

EVERY CONNECTION HAS A STORY

SHAPING2030 ON THE MOVE: A STATE OF AFFAIRS



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TOWARDS 2030

Just over three years ago, we made a start with Shaping2030, the new strategy of the University of Twente. The plan is certainly not an entirely new direction, but builds on the foundations of sixty years of higher education, research and valorisation in Twente. We are still as entrepreneurial as ever and continue to focus on linking technical and social sciences. But how we put this to the service of society continues to develop and move along with its whims.

We have noticed, in particular with Shaping2030, that the values from which we work have become increasingly central. We ask ourselves why we do the things we do and whether the way we do them is in line with what we stand for. In the choices we make, no matter how big or small, we are even more guided by what we find important. A commendable development, but one that is not always easy.

Step by step, we are moving towards the university we want to see ourselves in. In this special issue, you will find great examples of the actions we have taken toward a university that makes an optimal contribution to a fair, sustainable and digital society. A university that not only has that entrepreneurial character, but is also open and inclusive.

This further development is not a matter of sprinting, but one of patience and endurance. Some changes are complex and demand a lot from us as well as from our environment. The examples here show that the way to our goal is not a straight line, but a path with many surprises and challenges along the way. We are incredibly proud to see the energy and dedication with which our staff and students are working together towards 2030. We would like to thank everyone for their contributions to the creation and implementation of Shaping2030.

Vinod Subramaniam, Tom Veldkamp and Machteld Roos,
Executive Board of the University of Twente



COLOPHON

This special issue about Shaping2030 is a publication of the Shaping coordination team and was coordinated by U-today, the independent journalistic medium at the University of Twente.

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PRINTED BY

SMG-Groep, www.smg-groep.nl

AMOUNT OF COPIES:

700



**THE WORLD IS
CHANGING ALL THE
TIME, SO IS UT**

Shaping2030 is the mission and vision of the University of Twente to help UT remain an entrepreneurial university, now and in the years to come. A university that is in tune with new developments in society, that seeks partnerships and is quick to act. “That is urgently needed, because society is changing at a furious pace. It’s about seeing opportunities and seizing them”, says **Leontien Kalverda**, who became Shaping2030 programme manager.

The technical developments in our society and the resulting innovations are picking up speed. “Things are moving fast. At the University of Twente, we are training students for professions that don’t even exist yet”, says Kalverda. “The world is changing all the time and so is UT.” Shaping2030 helps give us direction for the new roads we need to take. The world demands it. What that demands of us is being entrepreneurial, have a clear vision and make smart choices.”

Shaping2030 is definitely not a magic bullet, she emphasises, but a mindset and a way of thinking.

“We are faced with the question: how do we become and remain the university we want to be? We at UT will find the answer to that question by striking out in new directions, seeking constructive partnerships, talking to each other a lot and above all by acting quickly.”

Pandemic

The realisation of Shaping2030 in early 2020 coincided with the outbreak of the pandemic. It was an exceptional period, says Kalverda. “We were in survival mode, but we decided to go for it anyway. Looking back it transpires that in this difficult period, UT was able to effectively define the vision of Shaping2030. To take just one example, many educational innovations were fast-tracked during the period of the pandemic. UT locked its doors and all education was delivered digitally. The fact that by working together we succeeded in that is a massive achievement.”

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I have one big goal: to make Shaping2030 tangible and concrete in the workplaces

Miss Shaping

Leontien Kalverda is sometimes referred to on campus as ‘Miss Shaping’. She’s fine with that. “As long as I am visible and people know me and call me. Because I have one big goal: to make Shaping2030 tangible and concrete in the workplaces.” Kalverda studied Communication Sciences at UT and has been working here for ten years in various roles, including at Marketing Communication (MC), and Strategic Business Development (SBD). Back in 2021 she was on holiday at a campsite in Drenthe when she was invited to interview for the role of programme manager for Shaping2030. She didn’t hesitate for a moment – from her folding chair, she applied for her dream job. Since then, she’s been working on UT’s vision and mission daily. “Colleagues congratulated me and then immediately afterwards asked me the question: but... How exactly are you going to do that?”

Substantial impulse

Even though not everyone is aware of what she does, she is firm in her convictions. Her job is useful and far from boring. “I am the awkward one, without being a pain. Every day I function as UT’s conscience and ask critical questions about everything we do on campus. “Why are we doing this actually? Who for? Will students and employees be better off as a result? Will society? Will it contribute to the university we want to become? What is the urgency? Why are we doing things in this order? How can we continue to grow? And who can we collaborate with?”

Kalverda says it is very important to ask all these questions. “I think the best outcome of Shaping2030 is that it has made UT a lot stronger as a learning organisation. We were already moving in that direction, but Shaping2030 has provided a substantial impulse. Let’s continue along this path.” According to Kalverda: “We at UT do sometimes pull the plug on projects that aren’t going well. But people often still find that step difficult. There’s no need for that. We really are making better and smarter choices if we dare to say: this project isn’t working, let’s call time on it.”

»



Mindset

UT is busy responding to new developments. The Shaping2030 mindset is already taking hold in many areas within UT, although not always consciously", says Kalverda. "There's already a lot going on! The themes for the short and medium term have already been set out. These are the defined priorities. We are holding pilot projects and the Shaping Expert Groups (SEGs) have identified what we already have in-house in terms of digitisation, sustainability and inclusion and how we can continue to grow. The long-term goals for 2030 have been set. The organisation is in robust shape. Goals have been defined which we are monitoring closely. Which goals have we achieved? What do we still want to achieve? My job is to stimulate and encourage, but ultimately the organisation needs to embody this itself."

Partnerships

An important goal within Shaping2030 is to connect with society and take steps towards the future together. "A good example of that is the partnership with VU Amsterdam. UT now also has Shaping connections with Apeldoorn and the Zwolle region. At these so-called satellite locations, students can now also follow UT education. For example, the Creative Technology joint bachelor course, which students will in future be able to take in Enschede and also in Amsterdam. Or the partnerships with the police academy, the tax department and municipalities with regard to Lifelong Learning. I am quite sure that the entire Eastern Netherlands region will benefit from the results of those partnerships.



At UT, we want to look for solutions to society's challenges together

Confidence

"In the short term, the challenge for UT is to respond even more to developments in society and to implement them even more quickly. Not in the sense of being at anyone's back and call, but solving today's problems together with society. "That calls for trust", says Kalverda, "because it's a rather complex game. At UT, we want to look for solutions to society's challenges together. To be the people first university, where people come first! Where diversity and inclusiveness are key values and talent is able to fully develop.

On paper, we are in pretty good shape in that regard, but in practice there is definitely still room for improvement. The Shaping Expert Groups (SEGs) have taken the first steps towards becoming an effective, future-oriented and efficient university. You can read about the many great initiatives that have already been taken in the stories in this special."

SHAPING EXPERT GROUPS

To execute the Shaping2030 vision, a more bottom up approach was developed by forming six Shaping Expert Groups on the following themes: Innovation of Education, Citizen Science, Individuals and Teams, Digitalisation, Inclusion and Sustainability.

Themes that we see as the fundamentals to realise our Shaping2030 vision. The aim of the SEGs was to find out to what extent these themes were already operationalised and, where necessary, make substantive proposals for improvements. The advice of every SEG also includes how these themes can be incorporated into the existing organisation. By the end of the summer all the advices will be ready, after which their task as a SEG-team is completed.

For this special we interviewed all the SEG-leads to give you an insight in what has been done so far.

THIS IS OUR STORY; THE POWER OF SHARING #1

In recent months, we shared a story every week on our UT homepage, the employee portal and LinkedIn. Scientists, support staff, researchers, students and alumni told their story. They interviewed each other about work, private life, passions and everything in between. They told about what inspires them to do their daily work. It resulted in a rich palette of stories, which in its own turn can be a source of motivation for others to move forward and increase our social impact. In this special issue, we revisit some of these stories and highlight a few quotes. Simply because they are so striking and inspiring, and because we believe in the power of sharing.

#048



"Everything revolves around people, not around technology. Everything is human work. Make sure you understand each other well and that you can always get along"

Bé Meerman - Project Manager and Coordinator of the Technology Enhanced Learning and Teaching (TELT) team

#66

"In our research, we should also involve the people who are most difficult to reach. That's what I make of inclusion and diversity."

Funda Atun - Assistant professor at the ITC Faculty of UT



#064

"Good ideas always come up when you bring people from different backgrounds together"

Alain le Loux - Alumnus Computer Science and Industrial Engineering & Management, now start-up investor

#019



"What I do might be small, but it can add value to everybody around me"

Rita Kizito - Programme Director of ATLAS, University College of Twente

#010

"To make a strong connection, you need to be very good in your own discipline. Which also means: we need nerds"

René Torenvlied - Professor in the field of Public Management at the Faculty of Behavioural, Management and Social Sciences (BMS)

THE STORY OF EDUARDO'S CALIMERO UNIVERSITY IS A STORY OF MARIJKE'S INCLUSIVE INTERNATIONALISATION



As the first in his family to obtain a university degree, education advisor **Eduardo Hermesen** knows from personal experience that higher education is not accessible to everyone. That is what interests him in the work of **Marijke Stehouwer**. As International Affairs coordinator and member of the Shaping Expert Group Inclusion, she helps make UT more inclusive - and that goes beyond just recruiting international students.

Eduardo: "You have a long teaching career, which started at high school level..."

Marijke: "I think teenagers are fantastic. But teaching teenagers... did not turn out to be my thing. I started as an English teacher in secondary school. Keeping track of whether everyone turned in their book reports or took their tests, oh man. So I switched to teaching college. University students are more responsible, which makes a big difference. In addition to teaching,

I was also a career counselor there. I loved talking to young people about their future and career plans! I wanted to do more of that – which is how I ended up here. First as a study advisor and now as International Affairs coordinator focusing on education."

Eduardo: "I am very interested as to what I can learn from your expertise. Starting with internationalisation – UT has really focused on that. All teaching is in English now, and we attract many international students. In practice I have noticed that internationalisation and diversity do not always come easy. I narrowly passed the English language test for teachers myself!"

Marijke: "It certainly won't happen on its own, you're right about that. And language is only the first step towards international education. If you attract international students, you have diversity, but how do you ensure inclusion? How do you get students to really mingle and learn from each other? Many courses are now ready for that next step."

Eduardo: "What is your role in this, as International Affairs coordinator?"

Marijke: "I think along with the programs and the Faculty Board about what they can do to take those

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If you attract international students, you might have diversity, but how do you ensure inclusion

Marijke Stehouwer

next steps. That usually starts with the question: what are your ambitions? This often has not been established yet. Each program has its own ideas, but everyone agrees that learning to work together in a group with different cultural backgrounds is a valuable skill that you can use in many places."

Eduardo: "In order for that to succeed, I think teachers also play an important role."

Marijke: "Absolutely! The first step is for teachers to realise they can learn something. They often say: everyone is equal to me, so I treat everyone the same. But teaching an international group is about taking different backgrounds into account and adjusting your teaching methods accordingly."

Eduardo: "Some teachers have the feeling that English is somewhat forced on them. And when I see the numbers of international students joining us, it seems like there's a lot going on at the same time."

