TU/e Policy International Classroom

Working group International Classroom

Final version

May 2019

Summary

In this document it is explained why TU/e needs an international classroom, what that is, what the TU/e policy proposal will be to realize it and what first steps are recommended to be taken to implement this policy. A separate implementation plan will be developed as a follow-up.

Vision

TU/e needs an international classroom in order to become truly international as stated in the TU/e strategy 2030. Therefore, in addition to engaging in international networks and partnerships, the international orientation of the TU/e "at home" will be strengthened. This is done by attracting non-Dutch students and staff, creating an international and diverse community and raising appreciation of the international dimension of present-day challenges. Students gain knowledge all over the world more and more, in person or on-line. The long-term objective for this is to provide students with an appropriate profile for an international labour market and/or career and contribute to the high (local) demand for qualified engineers. The internationally oriented industry in our ecosystem requires people to collaborate in an international setting. Internationalization of education is not a goal in itself. International cooperation and diversity in teams stimulates research excellence and contributes to the core functions of education: personal development, learning to work in diverse teams and gaining the required competences. An international community and classroom helps to create the required context for education and research. The classroom of 2030 will therefore be a diverse and international classroom, resembling the make-up of the high tech labor force. This diversity is an indispensable element of the quality of learning.

Definition

The international classroom is defined as

The TU/e International Classroom is a learning space of a group of students in which:
- different nationalities with different cultures are represented
- the common instruction language is English, which is not the first language of most students
- students and staff engage in and appreciate diverse and multicultural teams
- the diverse learning environment is (created) such that it enables students to gain international and multicultural experience and enhances the quality.

Analysis

An analysis was made by the working group on the international classroom with respect to the actual situation and challenges at TU/e, the national developments, a benchmark with 12 (inter)national institutions and the desirable ratio Dutch-non-Dutch students and staff. The outcome was summarized in a SWOT analysis on the actual situation in 2018/19.

Objectives

From this the challenges and objectives for 2025 were derived:

By 2025 education at TU/e will take place in an international classroom

- That consists of a balanced mix of Dutch and non-Dutch students and an internationally oriented teaching staff, with an average proportion of a quarter to one third of non-Dutch students, who chose TU/e for its educational model and quality and are interested in Dutch culture and society.
- Where according to the TU/e language policy the main language will be English and students and staff can communicate at the required level.
- Where cultural diversity is fully accepted and experienced as valuable and enriching to develop necessary personal and transversal skills necessary for future (international) workplaces and

careers of students and teaching staff in science and industry, to be able to contribute to the solutions for global societal challenges.
- In which achieving international learning objectives enriches the learning and teaching experience, and enhances the quality of and student and employer satisfaction with the TU/e education.
- In which all people feel part of an internationally oriented TU/e community (also outside the classroom) and where both national and international students and staff feel at home and included.

The desired international profile and expected achievements for students will be based on those defined by Jones, 2009.

Policy
A policy for the international classroom is proposed consisting of the following elements:

1. All students and staff, national and international, comprehend and endorse the TU/e education model. We will communicate the TU/e education model explicitly and make the Dutch-international context transparent for all incoming students and staff.
2. Number of non-Dutch students and staff: we aim for an average proportion of 25-33% to get sufficient critical mass, balance and inclusion.
3. International cultural diversity is perceived as an added value or enrichment for all students and staff.
4. Define and implement international learning objectives for all students to let them develop skills and mindset needed for their future (international) workplaces and careers.
5. Define and implement personal development objectives for staff to be able to contribute to the quality of the international classroom and to support their future employability
6. We implement or align with existing TU/e policies on language, diversity and international experience
7. All people feel part of the TU/e community, also outside the classroom, and integrated into the Dutch society

Next steps
In addition some elements for the implementation plan are suggested: inclusion, improvement of or alignment with existing policies and implementations of those, and definition of new elements.

1 Introduction

In this document it is explained why TU/e needs an international classroom, what that is, what the TU/e policy proposal will be to realize it and which first steps are recommended to be taken to implement this policy.

A working group that was constituted by the Executive Board in August 2018 developed the proposal (see for the members the list in the Appendix). During the development several stakeholders were consulted and a draft version was discussed in four panel sessions, two with mixed Dutch-non-Dutch groups of students and two with mixed groups of teachers. The proposed policy then was submitted for advice in several stakeholder meetings, such as OB, WOW, OO, OGS, JPC-B, JPC-B and BO. Their comments are included in this document.

Section 2 provides the TU/e strategy background on which the proposal is based, giving an answer to the question why TU/e needs an international classroom. In section 3 the actual status of the international dimension of TU/e is summarized. Section 4 zooms in on the TU/e International Classroom. The TU/e international classroom concept (4.1) and its objectives (4.2) are defined. The results of an analysis of the actual international classroom are described in section 4.3. The analysis focuses on:

1. the challenges at TU/e based on experiences in departments or educational programs by a quick scan and interviews with key people (4.3.1)
2. the national developments (4.3.2)
3. the approaches taken at 12 other universities and organizations (4.3.3)
4. the desirable ratio Dutch – non-Dutch (4.3.4)

From this a SWOT analysis was produced (4.3.5). In section 5 the actual proposal for the International Classroom Policy is presented. Section 6 indicates the next steps to be taken to implement the policy. A separate implementation plan will be developed as a follow-up.

Note

During the discussions on the policy proposal we came across a definition issue concerning the word *international*. It turns out that it often is used as meaning *non-Dutch*, mostly in the context of students and staff as opposed to Dutch or national students and staff, often assuming that they come from outside the Netherlands, had no education or job in the Netherlands before and do not speak Dutch. But on the other hand *international* is used as meaning including all nationalities, also the Dutch. In this document we tried to make the meaning as clear as possible, by using *non-Dutch* (and sometimes *foreign* if that is used by the consulted source) if Dutch students or staff are not included and *international* when all nationalities are meant[1]. With Dutch or national students and staff we mean in general students or staff that had a Dutch education (diploma) and therefore are used to the Dutch culture, speak Dutch, lived already in the Netherlands and mostly have the Dutch nationality.

We are aware of several grey areas, such as, for example, people with more than one nationality (or culture) of which one is Dutch, or people with Dutch nationality, able to speak Dutch, but coming with a non-Dutch education (diploma) from abroad, etc. We assume that this only applies to a small number of students and staff and does not really affect the policy proposed.

---

[1] In quoted text we did not change it.

2 TU/e Strategy

The policy or the international classroom proposed is based on the new TU/e strategy 2030 (TU/e Strategy 2030, 2018).

This strategy states that the mission of Eindhoven University of Technology is "*to educate students and to advance knowledge in science & technology for the benefit of humanity. We integrate education and research to enable our students and scientists to become thought leaders and to design and achieve the unimaginable. We translate our basic research into meaningful solutions, in close collaboration with our public and private partners*."

This strategy includes the following statements with respect to internationalization[2]:

"*Societal challenges and the technology to address them are becoming increasingly complex and interdisciplinary. Science is developing into **a team effort of interdisciplinary, international researche**rs. Businesses are increasingly looking to universities ‑ anywhere on the globe ‑ to develop new technologies. Learners of the future will create their own learning paths out of modules from different parties. Given the **international nature of our high-tech ecosystem**, we can only be of value to the region if we achieve **international excellence**.*

*This is why we need to connect with other universities, companies and societal stakeholders that share our goal of scientific excellence and our orientation on societal challenges. Through these partnerships, we will **participate in international educational programs, research and innovation programs and attract top students and research talent**.*

*We will strengthen our position in regional, national and **international networks** by engaging with new partners and focusing on select partnerships with other universities, industry and societal stakeholders.*

*Top science is international by nature. International reputation, reflected in international rankings, plays an important role in recruitment of top talent and in fundraising. The main three challenges for our university ‑ sustainability, technological advancement and the impact of technology ‑ do not stop at regional or national borders. **Research and innovation staff operates in an international, multicultural context** for co-publishing, acquiring (international) grants, reviewing, contributing to international roadmaps, and participating in international networks and partnerships.*

*The international dimension of education, too, is increasing, due to globalization, labor market developments and fast growing participation in higher education in the emerging economies. **The engineers we educate will build their careers in an international context, whether in academia or industry. The internationally oriented industry in our ecosystem requires people to collaborate in an international setting.***

***Internationalization of education is not a goal in itself**. International cooperation and diversity in teams stimulates research excellence and contributes to the core functions of education: personal development, **learning to work in diverse teams** and gaining the required competences.*

TU/e will therefore continue toward a truly international orientation, in which international collaboration supports attracting international students and staff and where an international community and classroom helps to create the required context for education and research.

