



PROFESSIONALS

SENIOR UNIVERSITY TEACHING QUALIFICATION

Centre of Expertise
in Learning and Teaching

UNIVERSITY OF TWENTE.



Introduction by Rector Magnificus Tom Veldkamp

ELEVATE YOUR TEACHING: THE SUTQ EXPERIENCE AT THE UNIVERSITY OF TWENTE

Dear Readers,

Welcome to this special edition of our magazine, showcasing the transformative journey of educators through the Senior University Teaching Qualification (SUTQ) programme at the University of Twente (UT). As Rector Magnificus, I am proud to introduce the remarkable achievements and innovative practices developed by our academic staff through this programme.

The SUTQ is a cornerstone in our commitment to excellence in teaching and learning. Designed for experienced academic staff, it provides a unique opportunity to dive deeper into evidence-informed teaching and create meaningful change in the classroom. This programme is not just about enhancing individual skills; it fosters a community of educators passionate about making a difference in student learning.

Teacher professionalisation is of utmost importance at UT. The SUTQ is part of the professional development opportunities available to our educators, helping them transition from skilled and collegial teachers to scholarly teachers. It emphasizes educational design research and evidence-informed practices, ensuring our educators are equipped to tackle real-world challenges and innovate in their teaching methodologies. Additionally, the SUTQ is a key component of the UT Talent Map, outlining pathways for academic growth and recognition within our institution. In this magazine, participants of the SUTQ share their stories, reflecting on their journey through the trajectory. You will read about their projects, challenges, and successes, and how the SUTQ has helped them innovate and refine their teaching practices.

I invite you to explore the inspiring stories of our SUTQ participants and see how their dedication and creativity are shaping the future of education at the University of Twente. Their experiences are a testament to the power of professional development and its impact on teaching and learning.

Thank you for joining us in celebrating the achievements of our educators. Together, we continue to elevate the standards of teaching and learning at UT.

Warm regards,

Tom Veldkamp
Rector Magnificus

UNIVERSITY OF TWENTE





CONTENT

INTRODUCTION	01
INTERVIEWS	03
Alieke van Dijk	03
Klaas Stek	05
Saskia Lindhoud	07
Thomas Weinhart	09
Wietse Bijker	11
A MESSAGE FROM ALUMNI	13
MORE ABOUT THE SUTQ	14
COLOFON	15

TAKE YOUR TEACHING TO THE NEXT LEVEL WITH THE SUTQ

ELEVATE YOUR TEACHING: THE SUTQ EXPERIENCE AT THE UNIVERSITY OF TWENTE

The Senior University Teaching Qualification (SUTQ) programme at the University of Twente (UT) has been a transformative journey for educators looking to innovate and refine their teaching practices. Designed for experienced academic staff, the SUTQ provides a unique opportunity to dive deeper into evidence-informed teaching and create meaningful change in the classroom.

In this magazine, participants of the SUTQ share their journey through the trajectory.





WHAT IS THE SUTQ?

The SUTQ is an advanced professional development programme tailored for experienced educators who wish to take their expertise in teaching and learning to the next level. Building on the foundation of the UTQ (or BKO in Dutch), the SUTQ focuses on designing, implementing, and refining innovative teaching practices that make a difference in student learning.

At its core, the SUTQ is a project-based programme that allows you to apply what you learn to your unique teaching context. It's tailored for educators who want to tackle real-world challenges, design innovative solutions, and evaluate their effectiveness. From integrating new technologies to improving assessment strategies, the possibilities are vast.

PROGRAMME CHARACTERISTICS

The programme is structured to keep you engaged and supported throughout:

- **Your project, your vision:** Participants choose their own project, focusing on goals like enhancing student learning, boosting well-being, or refining teaching methodologies.
- **Workshops and peer learning:** Expert-led sessions provide fresh perspectives and valuable insights, while peer collaboration ensures you're never on this journey alone.
- **Mentorship and coaching:** Personalized guidance helps participants navigate challenges, refine ideas, and bring their vision to life.
- **Portfolio and assessment:** By the end of the trajectory, you'll present a portfolio documenting your project, its outcomes, and your reflective journey, culminating in an assessment interview.

