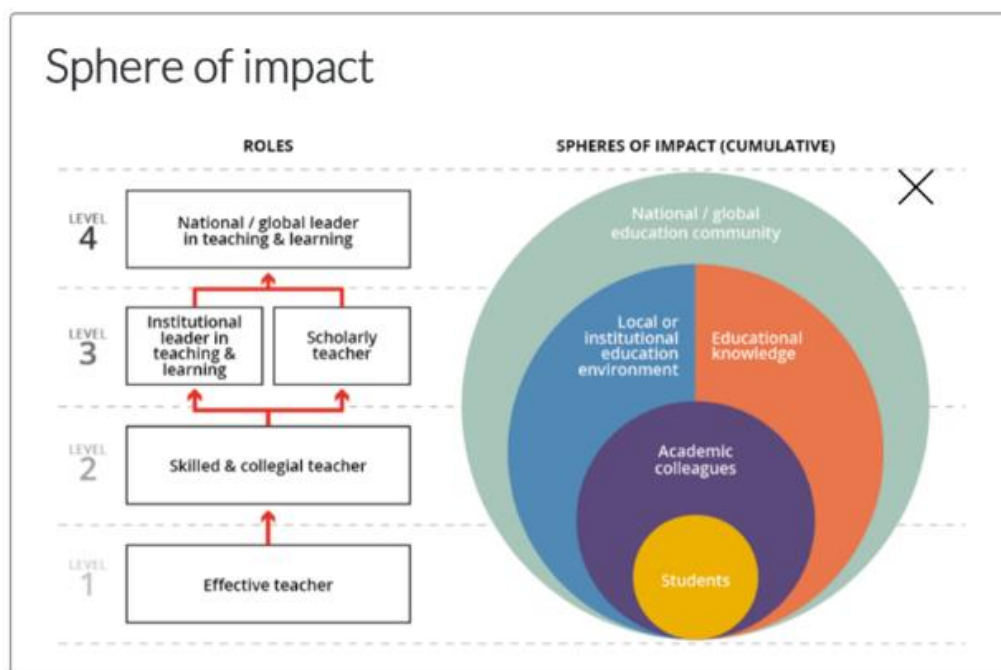


Figure 7. Overview of Grahams's Career Framework for University Teaching

Relevance of programme in terms of quality improvement education

Based on an international review of the literature, Villegas-Reimers reports that teacher's professional development has an impact both on teachers themselves and student learning⁴. Specifically, a number of studies report that the more professional the knowledge teachers have, the higher levels of student achievement. It is also known that professional development plays an important role in improving teaching methods, which again positively impact students' learning.

Measures and deliverables in relation to programme's ambition

The programme teaching professionalisation consists of four lines of actions:

1. Increasing participation in training programmes

The university supports educational improvement and teacher development by offering solid training programmes: the UTQ and SUTQ programmes and the Educational Leadership Programme. The number of teaching staff who obtained an UTQ and SUTQ and who completed the Educational Leadership Programme will increase. In 2021, the UT aims for at least 70 percent of the teaching staff will have an appropriate qualification, preferably a UTQ. Specific targets concerning participation in the SUTQ programme and Educational Leadership Programme vary per faculty and will be defined at a later moment.

³ Graham, R. (2018) The Career Framework for University Teaching: background and overview. London: Royal Academy of Engineering. Available at: <http://www.rhgraham.org/resources/Career-Framework-University-Teaching-April-2018.pdf>

⁴ <https://www.teachersity.org/files/PDF/UNESCO%20-%20Teacher%20Professional%20Development.pdf>

2. Development of customized courses

The UT will stimulate staff and students to participate more in customized courses. The content of the courses will be about main concepts of university’s educational model, like student-driven learning and project-led education. The customized courses also aim to further develop the different skills that educators need. For example a course about tutorship or a course that help teaching staff to design a module or course.

The faculty of Science and Technology will start a pilot with Learning Assistants. Within the faculty, there is sizeable group of students with an interest in teaching who want to actively participate in education. A specific course will be developed for Learning Assistants in which students from the faculty can participate and receive a pedagogical training. Depending on the success of this pilot, the course can be further developed into a programme and extended to other faculties who are interested.

3. Teaching communities

The university will support initiatives regarding teacher communities. The faculty of Electrical Engineering, Mathematics and Computer Science will introduce the UTeachers’ Academy@EWI. This will be a network of teachers within the faculty who have the ambition to improve their performance based on literature, experiences elsewhere, or input from colleagues. Members get the opportunity to execute pilot studies and to discuss the outcomes with colleagues.

Other ideas are explored. For example, the alumni of the Educational Leadership Programme, are exploring how to start a platform/ community with, from and for teachers at the UT. This kind of initiatives will be supported.

4. Rewarding teaching achievement

All faculties have recently adopted the policy concerning recognition and rewarding of teaching achievements and are planning implementation. The faculty of Geo-information Science and Earth Observation explicitly connects implementation of this policy to the quality agreements by mentioning further development of its pilot on rewarding teaching achievement by introducing a peer review system and enhancing the development of impact narratives. The university will support initiatives that aim to reward teaching achievement and will help to implement this across the university if the pilots are successful.