---

[2] Text was made bold by the authors.

*To recruit international top talents, we will further develop dedicated recruitment strategies. Special attention will be given to the welcoming and integration process of international staff and students. To achieve the international context in education, **it is our aim that 1/3 of the student population is international**[3]. This goal and the path toward it will be viewed in light of the ʻcontrolled growthʼ of student numbers.*

*To increase the international orientation of TU/e we welcome **highly talented staff and students from all over the world**. In addition, Dutch students and academic staff are encouraged to gain **international experience outside of the Netherlands** to become inspired by other environments and to be immersed in other cultures. Exchange programs with connected universities in international networks and partnerships, at all levels (students, staff), in diverse formats (digital, online, physical, blended), will be promoted.*

The international classroom imposes many challenges, such as the organization, didactics and materials used (e.g. literature, use of examples). We will formulate smart objectives, invest in and experiment with new formats."

With respect to the vision on education the TU/e 2030 strategy states the following[4]:

*"The 2030 generation of TU/e students will be digital natives with very diverse motivations, learning styles and educational needs. Our students will come **from all over the world,** and have diverse backgrounds in terms of age, culture, social background, gender and level of training. Learners will take responsibility for their own learning process, which may not always be linear. High-school graduates will combine working and learning experiences, leading to modular learning paths instead of pre-programmed five-year full time studies.*

*We will not only prepare high-school graduates for life-long learning. TU/e will also meet the needs of other potential groups of learners: workers who want to gain new knowledge and competences, **students in other countries all over the world**, online learners, and so on. We will explore and accommodate the learning needs of employees in the work force, together with our industrial and societal partners.*

*We educate and prepare our students for fast developing professional fields in an **international labor marke**t. High tech companies have many internationals in their workforce and are part of a global industry network. **This requires education in an international context, working in diverse teams and gaining international experience**.*

***The classroom of 2030 will therefore be a diverse and international classroom, resembling the make-up of the high tech labor force. This diversity is an indispensable element of the quality of learning. We aim to create an inclusive community with at least 1/3 international**[5] **students and stimulate students to take courses abroad or to interact with students abroad through online modules. The didactics and education materials we will use will reflect this diversity. Our choice and support measures for English as the main language for education is a first example of this**.*"

For the TU/e International classroom, as part of the objective of internationalization at home[6], already some initiatives in practice were taken, but a clear integral TU/e policy is still missing. For this

---

[3] International means non-Dutch here
[4] Text was made bold by the authors.
[5] International means non-Dutch here.
[6] Internationalization at home consists of several elements, such as digitalization (MOOCs, SPOCs etc.), use of international examples, international classroom, international teachers, or international literature

reason the Deans of the Bachelor College and Graduate School proposed to set up a working group with the assignment to define a clear policy with respect to the establishment of the international classroom at the TU/e which is explained in this document.

3 The international dimension of TU/e in 2019

The concept of the international dimension is, of course, not completely new at TU/e. A lot of aspects mentioned above are already addressed in some way. To give a short impression of the actual status the main activities in this area are summarized below.

Engaging in international networks and partnerships

Researchers, professionals and students of Eindhoven University of Technology are part of many regional, national and also international networks.

In the international arena, TU/e is renowned for its large involvement in the EU framework programs such as Horizon 2020, including the European Institute for Innovation and Technology (EIT) and the Marie Curie programmes. In the CLUSTER-network, we focus on education programs. With Zhejiang University we collaborate to enhance student exchange and research collaboration.

Our membership of the EuroTech Universities alliance is aimed at enhancing excellence in research, outstanding educational collaborations and at enhancing the technological competitiveness of Europe. As our universities are placed in significant innovation ecosystems (i.c. Copenhagen, München, Lausanne, Paris, Haifa and Eindhoven), our aim is to connect these ecosystems through collaborations that allow for integration of academic research, industrial R&D and new international educational initiatives including life-long learning.

International community objective

The TU/e has wished to have diversity among staff and students already for quite some time. To this purpose it strives to attract talented Bachelor's and Master's students, PhD candidates and PDEng students, and teachers, while being inclusive in the areas of nationality, gender, scientific schooling, etc. As such, the TU/e pursues a community in which students learn to collaborate in multicultural and multidisciplinary groups, in so-called *international classrooms*, and where students and staff members are at home, enjoy their work, and where everybody has the chance to be heard and participate.

To become a truly international community, a **community manager** was appointed to develop activities to better integrate the existing national and international communities. Examples are the TU/e Community Portal, several community events, and abolishing the separate introduction of national and international students.

The TU/e community strategy and policy can be found in the internal document *One page strategy Community.*

Need for international student body and common language

Internationalization of education is a requirement in the Brainport region to be attractive to the international labor market: we need to attract and retain our knowledge workers. In this region it is also important for employees to have the skills to work in an international context. The educational vision of Brainport states the following: "*Within five years international skills must be a fixed part of primary and secondary education as well as tertiary vocational education (MBO) in the Brainport*

region".[7] The same applies to the TU/e: internationalization is important for the labor market position of our students. This was the main reason for starting English MSc programs in 2005. Since 2017, most BSc and MSc programs are in English and in 2018 an integral language policy was adopted. As of 2020 the lingua franca (working language) of the TU/e will be English (cf. *Integral Language policy at TU/e*, 2017). This makes it possible for students from all over the world to participate in a program and fully integrate at TU/e, creating an international context.

The Brainport vision was endorsed at a recent FME conference (March 2019). A study will be published soon in which requirements for applicants in the labor market were investigated. It turned out that speaking English ánd Dutch fluently was one of the five most important elements, which was confirmed by (large) companies present: English because it is the internal communication language, but a good or even basic Dutch proficiency is appreciated for communication with customers.

A report on stay rates by Nuffic (cf www.nuffic.nl/stayreates, 2018) states that in the Netherlands almost 25% of the graduates (universities and HBO) still live here after 5 years and that this number is growing. Graduates from technical universities have an average stay rate of 41%. TU/e has the highest score of 52%, followed by TUD: 41%.

The TU/e 2020 ambition for incoming bachelor students from outside the Netherlands is >20% and for master students > 35%. Also, >90% of all students should have an international experience during their studies.

The TU/e annual report 2017 gives an overview of the development of the percentage of international, non-Dutch students and students with an international experience in recent years. In the last three years this percentage has grown from 10 to 13% and 39,5% to 52,9% respectively. The intake of non-Dutch 1st year students has grown from 15 to 19-20% in the last five years. In 2018-2019 it was even 23%.