THE IMPACT OF STUDENTS DECISION- MAKING ON LEARNING AUTONOMY AND MOTIVATION



HOW CAN STUDENTS PLAY A BIGGER ROLE IN THEIR LEARNING?
THAT'S THE QUESTION ALIEKE VAN DIJK EXPLORED IN HER SUTO
PROJECT.

By involving students in formulating assessment criteria, she aimed to boost their autonomy, motivation, and ownership over their learning. A concept central to the University of Twente's focus on student-driven education.





A COLLABORATIVE APPROACH TO ASSESSMENT

Alieke tested two-course designs where students actively helped shape the assessment process. The approach was impactful.

At the start of the course, students worked in groups to identify criteria they felt were important for meeting the assignment's objectives. Examples of past assignments and guiding categories helped them get started. Students voted on the most relevant criteria, which formed the first version of the rubric. This was followed by a teacher-led session where students discussed improvements to clarify and fine-tune the criteria.

Students applied the improved rubric during peer feedback sessions on their draft assignments. Based on their experiences, they suggested final refinements, leading to a rubric used for formal assessment.

WHAT DID THE PROJECT REVEAL?

Students responded positively to being part of the process. They felt more engaged and experienced a greater sense of ownership and autonomy in their learning. Interestingly, Alieke found that more guidance doesn't always help. While students initially asked for more support, too much structure felt restrictive to their creativity.

The first design, which offered slightly less guidance, led to higher levels of intrinsic motivation and autonomy. Finding the right balance remains a challenge. But the results show that involving students in meaningful decisions can make a real difference.

KEY TAKEAWAYS

Alieke's project confirmed that students appreciate it when teachers involve them in shaping their education.

Their feedback—when gathered during the course rather than after—provides valuable insights into what works and what doesn't. Students have a clear idea of what they need to succeed and are eager to share it when given the chance.

From her peers, Alieke learned to think outside the box. "Your initial ideas might be nice ones, but it is helpful to discuss with your colleagues what their experiences are and what further to consider." It helped her to become more practical and concrete in her designs; considering different contexts and outcomes.

CHALLENGES AND SURPRISES

At first, some students were sceptical, questioning whether the project aimed to reduce assessment complaints. Alieke tackled this by being transparent about her goals from the start. To her surprise, students were enthusiastic about participating in focus groups after the course, offering honest and useful feedback that helped refine the design further.

The approach is still used in Alieke's course, and students continue to appreciate their role in co-creating assessment criteria. The project has even inspired internships and thesis topics, showing that student-driven learning remains a hot topic for exploration.

ADVICE FOR FUTURE SUTO PARTICIPANTS

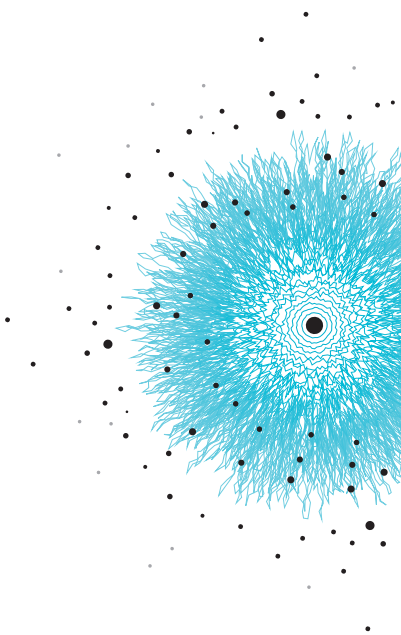
"When selecting a topic for your SUTO, talk to your students to know whether they share your ideas and if they need improvements. Having student input to support and fuel your project is helpful and supporting."

