

Six recommendations for (more) visible success in the workplace in recognizing and rewarding university teaching, teaching quality, and educational career paths within the 4TUs

# Room for everyone's educational talent

No written word, nor spoken plea can teach young hearts what they should be. Not all the books upon the shelves, but what the teachers are themselves.

Rudyard Kipling

# Colophon

Six recommendations for (more) visible success in the workplace in recognizing and rewarding university teaching, teaching quality, and educational career paths within the 4TUs

#### Room for everyone's educational talent

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### Introduction

Friday 2 December 2022, the 4TU Centre for Engineering Education was invited to the 4TU rectors' meeting to present and discuss the results of the Teaching Culture Survey (TCS) 2022 and the status of the Sector Plan project Teaching Quality and Teaching Careers (in Dutch: Sectorplan project *Docentkwaliteit en Onderwijsloopbanen*). The core of these projects is to gain insight into how at our institutions university teaching, teaching achievements, and teacher professionalisation are recognised and valued and therefore contribute to academic careers with an emphasis on teaching and learning. After all, it is the ambition of our institutions to be leaders in innovative engineering education and for educational quality and sustainable educational innovations, professors and lecturers (besides students) are the most important success factor; and so are their professionalisation, appreciation, and recognition.

From the <u>TCS results</u>, it appears that the vast majority of our communities would like education to be of (greater) importance in career advancement and promotion to full professor. However, the communities' perception is that this does not (yet) happen (enough) and they still have little confidence in 4TU leadership in this respect: at departmental, faculty, and institution level. The greatest concern and scepticism is found among midcareer academics, especially Assistant and Associate Professors.

The rectors **named and acknowledged the large gap** between the nowdeveloped HR **policies** and associated HR **tools** at the four institutions on the one hand, and on the other how those policies and tools are actually known, implemented, used, experienced, and perceived **in the workplace**: among departments (individual staff members, department chairs and section heads), faculty career development committees and HR advisors of faculties and departments.

#### 4TU Rectors' requested 4TU.CEE for advice

The rectors requested the 4TU.Centre for Engineering Education to recommend a strategy on how to accelerate the closing of the gap between Recognition & Rewards (R&R) policy (and available tools) and workplace practices and thus focusing on recognition and rewarding of *university teaching, teaching achievements,* teaching quality, and shaping career paths with an emphasis on teaching and learning.

#### Approach

The recommendations (in Dutch: het advies) were developed in spring 2023 by the 4TU.CEE board members Remon Rooij and Perry den Brok and the project leader of the Sector Plan, Sylvia Walsarie Wolff. A draft of these recommendations was intensively discussed within the 4TU.CEE board and was submitted for review and feedback with numerous colleagues within the four Dutch Universities of Technology. Thank you for your valuable feedback!

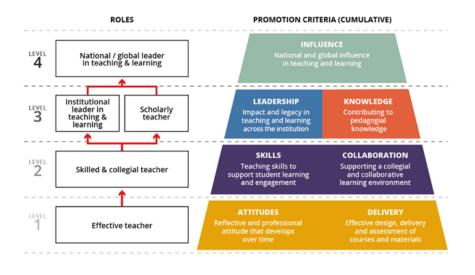
#### Context

Our institutions have done considerable work in recent years to promote the recognition and reward of teachers and teaching. Policies and instruments have been developed: see, for example, the Sector Plan project on <u>Teacher Quality and Teaching Careers</u> for an overview. In doing so, our institutions are closely collaborating and building on the work of Dr Ruth Graham, who with her <u>Teaching Framework</u> has clarified the way how to develop within universities more attention, recognition, and appreciation for teacher quality, teacher professionalisation, and career paths with an emphasis on teaching and learning (Figure 1).

What is clear is that in assessing teachers, more attention is / should be paid to the spheres of influence and impact (cumulative), educational leadership, scholarly teaching and scholarship of teaching and learning, and evidencing teaching quality (see Appendix 1 for further interpretation of these terms).