	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Percentage of international, non-Dutch students (1 Oct 18)	9%	10%	12%	13%	13%
Bachelor program (including premaster)	4%	5%	6%	7%	9%
Master program	17%	19%	21%	23%	21%

Intake first year students	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Percentage of international, non-Dutch students	15%	18%	21%	20%	19%

---

[7] http://www.brainport.nl/lp-visie-internationalisering-onderwijs

With regards to exchange of students, 411 students from outside the Netherlands spent some time at TU/e in 2017, 685 TU/e students (16%) spent some time abroad for an international internship, research or exchange program, although a recent analysis shows that the way International Experience is organized per department (graduate program) differs a lot
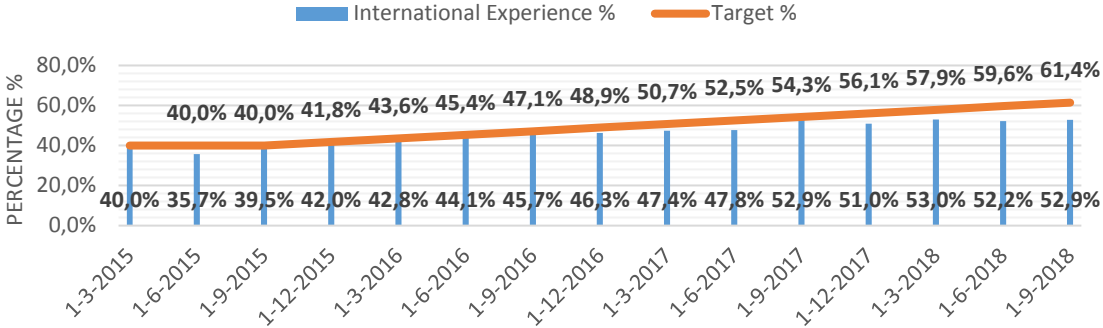
International staff

Research groups consist of staff members from various countries. 33.5 % of the total staff is foreign. Most of them are non-tenured academic staff: PhD students (which are employees in Eindhoven University) and young researchers with a temporary contract form the majority. About 60% of this non-tenured staff is foreign[8]. For the tenured staff at present about 40% of the assistant professors are from abroad whereas this is about 20% for the associate professors and full professors.

Percentage foreign staff (per 31-dec-18)					
	2013	2014	2015	2016	2017
full professors	19,5	18,0	19,6	20,5	18,7
associate professors	18,6	17,2	18,9	20,0	20,7
assistant professors	31,7	32,6	37,3	39,4	41,0
PhD students	62	55	59	63	57

This means a significant proportion of our teaching staff is English speaking. The rise in the number of international and national students in recent years has meant that an increasing number of English speaking teachers is also active in the Bachelor's programs.

---

[8] This also holds for the PhD students that are not employees of the university.

4 TU/e International classroom

4.1 Definition

What is an international classroom? The Nuffic Academy defines it as "*a classroom in which different nationalities are represented and in which the instruction language is not the mother language of all students present*." However, this is a rather narrow definition. In the definition given by the University of Groningen the International Classroom (IC) also involves curriculum development and development of required competencies for staff and students (see References for the consulted websites of RUG). It is approached as an institutional, organizational change process requiring changes at the personal, curriculum and institutional level. The key characteristics in this approach are: a group of students from diverse backgrounds (in culture, education, experience), starting from a vision/rationale on internationalization, working effectively with student and staff diversity through purposeful interaction, including the overall learning environment (formal, informal and hidden curriculum), with appropriate support for staff and students in a multicultural and multilingual environment. This approach is based on international research on tools for teaching in an international classroom (Carroll 2014), curriculum internationalization and principles of teaching and learning across cultures (Leask 2015) and case studies of the international classroom in different disciplines (Green and Whitsed 2015).

Based on this we propose our definition of the International Classroom as:

The TU/e International Classroom is a learning space of a group of students in which

- different nationalities with different cultures are represented,
- the common instruction language is English, which is not the first language of most students present,
- students and staff engage in and appreciate diverse and multicultural teams, and
- the diverse learning environment is (created) such that it enables students to gain international and multicultural experience and enhances the education quality

We distinguish different actors with their roles and involvement:

- **Dutch and non-Dutch students**: they achieve the learning objectives such as gaining international experience or ability to work in a diverse, multicultural context
- **Dutch and non-Dutch teaching staff**: they teach in an international classroom within the scope of the TU/e education model
- **Organization**: provide policy, budget and facilitate the required international learning environment
  - **Management**: provide strategy, policy and budget
  - **Support staff**: support implementation of policy, provide training, facilitate and support multicultural and international interaction and appreciation, also outside the classroom

Together they form the international **TU/e community**.

The interactions between the actors are multiple as shown in the figure below.
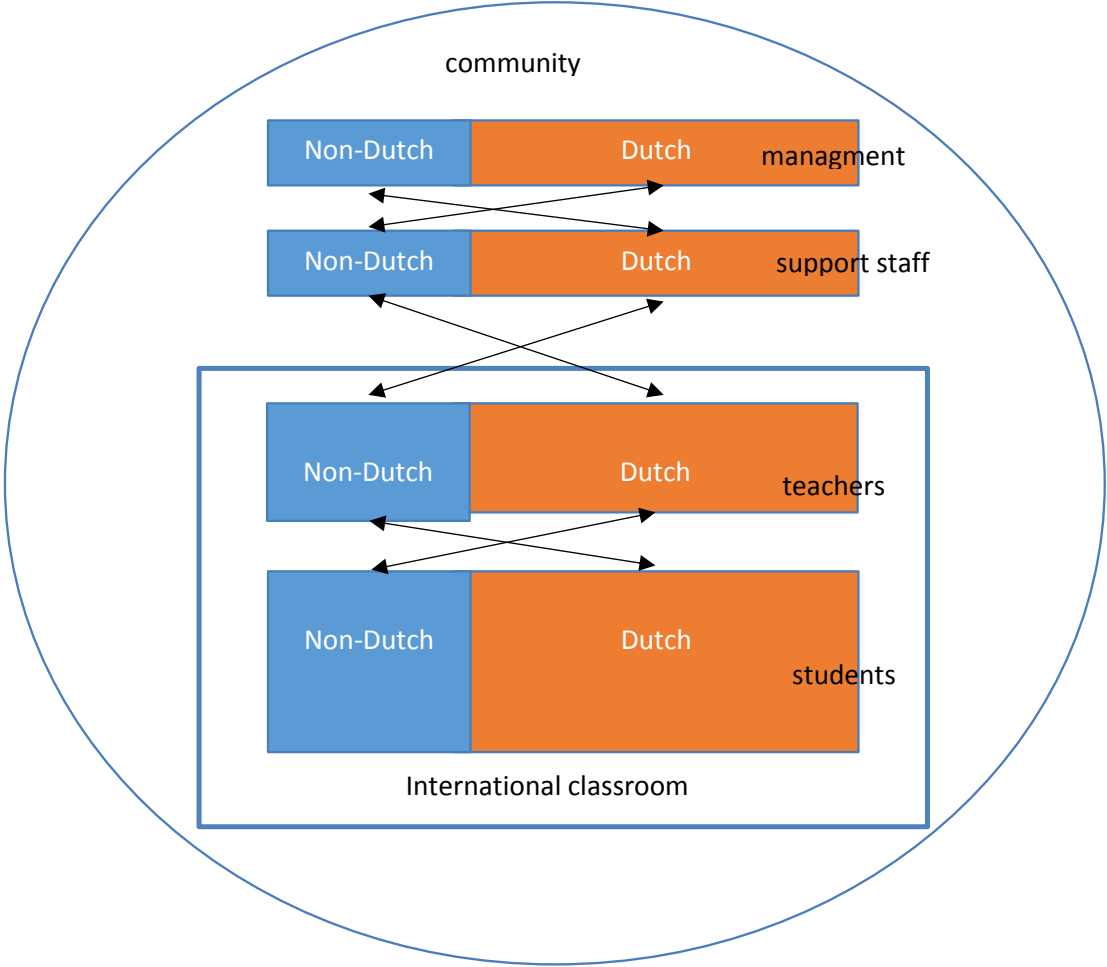
4.2 TU/e objectives

With the policy proposed in this document TU/e wants to lay the foundation for the desired/required international context, enabling students and staff to work in diverse, multicultural teams and gain international experience. We consider diversity an indispensable element of the quality of learning. For students this is part of their development as global citizen and a preparation for the international labor market in academia or industry that requires international, multicultural collaboration and language skills and for staff a challenge to extend their career development. For this purpose this policy should support:

- creating an inclusive and balanced community with a quarter to one third of non-Dutch students
- internationalization being experienced as an enrichment of education and career development, bringing new and additional opportunities
- realizing our strategy 2030 objectives

By creating and developing the International Classroom at the TU/e we want to contribute to the desired profile of our graduates. We expect students to (as in Jones, 2009, referring to Leask, 2007):

- gain knowledge of other cultures and appreciation of cultural diversity;
- gain international perspective on the field of study and research;
- develop the ability to work effectively in settings of social and cultural diversity;
- develop the ability to think globally and consider issues from a variety of perspectives;
- develop the ability to communicate across cultures;
- develop the ability to engage positively with cultural others in both their professional and private lives;
- be responsive to international communities;
- gain awareness of their own culture and its perspectives and how and why those are similar to and different from other cultures and their perspectives.