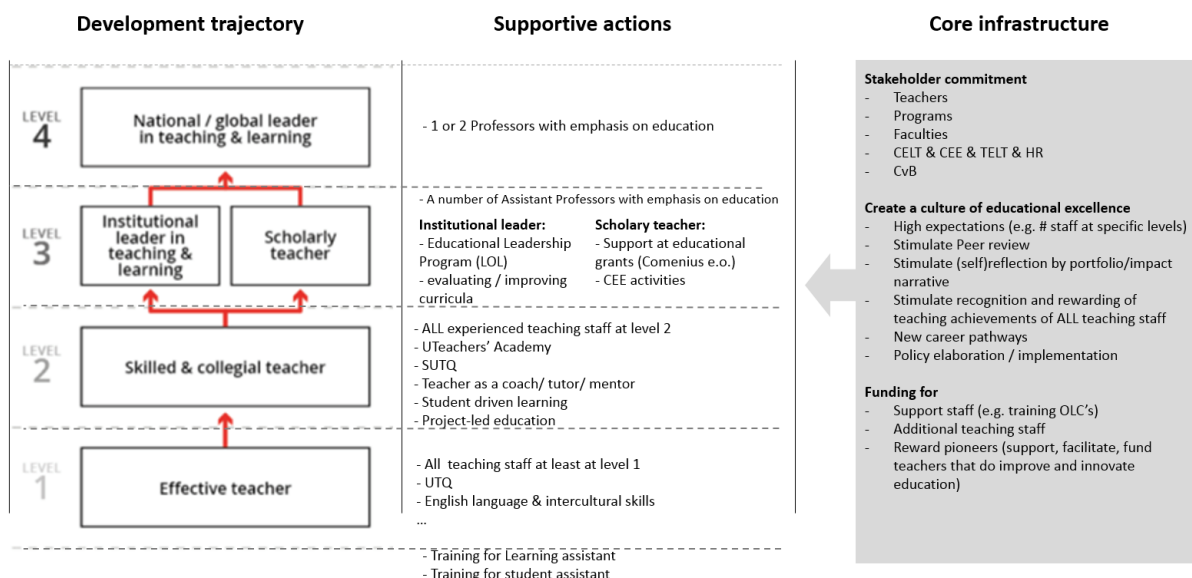


Figure 8. Overview of UT quality agreement programme 'Teaching professionalisation'

Most of the actions can be characterized as **supportive actions** (e.g. supporting to initiate teacher communities), each of which aligns with a specific level in the aforementioned framework. Additionally, several pathways identified by the faculties help shape the **infrastructure** through which

the supporting actions can take place (e.g. elaborating policies like recognition and rewarding teaching achievements).

An overview of the plans and initiatives is given in figure 8, which shows how the supportive actions aligns with the four levels of teacher development, as well as key aspects of infrastructure that will enable them.

5.4 Programme Talent development of students

Current policy

At the UT, education means student-centered learning where students enjoy freedom of choice and opportunities to develop themselves. This is, for example, reflected in the Twente Educational Model, which is project-based bachelor education that enables students to develop themselves not only academically but also personally and professionally, for example in the roles of researcher (onderzoeker), designer (Ontwerper), and organizer (Organisator). For the top-10% cognitively talented students, the UT offers extracurricular honours education in the form of 5 bachelor and 3 master tracks. A broader set of talent development opportunities is also facilitated extracurricular, for example in the form of student engagement (often called “activism” at the UT), student teams (e.g. solar team) and entrepreneurial development. Students are thus facilitated in many ambitions and talents. However, talent development is mostly offered to the already recognized (cognitively or otherwise) talents. Students who have not discovered their talents or passion yet or who are underachievers are not sufficiently seen or challenged. No structure is provided to support students in their choices and insufficient guidance is provided to students to help them discover their talents or to seek opportunities. Currently, a university-wide vision on talent development for students (UTalent) is under development (Herek, Wagenaar & Dirksen), which addresses these points and also embodies the concrete programs as formulated below.

Programme’s ambition

The ambition of the Quality Agreements Talent programme is that all students are stimulated and have the possibility to create their own learning experiences. The aim is to both increase the amount of students reached by our talent programmes and to lead to greater diversity in talents explored by students, thus enhancing student’s career possibilities, employability, and wellbeing.

The intention is therefore to build a UT talent development programme upon two pillars (thereby expanding upon the current situation which mainly focuses on the first pillar):

1. Talent development with the goal to recognize and challenge the highly talented students (top 10%). Students may be gifted in the classical cognitive competencies, but also in leadership competencies, design competencies etc. (excellent students)
2. Talent development with the goal for every student to achieve their full potential by becoming aware of, exploring, and developing their own talents (growth of all students).