DEVELOPING STRATEGIC THINKING AT THE UNIVERSITY OF TWENTE

FOR KLAAS STEK, TEACHING AT THE UNIVERSITY OF TWENTE HAS ALWAYS BEEN ABOUT MORE THAN DELIVERING KNOWLEDGE. IT'S ABOUT PREPARING STUDENTS FOR THE CHALLENGES OF TOMORROW. THROUGH HIS SUTO PROJECT, KLAAS SET OUT TO ANSWER A BIG QUESTION:

CAN STUDENTS DEVELOP STRATEGIC THINKING IN JUST 10 WEEKS?

Over five years, Klaas carefully studied how his 10-week course, combining soft-skills workshops and real-life cases, impacted students. His findings? With the right approach, strategic thinking can indeed be nurtured in a short timeframe—where a world of potential for students and educators alike lies ahead.



**KEY INSIGHTS**

Klaas's research uncovered important factors that influence the development of strategic thinking:

Students who are result-driven, curious, and open to new experiences showed the greatest progress.

A moderate level of creativity gave students an edge in thinking strategically.

High levels of anxiety were a clear barrier to progress, highlighting the need for supportive learning environments.

His research with international business schools also revealed something unique about UT students: their strong analytical skills, which Klaas found to be a key foundation for developing strategic thinking.

LESSONS FROM THE SUTQ PROCESS

For Klaas, the SUTQ experience was not just about research. It was about growth. Having started his teaching career in the 1980s with a teacher-centred approach, Klaas has embraced a more student-centred philosophy, and the SUTQ helped him refine it further.

Working alongside his cohort of peers was another highlight. "Seeing how others approached similar teaching challenges gave me new ideas and perspectives," he says.

STAYING FOCUSED

Klaas admits his biggest challenge was staying focused. "I measured so many things that I got overwhelmed," he reflects. In hindsight, he would simplify his research objectives. Unexpectedly, his work with international cohorts also revealed key differences

in how students approach learning, reinforcing the importance of tailoring teaching methods to specific student groups.

PROUD MOMENTS

What Klaas is most proud of is the recognition from his students. "They appreciate the effort I put into continuously improving the course," he says. Sharing his findings at international conferences has also been a rewarding experience, allowing him to contribute to the broader academic community.

ADVICE FOR FUTURE SUTQ PARTICIPANTS

"Engage with your cohort and do not be afraid to try new things," Klaas advises. "The SUTQ gives you the space to experiment, reflect, and grow as a teacher. Take full advantage of it—it will sharpen your skills and build your confidence."

Klaas's journey highlights what's possible when educators commit to improving their teaching. His work has enhanced his courses and sparked meaningful discussions about teaching innovation at UT and beyond.



THE POTENTIAL OF BLENDED LEARNING AT UT

SASKIA LINDHOUD'S SUTO PROJECT FOCUSED ON IMPROVING HOW FIRST-YEAR BACHELOR'S STUDENTS ENGAGE WITH HER BLENDED-LEARNING COURSE ON CHEMICAL EQUILIBRIA. HER GOAL? TO BETTER UNDERSTAND STUDENT LEARNING BEHAVIOUR AND EXPLORE HOW PEER LEARNING AND ONLINE TOOLS CAN IMPROVE OUTCOMES.



**SASKIA LINDHOUD****TAKEAWAYS**

Saskia explored three main questions in her project:

- How can learning analytics provide insights into online learning?
- What data is needed to guide student study habits?
- How does peer learning improve motivation and results?

By analysing how students interacted with online content, she found they approached resources differently: pencasts were viewed in full, while mini-lectures were revisited selectively. However, the resolution of the data was not detailed enough to monitor progress effectively.

Her incorporation of group discussions created a stronger sense of community, with students reporting they felt more engaged and supported.

LESSONS LEARNED

Through her SUTQ, Saskia realised the importance of shifting roles in blended learning:

- Teachers should act as facilitators, not just transmitters of knowledge.
- Students must move from passive learners to active creators of knowledge.

