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TEACHING EXCELLENCE PROGRAMMES – LESSONS LEARNED AT TWO UNIVERSITIES

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ABSTRACT

Universities are seeking novel ways to strengthen the collective educational competence of their faculty and promote educational merits. In this paper we describe and compare the experiences of two recently started initiatives for teaching excellence, the *Program for Future Leaders for Strategic Educational Development* at KTH Royal Institute of Technology (henceforth KTH) and the Teaching Fellowship

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Programme at the University of Twente. Both programs have recently completed one complete round of implementation. The programmes are similar in that the participants work on a project of their own for an extended time, while also being part of a community with regular meetings and supported by coaches. The main differences are the programme duration, number of participants, and whether the projects are in a specific theme or wholly formulated by the participants. In this study, both programs are evaluated using similar themes. We analyse this data, and reflect on the context, conditions and design of the programs and our lessons learned from these first experiences.

1 INTRODUCTION

1.1 Recognising, Developing and Rewarding Teaching Excellence

Many universities are looking for ways to raise their ambitions for engineering education. Society is facing complex challenges that are both severe and urgent, which motivates the need for students to learn by tackling realistic problems with interdisciplinary approaches. Another major change driver is digitalisation, which profoundly affects engineering practice, but also engineering education as such. Other issues are more longstanding, such as making engineering education attractive to prospective students, combined with stimulating motivation and retention of the students in engineering programmes. It can be argued, however, that we have come further in identifying what developments are desirable in engineering education, than in understanding how to make them happen.

To enable and drive developments such as these, universities have begun to see the need for faculty to have significant competence in teaching and learning. One implication is that engineering faculty need to be supported in their professional development, another is that the incentive structures need to change so that teaching merits and excellence are better recognised and rewarded.

In contrast to research, teaching merits are perceived by many academics as undervalued in the university career. In the *Teaching Cultures Survey* from 2019, for example, merely 25% of respondents reported that teaching is rewarded in the academic career, and 57% even identified education roles as “career-limiting”. Only 25% reported that teaching was very important in promotion to full professorship at their university (Graham 2020). However, the same survey shows an interesting gap, which can give hope for the future. Of the respondents who are in a position as university leaders, no less than 57% think that in the next five years teaching will be more prioritized in academic promotions at their institution.

It is no surprise, then, that university leaders are taking initiatives to make teaching merits play a more important role within promotion structures, and to show that teaching is valued in other ways. In Sweden, about half of the higher education institutions have systems for recognition by awarding honorific titles such as “Excellent Teacher” (Winka 2017). In the Netherlands, there is a particularly strong movement to modernise the system of recognition and rewards. The one-sided focus on bibliometric indicators is challenged, and there is recognition that the academic career system

must enable greater diversity, if universities are to achieve excellence also in education, impact, and leadership (Recognition & Rewards 2019; 2023).

One issue that has been referred to as a particularly important barrier to greater recognition of teaching merits is the perceived difficulty to evaluate such merits. As a response, a coalition of universities led by Ruth Graham have developed the *Career Framework for University Teaching*. Figure 1 shows the four levels of teaching achievement in the framework, and the key capabilities that determine achievement at each level. This framework has now been adopted by some 50 universities worldwide, who are systematically sharing and documenting their experiences (Graham 2018b).