4.3 Analysis

To get an overview of the actual situation of the international classroom for TU/e, the working group made an analysis of:

1. the challenges at TU/e based on experiences in departments or educational programs by a quick scan and interviews with key people
2. the national developments
3. the approaches taken at other universities
4. the desirable ratio Dutch - non-Dutch

From this information a SWOT analysis was produced.

4.3.1 Challenges at TU/e

From the quick scan and the interviews we learned about the actual activities, the problems that were perceived and solutions for cultural and language problems and general issues in the classroom that are in place. They were confirmed and supplemented in the quiz answers and the discussions in the panel sessions.

Some facts:

- Almost all courses are already taught in English.
- The mix of students is very diverse (almost all EU countries and many non-EU countries, mostly Asian, especially many from China and India but very few from Africa, Australia or the USA.) The percentage of non-Dutch students in courses varies from 10 to 70%.
- The presence of non-Dutch students is often not addressed in lectures or seminars. Most teachers are not aware of any problems or opportunities and just teach their course in English with (translated into) English course material.
- Very few teachers make use or take advantage of the presence of more nationalities in the classroom. Only a few teachers mention a learning objective for international orientation in future careers of students.

Problems reported for non-Dutch students:

- Difference between "exchange" and "degree" students. "Exchange" students stay for a short term and are not always fully motivated, while "degree" students stay longer to obtain a degree and are selected more carefully.
- Mismatch of prior knowledge
- Less academic attitude
- Time pressure with scholarships
- Less options for internships
- Slowing down of process

Problems reported for all students and staff

- Cultural issues (working in groups: difference in working style, reluctance to mix; relation teacher-student)
- Language

Solutions already found at or suggested by departments:

- For cultural issues: buddy system, course on intercultural team work, academic advisor, force mixing in introduction, use it in the course by presenting examples from other cultures

- For language issues: check understanding regularly, use simple language, paraphrase, use alternative ways of communication, courses in academic writing, courses in English or Dutch language.
- For classroom: offer extra sources to fill gaps in knowledge/skills, force mix in case an international learning objective is to be achieved, but add extra means to prepare for that, individual/personal approach, stimulate taking a course on scientific integrity in case of cultural differences or different background in this area, conditions for new exchange contracts, find ways to control the diversity in the influx of students, systematic introduction to Dutch/TU/e education vision and model to (foreign) teachers.

Some of the insights and conclusions that were drawn from this analysis are:

- The focus should not only be on the non-Dutch students. The international classroom affects all students and staff, especially in cultural aspects.
- Cultural aspects need attention. It was recommended to start a (PhD-ESoE) project to study more in-depth how cultural differences can be utilized successfully in group work and challenge-based learning.
- The difference in prior knowledge should be addressed, which means more attention for screening and selection beforehand, especially in the case of exchange students.
- It maybe worthwhile to make a distinction between 'degree" and "exchange" students who come to TU/e with different expectations and commitments.

4.3.2 National developments

The topic 'International Classroom' currently receives a lot of attention, both at the level of the individual universities and on national level.

In June 2018 the Minister of Education presented the letter on "Internationalisering in evenwicht" (Balanced Internationalization) with her vision on internationalization in vocational and higher education to the Tweede Kamer (House of Representatives). She proposes a balanced approach with respect to quality, accessibility, efficiency and connection with the environment. She endorses the added value of internationalization, but takes concerns as expressed in Dutch society, politics and media serious. She proposes a conscious language policy and emphasizes the responsibility of institutions to avoid negative consequences of their choices. Main policy points:

1. **Quality** comes first. Internationalization can have added value, but should be part of the vision of an institution. In view of the opportunity that every student should have to get an international experience, the international classroom is mentioned explicitly as one of the options. Didactics in this context should receive attention. Therefore, institutions are encouraged to let teachers develop competences, e.g. via the BKO. A Comenius scholarship can be obtained by teachers in Higher Education for innovative ideas for the quality in the international classroom. Best practices should be shared via Nuffic. In addition international mobility, the development of joint programs and double and joint degrees, and scholarships will be stimulated.
2. Guarantee of **accessibility** is essential. Dutch educational institutions should remain accessible for Dutch students. Repression of them by non-Dutch students should be avoided.
3. **Efficient** education offer. Internationalization should not jeopardize the efficient spending of public resources. A high stay rate of non-Dutch graduates is required. The financial impact at institutions of the participation of non-Dutch students will be investigated further. Some aspects are: the funding of non-EER students should be cost-effective, the desirability of

incentives for scaling up, the non-growing of the research funding with the growth of EER students etc.

4. **Connection with the environment.** The need for valorization is emphasized, but also onboarding and integration in the (Dutch) academic community of non-Dutch people. Learning Dutch or keep up Dutch should be stimulated.

In the "Internationaliseringsagenda Hoger Onderwijs (May 2018)", the VSNU (Association of Dutch Universities) and the VH (Association of Universities of Applied Sciences) have announced several goals and related follow-up actions.

In general, in case of the international classroom and admission and selection of students, there is a trilemma that needs to be taken into account: accessibility, quality and yield. For selection in the institution is allowed to make decisions at the moment. For selection in the bachelor the ministry of education, culture and science (OCW) maybe is going to decide whether this is allowed or not. Also, important to realize is that we are dealing in this context with the Act on Equal Treatment and the Lisbon Recognition Convention (LCR).

Relevant topics to be considered are:

1. Instruments to manage the influx of non-Dutch students

The VSNU and VH have asked the Dutch ministry of Education to broaden the legal options to manage the influx of non-Dutch students. The Minister has agreed to take this on. The following topics are still under discussion:

- To include in the OER that international diversity is a selection criterion to enable the international classroom
- To apply for a limitation in students only for an English-language track of a study program in order to ensure sufficient accessibility for Dutch students
- To have a cap of non-EER students in specific cases
- To have a higher tuition fee and/or a handling fee for non-EER students

The Minister has indicated that the first option is probably not viable (due to legal restrictions), although some study programs might already effectively do this. For the other options it could be possible to differentiate between nationalities, for instance to prevent that one non-Dutch nationality becomes too dominant. Some Dutch universities already take such an approach.

2. Choice of teaching language: change of article 7.2 *Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek* and changes in the NVAO supervision framework

Proposals to change Article 7.2 of the Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek that concerns the choice of language are being discussed. The actual text indicates that the default language is Dutch and deviations should be determined in the Code of Conduct of an institution, based on the necessity caused by the specific nature, design or quality of education or the origin of the students. Changes in Article 7.2 could lead to additional demands to our Code of Conduct. The VSNU continues to emphasize the autonomy of universities and implications for the administrative workload.