The path that the Netherlands has embarked on with the Recognition and Rewards policy (including diversification of career paths, less emphasis on only quantitatively measurable performance figures for promotions) is a good one in our view, but it also has its points of concern and attention. Indeed, a large group of scientists has loudly expressed their concern for arbitrariness, less quality, and less international recognition of the Dutch scientist when completely abandoning measurable performance figures in favour of so-called narratives (ScienceGuide 2021).

*Our* view is that one need not exclude the other: a good narrative can/should be underpinned by arguments, vision, and experiences, but also by hard(er) numbers and facts. They are - as far as we are concerned - both sides of the career coin! And that shift towards 'and-and' is already an important step forward, as is the shift towards simply paying more attention, recognition, and appreciation to education (alongside research, valorisation, and leadership).



SPHERES OF IMPACT (CUMULATIVE)

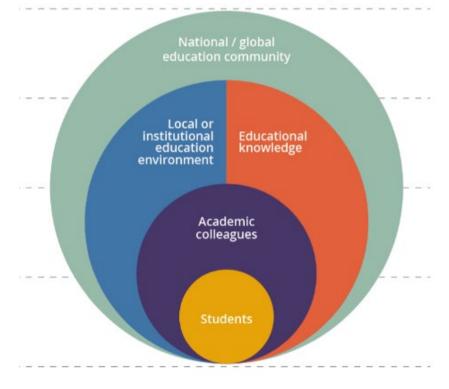


Figure 1. Roles, promotion criteria and spheres of impact for *university teachers*. Source: <u>www.teachingframework.com</u>

# **Six Recommendations**

- 1. Put initiatives in motion, as soon as possible: Just do it!
- 2. Give individual staff members and their supervisors useful tools to record and share teaching achievements and evidence.
- 3. Retrain and continuously educate faculty management teams, career development committees, section heads, and department chairs on the topic of R&R with emphasis on teaching and learning.
- 4. Put a spotlight on staff members who, on the basis of their educational skills, became role models and show how their achievements and evidence in education contributed to this end.
- 5. Support (and inspire) with appointments of full professors
- 6. Intertwine teaching and research

These six recommendations are elaborated below in many concrete (possible) actions. We think it is up to the institutions themselves to consider and assess what is desirable and realistic in their own institutional context and what is a **need-to-have** or **nice-to-have** advice. The recommendations need **leadership** anyway – and we make very concrete suggestions for that – but also resources, such as **time and money**. Time is usually a matter of priority; giving people the time and space and/or asking them to take it (but thus also recognising and rewarding them in it) for the things we consider important. Money usually does not solve problems, but it can get people moving. Culture changes do not happen 1-2-3 so the Executive Boards (in Dutch: CvBs) and deans will have to **invest and budget** money structurally for the various actions.

# Put initiatives in motion, as soon as possible: Just do it!

The R&R policy is there, the HR tools are there, the academic leaders want change, and the community wants change. What is stopping us from making progress? We need to 'simply' put our energies into the colleagues concerned. Below is a range of ideas that could, perhaps should, be picked up yesterday rather than today:

Action 1.1 Ask all departments / sections to see if there are colleagues who are eligible for a UD2 $\rightarrow$ UD1 $\rightarrow$ UHD2 $\rightarrow$ UHD1 $\rightarrow$ HL promotion step through the accent-on-education pathway (in the short and medium term). Help them (pro)actively 'evidencing' (see Appendix 2 and 3) their teaching achievements.

Action 1.2 Recalibrate all (relevant) Teachers (Docenten in Dutch) D1 and D2. Within the current group of D1 and D2, quite a few colleagues could well fall under the **UD1 or UHD2 profiles** with **emphasis on teaching and learning**. Certainly the colleagues holding a PhD might also be involved in PhD supervision, write scientific articles, or do educational research. Colleagues who are programme coordinator or programme director, chair of a board of studies or examination board, or education coordinator of their section/department also tend to score well on organisation, management, and leadership. Perhaps some do not want this path, but then that is immediately clear (and then D1 seems to be the final scale).

An advice along these lines (which came to our attention several times during our request for feedback on our draft advice) is to **periodically** reassess all staff (and not just tenure trackers); for example, every staff member every five years along a feedback committee that advises the department chair/dean on the academic profile of the colleague in question.

