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Establishing reward systems for excellence in teaching – the experience of academics pioneering a reward system

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ABSTRACT
Higher education institutions are struggling to elevate the value and status of academic teaching. In this endeavour, rewards for excellence in teaching are becoming a common measure. This study reports on the experience of the first academic teachers who were given the status as rewarded teachers in new reward systems. We explore rewarded teachers' potential to influence teaching and learning culture through a socio-cultural perspective, where influence is assumed to materialise through teachers' networks and cultural change is linked to a widening of significant networks. Interviews with 13 rewarded teachers from three universities were analysed using thematic analysis. We find that rewarded teachers maintain their positions in existing networks and gain visibility and influence in wider networks. This widening of their teaching and learning network is a first step, that over time can become a wider significant network potentially important in influencing culture. We suggest that a productive measure to support rewarded teachers is to provide support for expanding their significant networks further, bridging the boundaries between teaching cultures. This study adds to our knowledge about how reward impacts networks, and the potential role rewarded teachers play in cultural change, a perspective that is underexplored in research on reward systems.

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KEYWORDS
Higher education; teaching reward systems; teaching and learning networks; impact of reward systems

Introduction

Higher education institutions are struggling to elevate the value and status of academic teaching. In this endeavour, rewards and recognition for excellence in teaching are becoming common. Types of reward range from fellowships, prizes and titles, to schemes integrated in institutional or national systems for quality improvement, promotion and appointment. Teaching reward systems typically share some overarching objectives, namely enhancing student learning and educational quality, giving individual academic teachers recognition for a scholarly teaching practice, and strengthening the

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status of teaching in higher education (Chalmers 2011; Olsson and Roxå 2013; Turner et al. 2013; Fung and Gordon 2016; Winka 2017).

Reward systems for excellence in teaching, also called pedagogical merit or reward systems, are widespread and well-established in Swedish higher education, existing for more than 20 years (Winka and Ryegård 2021). The Swedish model has further inspired schemes for assessing pedagogical competence and rewarding excellence across the Nordic countries (Grepperud et al. 2016; Førland et al. 2017; Pyörälä, Korsberg, and Peltonen 2021; Winka and Ryegård 2021). What has now become a Nordic model typically involves institutional systems that target experienced and accomplished academic teachers. The assessment criteria build on the principles of the Scholarship of Teaching and Learning (SoTL) (Boyer 1990; Felten 2013), focusing on student learning and a scholarly teaching practice with systematic, evidence-based and documented development of teaching and learning. In the Nordic systems, academic teachers apply for recognition with reflective teaching portfolios that are assessed against set criteria in a peer review process, and successful applicants are given a status (e.g. *Excellent teaching practitioner*), often accompanied with financial incentives. One characteristic of the Nordic reward systems is an explicit or implicit aim of changing the institutional teaching and learning culture, towards an evidence-based scholarly teaching practice and collegial culture that will benefit not only the rewarded individuals but the entire organisation (Olsson and Roxå 2013; Olsson et al. 2018).

In Norway, the very first pedagogical reward systems were established in 2016 at three universities. The following year, the White Paper *A culture for quality in Higher Education* introduced a governmental policy for systemic quality development in higher education (KD 2017), which required all higher education institutions to develop pedagogical reward systems to stimulate quality in teaching and reward educational development (KD 2017, 22). Norwegian institutions have since implemented reward systems, resulting in similar but local institutional policies, largely inspired by the Swedish systems. Even though these systems reward individual academic teachers, an additional purpose is to contribute to a cultural shift towards a scholarly and collegial approach to teaching as defined by the criteria for reward (Grepperud et al. 2016; Førland et al. 2017; Sandvoll, Winka, and Allern 2018; Olsson et al. 2018). An expectation is that rewarded teachers in some way will contribute to this cultural shift, by e.g. engaging in educational development and by serving as role-models, mentors and inspiring others.