The new NVAO supervision framework (Beoordelingskader Accreditatiestel Hoger Onderwijs Nederland, 2018) was presented in 2018 and is in operation since February 2019. This framework contains a specific clause concerning the added value of the choice to teach in another language than Dutch. The choice has to be motivated and teachers should be able to teach in that language

3. <u>Measures to facilitate internationalization</u>

At a national level there is attention for the Improvement of secondary circumstances at the university and its surroundings to facilitate internationalization. An action plan regarding the student housing situation was presented on 3 October 2018 by the ministries of Foreign Affairs and Education, Culture and Sciences, VSNU, VH, Kences, G4, Netwerk Kennissteden, Vastgoed Belang, LSVb and Nuffic.

4. <u>Influence of EHEA</u>

National education policy may be influenced by the European developments. At the EHEA (European Higher Education Area) ministerial conference in Yerevan, 2015, the EU ministers of Education discussed the status of the Bologna process. They concluded that although progress had been made, the implementation of structural reforms was showed large differences and needed attention. They set new priorities among which to promote intercultural understanding and international mobility, and recognition of credits gained abroad.

4.3.3. Benchmark with other universities

We looked at the policies and good practices of other universities with regards to the composition and organization of the international classroom. The central questions were:

*   What policies do other universities have?
*   What can be learned from them?
*   Is there a difference between technical and general universities?
*   Which solutions and/or instruments used at other universities could be applied at TU/e? And why?

To analyze these questions, a selection was made of 12 (inter)national institutions

TU Delft	TU Twente	Universiteit Wageningen
Universiteit van Amsterdam	Universiteit Maastricht	Rijksuniversiteit Groningen
Technical University Munich	KTH Zweden	Imperial College
KULeuven	RWTH Aachen University	Nuffic

Table 1: *Overview of the 12 institutions that were included in the analysis*

The main findings of this analysis are summarized below. Most examples are taken from Dutch universities.

Policy with regards to the composition of the student population
In general, most universities indicate that they value the incoming non-local students, and that they want to maintain and/or develop the international atmosphere and character of their institution, without naming specific target numbers or percentages. A lot of universities stress the importance of a balanced composition of the student population. In their policy documents, hardly any universities indicate that they want to limit the percentage of non-local students, although news articles indicate that these worries do exist for the future. Several universities indicate that they look for ways to prevent that a possible future sudden influx of non-local students would limit the places for local students. This does not appear to be an issue at the moment, although some institutions indicate that this moment may be approaching soon (e.g. TU Delft).
Related to the student ratio, some institutions also mention the percentage of foreign staff, although this is much less common. Several institutions do, however, note that foreign staff is essential in creating a truly international community.

Instruments to steer the composition of the student population with regards to nationality

None of the universities indicate that they select their non-local students based on the country of origin. Most institutions indicate that they try to direct the composition of the group of non-local students by taking certain measures in the process of recruitment and promotion, bringing their programs under the attention of certain groups. Examples of these measures are: sending promotion material to certain countries or institutions, making information on the website available in certain languages, having online "open days" and having recruitment/admission office "hubs" in selected countries.

An important factor that is very much interwoven with this, is the language policy that is in place. The degree to which programs are available in English in the different stages (bachelor, master, and postmaster) influence the accessibility of the institution for non-local students. Most universities clearly indicate in their general policy, international policy and/or language policy why they have made the choice to offer (some of) their programs in English

Policy with regards to the international classroom

Not all institutions mention the international classroom in their policy or strategy. Some mention the term, without elaborating on what this means. Notable exceptions are the universities that have a large influx of non-local students. The Rijksuniversiteit Groningen (RUG), for example, is one of the Dutch universities with a high ratio of non-Dutch students. The RUG has gone through an extensive process to determine what they consider to be a true international classroom, and how they want to achieve this ideal situation. In several documents that are available online, the RUG indicates what the concept of "international classroom" means for their institution. This leads to the following definition: "Inclusive, activated learning in which we use diversity as a resource through purposeful interaction, based on a program vision on internationalization, aligned in a meaningful curriculum design with internationalized learning outcomes".

Maastricht University (UM) does not mention a specific definition of the concept of the international classroom, but does indicate in the description of the project "international classroom", that this "involves much more than just maintaining high percentages of international students and staff. It encompasses a long-term project with many activities and initiatives. And it has also become a mindset among the members of our academic community".

The University of Amsterdam (UvA) also has an extensive policy on internationalization and on the international classroom. For the latter, they indicate that a dedicated policy is currently in development. According to its policy on internationalization, the international classroom at UvA consists of a number of elements: the curriculum, the language policy, diversity and the student experience.

The other institutions don't have a specific definition of the international classroom on their website or in their public policy documents. They do, however, often indicate that certain measures are taken to enhance international cooperation, which will be discussed in the next section.

Instruments to enable cooperation in the international classroom

Many of the institutions indicate that they see the international classroom as a way to prepare their students for the international environment of their future workplace. For this to work, all parties involved (students, lecturers, support staff) need to have the skills necessary in an international environment. The institutions use different measures and instruments to achieve this goal. Information is shared with staff through multiple channels, such as online booklets, sometimes targeted at different target groups or handbooks.

A lot of institutions offer courses to their lecturers on teaching in an international classroom, some make this a part of the courses in preparation for the Teaching Qualification (BKO). Courses on

international and/or intercultural collaboration are available in several institutions. Some institutions also have specific courses for incoming non-local staff.

Other examples of instruments are communities (online or offline) in which staff members receive information and can exchange ideas about the international classroom, and the organization of special events to make staff aware of activities concerning the international classroom (lectures, symposia, network days,…).

Some institutions mention that learning in an international context is seen as a priority, and therefore this element is made part of the learning goals of programs and/or courses. Explicitly making use of the international composition of the classroom to place information in an international context, will bring the international classroom to a higher level.

Conclusion: What does this teach us for the TU/e policy on the international classroom?
With regards to the influx of non-Dutch students, the TU/e needs to decide whether it wants to (continue to) set a certain target number for the balance between national and international students. Most institutions don't mention this explicitly on their website or in their policy. A second question is whether the influx of non-Dutch students should be further specified like in the policy of Wageningen University. What is the ideal ratio to create a truly diverse international classroom?

With regards to instruments to influence the influx, the policy for recruitment and selection of new students appears to be the main instrument at the moment. By strategically focusing on certain countries/areas in their communication and the services they offer (e.g. local recruitment/admission offices), several universities try to influence the composition of the international student population. Another instrument is the language policy of an institution, which is already clearly defined at the TU/e.

It is important that the TU/e closely follows the national developments that are taking place concerning possible future instruments to have more control over the influx and composition of the international student population. If necessary, the TU/e can also propose new instruments, possibly in cooperation with the 4TU partners.

Concerning the policy for the international classroom, the information from the other universities teaches us that it is highly important to have this topic broadly embedded in the university: the involvement of students, academic and support staff, student organizations and the TU/e community as a whole are vital to optimize the impact of the international classroom. Awareness of the implications and opportunities of the international classroom is an important first step, followed by a clear policy on the international classroom with clear measures. A lot of information on "good practices" from other institutions is available to inform the TU/e on how to embed the international classroom in the curriculum, and how to provide all members of the TU/e with suitable information and (practical) advice to achieve this.

4.3.4 Desirable ratio Dutch – non-Dutch

As was already touched on above (cf. section 4.3.2 and 4.3.3), some discussion is going on what should be the ideal, minimum or maximum ratio Dutch – not-Dutch students. From a pure internationalization perspective one could argue that a real internationally oriented university would have a very high mix of nationalities and that would mean that the Dutch part would be very small. For a private university this could be an objective, but as a Dutch public university we feel obliged to serve the interests of Dutch society where we aim at more Dutch higher educated graduates. On the other hand we also want to focus on the influx of non-Dutch students to offer our engineering students an international, multicultural context at home in view of their future careers in science & technology and business. Moreover, given the predictions of demographic developments, an influx of

non-Dutch students might be even necessary, as we want to serve the interests of Dutch society, which show a high demand of higher educated people, The first consideration is asking for setting a maximum to the admission of non-Dutch students to not repress Dutch students, the second for a minimum to be able realize our objectives and to be attractive for talented non-Dutch students as an inclusive community.