	Extracurricular	Intra-curricular	Individual guidance
Recognize and challenge highly talented students	5 bachelor and 3 master honours tracks, University Innovation Fellows	Deepening programmes (e.g. Star and Plus), Double programmes, ATLAS	Coaching
Stimulate all students to become aware of	Student teams, career market, lunch lectures, DesignLab, DreamTeam	Design own learning paths, professional development activities within modules	Coaching, Mentoring, buddy system

,and explore, their own talents			
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Figure 10. Perspectives on talent development and examples

Facilitating students to discover and develop their own talents is a process that consists of two essential interacting processes. Firstly, a bottom-up approach in which the individual student is central in exploring questions as: Who am I, What are my talents, What is important to me, What do I have to offer, What do I want to develop? And secondly a top-down approach in which the environment is central: What is out there? What are career options? What is expected from graduates in my field? These two types of questions should be answered not in isolation, but related to each other. In view of this and figure 10, the following two goals are formulated at the UT level:

1. Currently the individual guidance is underdeveloped. Student advisors only have the capacity to talk to their students (on average) once per year and the Career Service Centre does not have the capacity to provide intensive support to all students. Therefore, we need to **explore the possibilities and added value of offering coaching or mentoring in relation to talent development that is available to all students.**
2. Initiatives to become aware, explore and develop your own talents, both for the highly talented students as for the complete student population are now scattered. However, becoming aware of your own talent and walking the extra mile is more difficult to do in isolation than in a community. The confrontation and interaction with both like-minded and otherwise-minded people is stimulating and will aid reflection on and exploration of own talent. Therefore, we propose **to explore the possibility of developing a UTalent Hub (digital and physical) that facilitates talent development.** This could vary from the availability of digital tools to get feedback and become aware of your own talents, an overview of talent development programmes, a story-lab, a place to hang-out and interact with others, etc

Coaching and the UTalent Hub are closely connected: i.e. physically happening on the same location, coordinated by the same individual, and coaching students to explore their own talents allows them to develop their talents in the various opportunities at the UT (brought together in the UTalent Hub).

Relevance of programme in terms of quality improvement education

Research in various study programs (reference: Bridge the gap) has shown that a clear view of students about their talents, beliefs and motives in relation to their (future) profession (a clear professional identity) positively influences their well-being, motivation to learn, study outcomes and quality of career choices.⁵ A clear professional identity is an important catalyst for students to direct their career development and making informed choices⁶ as it contributes to their career clarity and career confidence⁷. Developing a strong professional identity is not an individual process, it is shaped in relation to the sense of belonging to the community⁸. The prototypical image and role models that study programs (unconsciously and consciously) provide can therefore be very influential on the extent to which students can identify themselves with their future profession. If students experience a mismatch between who they are and this prototypical image (e.g., because they differ in gender,

⁵ Canninus, E. T., Helms-Lorenz, M., Beijaard, D., Buitink, J., & Hofman, A. (2012). Self-efficacy, job satisfaction, motivation and commitment: exploring the relationships between indicators of teachers' professional identity. *European journal of psychology of education*, 27(1), 115-132.

⁶ Meijers, F., Kuijpers, M., & Gundy, C. (2013). The relationship between career competencies, career identity, motivation and quality of choice. *International Journal for Educational and Vocational Guidance*, 13(1), 47-66.

⁷ Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behavior*, 45(1), 79-122.

⁸ Meijers, F., Kuijpers, M., & Gundy, C. (2013). The relationship between career competencies, career identity, motivation and quality of choice. *International Journal for Educational and Vocational Guidance*, 13(1), 47-66.

cultural background, interests, etc.), more effort is needed to build a strong professional identity. If they fail to do so, this often results in drop-out. To support students in developing their professional identity, two components are central as they mutually influence each other: 1) supporting reflection on your own talents and motives via career dialogues and 2) activating student to explore future possibilities⁸. A talent development program will need to consider at least these components⁹.

The literature thus shows a clear link between a talent development program, the professional identity of the student and study success. Talent development is thus an essential aspect for achieving a high educational quality at the UT.

Measures and deliverables in relation to programme ambition

As said, the aim is to increase the amount of students reached by our talent programmes and to lead to greater diversity in talents explored by students in order to enhance student’s career possibilities, employability, and wellbeing. To reach these aims we look specifically into coaching and opportunities for talent development. The former will be an initiative at the institutional level and the latter consists of both of an initiative at the level of the institution as well as faculty specific plans.