Marijke: "Well, we do not intend to force the issue, because that won't get people on board. We have to do this together. What does help, I think, is that we have an increasingly international staff. They know what it's like to get to know the Dutch education system, for example. In this way they can help build a bridge."

Eduardo: "Is there such a thing as too international?"

Marijke: "What do you think would be too international?"

Eduardo: "Suppose we no longer attract Dutch students at all, for example."

Marijke: "No, nobody wants that. We are a Dutch university and, as UT, we are also very much connected to the region. That's part of our character, and a very beautiful thing. You can have both a Twente and an international character. The small-scale, being able to just walk into your colleagues' offices and get to know them - that is really part of our identity. That also appeals to many people. Although there is also a flip side. Who you know is very important if you want to get things done. That is difficult if you are here temporarily, for example as an international student. We might have to work on that a bit."

Eduardo: "Yes, we should be able to ensure a good start, everyone should feel welcome. You also just said that diversity is more than internationalisation. What else is important – according to you?"

Marijke: "Be aware of differences in ethnicity, gender identity, physical limitations - you name it. And to me, what's very important, is that while we look for ways in which we can be more inclusive, we keep an eye on people's different starting points. We should not exclude people because we push inclusiveness too far."

Eduardo Hermesen (1971)

is an experienced educational teacher trainer and coach, with expertise in the field of education design. In the Technology Enhanced Learning and Teaching (TELT) team, he focuses on online education and Massive Open Online Courses (MOOCs). Eduardo has a background in mechanical engineering.

Marijke Stehouwer (1980)

studied in Groningen and Newcastle (United Kingdom) and started her career in education as an English teacher - first in secondary education, later in higher education. She has been working at UT since 2009. She started as a study advisor and bachelor coordinator at TNW and, after various positions, she has been the coordinator of International Affairs with a focus on education at the Engineering Technology faculty since September 2020.

Eduardo: "What would you suggest I do, in order for me to have a better eye for diversity?"

Marijke: "Good question... I would ask: what is your goal? In case you mean: know more about the subject..."

Eduardo: "Awareness is a good start, and what will be your ambition for the coming years?"

Marijke: "I still have a lot to learn about inclusion. And it would be great if international education was so ingrained that my position would become obsolete. That is a long-term process. You can redesign modules under external pressure but that will engender unhappy teachers - and probably won't improve the quality of education. I started this position in September last year, so for now I'm really in the right place."

RECAP

"Being interviewed in the context of the story series 'This is our story' was an interesting experience; talking about what I do with a UT-colleague I hadn't met before provided a fresh perspective and an opportunity to reflect. Seeing the 1-hour conversation we had reduced to an article of one thousand words, that still reflected the spirit of our meeting, demonstrates the quality of the editors involved. The photo session (just me and an egg in a completely white studio) was almost surrealistic but a lot of fun."

Marijke

SHAPING EXPERT GROUP INCLUSION

"INCLUSION IS ALL-EMBRACING"

If there is one thing Laura Vargas is proud of, it's the fact that over the past two years, UT people have found their way to the SEG Inclusion. They are now spontaneously taking their questions and problems there. The response of SEG leader Vargas is simple and to the point: "How can we help you?"

The SEG Inclusion's most important goal recently has been to create more awareness about inclusion. The topic has received greater attention in recent years, she says. "Not everyone knows exactly what we're talking about. You hear things like: so... that has something to do with women, right? Or: oh yes, that is about the international students! But inclusion is much bigger than that. It's all-embracing. It means that we want everyone at UT to have equal opportunities to develop to their full potential."

The dialogue on the theme has been actively and eagerly sought in the past period. Roundtables, presentations, interviews, anything that increased awareness about the subject and facilitated the dialogue was embraced. That involved talking to students and employees from all courses, faculties and support departments throughout the organisation. Vargas: "We initiated a broad discussion about inclusion, both in the workplace and at higher management level. We asked: "What are the obstacles you encounter when developing to your full potential in your study? Or in your work as a lecturer? What do you need to belong at UT? A huge amount of work has been done. We held 'round tables' and individual interviews involving more than 100 participants. We have held numerous presentations for groups and individuals. In addition, a method for the round tables has been developed and students and staff have been trained as moderators to seek the dialogue and to facilitate the round table discussions."

The legacy of the SEG Inclusion is impressive. "We have managed to reach a large number of people, more than 400, who have an intrinsic interest in



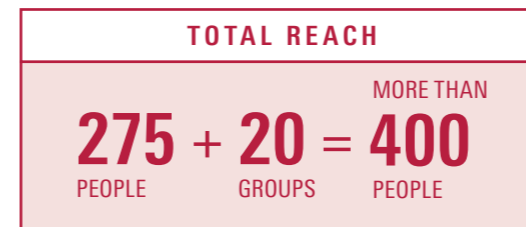
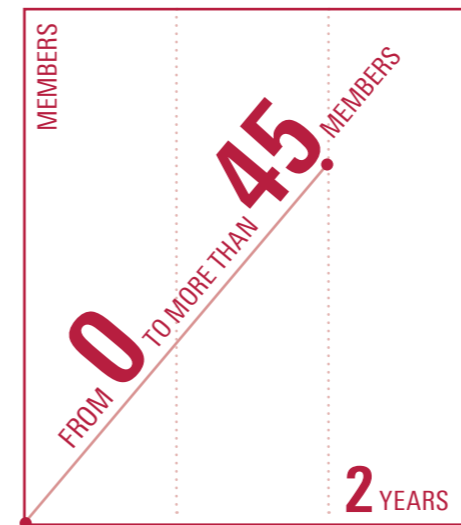
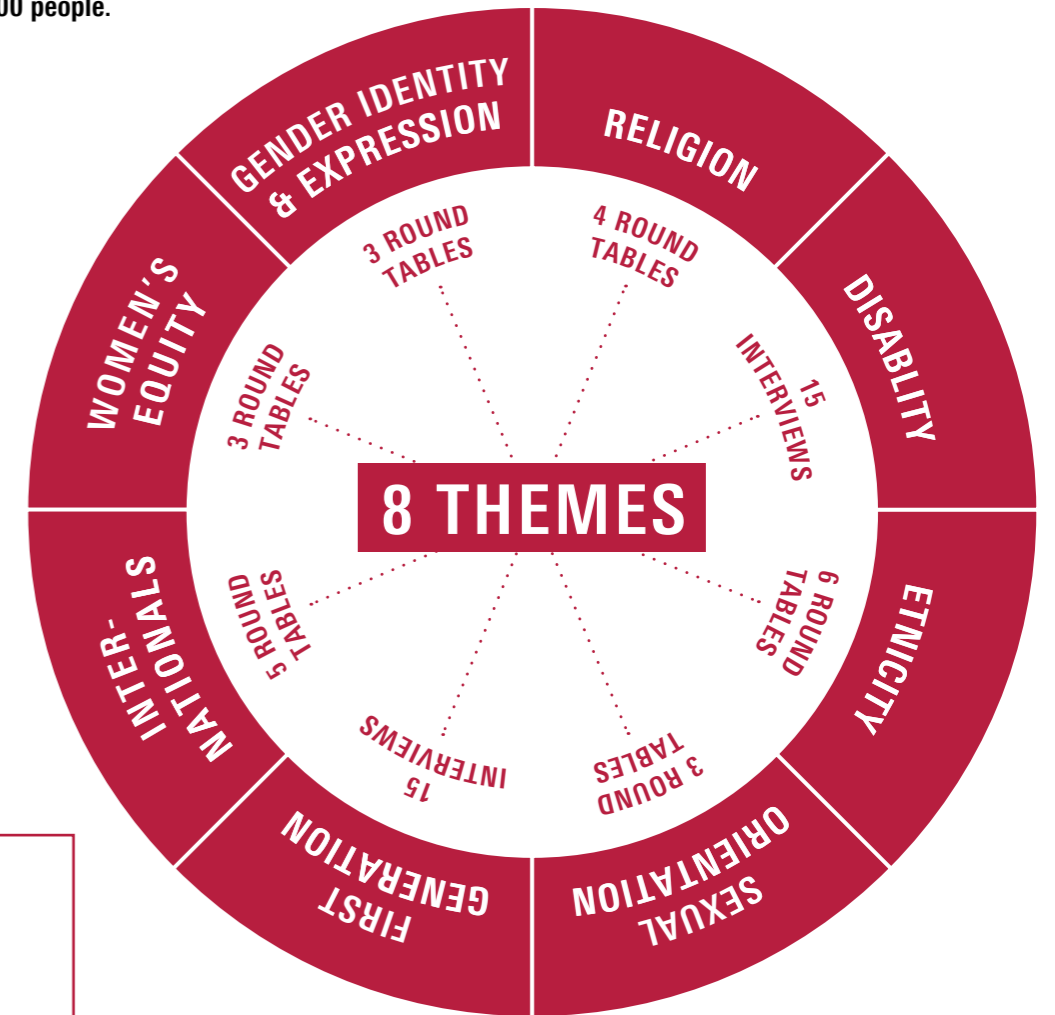
the issue of inclusion. I am very proud of the team. We have achieved so much! But... there's still work to be done. We have started a major movement, now we must also take full responsibility for the theme. We are definitely not done yet. In fact, the dialogue about inclusion has only just begun."

What else does UT need to do to make the theme of inclusion a success?

To become an inclusive organisation we need to establish an integral overarching long-term vision on inclusion, aiming for a cultural change; inclusion should be firmly embedded in all the layers of the University of Twente. There are several units and great initiatives working towards inclusion, but in the past two years we have found that there is still a lot to be done. We sincerely hope that UT will free up sufficient capacity to achieve our goals for 2030.

FACTS & FIGURES SEG INCLUSION

In order to gather input from the organisation, SEG Inclusion organised various meetings, such as round tables and interviews with stakeholders. In total, they reached more than 400 people.



For more information about the SEG and all the members, check:

utwente.nl/seg-inclusion



THE STORY OF IVAN'S OPEN MIND IS A STORY OF MAYA'S DIALOGUE WITH SOCIETY

Sharing knowledge is very important to e-learning specialist **Ivan Oliveira**. Together with his UT colleagues, he's started a YouTube channel to explain what research they are doing. In a way, DesignLab project manager **Maya van den Berg** has a similar mission: she wants to build bridges between academia and society. What has Maya learned so far? "When scientists are asked to become part of the public debate, there's a risk they're forced to choose a side."

Ivan: "I haven't spoken to you in a long time; what are you doing these days?"

Maya: "I've been a project manager at UT since 2014. I now work at DesignLab, where I'm trying to build bridges between academia and society. We focus on citizen science: how can we engage non-scientists in science?"

Ivan: "So you're helping us to reach out more to society. Do you think we do enough already? Or can we do more?"

Maya: "I think we can do more. We want to include more people from outside academia in the scientific process. We want to collaborate with non-scientists. But how do you actually do that? How do you motivate people, and make them feel welcome? I mean, among scientists, we're talking English all the time. But as soon as you leave campus, people speak Dutch – or German, if you travel a few more miles east. My neighbour is not going to study at UT if all courses are in English. Just by using this language, we're excluding many people from around us. But it's not easy to find a solution."

”

One of our biggest assets is the fact that academics are neutral

Maya van den Berg

We are part of an international community, with colleagues from Brazil like you working with us!"