The potential for change therefore depends not only on the system itself, but also on the rewarded individuals – in particular, as will be argued below, the very first academic teachers to apply. Understanding how rewarded teachers experience becoming and being a rewarded teacher and how they potentially influence teaching and learning cultures, has implications for how institutions may use reward systems to support quality enhancement. This study reports on the experience of the first academic teachers who were given the status as rewarded teachers in three new institutional teaching reward systems in Norway. We also explore rewarded teachers' potential to influence teaching and learning culture. To pursue this, we use a socio-cultural perspective, where influence on culture is assumed to materialise through rewarded teachers' networks (Figure 1) (Roxå and Mårtensson 2009; Roxå, Mårtensson, and Alveteg 2011). Thus, we pursue the following research questions:

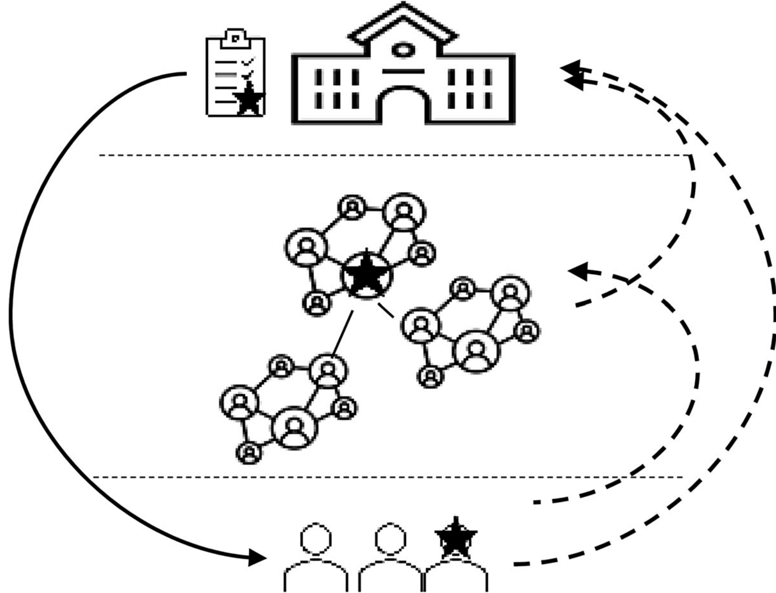

Figure 1. The institution (macro level) introduces a teaching reward system (star) that target individual teachers (micro level) (solid arrows). These teachers are part of social networks (meso level). Reward systems that aim for a cultural change rely on the rewarded teachers to influence their colleagues through their networks (dotted arrows).

- How do academic teachers experience being the first to seek recognition and be rewarded in newly established reward system for excellence in teaching?
- Can we detect early signs of rewarded teachers' influence on teaching and learning cultures, specifically by exploring how reward impacted personal networks and roles?

Previous research and theoretical framework

In this section, we point to previous research that has studied the impact of reward systems. Less common are studies relying on an explicit mechanism through which the impact is found to propagate. Such knowledge may be important for institutions that have established such systems.

Impact of teaching reward systems

Reports on the UK Professional Standards Framework (UK PSF) show impact on the higher education sector, institutions and individuals (Turner et al. 2013). This framework is used widely internationally to identify the standard of pedagogical competence and teaching practice, and it forms a basis for recognition by Fellowships (Advance-he.ac.uk 2011). In addition to alignment between institutions, the UK PSF has contributed to attention and acknowledgement of excellence, has provided a common language, and has led to changed practices for institutions as well as for individuals. A lack of alignment between the framework and the local cultures, subject-specific issues and

institutional career paths was also identified (Turner et al. 2013). For academic teachers engaging in professional development leading to UK PSF Fellowships an important motivational factor was the personal recognition, along with political, strategic and pragmatic reasons (Botham 2018; Spowart et al. 2016). The recognition was perceived as acknowledgement of individual achievements and as contributing to increased credibility and status (Botham 2018). Fellows support colleagues' professional development by engaging in mentorship and leadership (Botham 2018), and tend to emphasise the importance of outcomes for the community as well as personal professional development (Spowart et al. 2016).

A well-studied Nordic reward system is the Pedagogical Academy at the Faculty of Engineering (LTH), Lund University. Olsson and Roxå (2008) found that academic teachers in all categories, including senior/research-focused positions, had been rewarded and that rewarded teachers later advance into leadership positions. The reward system has impacted policy (e.g. promotion criteria), which is likely to influence the behaviour of staff (Olsson and Roxå 2008). Looking at student course evaluations, Borell and Andersson (2014) found that rewarded teachers at LTH had higher average scores, indicating that the system captures characteristics important for the students' experience of learning. Overall, Swedish institutions with teaching reward systems report increased interest and focus on teaching and educational development (Winka and Ryegård 2021).