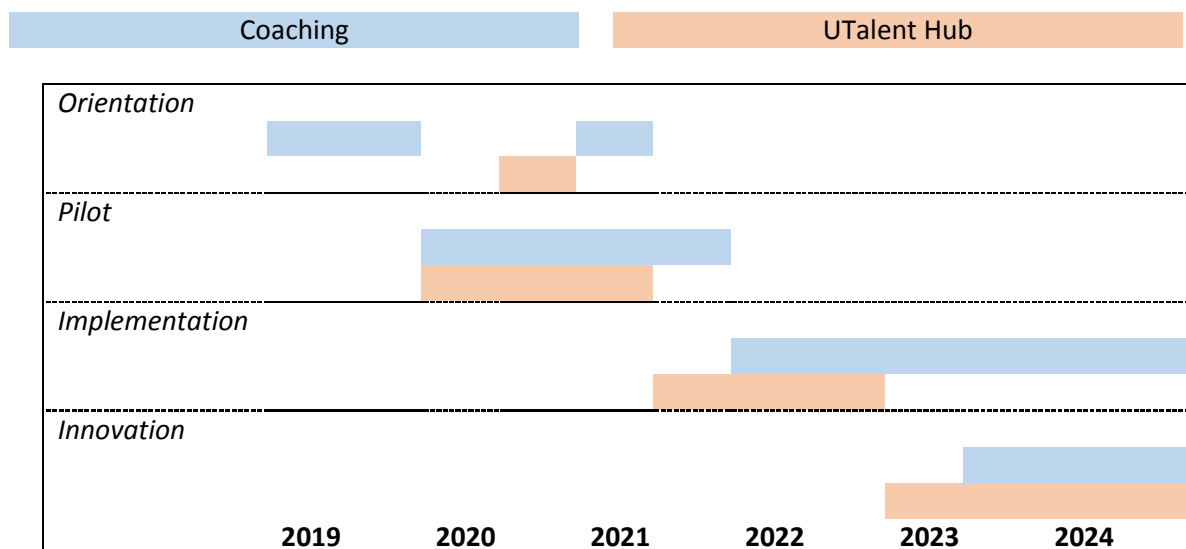


Figure 11. Overview on how UT quality agreement programme ‘Talent development of students’ develops in time.

Coaching:

- Inventory of ongoing coaching activities, needs and possibilities including recommendations for pilot years (start 2019)
For example, ET and EEMCS already indicate the need for additional personnel and expertise with regards to coaching students in their faculty plans. Besides, BMS and TNW wish to hire additional teaching staff in view of the teaching professionalization programme which recognizes the important role the teacher has as coach to students.
- Feedback tools on talent and career development (e.g. Carriere Kompas) (2019-2020)
- Training for coaches developed (2019), coaches at pilot programmes trained (2020)
For example, ITC proposes to develop a mentor system for its master students.
- Coaching offered to a wider range of students in pilot programmes (2020)
- Effect measurement on contribution of enhanced coaching on career confidence, career exploration and career clarity (2020-2021)
- Pilot evaluation, including recommendations for UT-wide implementation (2021)

⁹ Research project Bridge the gap (BMS): <https://www.techyourfuture.nl/a-955/bridge-the-gap>

- Coaches at all faculties trained, capacity adapted at CES (start 2023)
- Coaching/mentoring facilities offered to all/more defined subsets of students (2023)
- By 2024 coaching will be more widely implemented, in line with conclusions on contribution of enhanced coaching on career confidence, career exploration and career clarity.

Opportunities for talent development:

1. Diverse learner needs

Important in considering the opportunities for talent development is the growing diversity of students. This calls for attention to 1) intercultural competencies (see also the Global Citizens programme), for example by having a special skill learning line around internationalization (ITC) or providing international experiences within all degree programmes (EEMCS); 2) diverse learner needs, for example by offering services in multiple formats (ITC); and 3) deficiencies, for example by having flexible premasters (BMS).

2. Challenge highly talented students

This is the focus of BMS, who intends to do by developing an additional bachelor honours track 'Open Innovation & Entrepreneurship', increasing participation of the existing intra-curricular and extracurricular bachelor honours programmes and offering double degrees for 80% of their master programmes.

3. Develop new talent initiatives

ITC will develop a specific elective course around entrepreneurship, ET will introduce a new master project for developing academic and professional skills, and EEMCS will start with the Data Science Lab where master students deal with real world problems. Both TNW and EEMCS will also offer extra training facilities in support of the development of teaching talents: see also the Learning Assistant Program (specified under the teacher professionalization program).

4. UTalent Hub:

- Inventory of existing talent development opportunities related to the diverse types of talent, needs and possibilities (2019)
- Recommendations for further development of initiatives and/or further exploitation of existing UT units (DesignLab, Student teams, Honours, UCT)
- Online exploration tool, relating opportunities to the diverse types of talents (2020)
- Virtual UTalent Hub (2020)
- Physical UTalent Hub at a central location (2020)
- Communication/marketing plan on talents, role models and PR activities (2020)
- Pilot evaluation, including recommendations for UT-wide implementation (2021)
- UT-wide implementation, with continuous innovation loops, in a dynamic environment of the UTalent Hub relating coaching and talent discovery with UT-opportunities (2021-2024)
- By 2024 the UTalent Hub is fully running and has even seen first rounds of innovation.

Extra teaching staff:

Within the UT, the focus is on small-scale and interactive education. For Bachelor's programme this implies that students often work in project groups and regularly receive feedback. Within Master's programmes, the connection with research groups is strong and students receive an intensive guidance during the graduation period. A number of faculties will to recruit extra (teaching) staff in order to guarantee this small-scale and intensive learning environment.

5.5 Programme Global Citizens

Current policy

The UT wants its students to be as prepared as possible to succeed in an international working environment after graduation. To put this aim into practice, the UT needs to shape the language, content and form of the degree programmes to better fit this international context. Furthermore, the UT believes it is important for students to gain international experience, either by going abroad (for example, through exchange programmes, internships, joint course work, online cooperation and joint education programmes) or by way of the local, campus-based international classroom.