Ivan: "True, maybe by speaking English we're getting disconnected from Dutch society. Then again: on my faculty The Netherlands is not the main focus area. To reach a worldwide audience, it is necessary to communicate in an international language."

Maya: "Exactly. And this is not the only dilemma. There's an open science movement coming up: we want to open up science, we want to share our knowledge and skills with other organisations who could join us to work on societal challenges."

IVAN OLIVEIRA BA (1979)

was born in Brazil. He obtained his bachelor's degree in film production at the Federal University of São Carlos and started his career producing TV commercials. Eager to explore the world, Ivan and his wife moved to the Netherlands in 2009. Here, Ivan became a freelance filmmaker. Having a passion for programming and all things technical, Ivan also started his own e-Learning company. He eventually became part of UT as e-Learning Specialist. Ivan participates in multiple international projects and creates for GeoHero, the YouTube channel for the ITC Faculty of UT.

The Dutch Research Agenda even wants scientists to acquire research questions from the public: "What would you like to hear from us?" That's a complete reversal of the current situation. It brings in many challenges. How do we, for example, make sure that we stay away from political matters?

One of our biggest assets is the fact that we are neutral. That's sort of a seal of approval: when you've got your research done by academics, it's fully reliable and in line with ethical standards. When scientists are asked to become part of the public debate, there's a risk they're forced to choose a side."

”

Here at UT, behind every door there's an interesting story

Maya van den Berg

Ivan: "Do you think society is ready to embrace science?"

Maya: "Not at all. But that's exactly the reason why we should show ourselves more, why we should start a dialogue with society. It's important we show people how science works and – if possible – have them stepping into science. In that way, we can change the way people look at us. That has become more challenging in a world full of fake news, but it's also more urgent than ever before."

Ivan: "Earlier, you mentioned you're trying to build bridges. How do you do that?"

Maya: "A vast majority of my work consists of reaching out: to municipalities and regional authorities, to research funding agencies, to European networks. I am also always curious to meet scientists like you, to get a closer understanding of their needs and how they feel they can contribute to society. I feel we need places like DesignLab, where we support researchers to 'translate' their scientific knowledge to society. I think you should not put that responsibility entirely to researchers, as science communication requires a whole different set of skills."

Ivan: "You're right. I'm not going to print my articles for my neighbour to read. But he is certainly curious about what I'm doing."

»

DR. MAYA VAN DEN BERG (1981)

is a project manager at UT's DesignLab. She studied contemporary history at the Rijksuniversiteit Groningen and did a PhD at the UT, where she examined how local governments are preparing climate change adaptation. Working in civil service for some years, she became a research coordinator at the IGS research institute and then moved to DesignLab where she currently is a program manager.

Therefore, at ITC, we started the GeoHero YouTube channel to communicate about what we do. I'm interviewing staff members about their research, and we're trying to explain concepts in a way anyone can understand them."

Maya: "That's a good idea. It's like you say, it all starts with curiosity. You want people to become curious, so they are actually going to watch those videos. Here at UT, behind every door there's an interesting story. We have thousands of stories to tell and some of them can lead to dialogues with society. We need to tackle this task as a university as a whole. Shaping2030 is giving us a lot of directions there. At DesignLab, I am very happy to be preparing the Citizen Science Hub – that should allow us to build new bridges."

RECAP

"It has been a rewarding journey to participate in the chain of Shaping2030. I loved getting to know both Dipti and Ivan who have very different backgrounds, yet both are passionate about their research and how they can empower others by sharing their knowledge. Looking back at the interviews, I realise how much effort we are putting in to make our work meaningful. I am proud to be part of this community!"

Maya

SHAPING EXPERT GROUP CITIZEN SCIENCE

"EVERYONE IS A SCIENTIST, NOT JUST THE RESEARCHER"

Over the past two years, they have complemented each other perfectly and each taken on their own role as SEG lead Citizen Science. In the first year, Renske van Wijk shouldered the biggest share of the burden as project lead. "I like being there at the start of things, when everything is still open", she says. Last year, Bridgette Connell stepped in as SEG lead to push forward the processes already set in motion and consolidate the work of the SEG.

The University of Twente wants to have an impact on society and engage in issues that matter. "As an enterprising university, this institution has already been quite successful in terms of commercial activity and partnership with business. Now it is time to strengthen our connection with society and residents. One of UT's missions is to become a 'People First University'. More and more partnerships are being established with citizens, citizens' initiatives and civil society organisations, enabling us to understand the issues within society better and more quickly", says Van Wijk. "Philosopher of technology Peter Paul Verbeek has stated that Citizen Science can be significant for the democratisation of science. And that's true!"

Van Wijk works at the TechMed Centre as project lead of the TOPFIT Citizenlab. Her field is health & technology, in which there are numerous scientific challenges, and Twente residents get plenty of opportunity to contribute ideas and get involved in those challenges. "There is so much knowledge among citizens – about how they feel about their health and where the opportunities and obstacles to feeling happier and healthier lie. So we conduct research with them, from defining the question for the research to data research and publishing the results. "Everyone is a scientist, not just the researcher."

There is already a lot going on at UT in terms of Citizen Science. For example, an app that warns you about tick bites, based on data collected by volunteers combined with weather data (KNMI), satellite images (NASA) and land use data. Or leading a European project in which participants in four countries are learning from and testing the regional organisation of citizen science (INCENTIVE project). Nevertheless, Bridgette Connell believes there is still a gulf to be bridged between scientists and citizens. "It is important that we continue to understand one another. Society is moving faster than we are.



As a university, it is our task to involve citizens in the problems of contemporary society, such as the coronavirus or climate change, and provide them with reliable information. In a way that fits with how they see the world." The legacy of the SEG Citizen Science is a strategy document for the executive board. Its most important recommendation is to create and facilitate an environment for Citizen Science on the UT campus. "A (virtual) environment bringing together all the Citizen Science projects which have been set up at UT under one roof so that they can learn from one another. Where we can support Citizen Science research and build sustainable relationships with society. But definitely also a place where the UT welcomes citizens, makes science actively visible and reduces its distance from the outside world. Van Wijk and Connell: "We have managed to bring the two worlds closer and closer together, we now want to build on that."

What else does UT need to do in order to make the theme of Citizen Science a success?

"Move from fragmentation to coordination. Support this working method across UT and continue to develop it. In this way, we can become THE place where citizens and scientists share ideas about technological solutions to society's problems."

FACTS & FIGURES SEG CITIZEN SCIENCE

Among other things, the SEG Citizen Science gathered knowledge and expertise about its topic within the organisation and identified what is already happening in this field. The infographic below shows the initiatives that the SEG Citizen Science undertook to collect the information.

13 IN-DEPTH INTERVIEWS WITH ACADEMICS INVOLVED IN CITIZEN SCIENCE

2 CITIZEN SCIENCE CONFERENCES HELD

240 PARTICIPANTS IN TOTAL AT THE CONFERENCES

OVER **25** CITIZEN SCIENCE PROJECTS IDENTIFIED

For more information about the SEG and all the members, check:

utwente.nl/seg-citizenscience

BEHIND THE SCENCES #1

Our story series is characterised by its distinctive photography. For the realisation of this series, the UT cooperates with communication and marketing agency More. In each interview, one item, in the form of a tangible object, is sought. This object, or prop, symbolises the 'bridge' between the two people.

This object literally returns in the photography concept; the declarant holds it and 'reaches out' towards the main character. The photo sessions for this take place in the studio of More. In addition to the photographer, a creative director is always present to put the interviewees in the right place and in the desired position. After all images have been shot, the employees of More cut and photoshop the photos into one image. See below how such a creative photo is created.



The items in Ivan's mind represent different subjects which are important to Ivan and he knows a lot about

Rotated the top of Ivan's head so it looks like his mind is open.

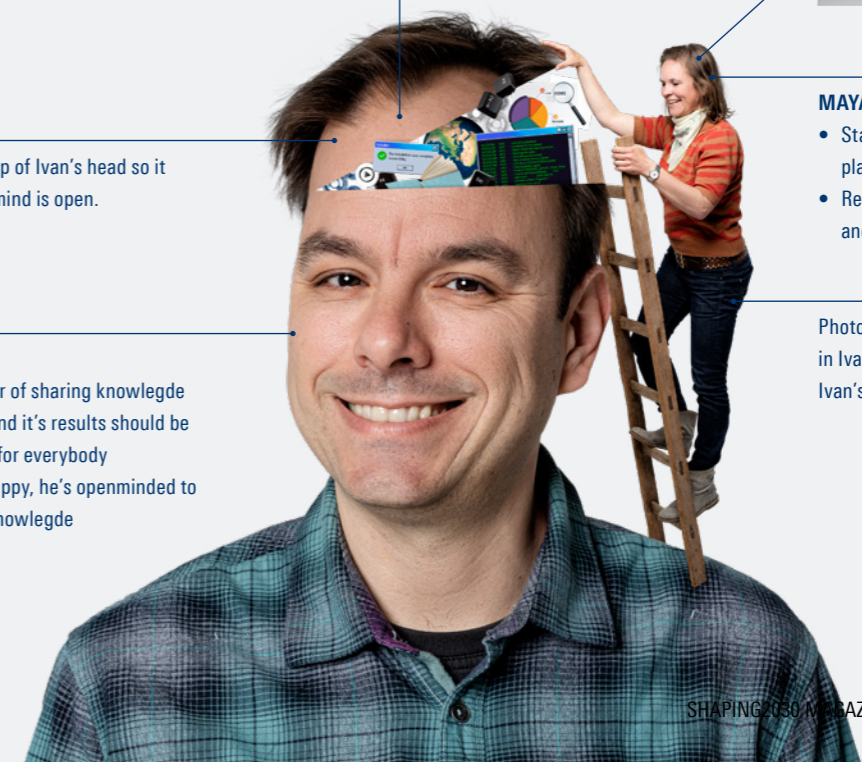
IVAN

- He's is favor of sharing knowlegde
- Research and it's results should be accessible for everybody
- He looks happy, he's openminded to share his knowlegde

MAYA

- Stands on a ladder that will be placed on the shoulder of Ivan
- Reaches out to 'open' Ivan's head and takes a peak inside

Photoshopped Maya so she stands in Ivan's shoulder and leans against Ivan's head





THE STORY OF KATHI'S EUROPEAN DREAM IS A STORY OF MASSIMO'S MULTIPLE ACADEMIC PATHWAYS

If you want people to work together, policy advisor

Kathi Lemmens-Krug knows, it's crucial that they

treat each other as equals. Her family roots in Eastern

Germany and her studies in European Governance have

taught her that. Today, Kathi asks Associate Professor

Massimo Sartori about hierarchy in academia. How

does he – as an award-winning scientist – look at the

way we build our academic careers? "Nowadays, one

person is required to have too many skills."

Kathi: "I understand you're working on wearable robotics. How did you become interested in this research topic?"

Massimo: "A friend of mine had an accident and lost his ability to walk. Around that time, I was looking for a subject for my master's thesis. I was intrigued by a thesis in robotics about exoskeletons for people who've had a spinal cord injury. Later, the 'human' aspect – the biomechanics of movement – fascinated me more and more as well. You need a lot of knowledge about the human body to make this kind of technology work. In 2017, I came to UT, because the department of Biomechanical Engineering is one of the best in Europe in the field of wearable robotics."