The TU/e strategy 2030 states that – taking into account that our main objective is to only recruit high-talented students and staff - the aim is that one third of the total population of students should be non-Dutch. The main reason is that intuitively or from experience we think this might be a good balance, but we also can find evidence in literature that this is more or less a safe minimum number for a minority to feel included and to be able to have influence on the dominating culture.

In Dahlerup (1988), the importance of the relative size of a minority was already investigated, here applied to women in Scandinavian politics. Point of departure is the 30% needed for getting critical mass to make a difference. This study refers to an American study of Kanter (1977) focused on gender and race differences in a corporation, in which she distinguishes four types of groups based on the different proportional representation: 1) the uniform group (their culture dominates an organization), 2) the skewed group, a minority, considered "tokens", less than 15% (is controlled by the numerically dominant group), 3) the tilted group, 15-40% (the minority is able to influence the culture of the group), 4) the balanced group, 40-50% (culture and interaction reflect balance).

Centola et al. (2018) present findings that "provide direct empirical demonstration of the existence of a tipping point in the dynamics of changing social conventions. When minority groups reached the critical mass—that is, the critical group size for initiating social change—they were consistently able to overturn the established behavior. The size of the required critical mass is expected to vary based on theoretically identifiable features of a social setting. Our results show that the theoretically predicted dynamics of critical mass do in fact emerge as expected within an empirical system of social coordination". They state that their "findings show good agreement with qualitative studies of gender conventions within organizational settings (cf. Kanter, 1977), which hypothesized that a critical mass of ~30% could be sufficient to overturn established norms (cf. Dahlerup, 1988)".

We should also realize that not feeling included will have a strong impact on the performance of that group for which we should take responsibility.

In a gender focused study (Dasgupta et al, 2015) it is argued that female peers in small working groups enhance women's motivation, verbal participation, and career aspiration in engineering. They provide experimental evidence showing that gender composition of small groups in engineering has a substantial impact on undergraduate women's persistence.

Looking at the TU/e population, we can conclude that the actual ratio Dutch – non-Dutch is unbalanced with the respect to the different groups that can be distinguished:

• Students: the average of the total is ca 13%, more Dutch students in bachelor than in the master
• Scientific staff: the average of the total is already ca. 1/3, but it is unbalanced if we consider the different levels: full and associate professors below 1/3, the rest above 1/3
• Support staff and management: almost 100% Dutch

To achieve the aim of 1/3 of the total on average, this at least suggests close monitoring of the development of the scientific staff and taking some measures to make the support staff and management more international. The non-Dutch students still form a small minority, which suggests that we have to take care of their inclusion.

4.3.5 SWOT TU/e

From the analysis reports and several discussions the working group made the following SWOT analysis for the international classroom at TU/e:

Strengths
- Effective language policy for the English language
- Admission and recruitment policy for non-Dutch students in place (although maybe not sufficient)
- High and effective study yield of non-Dutch students
- Objective of student recruitment policy of target countries is retention. Stay rate of non-Dutch students is high (52,1 % from TU/e in 2017; highest in the Netherlands, see Nuffic report)
- Teaching staff is already quite international (33,5 % foreign staff in 2017, cf. annual report 2017)
- Attention for international aspects in TU/e community building (community manager)
- Professional Development trainings (e.g. BKO) in mixed cultural groups with already some attention for international classroom and use of multicultural input

Weaknesses
- Not yet all teachers have an open attitude and approach towards internationalization; this should be improved.
- Enrichment ambition
  - Although we aim at enrichment for all students, we do not address this yet as an opportunity.
  - Staff lack sufficient knowledge of and training in cultural differences to use the international classroom for enrichment purposes in education.
  - Percentage of non-Dutch students in educational programs varies a lot (10-70%).
  - No policy on ideal mix.
- Admission policy:
  - Cultural aspects not sufficiently addressed in admission policy of non-Dutch students. Test is not in use anymore.
  - Degree and exchange students are not distinguished explicitly, although motivation can be quite different. Screening/selection of exchange students not always sufficient.
- Community building: Non-Dutch students do not mingle enough with Dutch students, esp. in master
- Approaching non-Dutch students by Dutch students during courses and in group work could be improved
- Recruitment: non-Dutch students are not always sufficiently prepared for our education model (open, personal and engaged), such as for example, challenge-based learning, working in groups, expectations on roles and outcome of work, esp. in (graduation) projects etc.
- Facilities are not sufficient, such as food offer. Also housing needs attention

Opportunities
- TU/e Strategy 2030: ambition for truly international
- Branding of TU/e as international university. Support for higher international ranking
- Support from our international-oriented ecosystem. They ask for graduates with international orientation.
- Internationalization is part of general diversity and inclusion policy
- Addition of international attitude and skills to learning objectives
- Development of diversity mindset

Threats
- Unlimited growth of students without selection possibilities
- Political image and public opinion: less accessibility and fear for repression of Dutch students, loss of Dutch culture and language, use influx of non-Dutch students as revenue model

5 TU/e Policy Proposal

As stated in the introduction, the TU/e policy for the international classroom is part of the TU/e strategy to become a truly international university by among other things strengthening the international orientation at home by defining and implementing an international classroom policy and developing activities to form a truly international inclusive community at TU/e.

The main purpose of the international classroom in addition to the external international experience program is to provide the engineering students with an appropriate profile for their future (international) workplace and career in science & technology or industry. Especially the demand from our Brainport region for graduates with international skills is high. They will get the opportunity to develop these international skills such as working in international, multicultural teams, bi- or multilingualism, international communication and thinking globally. The international classroom therefore is also part of our offer of a high quality study program and is seen as enrichment for all students.

The challenges that TU/e is facing are summarized as follows:

- The absence of an integrated and clear policy with regards to the International Classroom.
- The focus on international classroom as an opportunity for all students and staff (enrichment). The mixing or integration of national and international staff is still insufficient. This demands awareness of cultural differences: an awareness of existing differences, how these may lead to biases and discrimination, but also knowledge on how these differences can be used to enhance the learning experiences and learning objectives.
- Support for international/intercultural communication skills among staff and students. Implementation of the language policy of TU/e and providing training.
- Finding or creating recruitment/selection/admission instruments for realizing the ideal mix and number of students in the context of the national developments.
- Harmonization of starting level of all students. We are faced with prior knowledge gaps and differences between "exchange" students (stay for short term) and "degree" students (stay longer to obtain a degree and are selected more carefully). We have to provide means to update particular knowledge.
- Management of the political image and public opinion on attracting non-Dutch students. Although we aim at a cost-effective approach, we do not intend to use the influx of non-Dutch students as a revenue model.
- Transparent information about the TU/e education model during the recruitment process of students and staff to manage expectations.
- Improved facilities for non-Dutch students and staff, such as housing and catering. This is necessary to be attractive for talent (staff and students) and to maintain a high stay-rate in our region.

Based on these challenges the following objectives are defined to be achieved by 2025.

Objectives for the TU/e international classroom:

By 2025 education at TU/e will take place in an international classroom

- That consists of a balanced international mix of Dutch and non-Dutch students and internationally oriented teaching staff, with an average proportion of a quarter to one third non-Dutch students, who chose TU/e for its educational model and quality and are interested in Dutch culture and society.

- Where according to the TU/e language policy the main language will be English and students and staff can communicate at the required level.
- Where cultural diversity is fully accepted and experienced as valuable and enriching to develop personal and transversal skills necessary for future (international) workplaces and careers of students and teaching staff in science and industry, to be able to contribute to the solutions for global societal challenges.
- In which achieving international learning objectives enriches the learning and teaching experience, and enhances the quality of and student and employer satisfaction with the TU/e education.
- In which all people feel part of an internationally oriented TU/e community (also outside the classroom) and where both national and international students and staff feel at home and included.