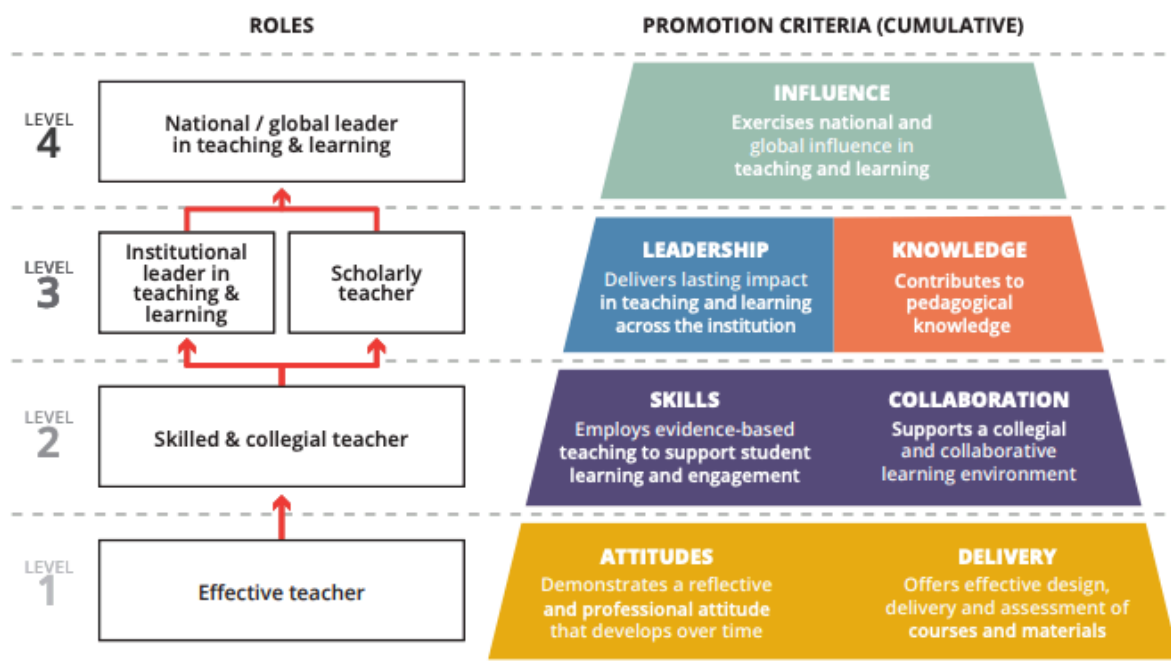


Fig. 1. Career Framework for University Teaching. Developed by Ruth Graham (2018b).

1.2 Teaching Excellence Programmes

It is in the light of this background that we can understand how some universities are seeking new ways to strengthen the collective educational competence of their faculty and promote educational merits and excellence. This study focuses on the experiences of two programmes for recognizing, furthering and rewarding teaching excellence. The universities are located in Sweden and the Netherlands. The programs have somewhat different design although the aims are similar. In both cases, the programs were designed for selecting already distinguished teachers and supporting their continued establishment and visibility as educational leaders.

This positioning of the programs can also be expressed using the *Career Framework for University Teaching*. To be eligible for the program, participants are expected to already be well established on level 1, as *Effective teachers*, and level 2, as *Skilled and collegial teachers*. The aim of the programs is to support the participants in their

continued development, empowering them to develop themselves also on level 3, as educational leaders as well as scholarly teachers. Level 3 encompasses both those who have broad and positive influence on the educational environment of their own institution (level 3a) and/or those who make contributions to it the development of higher education pedagogical knowledge nationally and internationally (level 3b). An important feature of the framework is that it is cumulative, meaning that any level also includes those below. Accordingly, the programmes are not meant to prepare the participants for leaving their roles to become “just” leaders. They should also stay firmly anchored in their own teaching practice, as effective, skilled, scholarly and collegial teachers. In the following, we describe each of the two programs in more detail.

1.3 Teaching Excellence Programme at KTH

The programme at KTH came by as a result of internal investigations into how teaching excellence could be better recognised. Awarding a title such as “Excellent Teacher”, which is common in Swedish universities (Winka 2017), was seen as too much focused on past merits. It was more attractive to spend resources in ways that would strengthen participants’ expertise and skills further, thereby also contributing to strengthen the culture and capacity for development at the university. The plans for the programme were presented in 2019. After a long postponement during the pandemic, it opened for applications in fall 2021, with the Swedish authors of this paper commissioned to lead the program.

The name of the programme became *Future leaders for strategic educational development*. The announcement promised that successful applicants could use twenty percent of their time during the year 2022 for their participation. The idea was that the core of the programme was the participants’ work on their own projects, hence the focus and content of the programme was shaped by their interests. In addition, several kinds of joint activities were planned to support their work and to build a community.

Applicants were expected to have substantial teaching experience, i.e. several years, and by the time of application they must also have completed the courses on teaching and learning in higher education required at the university (at least 15 ECTS credits). The application consisted of two parts. The first was a self-evaluation, in which participants should reflect on their pedagogical competence in six dimensions, intended to reflect levels 1 and 2 in the Career Framework for University Teaching (Graham 2018b). The second part was a preliminary project idea, demonstrating their interest and ambitions and discussing how the work would contribute to the university and the participant’s school. Projects should strengthen their own ability to contribute to educational development and innovation at the university, also benefiting their own teaching. The programme received over twenty applications, and a selection of fourteen participants was made by the Vice Rector with input from Heads of Schools and the programme leaders.