Kathi: "Do you get to see the practical results of your work enough?"

Massimo: "Well, during my PhD and most of my postdoc I didn't reach the patient's level. First, I had to learn and understand a lot. Towards the end of my postdoc, I could start applying my work on robotics to patients. For example, I saw people who could extend their knee again for the first time using the robotic systems my team and I developed. That was really cool to see."

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You can publish as much as you want; if you don't get grants, it's over

Massimo Sartori

Kathi: "From my own experience, I can say research becomes much more valuable once you get a personal connection to it. Speaking about value: have you heard that they're working on a more comprehensive way of rewarding and recognising people in academia? In Dutch, it's called 'erkennen en waarderen'. Your work is less about fundamental science. Do you feel it's recognised enough?"

Massimo: "I notice that priorities are changing in the right direction. With the TechMed Centre, UT is trying to focus more on healthcare technologies. So yes, I do feel that my contributions are being recognised within Biorobotics, which is one of the TechMed Center's key pillars. But perhaps your question is somewhat broader. In academia, we reward people primarily on the amount of research money they bring in. The amount of grants you obtain, is key."

Kathi: "That, and the number of papers you publish."

Massimo: "Partly, yes, but you can publish as much as you want – if you don't get grants, it's over. Then again, in order to get a grant, you need publications. I think this 'publish or perish'-paradigm is a problem. We try to apply the same paradigm to everyone, but it doesn't work."

Kathi: "I totally agree! In fact, there's kind of a 'class system' in academia. There's the upper class – who's getting all the prestigious grants. And then there are people who publish a lot, they're also upper class. But next to that, there are people teaching first-year bachelor courses with five hundred students, year after year. Their work isn't as much valued."

Massimo: "True. Every academic has their own qualities – but nowadays, one single person is required to have too many skills. When I got my fixed-term contract as an assistant professor, the contract contained a table. It stated exactly how many papers I had to publish, how much grant-money I had to bring in, and that I had to supervise a certain number of successful PhD candidates within a pre-defined time frame. I was like: what?! That's a lot to ask. Some people prefer to do research, while others like teaching better. I understand it's cheaper to hire one person and let them do everything, but if we want good quality in academia, we'll have to do it differently. I think personalising professional pathways to each

individual is key in the "academia of the future". That starts by acknowledging there's a spectrum of paths you can take in your career."

Kathi: "Looking at your profile; you seem to be someone who is winning awards and grants. I would like to learn more about the process. Do you think it's an individual performance, or is it actually a group effort to allow one person to obtain a grant?"

Massimo: "That's a good question. Just now, I realise I've never thought about this. In my own team, writing grants has been mostly my task – because my team members are still quite early-career. But from what I've seen in the past, it's really a team effort. When I was a postdoc, writing grants for my superiors was a way to help the department. I knew my name wouldn't be on the proposal's PI list, but I guess that was ok for me, because it helped me understand how the granting system works. And I got to build my own collaborative network across Europe. Besides, I knew that if an application was successful, it would pay my salary for the next year."

You know, when you're a postdoc, you're in a kind of limbo. Most of the things you do, are driven by this uncertainty, the fear to be left out of academia, to lose your job... In the last part of my postdoc, I applied for a personal grant, because they're smaller and easier to write. I got all the way to the

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Personalising professional pathways to each individual is key in the academia of the future

Massimo Sartori

DR. MASSIMO SARTORI (1982)

is Associate Professor at the Department of Biomechanical Engineering in the faculty of Engineering Technology (ET) where he leads the Neuromechanical Modelling and Engineering Lab. His research focuses on interfacing robotic technologies with the neuromuscular system for enhancing human movement. Sartori was born and raised in Italy and worked in Germany, Australia and the US.

KATHI LEMMENS-KRUG MSC (1988)

is policy advisor for research. She focuses on scientific integrity. Kathi is also writing her thesis about policy in the field of the quality of education at European universities in the UT department CHEPS. After completing a Bachelor in European Studies at the UT and a Master in European Governance at the University of Bristol, she did an internship at the DG Education and Culture at the European Commission and worked for DAAD, the German institute for university exchange.

interview, and then I didn't get it. That was very painful – another thing I had to learn: academia is really about failing, failing, and failing again. Because that's the only way you can learn and improve."

Kathi: "You mean: it happens to everyone?"

Massimo: "Indeed! It's just the way it goes. You do experiments, you fail. You write a paper, you get rejected. But that doesn't mean your work is in vain. You might use the work later, for new projects. It's about getting rejected and building resilience. And only by building resilience, you will find your way."

RECAP

"I really enjoyed talking to Kathi. That interview gave the opportunity to talk about something that you normally would not talk about. We shared thoughts on career, work demands, ambitions. What I liked the most was the feeling that we both talked in an honest and transparent way about our ideas."

Massimo

SHAPING EXPERT GROUP INDIVIDUALS AND TEAMS

"WE NEED TO THINK OUTSIDE THE BOX MORE OFTEN"

Over the past two years, Jeroen Jansen, ITC Tenure Track coordinator and SEG lead Individuals & Teams, has been working with his group to get UT moving forwards in terms of talent development. He wants everyone to have a manager who is prepared to think creatively about his or her people's development needs.



In his office on the ground floor of the ITC, he talks about it in passionate terms. "A successful career naturally starts with your own ambitions, but in order to take a step forwards in your career, you are also dependent on your manager. Suppose you want to become the head of finance. You will probably need to take several interim steps in order to achieve that goal. It is important that you take responsibility for that yourself. And after that, your manager needs to facilitate you. But do you feel safe enough to express your future ambitions during your annual review? Even if those ambitions lie outside the 'usual pathways'?"

The 'parliamentary debate' which the SEG held in late May 2022 definitely was. Under the auspices of the Dutch Debating Institute, 90 participants discussed the theme 'Recognising and showing appreciation'.

As a manager, he tested it out in his own department, for example by asking colleagues about their ambitions and proactively enquiring which obstacles they are encountering in the further development of their career.

The SEG Individuals & Teams has now been in existence for two years. A cultural change has been set in train, says Jansen. "But that change mustn't end when Shaping2030 ends. The task is to embed our conclusions and embody them. Heads of departments, management teams, support departments and faculty management must now take them further.

The structure of the current annual review is outdated and obsolete, concludes Jansen. "That also emerged from the Round Table discussions held by our SEG. A different structure has now been devised. There is still room for improvement, but a start has been made. We want to move from control to trust. We still have room to grow at UT in that respect, but I am very pleased with the direction we have taken", says Jansen.

We are an enterprising university. That means we need to have courage. And that also applies to every individual's personal development. At UT, we like to bask in the successes of companies like Booking.com. But we can also take pride in individuals who have been able to develop personally and professionally right across UT, in whichever direction. We need to think outside the box more often and share the successful results of doing that with the world."

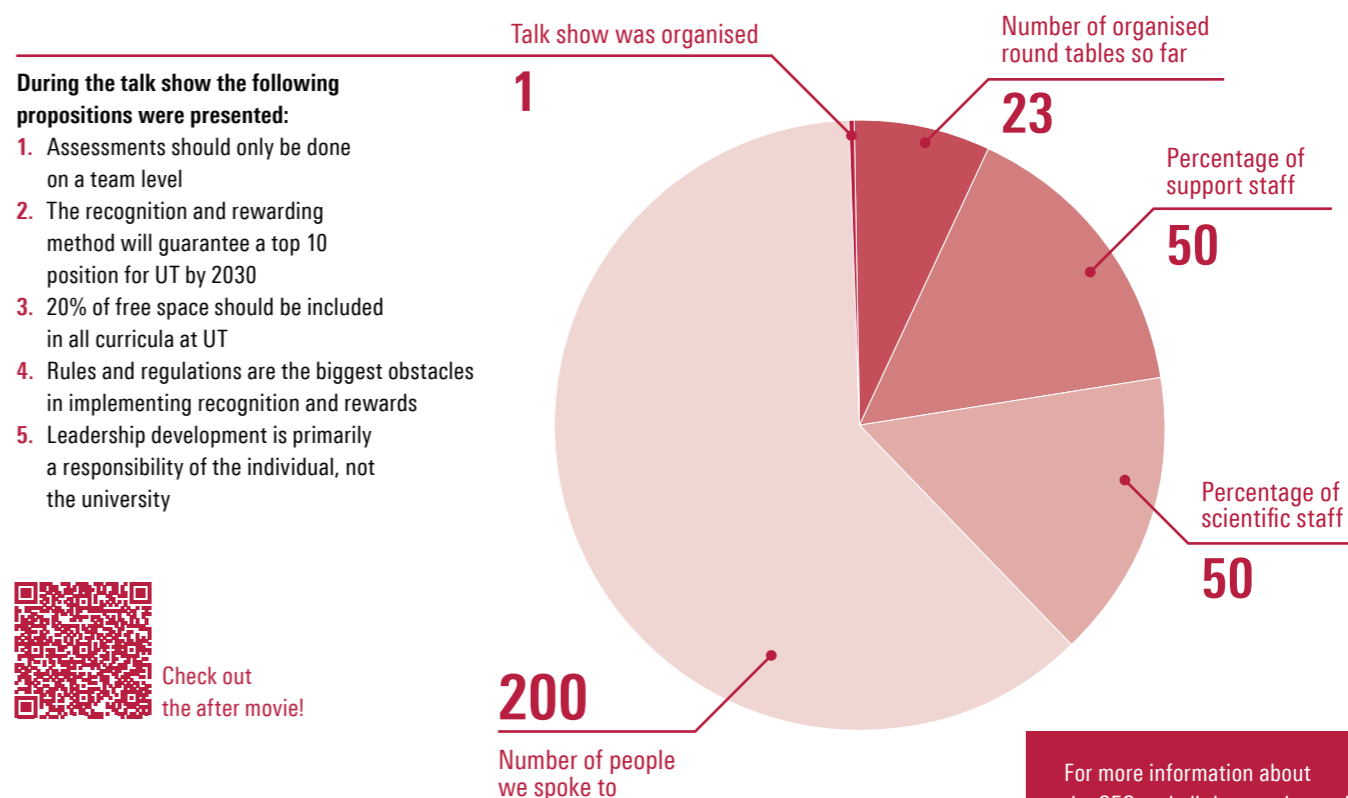
Together with Ratna Toering, head of communication, he has submitted a proposal to the UT Incentive Fund. "The proposal is called: Speak Up and provides tips on how you can tell your manager what is on your mind without them holding it against you. We hope and expect that it will prove a valuable contribution."

What else does UT need to do in order to make the theme of talent development a success?

We want to move from control to trust. We still have room to grow in that respect at UT.

FACTS & FIGURES SEG INDIVIDUALS AND TEAMS

Shaping individuals and teams is about the entire UT. Everyone is involved as employees, researchers, teachers, students, and as teams. That's why the SEG Individuals and Teams values having a dialogue with each other, inspiring each other, and sharing experiences and successes. Therefore, the SEG organised inspiration sessions, round tables and a talk show. The round tables were about recognition and rewards within UT to create awareness and align different related projects. The infographic below shows the state of affairs so far.