To accomplish this, the UT formulated the Internationalization Vision 2020: “Educating the Global Citizen” (2015). It describes ambitions regarding international curricula, participation in international networks, building an international community and international student intake.

Programme’s ambition

After optimizing processes (2015-2018) concerning international student intake, admission and the customer journey, the focus for the coming years will be on the international curriculum. Based on their vision, degree programmes will shape their content and form to better prepare the students for being and working as a global citizen. The service departments will support the faculties by having the right expertise or resources available so that faculties can devote their time to improve education. Next to this, efforts are scheduled to make the UT a more inclusive international organization.

To reach these ambitions the UT has launched the programme International Projects. The quality agreements – the programme Global Citizens – will be an integrated part of this bigger programme. The latter consists of the projects International Curriculum, Exchange/International experience and, in support of that, International Partnerships, which will focus directly on the improvement of quality of education.

The projects language policy, incoming degree students and contact center focus on improvement of support/quality of services provided to students and therefore have an indirect link with the quality of education.



Figure 12. Overview on how UT quality agreement programme ‘Global citizens’ is embedded in Programme International Project

Relevance of programme in terms of quality improvement education

The Education Council of the Netherlands (in Dutch: onderwijsraad) have stated that internationalization contributes to a higher quality of education¹⁰. The programme Global Citizens aims to further develop this and address internationalization explicitly within education.

¹⁰ Onderwijsraad Den Haag mei 2016. De volle breedte van onderwijskwaliteit Van smal beoordelen naar breed verantwoord <https://www.onderwijsraad.nl/upload/documents/publicaties/volledig/De-volle-breedte-van-onderwijskwaliteit1.pdf>

Besides, it is one of the goals of education to prepare students for the labor market. As we expect this to be more internationally oriented in the future, we can prepare students for this now thus increasing their employability. The Erasmus Impact Study confirms this, having found that graduates with an international experience fare much better on the job market¹¹. Further evidence is found in a Dutch study from CEO “Studie en Werk 2016” which focused on Dutch Higher Education Students and shows that the “study abroad experience” leads to a decrease in time to find a job¹².

The goal of the Global Citizens programme is not only to support the students having an international experience, but embed this experience in an international curriculum. This underlying motive fits the goal of internationalization as formulated by Professor Leask. She is best known for her research focused on engaging academic staff in the process of internationalization of the curriculum, including Internationalization at Home. To contribute to solving big problems of the world, Professor Leask believes that graduates of tomorrow should not be restricted or parochial of mind. Internationalization, in the sense that students have access to knowledge and wisdom from all parts of the world and are open to new ideas regardless of the origin of those ideas, is important in achieving that¹³. Hence, the UT believes that internationalization strengthens UT’s ambitions towards education in general. *“Our ambition with respect to education is to prepare students for the future in which they are expected as global citizen to contribute to Grand Challenges and sustainable development goals.”*¹⁴

Measures and deliverables in relation to programme’s ambition

As explained, the programme Global Citizens consists of the following lines of action:

- International Curriculum,
- Exchange and International experiences,
- International Partnerships.

1. International curriculum

Better prepare students on working in an international environment by the educational programme. In such an International Curriculum it is recognized that internationalization requires incorporating a global, international or intercultural dimension into teaching (i.e. in the preparation and delivery of education) and learning (i.e. in the learning outcomes of the degree programmes). For this we will be assessing and improving (the quality of) internationalization by using the methodology of Certificate on Quality in Internationalization (CeQuInt).

- In co-creation with all faculties an analysis of strengths and weakness of the internationalisation of all programmes as well as of UT-central level is available (2018-2019).
- Support (expertise/manpower) of programmes in the process of working towards a CeQuInt-certificate is organized.
- Pilot: transform existing curricula to International Curricula in 3 programmes of EWI and 1 of ITC (2019-2021)
- Expand number of pilot programmes with 5, of which 3 will be from EWI (2020)
- All programmes have integrated intercultural competencies in their curriculum or developed plans to do so, also the programmes that are not working towards the CeQuInt (2021).
- At least 3 programmes are awarded with a CeQuInt certificate or are in an advanced state of getting it (2021)
- At least 7 programmes are awarded with a CeQuInt certificate or are in an advanced state of getting it (2024).

¹¹ http://europa.eu/rapid/press-release_IP-14-1025_en.htm

¹² http://www.seo.nl/uploads/media/2016-47_Studie_Werk_2016.pdf

¹³ Betty Leask, Internationalizing the curriculum, 2015

¹⁴ EWI Quality agreements investment agenda 2018-2022 for UT voorbehoud instemming FR

2. Exchange and International experiences

ET wishes to increase the number of bachelor and master students that have an international educational experience. In order for all faculties to widely facilitate international experiences, the service departments will improve their support to students and faculties by redesigning (where needed) the Exchange-chain (2019-2020).