Action 1.3 Install and/or appoint a senior staff member **per department** as **educational leader and/or pedagogical coach**<sup>1</sup>. This person can support and help individual staff members, and actively advise department management (section heads, department chair, department managers) on which colleagues stand out positively with their teaching achievements. Such a person could also chair the department's Education Executive Board and advise sections, programme coordinators and subject coordinators on content, teaching and/or organisational

<sup>&</sup>lt;sup>1</sup> This is a different role and responsibility than, say, programme director or programme coordinator, although such a person could also fulfil the role of education leader. Programme directors are primarily responsible for the teaching quality of an education programme; department heads for the teaching quality in a department.

matters (for example, deployment and planning). And give this person not only the role and responsibility, but of course also the time, recognition and appreciation.

Action 1.4 Develop a **teacher professionalisation offer** focused on growth as a teacher within an engineering university. The teacher professionalisation offer at our institutions is (too often) limited, fragmented, disjointed, little engineering education specific, and too little focused on the higher levels of Graham's Teaching Framework. If we take the Recognition and Reward programme seriously (and we do!), then as institutions we need to offer – jointly or otherwise – a coherent professionalisation programme that supports teachers to grow into collegial teachers, scholarly teachers, institutional education leaders, and national/global education leaders.



#### Give individual staff members and their supervisors the concrete means to record and share teaching achievements and evidence.

In research, we have the systems and culture to record publications, citations and impact, and acquired projects. For teaching, we don't do this much, if at all. Additionally, there is an increasing focus on how initiatives within the university (research as well as education) generate demonstrable impact in society.

Action 2.1 Develop a documentation tool for teaching achievements: a method, a platform or (E-)portfolio tool for lecturers (and appropriate to their needs) to systematically and reflectively document<sup>2</sup> their personal development, teaching, educational vision and innovations, educational committee and advisory work, educational research, educational publications, educational impact, educational events and conferences, and their own training and professionalisation programme.

The platform can allow teachers to actively think through a variety of questions on these aspects, evidencing their achievements and impact, their personal learning and pedagogical competence development. The platform can also provide space to make explicit teachers' informal learning (for example, through innovation projects, peer coaching, reading (teaching) literature, working visits in practice/industry, and so forth). Certain parts of this reporting and documentation can be explicitly **directed towards the 'outside world'**; society, practice/industry, other lecturers inside and outside the institution.

- Have new staff (and/or staff starting with UTQ / SUTQ / Educational Leadership course) work with this portfolio right from the start (of the course) so that they are used to systematically recording their teaching achievements from the start of their appointment.
- And in doing so, have the R&D conversation about those teaching achievements (including this evidencing), teacher professionalisation, and the career path with emphasis on teaching; at least with those for whom this is relevant. Determine together staff member and supervisor a teaching-driven R&D conversation agenda. The R&D preview can help executives get a good picture of the people involved and the criteria for teaching expertise (see Annexes 2 and 3 that go into this in more detail). Have a/the department's teaching leader/pedagogical coach (see Advice 1) participate as an advisor to

<sup>&</sup>lt;sup>2</sup> Perhaps this is a separate educational innovation project that the four institutions (through 4TU.CEE?!) could / should work on

supervisor, as a second reviewer or informant of individual staff members.

There is a danger that the aforementioned categories of evidence could start to be used (for example, by supervisors) mainly to demonstrate what is not present in someone's file and CV in terms of experience and expertise. This is, of course, not the intention. We think the instrument will/should inspire colleagues to excel in one or more educational aspects (and not all!).



Retrain and continuously educate faculty management teams, career development committees, section heads and department chairs on R&R with an emphasis on teaching and learning

It may sound somewhat peculiar, but many management teams of faculties and/or departments, faculty Career Development Committees, and department and section heads have **little or no experience with the academic career track with an emphasis on teaching and learning**, if only because they themselves most likely did not enter their managerial position through this track. More qualitative assessment and the assessment of working in teams (for example, teaching teams) also lead to searches for other working methods and assessment strategies everywhere. This shortcoming will not resolve itself; what is more, it can easily perpetuate or reinforce itself if we do not actively start changing the system, tools and structures. For example, we consider that:

Action 3.1 ...in every faculty, there should be one or more experts - and thus a **recognised trainer for supervisors and career development committees** – on Evidencing teaching achievements. And also give this person (these persons) not only that role and responsibility, but also the time, recognition and reward for this.