For more information about the SEG and all the members, check:

utwente.nl/seg-individualsandteams

TEN GUIDING PRINCIPLES FOR RECOGNITION & REWARDS:

1. Work and work management should be based upon the main principles of Shaping2030: Personalised talent development, inclusiveness & diversity, uniqueness, teamwork, integrity, stewardship leadership, continuous (sustainable) learning & development, and operational excellence.
2. Performance management, assessment, and evaluation should include reference to goals that individuals and teams have formulated for themselves in relation with the performance goals of their organizational units (service departments, faculties); individuals and teams should assess and be assessed in light of their own aims and quality goals and related to Shaping 2030
3. Work management should be future driven and oriented to improve the balance between individual, team, and UT goals.
4. Assessment and evaluation of individual and team performance as a part of work management, should take a qualitative interpretive evaluation into account; where quantitative metrics may play a supportive role.
5. Leadership and team effort should be distinctly echoed in assessment and evaluation.
6. Assessment and evaluation should be seen as a process where both sides assess their functioning in a dialogue between "to-assess" and "to be-assessed".
7. Reflection and self-evaluation in the totality of performance management process should be encouraged.
8. Cross-disciplinary and within-disciplinary differences in traditions in knowledge dissemination, service provision and research should be articulated in assessment and evaluation.
9. For research effort – assess contribution to Open Science.
10. Re-consider criteria regular.



THE STORY OF BRECHJE'S FERTILE SOIL IS A STORY OF ALBERT'S BOOMING NANOTECHNOLOGY

Brechje Maréchal likes to keep both feet on the ground. With that practical, down-to-earth attitude, the policy worker creates the fertile ground in the UT to improve the university's sustainability. **Albert van den Berg** is also a regular visitor to the countryside. He worries about the melting snow in his beloved Alps. But how does he translate that personal concern to his work as a professor? "As a university, we must lead the field."

Brechje: "How do you see your role at the UT in the sustainable movement up to 2030?"
Albert: "I want to motivate people and move them in the right direction. In Twente, our attitude tends to be: we are doing great things, but no one knows about them. Which gets us nowhere. I feel that we should do more things that generate publicity for us. Pack the roof with solar panels, or something. You then get told that this is not a business case."

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I do feel that a sustainability elective should be included in every bachelor and master cycle
Albert van den Berg

What do you mean? It's PRI! That has value: we get students involved, we raise our visibility nationwide. I recently heard that the UT is the most energy-efficient technological university in the Netherlands. If so, show it! Very few people know that the pond near the Horst is a cooling system. Or that we store more than a thousand cubic metres of rainwater under the campus. Put up signs, I say. Make it visible and tangible."

Brechje: "We obviously do a lot already, but you're right. We could be more visible. When it comes to green choices, do you support big changes or small daily changes?"

Albert: "To be honest, I'm not someone who always turns off the tap when brushing my teeth. I admit I could do better. However, I am building a sustainable house with a rainwater harvesting plant. In that sense, I choose steps which have a great impact on my life."

Brechje: "To implement big changes in organisations, you need support. You won't achieve change with technical solutions alone. Involvement and collaboration are equally important. Or do you see it differently?"

Albert: "No, I agree with you. You need to make the subject sexy. Then you'll get people on board. Take the Tesla. It's a lovely car and people want to have one. What's more, it's sustainable. A green home doesn't need to be boring. My new house has a moss roof, heat pump, water capture system and fifty-six solar panels. But above all, it's a house I want to live in."

Brechje: "Fifty-six solar panels, lol! Do you need that many?"

Albert: "Yes, I have an electric car, which takes quite a lot of energy... Incidentally, talking about small steps: last year, we had a car park scattered with greenSand, a mineral that absorbs CO². I talked about that in my department. A colleague then suggested replacing the water cooler in the kitchen by an installation that uses tap water. All that transport of water bottles was totally unrealistic... In that way, you inspire each other to come up with ideas."

Brechje: "Something like greenSand almost sounds like a magical intervention: scatter sand and solve the climate problem. Do you think that's the direction we need to go? Or do we need to change our behaviour too?"

Albert: "Yes, we certainly need to consume less. Although I'm also a gadget man..."

Brechje: "And I think that we can save a lot on mobility too. Do we really need to travel? For research, international meetings are really useful, so you shouldn't ban them. However, it is useful to ask the question: is this journey necessary?"

BRECHJE MARÉCHAL MSC (1975) is policy officer environment & sustainability. Before she came to the UT in 2018, she worked in Italy, in the Philippines and at Twente Milieu in Enschede. At the UT, Brechje is involved in how the university's business operations can be more sustainable. In doing so, she applies the knowledge she has acquired in the past: from her background as environmental scientist to her work in community development, and from her experience as a lecturer to her research into sustainable agriculture and soil protection.

PROFESSOR ALBERT VAN DEN BERG (1957) is professor of sensor systems for biomedical and environmental applications and scientific director of MESA+ Institute for Nanotechnology. He also does research into the manipulation and movement of fluids at micro and macro level. Based on those studies, he develops chips which can be used in the medical world. In 2009, he received the Spinoza premium for his work.

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Very few people know that we store more than a thousand cubic metres of rainwater under the campus. Make it visible

Albert van den Berg

Albert: "Exactly, I won't fly to Turkey for a meeting with fifty people anymore. On the other hand: It's easy for me to talk. Young scientists still need to build their international networks. So, I find it hard to say: you can't fly any longer. But if you are travelling less than 800 kilometres, take the train."

Brechje: "What sustainable opportunities do you see for education? Students tell me that there is not enough focus on sustainability in the subjects they study."

Albert: "Isn't there a sustainability master, though?"

Brechje: "Yes, but I mean that sustainability is addressed in each subject. Do you see it as your role to promote that?"

Albert: "I do feel that a sustainability elective should be included in every bachelor and master cycle. But you won't come across sustainability so much if you study theoretical subject. On the other hand: you can always stimulate sustainable applications. Incidentally, our research plays a big role in that. At the MESA+ Institute, we have the BRAINS initiative, and we look, for example, at sustainable materials for batteries and Negative Emission Technologies (NET). At the Centre for Energy Innovation, they also have ambitious plans. And what about sustainable health and food technology. There must also be lots of things happening on campus that I don't yet know about..."

Brechje: "In conclusion: what role do you feel that we at UT play in the transition to a sustainable society? Should we take the lead in that?"

Albert: "Yes, as a university, we need to lead the way. And that's expected of us. In the region and in the country, they watch us: what are we doing? And remember; we have no time to lose!"

RECAP

"Through my contacts with Brechje, I have seen how much is being done at the UT in the field of sustainability and climate. But also the tremendous research and educational potential that exists in the technological (nano), socio and geo fields."

Albert

SHAPING EXPERT GROUP SUSTAINABILITY ON THE WAY TO A MORE SUSTAINABLE UT

Cheryl de Boer, assistant professor at the Faculty of Geo-Information Science and Earth Observation, learns from and enjoys her role as SEG lead. "Particularly because I find our work within SEG Sustainability so incredibly interesting and important. Together we are working towards a more sustainable future and looking for opportunities for the University of Twente to contribute to this. The whole team is very passionate and supports our efforts for making the changes and developing the knowledge in this area that can help change the world."



Awareness and communication is key. That is why the SEG Sustainability has worked on providing a card game for students on sustainability. Your Sustainability Journey is the name of the game, which has been translated into the Dutch context in collaboration with Karina Vink (ET) and the Green Hub. The card game has already been widely used by various groups of students. "We would now also like to use it with students who have just started", says De Boer. "Using the card game, we ask students what they are already doing to contribute to a sustainable world. Do they cycle to campus, are they vegetarian, do they take a shower less often or for a shorter time? The impact of those actions is made clear in the game. Afterwards, every student makes a personal sustainable choice(s), which they will commit to in the coming period", De Boer explains.

She emphasises that it is only one of the action points. "The theme of sustainability is very broad. We are already doing a lot at the UT, but it is very fragmented. If you search for sustainability online on the UT website, you will come across all kinds of 'separate' initiatives. We must make a better connection. At other universities I see that all sustainability initiatives are presented on one website. That has many advantages."

It is time to make choices, emphasises De Boer. "We spoke to many people within the faculties, felt their passion and took stock of what they want to concentrate on. A lot comes to light

when we start a conversation about sustainability on campus. One theme that often emerges is Climate. A lot of research has been done at the UT within the themes of energy transition and resilience. Those two themes play a role in every faculty at the UT. We want to bring students and researchers together and strengthen the relationship between education and research on the theme of Climate. Our strong point is that we are the only university that can approach such a wonderful theme in a multidisciplinary way from a Geo (ITC), Techno (ET, TNW and EEMCS) and Socio (BMS) point of view. In addition, we have Albert van den Berg, who has been appointed as professor championing sustainability and who will support this passionately until his retirement."

The efforts of the SEG Sustainability will continue energetically, past the summer even though our official term will end. De Boer: "We are on our way to a more sustainable campus; a lot is also being done by CFM and Green Hub in this area. We now first have to make choices together with the Executive Board. There are so many possibilities around this theme and we hope that everyone will join in."

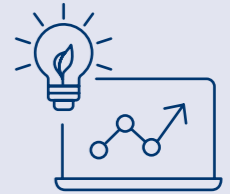
What does the UT still need to do to make the Sustainability theme a success?

"We must continue to talk to each other and work together towards a more sustainable future... and occasionally be brave enough to take huge steps!"

FACTS & FIGURES SEG SUSTAINABILITY

Sustainability is an essential part of the Shaping2030 strategy. In 2030, sustainability is a precondition for everything we do at the University of Twente.

As the Shaping Expert Group on sustainability, we want to use the strength of knowledge and ideas to achieve this goal. Many initiatives are starting up across the UT community to make our organisation more sustainable. The first challenge is to bring all those initiatives together in one overview, to show the UT community, and the outside world, all the sustainable initiatives that are being realized. Second, the SEG will initiate and support new initiatives, and to boost and support the process towards becoming a sustainable organisation in 2030. We work together with the Green Hub, SEE Programme and other groups across the university.



Energy data platform

The University of Twente is a large consumer of various energy resources, enabling 3500 researchers and 11500 students to develop and learn about new technologies. In the past few years, all metering of energy consumption has been digitised and bundled into a central system. However, this system was only accessible to a few people within Campus and Facility Management. There are more people that would like to have access to the data. The Energy Data platform has been developed to make this information accessible to a broader audience. It has been built with full transparency in mind and therefore opens all energy-related data up to the public.

SEE Programme

The UT wants to fulfil its societal duty by stimulating awareness on energy, the environment and sustainability issues. To put this into practice, it has launched the Sustainability, Energy & Environment (SEE) programme, a university-wide programme for managing its sustainability, energy & environmental performance.



Green Hub

Green Hub Twente aims to build a broad sustainability network amongst the student body, the UT, companies, researchers, organisations, and the local community. Creating a central point, being a platform and playing an active role in Shaping2030.



Card Game

The card deck helps you discover the steps of your individual journey: your current impact; what it could be; and how to get there by focusing on specific actions you can take.