She also noticed a surprising trend: students often hesitated to bring their peer-generated answers to exams, citing uncertainty about their validity. This highlighted a need to address how students handle scientific uncertainty.

GROWTH AND RECOGNITION

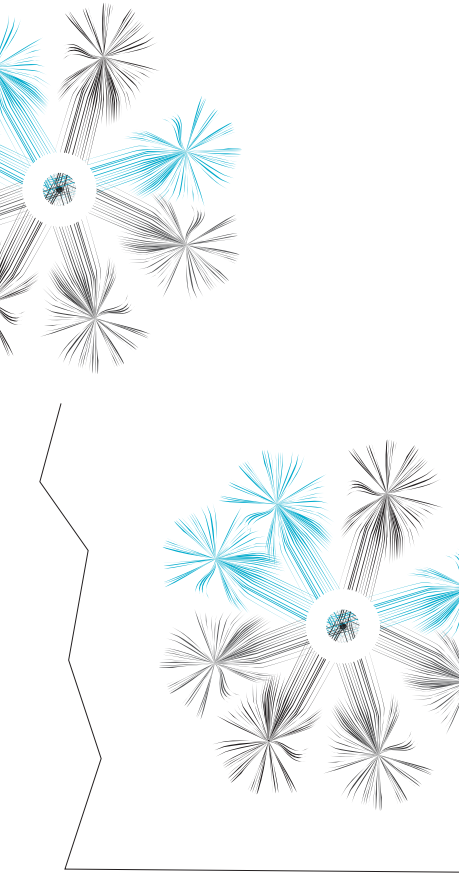
Saskia's SUTQ project expanded her interest in understanding how students learn best. Peer learning has become a cornerstone of her approach, and she now applies what she learned to other courses. Her work has not gone unnoticed. Two of her articles on SURF Vraagbaak were among the top 10 most-read in 2023, and she is working to publish more of her findings.

CHALLENGES

One challenge Saskia faced was the timing of her learning analytics setup. It was implemented just one day before her course started. With more preparation, she could have gathered better data. She also learned the value of using standardised survey questions to gain deeper insights into student motivation.

ADVICE FOR FUTURE SUTO PARTICIPANTS

Saskia encourages others to embrace the SUTO process fully. "It's an investment, but it gives you new perspectives and tools to improve your teaching. Interacting with colleagues across disciplines adds so much value."