Action 3.2 ...each Faculty Career Development Committee should include a minimum of two people with (proven) expertise in the field of academic careers with an emphasis on teaching and learning, including the evidencing of teaching achievements (see also Appendixes 2 and 3 that elaborate on this).

Action 3.3 ...each institution appoints an **ambassador** who may and can 'interfere' with the R&R theme (with emphasis on education) on behalf of the Executive Board, with natural authority, and across all faculties. Specific responsibilities and a mandate should be agreed. And of course this person can also advise the Executive Board itself.

Action 3.4 ... every department chairperson, department secretary, department head of education (see Recommendation 1) and HR manager should have an information binder available about the career path with an emphasis on education. To this end, every institution should have a **Recognition & Rewards website** that is up to date and shares not only the institution's vision but also the concrete tools, procedures, contact persons, and the developments of subprojects, which should be covered regularly via the institution's newsletter (and also in the institution's education newsletter (if there is one) (See also Appendix 4).

Action 3.5 ... every institution should have a visible 'teaching hub' and/or knowledge centre for engineering education, engineering didactics, educational research, and/or teacher professionalisation, where knowledge and experiences are systematically gathered and shared with colleagues.

Action 3.6 ... between our four institutions, departmental experiences should be actively shared; not only with an organisation such as the Centre for Engineering Education (which is what is already happening), but also **between sections, departments and faculties** themselves. (see also Action 4.5 4TU Education Congress)

Action 3.7 ... every strategic human resources plan of a faculty and department should include at least a paragraph on careers with an emphasis on teaching and learning, including recognising and rewarding teaching.

Action 3.8 ...each institution (or faculty) installs a **focus group** to advise management and provide feedback on R&R developments at the institution (or faculty).



Put a spotlight on staff members who, on the basis of their educational skills, became role models and show how their achievements and evidence in education contributed to this end.

It is important that institutions show and **celebrate actual achievements**, that concrete changes take place (e.g. individual growth and promotions) and do so **with care for (academic) quality**. There are many ways to highlight all this and there is no one or THE best approach here. Besides the obvious actions of highlighting these **colleagues** or their **subjects** (via the Communications department) in newsletters and Education stories, we are also thinking of:

Action 4.1 Ask every teacher with an SUTQ / Educational Leadership course / Comenius / Teaching Fellowship to **disseminate** their insights (also) via an activity for colleagues (e.g. a workshop in the local Teaching Academy, or a 4TU.CEE seminar), the 4TU.CEE Innovation map, the 4TU.CEE newsletter, and the institution's own local education newsletter.

Action 4.2 As an institution, use **natural occurring moments** such as Education Day, the Teacher/Teaching Team of the Year election, the completion of an SUTQ / Educational Leadership course, for dissemination of teaching innovation and research projects, and positive attention and PR for the innovative teachers. And don't forget to invite and involve colleagues from other TUs in the process; as a critical friend for feedback, but also for them to learn.

Action 4.3 Create an informative booklet or website at your institution with concrete examples and stories of people and evidence (portfolios) in the field of career steps with an emphasis on education; in particular examples of the career steps  $\rightarrow$  D1,  $\rightarrow$  UHD,  $\rightarrow$  HL. The <u>UT</u> booklets of the SUTQ are good inspiration.

Action 4.4. Develop a workshop format 'Evidencing teaching achievements for R&D talks' for lecturers (D, UD, UHD, HL) and managers/R&D supervisors, in collaboration with local Teaching Academies, where, for example, a number of role models, top lecturers, education leaders and teaching ambassador(s) show how they do it and start the conversation with colleagues about the why, what and how.