3. International Partnerships

ET, ITC, and BMS want to develop and strengthen existing International Strategic Partnerships & Networks (ISPN) as a means to create enough and qualitative good places for outgoing students in an efficient way. For example, by offering double degrees for 80% of the English master programmes (BMS, 2022) or extending ECIU Exchange Partnerships to other degree programmes (ET, 2021). Service departments will support this with redesigned contracts (2020) and looking to extend contract at a UT-level (2022).

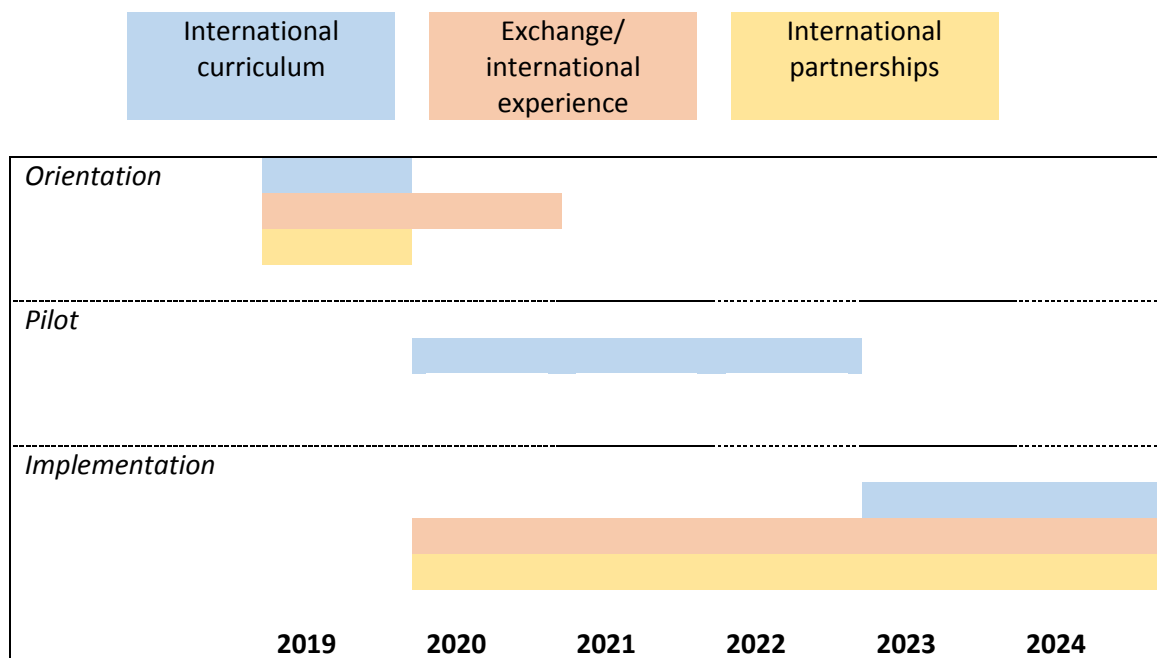


Figure 13. Overview on how the UT quality agreement programme 'Global citizens' develops in time.

10. Governance on quality agreements

The UT has chosen to implement the quality agreements by means of a programmatic approach. That is why the UT designed a process for continuous development that will lead to tangible results per programme. The way of working to keep track on the quality agreements, and to adjust plans if necessary, fits into the regular quality improvement cycle of education. This means no extra programme organization needs to be established. People who normally are responsible to guarantee that education is of high quality, and service departments that support in this process, also are involved in realizing the quality agreements. The University highly values the involvement of students in discussions on development of education. Because students are partners in achieving high-quality education, students will be enabled and stimulated to co-determine the course of the quality agreements. At faculty level they will contribute via regular evaluations, Programme Committees, Study Associations and the Faculty Council and if necessary through specific surveys. At university level they will contribute via Student Union and in the University Council.

10.1 Planning and Control cycle

At the UT, quality of education is assured by means of plan-do-check-act cycli (PDCA) that operate on programme level, faculty level and institutional level. These layered PDCA-cycli are utilized to direct the development of the quality agreements programmes. Discussions have different levels of detail, depending on the organizational level. Because in general, education is experienced within the context of a programme, it is important that the right information ascends to the next organisational level. Deans, Vice-Deans of Education, and Programme Directors have a pivot role in this process. They are responsible to determine whether input from degree programmes require follow up at faculty level. A vice-dean of education can also decide to address an issue at university level and to stimulate university-wide decisions are taken. All vice-deans-of education participate in the University's Commission of Education, which is chaired by the Rector Magnificus. This commission is responsible to advice on education related strategy and policy. This body also advices on the course of the quality agreement programmes.

The UT developed the plan on quality agreements bottom-up. In the coming years, the faculties will remain responsible to decide what will be done within a quality agreement programme and to motivate how the corresponding budget will be spend. The annual plans that are related to the WSV-budget need approval from the faculty councils. At University level, it has to be decided what common facilities are needed per quality agreements programme, and which initiatives require central budget. Each year, the University Council has the right to approve how central WSV-budget is spend for the next year.