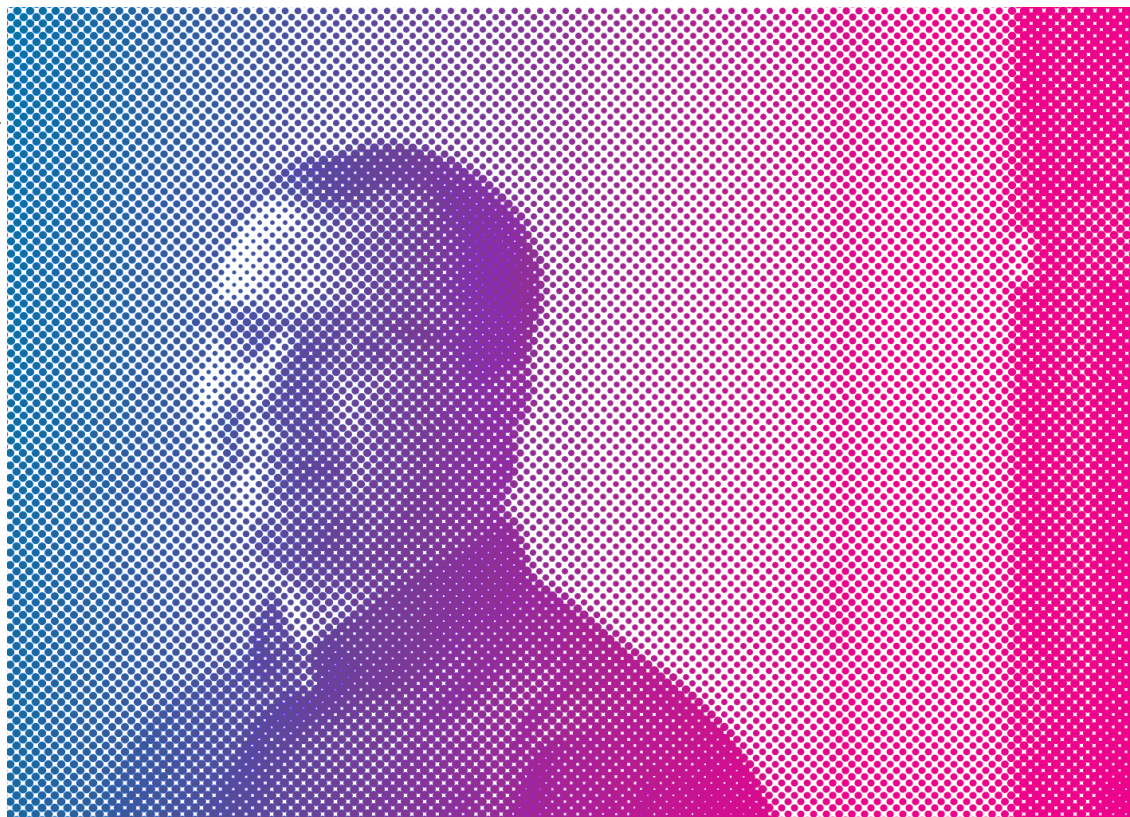


TEACHING ENGINEERS TO THINK BEYOND CODE

SHOW DO YOU TEACH PROGRAMMING IN A WAY THAT STICKS?
FOR THOMAS WEINHART, THE ANSWER LIES IN SHIFTING FOCUS
FROM SYNTAX TO STRUCTURE.

Engineering students often pick up coding basics quickly, but struggle with designing well-structured, effective programs.

To tackle this challenge, Thomas introduced Computational Thinking (CT) into his programming course. CT is a problem-solving method that helps students break down complex problems and design smarter solutions.





A FRESH APPROACH

Instead of simply teaching coding syntax, Thomas revamped the course by blending CT principles with traditional programming instruction. The redesigned course guided students to:

- Think strategically when approaching programming tasks;
- Apply structured problem-solving techniques to break down research questions into logical steps.

By analysing student performance, surveys, and focus group feedback, Thomas saw impressive results:

- Students improved their ability to design structured, logical code;
- They developed a deeper understanding of coding principles;
- Many gained confidence, seeing programming as a skill they could master and apply effectively.

WHAT THOMAS LEARNED

A key insight: small teaching tweaks can have a big impact. Interactive group work, short quizzes, and reinforced learning moments boosted engagement and participation.

Another key insight? Listening to students matters. Focus groups provided valuable feedback for future course improvements. "Hearing how students experience your teaching gives you a clear view of what works and where you can improve," he says.