Action 4.5 Develop a **4TU Engineering Education conference** (including 4TU *Engineering Education Innovation Awards*) where innovative teachers and/or teacher teams (in different themes/tracks<sup>3</sup>) can

<sup>&</sup>lt;sup>3</sup> Examples of track themes could be: 'best/most innovative feedback giver', 'best/most innovative user of technology in the classroom', 'best lecturer', 'best/most innovative connector to practice/industry', 'best motivator/coach', ...

share experiences and be recognised in them; perhaps nominated by staff members and/or students who would like to put certain teachers in the spotlight. Via the new 4TU.CEE book series **Higher Engineering Education research & Innovation (HEErI)**, the conference proceedings (i.e. the teaching experiences and stories of each lecturer) could be published in book form.

Action 4.6 Communication departments at the four institutions play an important role in directing attention to R&R with an emphasis on teaching and learning. We would like an open discussion to see how we can cocreate new communication strategies, communication habits and means.

We observe that education (performance) as a topic receives less PR coverage compared to research. In our view, this contributes to a perceived lesser status of education. We therefore suggest that institutions improve the coverage of education (performance) on websites, via newsletters and university magazines.

Institutions, including the Executive Boards, can also draw specific attention to education at external events, such as Dies celebrations, honorary doctorates, conferences, etc.

# Support (and inspire) with full professor appointments

Professors are appointed by the **Executive Boards**, which are informed by **advisory committees**: e.g. in Delft the Council of Professors, in Wageningen university-wide Appointment Advisory Committees. These committees therefore play a crucial role in the promotion of colleagues to full professor. Many (almost all?) of these professors will not themselves have become professors through the path 'with an emphasis on teaching and learning'. In order to be (more) successful in getting colleagues to become professors with an emphasis on teaching, the **knowledge surrounding teaching** (evidencing teaching expertise and achievements) will have to be **actively contributed** within these committees.

Action 5.1 We propose that the Executive Board (perhaps via the Ambassador; see Action 3.3)), together with the aforementioned Evidencing trainer/expert (see Action 3.1), could have regular discussions with the relevant committees about the cases on the table, teaching evidence strategies, successes and further ins and outs of promotions to full professor with an emphasis on teaching.

Action 5.2 Ensure that these committees include at least two persons with expertise in university teaching expertise and evidencing teaching achievements. If committees are formed for individual cases, it is logical that - in the case of an emphasis on teaching - 'teaching' should also be represented more heavily and visibly (than the other focus areas) in the committee.



#### Intertwine education and research

Following the Royal Netherlands Academy of Arts and Sciences (KNAW) 2018 position paper <u>'Spagaat of duet? Intertwining teaching and research</u> <u>at Dutch universities'</u>, our view is also that opportunities for synergy between teaching and research should be actively sought, also for the benefit of teacher quality, teacher development and teaching careers.

Action 6.1 Have lecturers explicitly name (for example, in R&D talks and in their personal teaching vision) how they see the relationship between teaching and research in their teaching practice. Questions to be addressed in this regard are:

> Why and how do they introduce students to which research (methods)? Why and how do students contribute to which research of their department?

How does their own research group's research inform the subject content of their teaching?

How does educational research and/or literature from pedagogy inform the didactics of their teaching (scholarly teaching)?

> What didactic research questions are relevant to their teaching practice? And how do you find answers? (scholarship of teaching and learning)?

Action 6.2 When developing a research proposal, ensure that there is always a discussion of what the research could mean for teaching. The education leader of a department (Action 1.3) can advise project and programme leaders of research well in this regard. When education is integrally involved in (developing and implementing) research projects, not only individuals but also the organisation/department in a broader sense can reap the benefits (synergy, quality, cooperation, impact, and so on).

Action 6.3 For a number of teachers, a doctoral (PhD) track is not realistic, and an academic career - with or without an emphasis on teaching - becomes difficult(er) to shape. Similar to the **Professional Doctorate in Engineering (PDEng)**, a **Professional Doctorate in (Engineering) Education (PDEd or PDEEd)** could be an idea for our institutions to consider; a pathway in which a lecturer eventually obtains this degree on the basis of, for instance, a large-scale educational innovation project and process in which all phases from initiative, design, implementation, through to evaluation and adjustments, including educational justification (through all phases), are defended before a PDEd committee.