It was finally announced that all Swedish pandemic restrictions were to cease on February 9, 2022, and on that very day the program started with a kickoff meeting. Monthly half-day meetings continued during the spring, often containing some input from an expert, group-wise in-depth discussions about the projects, and quick rounds for general discussions. In May the group went on a two-day study visit to Chalmers University of Technology in Gothenburg, the second largest technical university in Sweden. In addition to the programme leaders, participants were supported during the spring semester by a visiting professor in engineering education. After the summer, in late August, the group met for two full days. Then the projects were thoroughly ventilated with critical friends, two who were invited from within the university and two who were national thought-leaders. The monthly meetings then continued until November. Then the focus shifted to reporting the work in various arenas, including a festive poster mingle session in December for guests invited by the participants, and a university-wide conference on Scholarship of Teaching and Learning in March. Participants are still offered support with reporting and publication during 2023, including a travel grant if they wish to present their work in a national or international pedagogical conference.

1.4 Teaching Excellence Programme at the University of Twente

At the University of Twente, one of the (pilot) teaching excellence programmes is a Teaching Fellowship programme. This started in 2021. Each faculty was invited to nominate one fellow, and in addition two senior fellows were appointed. Senior fellows could also be nominated by the faculties but were selected by the University centre organizing the programme. In 2022, the second group of seven fellows started. The Teaching & Learning Fellowship is meant as an opportunity for staff to innovate teaching in an evidence-informed way, meet and learn with teachers from other faculties and contribute to the scholarship of teaching at the university. In this way, participants are meant to be stimulated to pioneer in educational R&D activities that can both advance their own professional development but also help improve education regarding aspects that are on the educational agenda of the university, connected to the university's vision. The faculty fellows are intended to target their own education and disseminate the results university-wide. The senior fellows are also meant to address impact beyond their own educational setting. The fellowship is not a professional development 'course' however, and is therefore also not assessed as such. Apart from the criterion that their approach should be evidence-informed and they should be able to spend one day a week for two years, the only other criterion was to disseminate their findings (e.g., in university events about educational innovation and/or teaching excellence, at conferences such as SEFI or national conferences, in education meetings or study days). To support knowledge exchange and community feeling, each group had a common theme: for the first group, CBL had been set as a common theme in the call for fellows to the faculties, in the second this was digitalization. To support the fellows in their activities, we did provide the resources to meet (every 6-8 weeks) in a coffee and/or lunch meeting to share knowledge and experiences and work on collaborative goals, if applicable. They also

had a coach and had the opportunity to discuss their plans and progress or ask questions about evidence-informed teaching practice both to a coach and the centre leader. They received support, for example, in obtaining ethical consent for their study with the university's ethical committee if desired. Faculties were free to select candidates using their own procedure, given the main criteria/recommendations in terms of time spent and main goals. We recommended the Senior University Teaching Qualification² as prior experience, but this was not mandatory.

Fellows are expected to spend (on average) one day per week on their fellowship for 2 years. They may use the title of their Fellowship for an additional year for dissemination purposes. To determine how the Fellowship programme should be continued after these first pilot years, an evaluation study was carried out.

2 METHODOLOGY

2.1 Evaluation Study KTH

The evaluation of the programme at KTH started mid-way through the programme with one hour of joint reflections with the whole group during the two full seminar days in August. A few weeks later, programme leaders made written reflections. After the formal activities in the programme were concluded, an online survey was sent to the participants (early April 2023). The survey consisted of several statements for quantitative rating that were copied from the survey at University of Twente, or formulated to be as similar as possible. Some questions were added, especially to prompt for more qualitative reflections. Participants were informed and asked for active consent to use their responses in this study. Further written reflections were made by the programme leaders, as part of writing this paper.

2.2 Evaluation Study – University of Twente

The evaluation study at University of Twente combined an online survey with interviews and document analysis. For this paper, the first cohort of fellows was surveyed one year after the start and two years after the start; they were also interviewed twice in relation. The second cohort was surveyed and interviewed once. In addition, documents (e.g. plans, outcomes, tools) were requested as data, and other stakeholders, such as education directors at each faculty were also respondents in individual interviews.

The online survey was used to gather data about their *satisfaction* with the fellowship programme (scale 1-5). Questions concerned, for example, their extent of engagement with the fellowship and how interesting they found it. In individual interviews, participants were asked to clarify their answers more in-depth. The interviews were also meant to discuss participants' *learning*, if available related to any documents participants' had shared. Documents could also be shared in a later stage in relation to participants' planning for their fellowship. The interviews and documents (e.g., presentations, publications, tools) were also used to show the way in which

² <https://www.utwente.nl/en/learning-teaching/professional-learning-development/sutq/>

learning had been applied by the participants, and whether there were already contributions at the level of student outcomes and/or organization.