OVERCOMING CHALLENGES

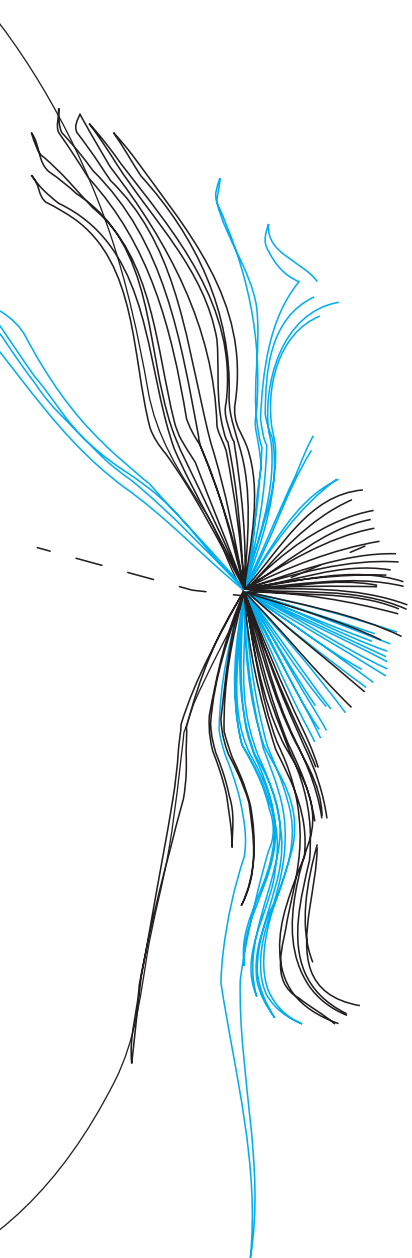
Timing was a hurdle. Fitting a curriculum redesign into the SUTO timeframe was not easy. Looking back, Thomas feels the changes could have been done in one step instead of two.

PROUD MOMENTS

For Thomas, the most rewarding part was the students' response. "Students really embraced the changes and appreciated the clarity Computational Thinking brought to programming," he says.

ADVICE FOR FUTURE SUTO PARTICIPANTS

Experiment with new teaching strategies. "Do not hesitate to try something different, even if it feels challenging. Listen to your students, learn from their feedback, and adjust as you go. Small steps can lead to big improvements."



SHARPENING FEEDBACK FOR STUDENT SUCCESS

SHARED SUCCESS CRITERIA AND EFFECTIVE FEEDBACK FOR SUCCESSFUL VISITS TO ORGANISATIONS

In higher education, fostering meaningful interactions between students and professionals is key to bridging the gap between classroom learning and real-world applications. The MSc Spatial Engineering programme at UT faced a challenge: students visiting professional organizations were often underprepared, leading to missed opportunities for productive discussions and deeper understanding. To address this, a new approach was designed, emphasizing clear success criteria, structured feedback, and student engagement with the feedback process.





THE INTERVENTION

A targeted intervention was implemented to improve students' preparation and feedback literacy. Instead of presenting predefined guidelines, students and teachers collaboratively developed criteria for successful visits. This process ensured clarity and increased student commitment to meeting these standards.

A meta-dialogue introduced students to the four levels of feedback: task, process, self-regulation, and self. Emphasis was placed on effective feedback practices, helping students understand how to give, receive, and use feedback constructively.

Students presented their preparation plans, receiving peer and teacher feedback using a straightforward format: what worked, what needed improvement, and what sparked curiosity. This structure encouraged actionable and balanced critiques.

RESULTS AND INSIGHTS

The intervention demonstrated several positive outcomes:

- Improved feedback quality: Both students and teachers provided more feedback, with an increased focus on process and self-regulation levels, which are more effective for deeper learning.
- Enhanced engagement: Students appreciated being part of the criteria-setting process and felt more ownership of their learning.
- Scalability: The approach is adaptable to other educational settings, offering a low-effort yet impactful way to improve feedback practices.



WIETSKE BIJKER

Interestingly, the process also influenced teaching staff, who began offering more thoughtful and targeted feedback despite their prior experience.

CHALLENGES AND LESSONS LEARNED

Adapting to a small cohort size and the impact of the COVID-19 pandemic posed challenges in drawing comparisons across cohorts.

ADVICE FOR FUTURE SUTO PARTICIPANTS

This study highlights the value of co-created success criteria and structured feedback in education. By involving students in defining expectations and fostering feedback literacy, educators can enhance learning experiences and outcomes. The method's adaptability makes it a promising model for improving teaching and learning practices across disciplines.