### **Sources**

Borrego, M., Streveler, R.A., Miller, R.L. and Smith, K.A. (2008), A New Paradigm for a New Field: Communicating Representations of Engineering Education Research. Journal of Engineering Education, 97: 147-162. <u>https://doi.org/10.1002/j.2168-9830.2008.tb00964.x</u>

Dijk, van E., van Tartwijk, J., van der Schaaf, M.F., Kluijtmans, M. (2020). What makes an expert university teacher? A systematic review and synthesis of frameworks for teacher expertise in higher education. *Educational Research Review*. Doi: https://doi.org/10.1016/j.edurev.2020.100365

KNAW (2018). Spagaat of duet? Position paper Verwevenheid van onderwijs en onderzoek aan Nederlandse universiteiten. https://www.knaw.nl/publicaties/spagaat-duet visited 30 March 2023.

ScienceGuide (2021). Nieuwe Erkennen en waarderen schaadt Nederlandse wetenschap. <u>https://www.scienceguide.nl/2021/07/nieuweerkennen-en-waarderen-kan-kwetsbare-groepen-schaden/</u> visited 2 May 2023.

Teaching Culture Survey (2023). <u>www.teachingcultures.com</u> . visited 22 February 2023.

Teaching Framework (2023). <u>www.teachingframework.com</u> . visited 22 February 2023.

# **Appendix 1**

#### Glossary

A number of key concepts are recurrent in the international debate, which we use in this advice report with six recommendations.

**University Teaching:** covers all kinds of activities relating to teaching and learning at universities. Examples include: teaching students and student supervision, curriculum development and evaluation, pedagogical research in higher education, development of university educational policy/strategy, course/program coordination, educational committee work, and more. (based on: Teaching Culture Survey (2023) – <u>www.teachingcultures.com</u>)

**Teaching achievements** are an individual's contribution to and impact on teaching and learning at a departmental, faculty, institutional, national and global level, including contributions to pedagogical research. (based on: Teaching Framework (2023) - <u>www.teachingframework.com</u>)

**Teaching expertise** refers to the tasks, roles, and responsibilities university teachers have (that is: teaching & supporting learning, educational design, assessment & feedback, educational leadership & management, educational scholarship & research) and the task-related dimensions for development (that is: better task performance, greater variety of tasks and more complex contexts, and larger sphere of influence). (Van Dijk et al. 2020) (Zie Bijlage 3)

**Evidencing teaching achievements** is about making explicit the quantitative and qualitative data and information that supports, arguments, and shows ('evidence') the performance of a university teacher. (Zie Bijlage 4)

**Scholarly teaching** is an intentional practice informed by evidence, research on teaching and learning, well-reasoned theory, and critical reflection. The objective of scholarly teaching is to maximize the students' learning. (based on Borrego et al. 2008)

Scholarship of teaching and learning (SoTL) involves a systematic analysis of pedagogical research questions that is documented and shared publicly (for example, via conferences and publications) in order to primarily- improve one's own teaching practice. (based on Borrego et al. 2008)

**Discipline-based education research** addresses pedagogical research questions and hypotheses with the goal to test theory and systematically gather data and produce pedagogical knowledge that leads to improved teaching and student learning within a discipline. Results are usually published in peer-reviewed journals to advance the field of teaching and learning (within that discipline). (based on Borrego et al. 2008)

#### List of abbreviations

4TU: 4 Universities of Technology in the Netherlands form the 4TU.Federation or 4TU: Delft University of Technology, Eindhoven University of Technology, University of Twente and Wageningen University and Research. These universities (TUs) often have their own abbreviations: TU Delft, TU Eindhoven or TU/e, UTwente or UT and WUR.

LBC's: career committees

TCS: Teaching Culture Survey

R&R: Recognition and Rewards. In November 2019, VSNU (now Universities of the Netherlands), NFU, KNAW, NWO and ZonMw published the position paper 'Room for everyone's talent; towards a new balance in recognising and rewarding scientists', in which we set out how we want to start recognising and rewarding the work of scientific staff more broadly. This initiative has since been further developed at national and institutional level.