The study was approved by the ethical committee of the university (req.nr. 221067) and informed active consent was obtained from all participants for the study.

3 RESULTS

3.1 Lessons Learned at KTH

A rewarding experience and a learning community – In the survey, participants report that their experience in the programme as very rewarding. Six statements about engagement, learning, usefulness and satisfaction received an average rating of 4,6/5. They are also enthusiastic about recommending the programme to a colleague (4,7/5). Participants valued the community very highly. Three statements about getting to know the others, sharing knowledge and experiences, and being stimulated by the others' projects were rated 4,7/5 on average. The programme leaders confirm that they too felt a strong sense of community. This aspect should be considered important when designing any future programme.

The projects – Participants mainly rated *their own project* as well chosen (4,0/5), and agreed partly to statements about the benefit of carrying out the project within the programme and that they felt supported in the programme (3,9/5). Fewer participants reported practical collaboration with other participants. Two statements about working together in their projects, or meeting outside the programme were rated 3,3/5. One participant says: "*The difference in the projects and background of the participants did not favor spontaneous cooperation. Still I had some informal exchange with some colleagues, especially following my feedback to their work.*" Another makes a suggestion: "*Create sub-groups that are more 'thematic' so that we keep the ball rolling with peer support (or peer pressure...)*". There were plenty of critical comments about the overall set of projects, finding some too big and broad while others were too specific to a particular teaching context. The programme leaders saw that there were several suitable and successful projects, but for future programmes, all projects should be selected for their strategical relevance, general interest, or at least have more in common. It is also important to select projects that can benefit from being in the programme. If the work can just as well be done on one's own, the programme risks becoming more of a distraction.

The programme activities – Participants show high appreciation of the amount of activities, the monthly meetings, and the two days in August, with average ratings of 4,5/5. The outstandingly most appreciated activity in the whole programme was the study trip to Chalmers (4,9/5). The two days focused on topics of high relevance for the projects. In particular, it showcased areas with important differences in how education is organised. This offered a highly interesting contrast and made a strong impression on the participants. One voice: "*The trip to Chalmers was a true highlight. This trip was the best part of the program, and has been very valuable to me for the long-term development of my role at KTH.*" Travelling together was also positive for the group cohesion. The study visit invited reflections about how things work at KTH,

something that could have been more present in the programme. One participant reflects: *"I would like more discussions about the management of KTH as well, the roles on all levels, how we manage education."* Another aspect is the input from experts, both internal and external, which was much appreciated. Their presence created a "sharper" context, which had positive influence. If the program is to be implemented again, the presence of critical friends in the activities could be more accentuated. Regarding the programme year, one participant usefully suggests more intense activities in the beginning: *"More activities in the first few months would make everyone jump in with much more energy and get momentum. More frequent interactions and discussions can expedite getting over the first stages of confusion."*

Planning, time and resources – The participants were accepted at the end of December, and many participants had difficulty setting aside time already during the spring term. Clearly, the process of announcing the program and making selections needs to start much earlier, giving participants a planning horizon of at least six months. Further, when the programme was announced, it was promised that the participant would be able to spend 20% of their time for their participation. In reality, it turned out that, with only a few exceptions, participants had to squeeze the work into their existing time. The background was a conflict regarding the programme between President and School level, exacerbated by the time pressure when deciding to open the programme. Many participants commented on this: *"Regarding funding and time, a premise before the program was that 20% would be given, but then it seems that no level really wanted to take these costs, so it fell on my division anyway, which meant that no extra time could be given. Of course, it meant less focus and lower quality."* If the programme is to be run again, the necessary resources must be safely secured and promises kept.

Number of participants – There were fourteen participants admitted, but after two drop-outs (one after three months and one after eight months), twelve people completed the programme. Some participants have commented that the group was too diverse in their background understanding of teaching and learning: *"Some colleagues would have benefited from some 'recap' of the main pedagogical concepts underpinning their projects"*. With fewer participants, each project can receive more attention and support, meetings can be more focused, and crosstalk between the projects can increase. It might be easier to secure the necessary resources. Exclusivity may also increase the merit value of being selected and of participating. If the program is to be carried out again, we suggest a smaller group, perhaps five to eight participants.