We will base the desired international profile on the expected achievements or learning objectives of students on the summary as given in Jones (2009):

"*In an effective cross-cultural learning environment, which for the purposes of this chapter, the authors have defined as an "international classroom", students might be expected to:*
- *gain knowledge of other cultures and appreciation of cultural diversity;*
- *gain international perspective on the field of study;*
- *develop the ability to work effectively in settings of social and cultural diversity;*
- *develop the ability to think globally and consider issues from a variety of perspectives;*
- *develop the ability to communicate across cultures;*
- *develop the ability to engage positively with cultural others in both their professional and private lives*
- *be responsive to international communities;*
- *gain awareness of their own culture and its perspectives and how and why those are similar to and different from other cultures and their perspectives.*"

Policy for the international classroom

To achieve these objectives the following policy is proposed to be implemented:

1. **All students and staff, Dutch and non-Dutch, comprehend and endorse the TU/e education model. We communicate explicitly and transparently about the TU/e education model and the Dutch-international context for all incoming students and staff**.

   We aim for the recruitment of talented students and staff that choose TU/e because of its education model (open, personal and engaged) and quality. To manage expectations this requires clear communication about what that is and what is expected/required from/for all students, Dutch and non-Dutch (e.g. English as common language, own responsibility, independent attitude working in groups, new developments such as challenge-based projects, from teaching to learning, etc.). We expect incoming staff to commit themselves to our education model as described in our strategy 2030 and which is largely based on Dutch norms and values. We assume that on the one hand non-Dutch students and staff choose deliberately for a university in the Netherlands and are interested in its culture and society. On the other hand, we assume that Dutch students and staff endorse the added value of the international learning and teaching environment.

2. **Number of non-Dutch students: we aim for an average proportion of 25-33% to get sufficient critical mass, balance and inclusion.**

To create an international environment and community at the TU/e campus, we believe that on average one third of our students should be from outside the Netherlands to get critical mass, balance and inclusion without jeopardizing the accessibility of our university for Dutch students. However, not every study program or department is required to have the same numbers, as this also depends on variables such as the interest of students and staff due to competition and the demand of the labor market. Therefore, we aim at a range of 25 to 33%. We will continue to monitor international recruitment targets closely and to set yearly targets for percentages and determine target recruitment countries (cultures). Based on experiences in former years we expect the number of non-Dutch bachelor students to be lower than that of the non-Dutch master students. In general, we aim at an overall proportion of 20-30% for bachelor and 30-40% for master students.

Special attention will be given to the admission of and information for so-called incoming *exchange students* as opposed to *degree students.* Exchange students only stay for a short time and are admitted mostly based on institutional contracts, not on individual screening. Occasionally, this leads to unwanted situations with respect to motivation and/or lack of prior knowledge.

To achieve these objectives we will invest in the development of recruitment, selection and admission instruments for students, which we realize will be restricted by the requirements that are imposed by the Dutch law. We will monitor the developments closely and start with pilots.

3. **International cultural diversity is perceived as an added value or enrichment for all students and staff.**

   We train and educate students to be able to come up with solutions for international societal challenges. More cultures and diverse prior education lead to more and diverse solutions. Therefore, we want them to be exposed to an international and rich cultural environment during their studies to develop the necessary skills, based on the list provided by Leask (2007) or Jones (2009). Therefore we promote to

   a. aim at the realization of a balanced mix of international cultures in the classroom

   If possible within the legal requirements imposed, we would like to develop recruitment and admission instruments to steer the mix of cultures.

   b. make use of international cultural diversity present in the classroom

   We will challenge teaching staff to develop methods to make use of the diversity in the classroom to contribute to an enriching experience for the students. We will provide them with best practices and training for that.

4. **Define and implement international learning objectives for all students to let them develop skills and mindset needed for their future (international) workplaces and careers.**

   For the different study programs international learning objectives will be defined. It has to be developed in such a way that every student should at least achieve one international objective during his/her study at TU/e, in addition to the required external international experience, for example, in the area of international team collaboration, cultural awareness, world citizenship etc. Objectives can be defined as part of the learning objectives related to the content of courses or as part of the skills trained during courses. As a start, it is not the intention to give credits to

students for achieving individual international learning objectives. The integration of international learning objectives will be measured on study program level.

5. **Define and implement personal competence development objectives for (academic and support) staff to be able to contribute to the quality of the international classroom and to support their future employability**.

   This applies to all staff, i.e. teaching staff and support staff at ESA and departments. Staff will get training possibilities, coaching and help to (support to) teach in an international classroom, based on cultural awareness. We will start with pilots and build on existing best practices, such as, for example, courses in the BKO and buddy systems.

6. **We implement or align with existing TU/e policies on language, diversity and international experience.**

   The language policy means that by 2020 the instruction and communication language at TU/e will be English, in the sense *English when necessary, Dutch if possible*. For the international classroom we need a common instruction and communication language to make sure that language is not a barrier for the international classroom. The leading criterion for the choice of this language is the future career of our students. As at the moment the scientific and international business interlingua is English, and we mainly educate students for the scientific or international business market, fluency in English is a prerequisite for most of our students and we therefore support this policy.

   Staff and students get training possibilities to improve their English proficiency. For non-Dutch speakers there will be the possibility to learn Dutch customized to the situation, from surviving in the Netherlands to fluent Dutch, for example to be able to communicate to customers or clients in the future. If considered relevant for their future, opportunities should be created for Dutch students to keep up a professional Dutch proficiency.

7. **All people feel part of the TU/e community, also outside the classroom, and integrated in the Dutch society**

   We take measures to foster the inclusion of non-Dutch students and staff within the international classroom. "You can also make friends during project work in class." We aim at reinforcement of the TU/e Community policy as carried out by the community manager with respect to international, intercultural activities. We promote all kinds of cultural inclusion programs, as for example, in the start week of the bachelor program, the kick-off of the master program and onboarding activities for foreign staff, but also participation in councils and student and study and sport associations. We explicitly appeal to Dutch students and staff to be involved international- and intercultural-oriented activities.

   We support stay in the Netherlands of non-Dutch students and staff by promoting all kinds of Dutch integration programs including Dutch language courses.

6 Next steps

The next step is to make a separate plan for the implementation of the International Classroom policy. The participants in the panel sessions who discussed a draft version of the policy document indicated that for them engagement in and appreciation of diverse and multicultural teams by students and staff was the most important. They also recommended a gradual approach in the implementation of the policy.

The following elements for an implementation plan are recommended:

1. Define an **international classroom development programme** consisting of projects reflecting the policy objectives stated above. This programme should also contain a time plan and a monitor component. We recommend starting with pilot projects.

2. Include, improve or align with existing projects/activities/policies, such as, for example

- TU/e language policy: paying attention to the required English proficiency, but also what is needed for Dutch proficiency
- TU/e diversity policy and community projects/activities
- TU/e external international experience policy
- Policy and targets for recruitment and admission of non-Dutch students in bachelor and master
- Policy and targets for international experience or exchange of students
- Policy and targets for recruitment of non-Dutch staff

3. Focus on new elements, build on best practices (at TU/e or other universities). Examples:

- Define and implement international learning objectives for students. Investigate where they can be applied best: in new learning formats (digital, blended, challenge-based projects etc.), as part of content-related learning objectives or skill training related to courses. See for an example of the latter the EE Systems and Control project 5SC26.
- Intercultural aspects have to be part of **all** introductions (start week, kick-off of master). Use best practices.
- Develop training for the preparation of teachers for multicultural groups of students and how to use the international classroom as a tool for educational enrichment, for example via the BKO, including awareness of differences, scientific integrity norms, individual learning paths, inclusion of international examples, how to use collaborative projects assignments, from teaching to learning etc., but also how to achieve mixed groups. Use best practices and start with pilots.
- Define and implement development objectives for the international classroom for the staff
- Improve communication about TU/e education model in the recruitment phase.
- Develop instruments to control the influx of non-Dutch students with respect to number and cultures.
- Implement a clear policy for admission of exchange students, review existing contracts.