The Planning & Control cycle of the UT consists of the following elements:

- Plan: Plans for further development of the quality agreement programmes are presented in the Spring memorandum of the UT and the UT budget, derived from the annual plans of the faculties.
- Do: Execution of the plans and activities per quality agreement programme as further specified in the annual plans per faculty and the UT plan on quality agreements (Continuous process).
- Check: Besides the annual report and faculty reports on the progress of the Quality agreements once a year, the UT management reports of March and October will be used to report on the progress of the quality agreement programmes at UT level. Each faculty presents its own report, which the Faculty Board communicates with the faculty council. The reports of the faculties are combined into one UT management report. This management report is discussed within the Executive Board (and Supervisory Board) and afterwards send to the University Council for information. By having a system with management reports, the UT can check whether activities are on schedule and processes are in control. If necessary, additional measures can be taken.

- Act: Based on information that is presented in Management Reports and the Annual Report, both faculties and the university will determine the desired course of action within a programme. If necessary, plans will be adjusted and budget will be reallocated.

During a calendar year, there are fixed moments for reporting on the progress of the quality agreements, and for adjusting plans and budget. This is presented in chronological order in figure 14.

PDCA	When	Who	What
Check	January - February	Faculty Boards & Faculty Councils	Faculty's Annual Report on quality agreements. Each faculty will explain what is achieved within the quality agreement programmes. Related to this, each faculty will provide insight in how WSV-budget has been used to realise these results.
Check	January - March	Executive Board & University Council	University's Annual Report. The University will report on the progress of the quality agreement programmes, thereby also providing insight in best practices per quality agreement programme. By means of the annual report, the university shows how the WSV-budget has been used to improve education. The University Council will be invited to attach their reflection regarding the realization of the quality agreements to the Annual Report. Monitoring of the progress will be done in both qualitative and quantitative ways.
Plan	March	University's Commission on Education	Based on the Annual Report, University's Commission on Education will discuss whether it is opportune for faculties to combine forces by commonly implementing a plan. For example, a pilot that was initiated within a programme by a limited number of faculties, and which has proven to be effective. The Vice-Deans of education are expected to consult with students and their faculty councils to hear whether they agree on such a plan and to discuss how to implement the plan in their faculties.
Plan & Check	April	Executive board and Faculty Boards	Spring meetings with the Executive Board and each Faculty Board. Based on information regarding the progress of the faculty within the quality agreement programmes, the intended course of the faculty within these programmes will be discussed. The minutes of the spring meetings provide input for the spring memorandum.
Plan	April	Executive board and Faculty Boards	Spring memorandum is a multi-annual plan (4 years). The memorandum provides a framework for annual plans of faculties. Directions for further development and implementation of the quality agreement programmes will be part of the spring memorandum.
Plan	June-September	Faculty Boards & Faculty Councils	Developing annual plan and associated budget per faculty. Faculty council has the right to approve how the WSV-budget is invested. Plan on how the faculty

			is involved in the quality agreements programmes can be adjusted and/or defined to more detail. The perspective of degree programmes has to be considered while developing the annual plan. The programme improvement plans provide input for this.
Plan	October	Executive board, Faculty Boards, and Service Departments	Autumn meetings between the Executive Board and each Faculty Board. The Executive Board will discuss with each Faculty Board what their concrete plans are for the following year regarding their involvement within the quality agreement programmes. The annuals plans of the faculties form the basis for these discussions. Faculties' needs for support from service departments will be discussed during the autumn meeting with service departments so that appropriate measures can be taken. Outcomes of the autumn meetings provide input for the UT budget (t+1).
Plan	December	Executive Board & University Council	Approval of University Council on main components of university's budget for following year.

Figure 14. Overview on how the quality agreements are embedded in the Planning & Control cycle of the university.

10.2 Monitoring instruments

As part of the regular quality assurance, the university has a broad range of monitoring instruments to collect information on the basic parameters of educational quality and to keep track on the implementation of UT's strategy. A set of key performance indicators (KPIs) are defined that are used within university's planning & control cycle. Several of these KPIs provide relevant information regarding the impact of the quality agreements. At the same time, the KPIs show the effects of all the efforts the university takes to improve quality of education. So changes in performances cannot solely be related to the quality agreement programmes.

KPIs that provide an indication of the impact of the quality agreements programmes are:

- Student appreciation regarding learning facilities (source: National Student Survey),
- Student appreciation regarding academic guidance and counselling (source: National Student Survey),
- Student appreciation regarding lecturers (source: National Student Survey),
- Number of teachers with a UTQ (source: UTQ Monitor, Human resource database),
- Study success, specifically drop-out rates of first year bachelor students and pass rates of bachelor and master students who graduation within nominal study time plus one year (source: 1 cijfer HO).
- Student-staff ratio at university level (sources: 1 cijfer HO and Human resource database)

10.3 Programme support

Faculties are responsible for bringing their plans into practice and achieving their goals. Service departments support faculties in this process. Depending on the programme, different service departments are involved. This support may consist of policy development, strategy execution, and organization of activities or processes. Service departments have regular contact with faculties so their support can be adjusted to the needs of faculties.