When asked if the participants would recommend the university to continue the program, they agree to a high degree, 4,4/5. To summarize the evaluation above, if the program is to be implemented again, some key recommendations are: longer planning horizon and more reliable resource conditions; projects should address a theme and be more strategically interesting so they benefit the university more broadly; more exclusive selection. Regarding the design of the program activities, the format can be developed based on the experiences during the first cohort.

3.2 Lessons Learned at University of Twente

Most participants in the fellowship (partly) agree (score of 4 or 5 out of 5) that their fellowship is interesting, engaging, and that they benefitted from it, for example, at the satisfaction level. They are (very) satisfied about the supportive atmosphere in their Fellows group, for example. *"I learnt a lot and exchanged ideas"*, one fellow reports, and examples at the learning level are about knowledge about the theme (e.g., CBL) and its applicability, but also about systems and support at the university. Most first cohort fellows reported they had already changed their teaching as a result of the fellowship; the second cohort reported to be in progress with this.

Although all survey answers were generally 'neutral' (3) or (very) positive (4-5), the question about receiving support to change/improve their teaching was answered least positive; at the same time, for most change/implementation was also still work in progress or at least not yet entirely completed. At the organization level, Fellows gave examples of having become part of a steering group, or playing a larger or more explicit role in their within-faculty teaching community.

Feedback about the programme concerning coherence among topics (in relation to the common theme), visibility, institutional support and change processes was offered. According to the interviews, differences among educational programmes were noticed by the fellows, also in relation to their colleagues' perception of the fellowship themes: *"I think in that regard we could also support each other"*. A *'feeling of belonging'* is mentioned. The network aspect appears to be mostly about sharing, exchanging and feeling supported as part of the group of fellows. Answers about support from their own colleagues or relevance of their work for colleagues are more neutral. Moreover 'time', also in terms of run time, was mentioned as challenging.

The education directors were mostly positive in their perception of the fellowship programme. They all felt, for example, that it should be continued after the pilot period. At the same time, they were all reflective about how fellows could be more supported (both by the directors themselves as in general) to fulfill ambitions both at the individual and faculty level. Community, visibility, and fellows as *'innovation brokers'* were addressed more explicitly with the education directors than apparent in the perceptions of the participants. In line with most of the feedback aspects of the fellows, however, education directors offered feedback to enhance selection and theme (balance of common theme with faculty connection and individual interests), visibility, brokerage (i.e. to support knowledge sharing, networking, about evidence-informed teaching innovation) and related support for fellows, as well as attention for time pressure and recognising and rewarding teaching. The fellowship provides input for further developing recognising and rewarding at the university.

4 DISCUSSION

By analysing these programmes side-by-side, we already have some initial improvement ideas based on these preliminary findings. For instance, we see a clear advantage with having an overarching theme for the participants' projects, connected to the university's education vision, however: balanced with faculty and participants'

own interests. The thematic proximity can create better potential for collaboration between the projects and thus strengthen the sense of community even further. It can also be expected to enhance the learning, when similar topics are explored through slightly varying perspectives. It could also make the resulting group expertise more recognizable to colleagues. Time is always a challenging factor in professional learning (Gast et al 2017), even if facilitation is (meant to be) arranged beforehand. Apart from communication about facilitation requirements, providing actual solutions to time pressure problems might be more fruitful, and is work in progress in these programmes.

This evaluation is an attempt to record the first impressions of the process by soliciting the experiences of those who were directly involved as participants or facilitators. It is important to note, however, that the full impact of initiatives such as these can only really be seen in the longer term. It is then also important to consider the impact achieved in the light of the broader conditions for educational development at the institution. To be able to ultimately achieve teaching innovation, teachers need to develop the related knowledge, skills and attitudes; they must also have the opportunity to apply this in practice. According to Desimone (2013; also referring to Kirkpatrick 1996 and Guskey 2022) subsequent levels of professional learning effects depend on teachers' satisfaction with their programme, their learning, and subsequently application.

At the same time, the programmes also have other forms of impact. Changes at the organizational level might be initiated because of, in interaction or along with programmes such as these. Participants are extending their sphere of influence, for example, provide input regarding how education is organised or how teaching is rewarded in the academic career system, or they may be consulted by others in relation to teaching innovation at team, department or faculty level. In relation, to more fully benefit both at the individual and organizational level of these programmes in terms of participants' development as scholarly and leading teachers, universities' framework for recognition and rewards need to be further developed to align with these programmes.

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