For more information about the SEG and all the members, check:

utwente.nl/seg-sustainability



THE STORY OF ALEX' GREEN COLORED GLASSES IS A STORY ABOUT JANNEKE'S BIOMEDICAL TECHNOLOGY

Ideally, students should learn a lot from each other and from their teachers. And vice versa. Lecturer in cell biology, **Janneke Alers**, is continually inspired by the new ideas and critical questions presented by her students. This is exactly the interaction that Green Hub coordinator **Alex Baker-Friesen** is looking for. So, a great opportunity to ask her how she gets the best out of her students and herself.

Alex: "Janneke, I want to know all about you, so let's begin immediately. For you, teaching is much more than just communicating knowledge, isn't it?"

Janneke: "Yes, I'm a teacher with my mind and soul. I'm strict and I expect my students to work hard. But I always challenge them on substance, not on peripheral matters. And if they get stuck, I'm there for them. I should say we are there for them, because I work with thirty amazing student assistants. We always look for the personal connection. What does this student need now? We build trust and create a relaxed atmosphere in which we can also laugh together. I really enjoy working with students. It's so inspiring to be involved in their development. Providing a safe environment in which they learn new things. Challenging and motivating them. And at the same time, I hope to communicate some of my love for cell biology too."

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For the positive vibe, for a blood and immunity lecture, I created a playlist of songs with 'blood' in the title

Janneke Alers

Alex: "You attach great importance to learning by doing, I read."

Janneke: "Yes. During practical sessions, students learn interesting insights - about the subject and about themselves. Sometimes they're nervous when they come into the lab, and I hear them complaining behind their microscope: 'It's so hard, there's so much to learn. Why do all my cells die?' But those cells don't all die. Or they manage it the next time. An experience like that gives them self-confidence. And the lab is a nice setting for me and my team to get to know the students better."

Alex: "At the Green Hub, I work with a team of students too. It's nice to hear that you work beside them, rather than giving instructions from above. That's how I work too."

Janneke: "That's really important: develop your own style. Students feel your discomfort if you're not being true to your nature."

Alex: "Do you have any more tips for me and my team?"

Janneke: "Give them a chance and create a safe environment where they can express their wildest ideas. They might think up a hundred mad plans, only ten of which are viable. But that's fine. So, now you have ten new, creative approaches. And it's really nice to get to know each other in a relaxed way."

Alex: "Sounds good!" Sadly, the Green Hub does not yet have an office, so, for the time being, we mainly speak to each via the screen. Sometimes I worry that the students aren't getting what they deserve because of that."

Janneke: "I recognise that, it's harder to connect from a distance. But keep going - things can only get better. Thanks to the efforts of Student Laboratories Twente (SLT), I've been fortunate that our practical sessions have been able to continue. Under strict conditions and in small groups, but you can imagine what a difference it makes that we can meet up. And I've considerably shortened my lectures by replacing some of the theory by assignments. And for the positive vibe, for a blood and immunity lecture, I created a playlist of songs with 'blood' in the title. There are even students who login earlier on Canvas for it, lol."

Alex: "That's good feedback too."

Janneke: "I know. But students can also tell me if they don't like anything about me or my teaching. I take that kind of thing very seriously. It helps me improve the quality of my lectures, practical sessions and teaching material."

DR. JANNEKE ALERS (1967)

studied biology in Utrecht and as a PhD student and post-doc did research into chromosomal abnormalities in cancer in Rotterdam. She went on to work at the KWF Dutch Cancer Society where she was senior policy officer and research coordinator. Since 2008, Janneke has been associated with the faculty of Science & Technology faculty at the UT, initially as training manager for Biomedical Technology. Since 2011, she has been (among others) lecturer of Cell Biology and she coordinates three modules in the Biomedical Technology bachelor programme.

DR. ALEX BAKER-FRIESEN (1987)

born and raised in England, studied Environmental Science (BSc.) at the University of Manchester and Sustainable Development (MSc.) in Uppsala, Sweden. In 2014, he came to the Netherlands to do a PhD at the University of Maastricht. Besides his PhD research into organisational change for sustainability, in 2018 he set up his own consultancy for issues at the interface of sustainable development and organisational change. In May 2020, he was appointed the coordinator of The Green Hub.

Alex: "Do you challenge yourself to keep learning too?"

Janneke: "Every teacher should do that! Even if it's just to stop you getting bored of your own subject. How else can you keep stimulating and inspiring your students? Fortunately, I'm a very curious person. I always want to know everything about everything. I mean, in the past I wanted to be an astronaut..."

Alex: "Oh, me too!"

Janneke: "Really? In that case, you'll recognise this: when NASA recently released the first video images of Mars, I was totally fascinated. I wanted to know everything about the Mars landing. Unfortunately, time is always an issue... Oh, I can see a basketball on your cupboard. Do you play?"

Alex: "The past ten years, barely. Too much to do, too little time. But I've found a court on campus, so I've started again. Are you keen on basketball too?"

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I like to add a competitive and game element to my teaching

Janneke Alers

Janneke: "Absolutely! I trained fanatically for fifteen years, played competitions, coached and refereed. I miss it. Which makes me think: perhaps my love of basketball is why I like to add a competitive and game element to my teaching. For example, my team and I organise an annual 'Holland's next cell model': a lab assignment packaged as a talent contest. That's really fun and encourages the creative mindset of our students."

Alex: "A final question: what inspiration would you like to give everyone at the UT?"

Janneke: "I was at one of our public open days a few years ago, and I was surprised by all the talent, knowledge, creativity and innovation we have here. I was amazed. We ought to showcase that more."

RECAP

"Especially in Covid-times I was struck by the fact that during these interviews it was so easy to connect to very inspiring UT colleagues from completely different disciplines that feel passionate about their work. It was really an uplifting experience which provided me with a fresh look at my own teaching."

Janneke

SHAPING EXPERT GROUP INNOVATION OF EDUCATION

"WE MUST DRAW LESSONS FROM EDUCATIONAL INNOVATIONS"

An interesting article appeared in the Elsevier Weekblad earlier this year. University of Twente employee, Cornelse Vreman and her two children, daughter Macy (22) and son Timon (24), had all studied applied physics at the Enschede campus. In the article they described how education has changed over the years. Macy and Timon find it hard to imagine that their mother had to visit different libraries to access scientific literature in the late 1980s and early 90s. They can find almost everything they need online. They also find it strange that people had to be quiet during seminars. Students worked on assignments individually at that time too, whereas there's a lot of group cooperation and online education today.

The interview with her children provided Vreman, SEG Innovation of Education lead, with the insight that education is constantly evolving and that new choices are being made all the time.

The SEG Innovation of Education has spent the past two years exploring the future of education. The core question was: how do we ensure that our University of Twente (UT) education continuously evolves? The focus was on Challenge Based Learning (CBL) and Life Long Learning (LLL). "We formed a working group in which many UT layers were represented", explained Vreman. "There was a lot of movement in our group. Each person used their passion for education to look across boundaries, joining forces while continuing to ask each other critical questions. All this resulted in cross-pollination. The student members gave the Strategy Council an inspiring presentation. We organised workshops on CBL and LLL for UT colleagues and also considered why we need educational innovation. The answer was 'If we want our university to have impact and really prepare students for the current and future employment market, our education needs to match this continuously changing society.'"

Vreman would have liked the SEG Innovation of Education's work to be more visible to others. Behind the scenes, the SEG also contributed to the Month of Education programme (EEMCS), the UT vision on education, the



Microcredentials working group, the national 'A smarter academic year' group and indirectly to the master vision. She also finds it really interesting that educational development is not dependent on an SEG. "Lecturers are always trying to find ways to improve their teaching so they can optimise the student learning process and they have worked extremely hard on this over the past two years! It's clear to me that lecturers are incredibly passionate about teaching students. However, we must continue to ask ourselves what works and does not work in these educational innovations. We can't help our education progress if we innovate without drawing lessons for the UT community from this."

The SEG Innovation of Education (IoE) is being disbanded on 7 July. A proposal has been submitted to the Executive Board to establish a permanent innovation of education committee. "Such a committee could feed and enrich the UT community on the choices we need to make in our continuous development of education."

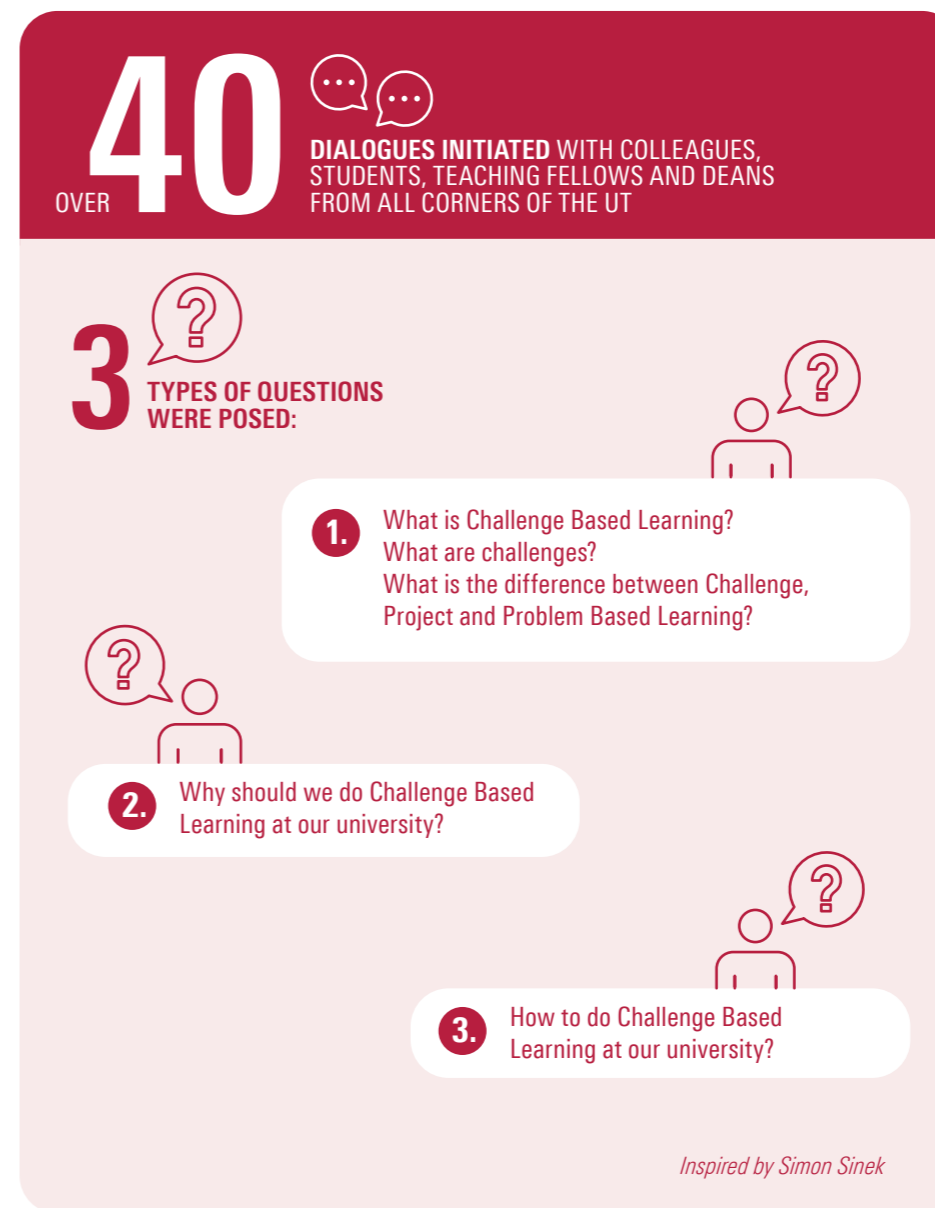
What does the UT still need to do to make a success of the Educational Innovation theme?