 $\label{eq:UD2} \begin{array}{l} UD2 \rightarrow UD1 \rightarrow UHD2 \rightarrow UHD1 \rightarrow HL: \mbox{ Assistant Professor 2} \rightarrow \mbox{ Assistant Professor 1} \rightarrow \mbox{ Associate Professor 2} \rightarrow \mbox{ Associate Professor 1} \rightarrow \mbox{ Full Professor} \end{array}$ 

UTQ: University Teaching Qualification

SUTQ: Senior University Teaching Qualification

ELC: Educational Leadership course

R&D: Annual assessment, more recently called 'Results and Development' conversations or talks

Comenius: The Comenius programme stimulates innovation in Dutch higher education. In addition to a grant, the new Comenius Fellows become member of the Comenius Network of the KNAW. The budget for the grants and fellowships is made available by the Ministry of Education, Culture and Science.

KNAW: Royal Netherlands Academy of Arts and Sciences

PURE system: Research Information Management System, also named Current Research Information System.

NRO: The Netherlands Initiative for Education Research

CEL: Centre for Learning and Education (CEL) at Leiden-Delft-Erasmus Universities

SEFI : European Society for Engineering Education, in French La Société Européenne pour la Formation des Ingénieurs (SEFI).

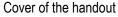
CDIO: The international CDIO Initiative is an innovative educational framework for producing the next generation of engineers. Conceive – Design – Implement – Operate (CDIO).

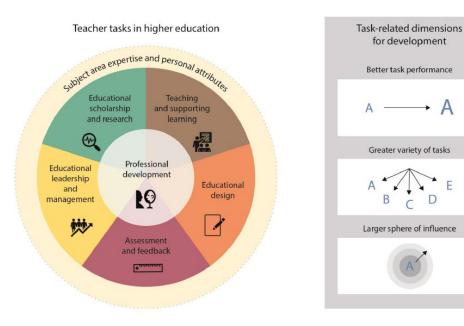
# **Appendix 2**

#### Handout for practice - what makes an expert university teacher?

Additional material by van Dijk, E.E. et al. (2020). What makes an expert university teacher? A systematic review and synthesis of frameworks for teacher expertise in higher education. Educational Research Review. Doi: https://doi.org/10.1016/j.edurev.2020.100365







Overview of the University Teacher Expertise model

→ A

E

D C

### Use of UNITE synthesis in practice



TEACHERS

Reflection on professional development regarding current teaching tasks and future ambitions



#### FACULTY DEVELOPERS

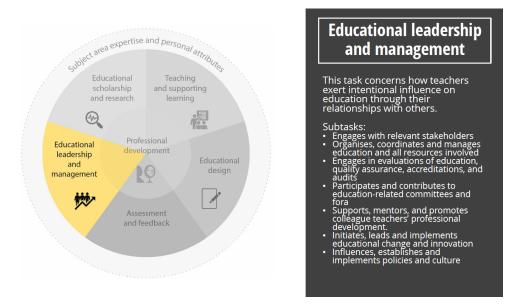
Critical examination and development of professional development activities and programmes



#### **POLICY MAKERS**

Foundation for policy on professional development and reward and recognition of teaching in academic careers

This is useful for practitioners, such as teachers, faculty developers and policy makers.



Example of the result of working with one of the six categories in the handout

# **Appendix 3**

#### **Evidencing teaching achievements**

To evidence the teaching achievements of university teachers we need to go beyond the number of students a colleague supervises, the number of courses a colleague is involved in, and the UTQ/BKO requirement. In particular for steps from UD2 (and D3) onwards, the sphere of influence and impact need to go beyond one's own students (see <a href="https://www.teachingframework.com/framework/spheresofimpact/">https://www.teachingframework.com/framework/spheresofimpact/</a>).

Certain kinds of evidence are 'concrete', 'hard', and 'easy' to observe, document, and make explicit, (partly) also via our PURE system:

• **formal coordination and leadership roles** with influence and impact beyond your own students; leader of teacher teams, program degree leader, department education leader, director of education, pedagogical coach, ...

• formal roles in education (advice) **committees** such as Board of Examiners, Board of Studies, faculty/institutional education advice or review committees, ...