A MESSAGE FROM ALUMNI

TO FUTURE SUTQ PARTICIPANTS

PASCAL WILHELM, UCT-ATLAS, SUTQ ALUMNUS FROM 2021

I did my SUTQ during the pandemic. My aim was to enhance reflection skills in my students by implementing an intervention (a reflection guide) and evaluating whether the level of students' reflections increased. And it did. The SUTQ offers a systematic method on how to go about improving education that makes sense. It makes sense because it is a scientific approach. Learning about this approach and applying it in your classroom fosters your interdisciplinarity as an academic; you are introduced to a discipline that has been striving for scientifically studying and enhancing student learning for decades. Perhaps it cannot directly solve the issue you have in your classroom, but it offers a way to approach the issue that has been proven successful and with less bias caused by naïve beliefs about education and student behaviour. With the SUTQ, I was able to improve my teaching practice. Who does NOT want that?

RAINER HARMS, BMS-ETM, SUTQ ALUMNUS FROM 2021

As an entrepreneurship scholar, my passion is to support technology entrepreneurs at all stages of their process. The SUTQ trajectory allowed me to take a deep dive into the motivations of STEM students, a population with great potential to combine technology with impact. Of course, not all STEM students want to become entrepreneurs – and educators should not attempt to force them in a direction they may not want to go. However, our role is to show them the entrepreneurial career option. Thus, the SUTQ project helped students clarify if they wish to become entrepreneurs, i.e. in exploring their career aspirations. More precisely, it was about identity work towards clarity on professional identity aspirations towards entrepreneurship. The intervention is that a set of reflection exercises based on critical learning moments helps students develop that clarity.

During the SUTQ, I received support from the SUTQ team and fellow participants. Also, colleagues from the Technical Faculties at UT, the 4TU entrepreneurship educators community, and the Comenius Project contributed to the project: "When you get stakeholders involved, the SUTQ is more fun and more effective", says Rainer.



MORE ABOUT THE SUTQ

- **Learning and Development Towards a Scholarly Teacher:** The SUTQ helps teachers transition from Level 2 (Skilled and Collegial Teacher) to Level 3 (Scholarly Teacher) within Ruth Graham's Career Framework for University Teaching.
- **Educational Design Research:** This approach involves the iterative development of solutions to practical educational problems, providing a basis for scientific inquiry. It aims to solve significant issues while generating new knowledge to benefit others facing similar challenges.

ABOUT THE CAREER FRAMEWORK FOR UNIVERSITY TEACHING

The Career Framework for University Teaching, developed by Ruth Graham, is designed to guide and support academic career progression based on contributions to teaching and learning. It includes four progressive levels of teaching achievement:

- **Level 1: Effective teacher** - Represents the threshold of teaching achievement all academics should attain.
- **Level 2: Skilled and collegial teacher** - Focuses on collaboration and skill development.
- **Level 3: Scholarly teacher** - Emphasizes scholarly approaches to teaching and learning.
- **Level 4: National/global leader in teaching and learning** - Reserved for those achieving significant impact at national or global levels.

The SUTQ is specifically designed to help educators transition from Level 2 to Level 3 within this framework:

- **From skilled and collegial teacher to scholarly teacher:** The SUTQ supports educators in moving beyond effective and collegial teaching practices to adopting a scholarly approach. This involves engaging in educational design research, which is a key component of the SUTQ. Participants learn to systematically investigate their teaching practices, implement innovative solutions, and contribute to the broader educational community through evidence-based findings.
- **Evidence-informed teaching:** By focusing on educational design research, the SUTQ ensures that participants develop the skills necessary to conduct research that informs their teaching practices. This aligns with the framework's emphasis on scholarly teaching, where educators are expected to generate new knowledge and apply it to improve student learning outcomes.
- **Professional development and recognition:** The SUTQ provides a structured pathway for professional growth, aligning with the framework's goal of recognizing and rewarding teaching excellence. By completing the SUTQ, educators demonstrate their commitment to advancing their teaching practices and contributing to the university's educational mission.

MORE INFORMATION OR SIGNING UP

For more details or to apply, contact CELT (Centre of Expertise in Learning and Teaching) via utwente.nl/celt

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