Dare to make reasoned choices to adapt our education to the changing context.

FACTS & FIGURES SEG INNOVATION OF EDUCATION

Many of today's problems cannot be solved by one discipline alone. It requires an interdisciplinary approach to create the best possible solutions. To take our responsibility as a university to educate future generations, we should further enhance our teaching and learning approaches with state-of-the-art tools and technologies. The main goal of the SEG is to facilitate and stimulate the development and diffusion of educational innovations among the broad community of academics at University of Twente. In addition, we elaborate on two strategic priorities of the UT: Challenge Based Learning (CBL) and Lifelong Learning (LLL).

The first topic, CBL, has now been worked out. How? You can read that in this infographic.



The SEG Innovation of Education took the lead in initiating dialogues with e.g. students, teaching fellows and deans from various faculties. These dialogues had a clear goal: coming up with a Twentse definition of the concept CBL, created with the expertise from all corners of our university.

By the end of the academic year 2020/2021, a concept of Challenge Based Learning for the University of Twente was developed.

For more information about the SEG and all the members, check:

utwente.nl/seg-innovationofeducation

THE STORY OF SRINIVAS'S FLIPPING THEORY IS A STORY OF MAARTEN'S DIFFERENT RACE



After **Srinivas Vanapalli's** father died of cancer, he asked doctors how his specific academic skills and knowledge might further cancer research. The result was a medical device for the preservation of biopsies at extremely low temperatures – a real solution to a real-world problem. This kind of use-inspired science is the most important reason for **Maarten van Steen** to work in academia. Srinivas is eager to find out how Maarten likes to shake up his research and teaching. “At UT, we run a different race – I think we are doing the right things and we do them well.”

Srinivas: “On your website I found a video in which you discuss the role of computer science in academia and society. Can you please elaborate on that?”

Maarten: “Ha! That video was my response to a debate that was going on about what is considered core computer science. I find that discussion ridiculous. To me, what matters is the reason why we are doing science. I believe in use-inspired research: scientific research to solve real-world problems. Where scientists with different backgrounds work together

without knowing the solution they are looking for beforehand. A computer science example is the great number of fake Facebook-accounts. Identifying fake accounts from real ones is a real challenge.”

Srinivas: “This touches upon another theme you have been working on: cybersecurity. You were involved in a new institute: the Centre for Safety and Digitalisation, or Centrum voor Veiligheid en Digitalisering (CVD) in Dutch. Talking about hardcore computer science.”

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The biggest safety and security concerns come from people who find it difficult to work with digital systems in a proper way

Maarten van Steen

Maarten: “Oh no, it’s not hardcore computer science, quite the opposite. Applying digital technology always involves people. The biggest safety and security concerns come from people who find it difficult to work with digital systems in a proper way. At the CVD, we train people to

become more digitally savvy. It’s like learning to drive a car: the actual driving of a car is quite easy. What you really need to learn, is to become a responsible member of a traffic community.”

Srinivas: “One of the objectives of UT’s participation in the CVD is life long learning. You have an interesting way of approaching education. You do away with classical teaching and focus on critical thinking. What do you mean by that?”

Maarten: “Thank you for this question. I like it a lot, just as I like teaching a lot. I ask groups of students to explain their solutions to each other. My assumption is that you won’t be able to explain something if you didn’t understand it.

DR. SRINIVAS VANAPALLI

started his academic career at the Indian Institute of Technology, Madras. He came to UT in 2002. Here, Srinivas obtained his master’s degree in electrical engineering cum laude. He finished his PhD with research on cryo-coolers, for which he spent most of the time in the United States. He worked for non-profit companies for many years, including Energieonderzoek Centrum Nederland (ECN) in Petten, before returning to UT. He works as an associate professor at the Faculty of Applied Sciences and conducts research into the application of cryogenic technology.

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I’m sort of lazy and I don’t really like exams; that’s why I make use of the wisdom of the crowd

Maarten van Steen

I motivate the students who are in listening mode to ask critical questions. To help the presenters pinpoint the parts of their explanation that were not yet clear enough. The listeners can only ask good questions if they understand what the presenters have been working on, too.”

Srinivas: “But you still need to grade your students. How do you do that?”

Maarten: “I make use of the wisdom of the crowd. Since I’m sort of lazy and don’t really like exams, I have set up a system in which students rank each other. In the end, I collect these rankings, average them, and translate them to grades. I’ve done this three times now, and my rankings barely deviate from those of the students.”

Srinivas: “Something else, then. The computer science study programme has grown really big over the last couple of years. Why do you think students are coming to Twente? Is it because of people like you?”

Maarten: “No, they’re not coming because of me. I like to think that students pick computer science because they have become so digitally savvy that they want to know what’s going on under the hood of the technology they use. A bit like myself. I also have an inherent interest in technology. I knew that I wanted to study applied math, but as a student I considered studying electrical engineering next to my math studies. My PhD in computer science was a bit of a coincidence. I think I could have taken different roads, and still have ended up doing the exact same thing I am doing now.”

Srinivas: “Funnily, you and I followed similar career paths. After our PhDs, we both worked for TNO and then came back to academia. Why did you make this switch?”

Maarten: “After my PhD I was a bit fed up with academic life and wanted a real job, ha ha! Working on applied projects, with real customers who paid real money.

»

PROF. DR. IR. MAARTEN VAN STEEN (1959)

studied Applied Mathematics at UT and obtained his PhD in computer science from Leiden University. He spent five years with TNO research, before returning to academia. After working at Erasmus University Rotterdam and VU Amsterdam he rejoined UT to become the Scientific Director the Digital Society Institute. As part of his work at UT, Maarten is member of the AiNed (Artificial Intelligence Nederland) advisory board and member of the NWO Science board.

I learned a lot at TNO, like project management. But at some point I realised that too little of my work was about the content. So I went back to academia. First at the Erasmus University in Rotterdam, then at the VU in Amsterdam and later to Twente. Now, I am a very happy camper. I still live in Leiden, but we have a cottage in a wooded area close to Eibergen. Since I love biking, I love my commute."

Srinivas: "Final question: in your eyes, how has UT changed since you graduated?"

Maarten "We are much more outward looking than other universities in the Netherlands. We find inspiration in the real world to do the things that we do. In academia in general, we tend to look at how well our colleagues are doing. But at UT, we run a different race. This is sometimes difficult, because we do need recognition from our colleagues at other universities to be able to do our own thing. But I think we are doing the right things and we do them well. If I'm not mistaken, you and I are both very proud to work for UT."

Srinivas: "You're right!"

RECAP

"These dialogues are more than just plain fun: together they really tell a story and force you as interviewer and interviewee to think about your role, and that of others when it comes to shaping our university for the years to come. I needed to think about what to ask Sevim, Srinivas did more than an excellent job when he interviewed me. This is what makes me connected to and proud of being a member of the UT community."

Maarten

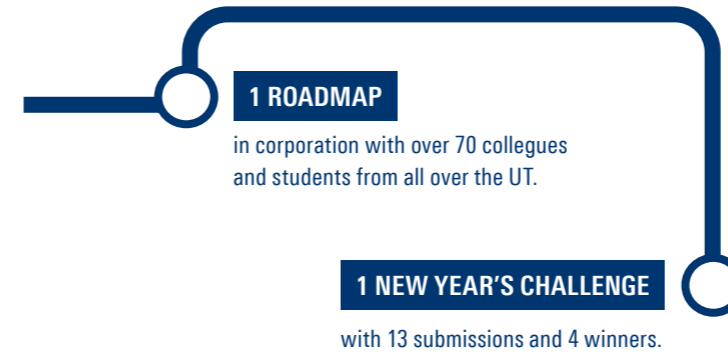
FACTS & FIGURES SEG DIGITALISATION

Digitalisation is an integral part of the university's ecosystem. To help explain digitalisation, the SEG Digitalisation follows a classification by Reinitz:

- **We digitise information.** The transition from an analogue to a digital form. Example: We digitise courses by recording lectures and placing them online.

- **We digitalise operations.** Digitalisation describes using digital technologies and information to transform individual institutional operations such as payroll, procurement, research administration, and course delivery.

- **We digitally transform institutional processes.** Digital transformation takes place when we change existing processes (and thus ways of working) in order to attain a high degree of effectiveness of digitalisation.



For more information about the SEG and all the members, check:

utwente.nl/seg-digitalisation

SHAPING EXPERT GROUP DIGITALISATION

DIGITISATION TO REMAIN A HOT TOPIC IN YEARS TO COME



Digitisation is definitely not new territory for the University of Twente. On the contrary. Much has already been done in this area in recent years. But according to Daisy Oolbekkink, project manager LISA and leader of the Shaping Expert Group (SEG) Digitisation, that is no reason to rest on our laurels. There's still a lot more work to be done. "In five years' time, the digital world will look very different than it does today. And we need to be ready for that. We expect employees to keep up with the developments and to master different skills in five years' time than they do today", she says. "It is not necessary for everyone at UT to have the same knowledge and skills, but we do want to get everyone up to their desired level and include them in new developments."

The SEG Digitisation started by developing a road map. "We listed everything we consider important in terms of digitisation at UT. What are we already doing? After that, we listed our short-term aims and linked them to concrete action points", explains Oolbekkink. The SEG identified two areas of focus to kick off with: blended and hybrid education and digital skills. "When it comes to blended and hybrid education, we are going to experiment with as many different types of subjects as possible; what works, what doesn't and what do you need in terms of skills and materials? We want to draw on the support which is already available, for example from CELT, TELT and the video team. Ultimately, we will then know what is required in order to be able to transition to a different form of education and how we can offer that; from course to coaching and everything in between."