• **awards**, such as lecturer of the year, education innovation of the year (for example, in own disciplinary community), EdX Prize for online teaching, ...

• **media** attention (visibility outside your 'normal', more local spheres: in newsletters (eg Educator at TU Delft, LCD.CEL at Centre for Education and Learning, 4TU.CEE), newspapers, ...

• Organizing, participating in, or visiting education **events**, such as TUD Education day, workshops, seminars, symposiums, webinars, ...: eg via own faculty, Teaching Academy, 4TU, Leiden-Delft-Erasmus (LDE)

• education innovation and/or education research **grants**: eg Comenius, 4TU.CEE, TU Delft Fellowship, TA-IDEE, The Netherlands Initiative for Education Research (NRO), EU, ..., including **co-operation** with educational scientists/researchers/advisors on those innovation projects

• Engineering Education (EngEdu) **conference** contributions such as presentations/workshops/roundtables/visits/key notes: for example, at European Society for Engineering Education (SEFI), the international CDIO initiative, Scholarship of teaching and learning (SoTL), ...

• education oriented **publications**: (journal) articles, reports, papers

• scholarly leadership roles, for example member of the editorial board of an EngEdu journal, leading (inter)national EngEdu communities

• attendance **formal professionalization** courses, modules, or 'leergangen': for example, SUTQ, Educational Leadership course, ... (beyond UTQ)

• participation in or starting a **special interest group** (community of practice) around an education theme

• attendance **informal professionalization** trajectories, for example: peer coaching and peer-review, via all those events mentioned above, ....

Other kinds of evidence are more soft, more qualitative, and need extra action, nuance, or context to be fully understood. For some people, the community knows (s)he is a good teacher, an active education innovator, always / continuously / consistently / systematically looking for ways to enhance and improve the learning journey of students, looking for (learning) data to support his/her innovations, and discussing/sharing teaching practices with colleagues (in home and outside). How to evidence this when you are such a person?

• Make explicit the **Education Vision** you have, value and knowledge based, evidence informed (for example, educational scientific theories/expertise), explicitly related to one's own teaching practice.

• Support your vision with evaluations of one's teaching performance which should show a kind of consistent and/or complementary message.

• A critical self-assessment, student evaluations, alumni evaluations, peer reviews and peer coaching, and the feedback from supervisors and pedagogical assessors together can give a rich picture of the performance of your

teaching/supervising/lecturing/mentoring/educational leadership or scholarship skills.

• When being self-reflective, you will be able to derive recommendations, new ambitions or goals, and innovation/development points not only for **your teaching** (Action Plan for your courses, your program), but also for **yourself** as university teacher (Personal Development Plan). Both are important!

It is important to say that all categories mentioned above are to inspire people to more systematically evidence certain teaching expertise(s). They are not meant as a tick-the-box overview. Some categories might be / will be less important than others for our colleagues; or even not important at all.

# **Appendix 4**

#### Information binder

The information binder may include:

- > Institutional policies and tools R&R (with an emphasis on education)
- Suggestions for departments on how to enable people with teaching talent (didactic, leadership, innovation, educational research, and/or organisational) to grow in their careers, e.g. an overview of available teaching committee work (Board of Studies, Board of Examiners, Binding Study Advice committee, committee for promotion assessments, working groups ...), educational management work beyond course coordination (graduation coordination, minor coordination, bachelor's and master's programme coordination, programme directorship (including director of education)...), Comenius programme, Teaching Fellow programme, ...
- > The flyers on Ruth Graham's Teaching Framework
- The more senior professional development offerings of the institution(s): SUTQ / Educational Leadership course, module Pedagogical coach, module Evidencing teaching achievement trainer/expert, module Scholarship in Engineering Education, etc.
- An overview of relevant educational congresses, educational journals, and educational organisations (of own discipline, but (especially also) 4TU.CEE, Centre for Learning and Education (CEL) at Leiden-Delft-Erasmus Universities, European Network for Engineering Education (SEFI), the international Conceive – Design – Implement – Operate (CDIO) Initiative, ...
- > An overview of local and (inter)national educational innovation funds
- ≻ ...
- > ...perhaps more

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