The participants of the panel session recommended to start with:

- A pilot for training teachers.
- A plan for compulsory addressing intercultural aspects in the introduction week and master kick-off for all study programs.
- A pilot with the development of international learning objectives.
- A new information "package" for new students for managing expectations better for all students.

References

External websites consulted

TU Delft (general website: www.tudelft.nl/en)

https://www.tudelft.nl/over-tu-delft/feiten-en-cijfers/onderwijs/inschrijvingen/

https://www.tudelft.nl/en/about-tu-delft/strategy/strategy-documents-tu-delft/

https://www.tudelft.nl/en/about-tu-delft/cooperation-of-universities/

https://ocw.tudelft.nl/courses/diversity-educational-settings/

https://www.tudelft.nl/global/

https://www.tudelft.nl/global/education/

Universiteit Twente (general website: www.utwente.nl/en)

https://www.utwente.nl/organisatie/feiten-en-cijfers/historie/#internationalisering-onderwijs

https://www.utwente.nl/en/vision2020/

https://www.utwente.nl/nl/ctd/medewerkers/onderwijs/How-to-teach-in-an-international-classroom/

https://www.utwente.nl/nl/ctd/medewerkers/onderwijs/interculturele-communicatie/

https://www.internationalstudy.nl/

https://www.utwente.nl/en/education/about-our-education/refugees/

Universiteit Wageningen (general website: www.wur.nl)

https://www.wur.nl/upload_mm/1/a/7/60d669b6-f604-4e84-98d0-7cfbe29643eb_WU%20Vision%20for%20Education%202017.pdf

https://www.wur.nl/upload_mm/f/2/7/2d69fbf6-f8bc-4eed-9256-1a204e2361ce_8412101823_CC_strategisch%20plan_NL_LR.pdf

Universiteit van Amsterdam (general website: www.uva.nl)

http://www.uva.nl/over-de-uva/uva-profiel/beleidsstukken/strategisch-kader-internationalisering/strategisch-kader-internationalisering.html

https://student.uva.nl/en/content/news/2017/08/uva-international-policy-updated.html

Universiteit Maastricht (general website: www.maastrichtuniversity.nl)

https://www.maastrichtuniversity.nl/internationalisation/international-classroom

https://www.maastrichtuniversity.nl/about-um/other-offices/knowledge-centre-international-staff

https://edlab.nl/innovation-2/theme-iii-international-classroom/

Rijksuniversiteit Groningen (general website: www.rug.nl)

https://www.rug.nl/about-us/internationalization/internationalization-at-home

https://www.rug.nl/about-us/where-do-we-stand/education-policy/international-classroom/

https://www.rug.nl/about-us/where-do-we-stand/education-policy/international-classroom/ic-concept-approach/wat-is-an-ic/

https://www.rug.nl/about-us/where-do-we-stand/education-policy/international-classroom/ic-concept-approach/icconceptual-framework.pdf

https://www.rug.nl/about-us/where-do-we-stand/education-policy/international-classroom/ic-concept-approach/staffteachinglearningbooklet.pdf

https://www.rug.nl/about-us/where-do-we-stand/education-policy/international-classroom/ic-concept-approach/supportstaffbooklet.pdf

https://www.rug.nl/about-us/where-do-we-stand/education-policy/international-classroom/ic-concept-approach/wat-is-an-ic/studentsbooklet.pdf

https://www.rug.nl/about-us/where-do-we-stand/education-policy/international-classroom/resources/external-references

Technical University Munich (general website www.tum.de)

http://www.international.tum.de/en/about-the-international-center/

https://www.tum.de/en/about-tum/our-university/facts-and-figures/

https://www.tum.de/en/about-tum/our-university/mission-statement/

http://www.international.tum.de/en/international-profile/partnerships/

KTH Zweden (general website: www.kth.se)

https://www.kth.se/student/kurser/kurs/LH235V?l=en

Imperial College (general website: www.imperial.ac.uk)

https://www.imperial.ac.uk/study/international-students/

https://www.imperial.ac.uk/strategy/

https://www.heacademy.ac.uk/individuals/strategic-priorities/internationalising-higher-education

KULeuven (general website: www.kuleuven.be)

https://www.kuleuven.be/over-kuleuven/strategisch-plan/truly-international

RWTH Aachen University (general website: www.rwth-aachen.de)

https://www.rwth-aachen.de/go/id/cght?lidx=1#aaaaaaaaaaaaofcp

Nuffic (general website: www.nuffic.nl)

www.nuffic.nl/stayrates

https://www.nuffic.nl/onderwerpen/interculturele-competenties-voor-iedere-student/

https://www.internationalisering.nl/modules/lesgeven-in-een-international-classroom/

Brainport

http://www.brainport.nl/lp-visie-internationalisering-onderwijs

Literature

Carroll, J. (2014). *Tools for teaching in an educationally mobile world*. London: Routledge.

Leask, B. (2015). *Internationalizing the curriculum*. London: Routledge.

Green, W., & Whitsed, C. (Eds.). (2015). *Critical perspectives on internationalising the curriculum in disciplines: Reflective narrative accounts from business, education and health* (Vol. 28). Springer.

Jones, E. (Ed.). (2009). *Internationalisation and the student voice: Higher education perspectives*. Routledge.

Dahlerup, D. (1988) *From a Small to a Large Minority: Women in Scandinavian Politics*, Scandinavian Political Studies, vol. 11 – n0. 4, pp. 275 – 298.

Kanter, R.M. (1977) *Men and Women of the Corporation*, New York: Basic Books

Dasgupta, N, M.McManus Scircle and M. Hunsinger (2015): *Female peers in small work groups enhance women's motivation, verbal participation, and career aspirations in engineering* in: Proceedings of the National Academy of Sciences of the United States of America, Vol. 112, No. 16, pp. 4988-4993

Centola, D, J.Becker, D. Brackbill, A. Baronchelli (2018) *Experimental evidence for tipping points in social convention* in: Science 360, pp. 1116–1119 (2018)

External reports

Internationalisering in evenwicht, OCW, 2018

Internationaliseringsagenda Hoger Onderwijs, VSNU en VH, 2018

Beoordelingskader Accreditatiestelsel Hoger Onderwijs Nederland, NVAO, 2018

Wet op het hoger onderwijs en wetenschappelijk onderzoek, artikel 7.2 Taal

External conferences

FME Miniconference: *Kiezen, leren en werken in de techniek* (March 2019), *L. Borghans and A. de Grip*

Internal reports and websites

TU/e annual report 2017, 2018

Integral Language policy at TU/e, 2017

One page strategy Community, 2018

TU/e Strategy 2030, 2018

Weiland, S. *Systems and Control Integration Project 5SC26*, Department of Electrical Engineering, Control Systems Group (under construction)

https://www.tue.nl/en/our-university/community/diversity-and-inclusion/

Working Group International Classroom

Paul Koenraad, Dean Graduate School (chair, core team)

Lisette Appelo, DAZ, Senior Policy Advisor International affairs (secretary, core team)

Marleen van Heusden, ESA, Policy Advisor International Affairs (core team)

Kathinka Rijk, DAZ, Policy Advisor Education (core team)

Camilo Rindt, Associate professor, ESA ME, Education Director

Ruurd Taconis, ESoE, Associate professor

Ad Kleingeld, Assistant Professor IE&IS Human Performance Management

Eva Demerouti, Professor Organizational Behavior & Human Decision Processes, Diversity Officer

Daisy van der Schaft, ESA BME, chain manager international admission

Carry van Weert, HR, professional development

Karin van Dorst, Communication Officer BE and CEC. (Inter)national recruitment, communication and study information

Sammy Oor, student

Rick Arts, student

Raoul Hendrix, student

Tamara Busscher, support