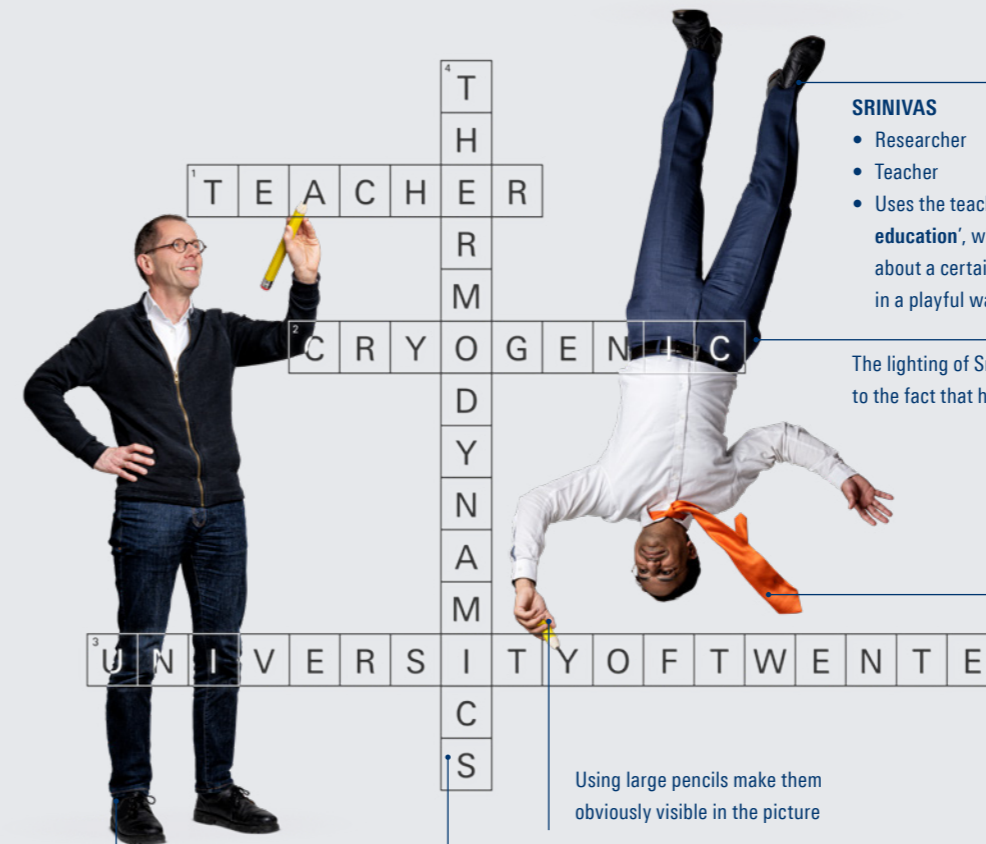
When it comes to acquiring digital skills, no two people take the same path, says Oolbekkink. "Everyone learns in their own way. That's fine, but we do want to get everyone moving in that direction. Standing still is not an option. After all, the job of an accountant changed between 1950 and 1970 too. The point is that developments are now taking place much more quickly. It is important that you know what you need, the digital skills appropriate to your role. We want to help everyone develop a digital mindset."

Thanks to the road map, UT is in a strong position to manage that transition. Where are we, which action points do we need to prioritise? Or scrap? "There are around 30 points in our programme that we want to work on. But not all at the same time", realises Oolbekkink. "And there's no need. Digitisation will remain a hot topic in the years to come. We want to keep the momentum going but to first concentrate on the two areas of focus I mentioned and assure them within the organisation."

What else does UT need to do in order to make the theme of digitisation a success?

We want to help everyone develop a digital mindset, to include all employees in new developments and raise everyone up to their desired level.

BEHIND THE SCENES #2



The original photo of Srinivas

- SRINIVAS**
- Researcher
 - Teacher
 - Uses the teaching method 'Flipped education', where he teaches students about a certain theory and will learn them in a playful way to make it there own

The lighting of Srinivas is adjusted to the fact that he's upside down

Tie is photographed in a way it looks like it's hanging upside down

Using large pencils make them obviously visible in the picture

Terms that are relevant for Srinivas are placed in the puzzle

MAARTEN
Helping Srinivas to solve the puzzle

PILOTS: FROM PAPER TO REALITY

VINCENT HÖVELS ACCELERATING TOWARDS 2030 TOGETHER

Events in the world are happening at a furious pace. Who had even heard of COVID-19 a few years ago? Or considered a Russian invasion of Ukraine? Only by being an agile organisation with the ability to quickly anticipate global developments can the University of Twente remain relevant and future-proof.

As liaison officer of the Shaping Expert Groups (SEGs), Vincent Hövels is a connecting factor who contributes ideas to UT at a strategic level. He catalogues the needs of UT people, how the organisation can contribute to the defined objectives and how we can accelerate towards 2030 together. "In a constructive way, without forcing UT people in a particular direction", he emphasises. "Shaping2030 is a mindset."

And with that, the executive board has set out a vision based on close cooperation and mutual trust. Rather than top down, they want new initiatives to originate from within the organisation. "To do so, we work closely with the departments. In pilots, as we call them, we gain insights at the specific situation of the department and find out together where we can support them in making the mindset their own. Within the pilot MS3 (department of mechanics of solids, surfaces and systems), for example, there was the wish to stimulate cooperation within the department. As Shaping2030 is about working together based on trust in order to make an impact and to be more adaptive to the world around us, we used this pilot period to find shared goals with the MS3 department, where everybody would benefit from."

They did this by interactive sessions where everyone could have their say. "In that way we found common ground and a basis where everyone was recognized." One of the outcomes was agreements on how to facilitate the growth of the department and the different chairs. "A great example of how the strategy was taken from paper to reality."

Hövels: "MS3 is one of the three pilots we did this year. And we see that this format is working well, as evidenced by the other two exciting pilots at the Centre for Educational Support and at the Applied Earth Sciences department, highlighted on the following pages. In 2023, we are going to run another eight pilots. We want to continue to set ourselves relevant objectives and grow – based not on hierarchy, but on trust. And for that we need all the 'colours and voices' we have within UT."



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In pilots we gain insights at the specific situation of the department and find out together where we can support them in making the mindset their own

Vincent Hövels



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Working together to promote the implementation of Lifelong Learning is an exciting challenge; we at CES are also learning.

Lieke Schreel

LIEKE SCHREEL THANKS TO LIFELONG LEARNING, UT IS ALSO LEARNING

Flexible learning, preferably lifelong, is taking great strides. The 'hunger' to continue to develop, even after graduating from a university, is partly the result of demand from the employment market. Technological developments in our society are moving at an incredible speed. Employers are wholeheartedly promoting Lifelong Learning (LLL). So is the University of Twente, which is why the theme was included in Shaping2030.

Within the framework of Shaping2030, the question was raised how the Centre for Educational Support (CES), can most effectively but also most efficiently support UT's LLL plans. It is a massive task, and one to which director Lieke Schreel and her CES employees are aiming to contribute. "LLL on this scale is new and organising enrolment, timetabling, certification and payment is a huge challenge", says Schreel. CES is keen to be involved in all the developments at an early stage of the process and the shaping team will support CES in the implementation of it. Schreel: "In the exploratory phase of the pilot, the issues that came up were mainly practical. What forms of LLL will there be? How can we support the lecturers? Where do we put the LLL students who come to UT? The LLL quartermaster's team is working hard to catalogue all of LLL's 'moving parts'. CES is keen to be as prepared as we can be, so that the implementation proceeds smoothly."

Schreel is identifying all the logistics issues around the topic with her colleagues. It's a task which is right up her street. "For us, working together to promote the implementation of LLL is an exciting challenge; we at CES are also learning. We need to work together because LLL touches all departments of CES: from Information Systems to timetabling, from lecturer professionalisation to registration and from student welfare to language teaching and international partners. As a support department, we can share ideas and communicate about the ways in which CES can facilitate the various different educational forms of LLL. And everyone at UT will benefit from that."

"UT already offers a lot", says Schreel. "From one-day workshops to three-day courses, from part-time studies to complete programmes, and everything in between. But thanks to Lifelong Learning, we will become an even better university. Learning never ends and as soon as those interested come to us, we need to be completely ready for them."

What else does UT need to do in order to make the theme of Lifelong Learning a success?

Together, we need to keep looking at what the UT's strengths are in this area, so that it can be rolled out right across UT.





MARK VAN DER MEIJDE
THE MOST CONCRETE ITC ANNUAL PLAN EVER

Shaping2030. At ITC, the faculty of Geo-Information Sciences and Earth Observation, they were initially in the dark as to what the term meant. “We asked ourselves: what does it mean, how will it help us and how can ITC link into it? But we quickly found that we were able to apply Shaping2030 to two issues that were already on the agenda at ITC, namely: writing a good annual plan and implementing educational innovations in teams”, says Mark van der Meijde, head of the Applied Earth Sciences department.

In order to write a new annual plan, ITC sat down with the Shaping2030 support team. “We explored what UT actually focuses on, and we came up with no fewer than 34 priority areas. They included many which have never filtered down to the organisation. That taught us to be as concrete as possible in formulating our objectives. We also asked for and obtained feedback on our previous annual plans. Could they be more focused? Are we matching UT’s requirements? That resulted in our department being able to present the most concrete, extensive and readable annual plan of all time. One with objectives that are workable and priorities we were able to clearly communicate within our organisation.”

More push

Van der Meijde considers the latter to be very important. “Shaping2030 sometimes goes right over people’s heads. Let’s keep it simple and translate our objectives to practice.” As far as he is concerned, there is definitely scope for a bit more push. “UT shouldn’t be afraid of simply imposing certain objectives. Take the issue of sustainability, or diversity and inclusiveness. Those matters shouldn’t be left to a single expert group. They are things the UT needs to roll out, impose and put into practice. We need to say: this is our vision and we are going to implement it quickly.”

The second pilot which is high on the department’s agenda involves educational innovations and working with teams. For a brainstorming session, the department divided itself into three teams: junior, experienced mid-ranking and senior. “We all need each other, but we are not all on the same path. Implementing educational innovations in teams calls for a tailored approach, not one-size-fits-all”, he says. The Applied Earth Sciences department recently invited Gerard Kempers, former skater and skating coach, to kick off the first session. Kempers shared valuable insights with his audience. “Only a few can be the best. They are the ones who win the prizes”, he pointed out. “But whether you are among the top at UT or you are a competitive mid-table performer, you do need to keep training together in order to achieve the best results.” Van der Meijde thought that was a great message.



Shaping2030 sometimes goes right over people’s heads. Let’s keep it simple and translate our objectives to practice

Mark van der Meijde

THIS IS OUR STORY; THE POWER OF SHARING #2



#X

“It really is all about balance. That you meet each other after yesterday and before tomorrow – so today! Mutually strengthen what you have been doing well for years, in order to take a step forward - together.”

Mark van Vuuren - Professor of Organisational Communication at the Faculty of Behavioural, Management and Social Sciences (BMS).

#026

“We want to be an open, inclusive and sustainable university. Traditional university rankings do not contribute to achieving those goals”

Kathi Lemmens-Krug - Policy Advisor

#070



“We should not forget getting everybody on board when we pursue our vision”

Timon Metz - Master student Industrial Engineering and Management

#31

“Many students are still unaware of all extracurricular activities you can do – while they would be interested in joining. I consider it my mission to reach them.”

Maartje van Delden - Portfolioholder for Personal Development and Education in the Student Union

#68



“Teaching is great fun and keeps me sharp, but research is my greatest love.”

Sarthak Misra - Professor in the Department of Biomechanical Engineering and heads the Surgical Robotics Lab.

PODCAST MY FUTURE DREAM JOB

In this podcast host Anic van Damme embarks on a journey to the year 2030 to explore professions that are now slowly starting to take shape or don’t yet exist at all.

Scientists of the University of Twente outline the future of their field of expertise, varying from cybersecurity to the role of Artificial Intelligence in HR to climate adaptation. These bright minds construct the most intriguing jobs you may be recruiting for in the not-so-distant future.



Scan the code and listen to the podcast!

THE POWER OF SHARING

In this series we are approaching the 100 stories mark, with which we will also conclude the series. You can read some of the stories in this special.

But keep sharing your story with your colleagues and students and keep inspiring each other. #togetherwerealisesaping2030.

SCAN THE QR-CODE FOR AN OVERVIEW OF ALL OUR STORIES