Service departments are financially compensated for their work either from university central budget or from faculties. In general faculties pay for services when this support only benefits their own faculty. Actions that are relevant for the university as a whole, are covered by the university's central budget. For example, development of new training programmes for teacher professionalisation can be used by all faculties and are centrally funded. The costs to train teaching staff from a specific faculty are paid by the concerning faculty. Annually, service departments should know what support is required for the year to come in order to have an adequate budget and to make the right preparations. Each programme element is coordinated by a service department (see figure 15 for an overview of the elements per programme). This service department is responsible for integrating the reports of the faculties into a report at programme level. This coordination also includes that, based on the needs of the faculties, decision-making will take place in order to deliver appropriate support.

	Centre for Educational Support*	Campus & Facility Management	Library, ICT-Services & Archive	Marketing & Communication	Human Resources	Strategy & Policy
Learning facilities	x	x	x			
Community building	x	x				
Teaching professionalization	x				x	
Talent development of students	x	x	x	x		x
Developing global citizens	x					x

Figure 15. Service departments that are involved in the UT quality agreement programmes

*Following departments of CES contribute to the quality agreements: 1. Centre of Expertise in Learning and Teaching, 2. Technology Enhanced Learning & Teaching, 3. Time scheduling & Exam office, 4. Student Affairs, Coaching and Counselling

11. Investment of WSV-budget

11.1 Income WSV-budget

The university allocates the WSV-budget to the faculties by means of student based funding. This means that every faculty receives a budget for those students who are funded by the Minister of OC&W. The faculties invests these WSV-budgets for the realization of the quality agreements. Twenty percent of the WSV-budget is allocated to the UT's central budget in order to cover the costs of initiatives or services that benefit the university as a whole. The UT estimated the size of the WSV-budget that the university will receive for the upcoming four years. This is presented in figure 16. The WSV-budget is approximately two percent of the total budget that the UT spends on education.

Benefits	2019	2020	2021	2022
Faculty of Engineering Technology	448	508	885	1097
Faculty of Electrical Engineering, Mathematics and Computer Science	391	444	772	980
Faculty of Science and Technology	539	706	1146	1429
Faculteit Behavioural, Management and Social Sciences	659	765	1329	1654
Faculty of Geo-information Science and Earth Observation	45	55	100	136
Central budget	506	599	1030	1293
Grand-total	2588	3077	5262	6589

Figure 16. Estimation of the WSV-budget the UT will receive coming years.

11.2 Budget per quality agreement programme

Based on the quality agreements of the faculties and the costs of university wide initiatives, the budgets of the programmes are calculated. The figures below present the long-term budget per programme. The budgets for 2020 until 2022 are an indication of expected costs. For 2021 and further, the investments in the quality agreements programmes will be specified in more detail. In doing so, the total WSV-budget will be allocated. Annually, expenditure of the WSV-budget needs approval of faculty councils and the university council. An inherent consequence of the programmatic approach is that the budgets for these years can be adapted as part of the planning and control cycle. This could mean, for example, that a part of the WSV-budget of 2020 is transferred to 2021. It is also possible, for the years 2020 till 2024, to change the budget between programmes. Nevertheless, the figures below are the best indication the university can provide at the moment. The information is provided for four years, because the Spring Memorandum also describes the policy agenda for a four years period.

Budget community building	2019	2020	2021	2022
Grand total	503	578	491	491
Need assessment home base	87	87	0	0
Developing home base	178	0	0	0
Implementation & continuation home base	164	416	416	416
Community building activities	75	75	75	75

Budget learning facilities	2019	2020	2021	2022
Grand total	741	733	797	815
Learning spaces	459	443	442	460
e-Learning	222	222	272	272

Digital assessment	60	60	60	60
Learning analytics	0	8	23	23

Budget teaching professionalisation	2019	2020	2021	2022
Grand total	472	472	447	447
Increasing participation training programmes	216	216	216	216
Development of and participation in customized courses	179	179	154	154
Teaching communities	59	59	59	59
Rewarding teaching achievement	19	19	19	19

Budget talent development students	2019	2020	2021	2022
Grand total	715	1235	1789	2092
Coaching	101	179	191	206
Opportunities for talent development	95	38	88	38
Extra staff	519	1018	1510	1848

Budget global citizens	2019	2020	2021	2022
Grand total	254	261	367	421
International Curriculum	130	130	130	130
Exchange / International Educational Experience	224	231	287	341
International Partnerships	50	50	100	100

Figure 17. Indication of long-term investments of WSV-funds in UT quality agreement programmes

List of abbreviations

BMS	Faculteit Behavioural, Management and Social Sciences
CELT	Centre for Expertise in Learning and Teaching
CES	Centre for Educational Support
C&FM	Campus & Facility Management
EEMCS	Faculty of Electrical Engineering, Mathematics and Computer Science
ET	Faculty of Engineering Technology
HR	Human Resources
ITC	Faculty of Geo-information Science and Earth Observation
LISA	Library, ICT services & Archive
M&C	Marketing & Communication
SUTQ	Senior University Teaching Qualification
S&P	Strategy & Policy
TELT	Technology Enhanced Learning and Teaching (multidisciplinary virtual team)
TNW	Faculty of Science and Technology
TOM	Twente Educational Model
UT	University of Twente
UTQ	University Teaching Qualification