Influencing teaching and learning culture

We adhere to a definition of culture offered by Schein (2004), in which culture can be observed as artefacts, for example norms, recurrent teaching practices (Trowler 2020), symbols (Geertz 1973), or tales about heroes and exemplars (Hofstede, Minkov, and Hofstede 2010). We acknowledge that these observable patterns are constructed and maintained during interaction where members of a culture habitually acknowledge the meaning of such cultural artefacts (Alvesson 2002). We argue that culture is dependent on some stability in significant interactions (Vollmer 2013). Thus, cultural change is linked to, among other things, change in network constellations.

In this study, influence on teaching and learning culture is assumed to materialise through rewarded teachers' networks (Figure 1) (Roxå and Mårtensson 2009; Roxå, Mårtensson, and Alveteg 2011). Applying network theory, Roxå, Mårtensson, and Alveteg (2011), analyse construction and maintenance of teaching and learning cultures. They suggest that the communication pathways through networks are important for cultural change, with a potential influence on teaching cultures:

> Since the construction of meaning in a conversation is dependent on who is taking part, a way to influence culture would be to influence the communication pathways. Thereby new people can be engaged in the discussion, and new members of a network can take on the role of being a hub. If this is achieved, both the flow of information and the negotiation of meaning will be affected. (Roxå, Mårtensson, and Alveteg 2011)

Studies of social networks support the claim that networks and collaborative practices are important while trying to understand how behaviour spreads (Centola 2018).

Informal learning through interactions and conversations in significant networks is key for teachers' professional development, and is where teachers presumably allow themselves to be influenced (Roxå and Mårtensson 2009; Pyörälä et al. 2015; Van Waes et al. 2016; Katajavuori et al. 2019). In significant networks, teachers share experience and develop their practice with a small number of peers, in an environment of trust and privacy (Roxå and Mårtensson 2009). Especially important for change are those relations that stretch beyond the individual's local context (Centola 2015; Centola 2018). Thus, cultural change is linked to a widening of teachers' significant networks which carry new insights and behaviour beyond the boundaries of the local community (Granovetter 1973; Roxå and Mårtensson 2013; Benbow and Lee 2019).

A study from LTH found that successful applicants (rewarded teachers) to the Pedagogical Academy had more and richer references to a diverse group of significant others in their portfolios, indicating a larger and more diverse network (Warfvinge, Roxå, and Löfgreen 2018). However, this study does not address whether the successful applicants' networks were influenced after being rewarded.

Studying collaboration and interactions within the reward system Teacher's Academy (University of Helsinki), Katajavuori et al. (2019) found that applicants were highly collaborative and interacted with others for personal development, co-teaching, sharing practice and creating artefacts, as well as systematic educational development. Previous research from the same reward system found that applicants had significant ties to peers within their discipline in their significant networks, and they also put a high value on peers outside their own unit (Pyörälä et al. 2015). Five years after establishment of the Teacher's Academy, rewarded teachers in general report having meaningful conversations with their local disciplinary colleagues. In addition, the Academy itself had become a Community of Practice across disciplines and campuses (Pyörälä, Korsberg, and Peltonen 2021). A Community of Practice is a group of people who have a shared enterprise and a shared practice that develop through a process of negotiation and reification (Wenger 1999). This emerging Community of Practice shows that significant relationships have developed among the rewarded teachers, adding to their significant networks within and outside of their disciplines (Pyörälä et al. 2015).

The above research converges on academic teachers' significant networks as key to understand influence in higher education. However, the perspective also highlights the need for relations that reach beyond the local contexts such as disciplinary communities or departments, for behaviour to spread within a social system (Centola 2018). *How* the rewarded teachers influence peers, particularly beyond their local contexts, and possibly contribute to a cultural shift in their respective organisations is underexplored, especially in newly introduced reward systems.

As we are attempting to look for signs of a cultural shift only a short time after introduction of teaching reward systems, a perspective on culture that allows for detecting early signs of influence is needed, a perspective that does not have to 'wait' for a shift in cultural artefacts (Schein 2004). The focus on the first-generation rewarded teachers' experiences, allows us to investigate whether these pioneers describe emerging significant networks that are wider than their local context. If so, following the mechanism described above where patterns of recurrent interactions shape a shared

understanding, it can be argued that even a first generation of rewarded teachers may count as influencers of teaching cultures, even though direct impact on the culture itself cannot yet be detected.

Materials and methods

Context of the research

Three Norwegian universities introduced their institutional reward systems in 2016, before it became a national requirement, and they were thus leaders in the development of reward systems in Norway (Grepperud et al. 2016; Førland et al. 2017). The first teachers were rewarded in 2017 (a total number of 21 at three institutions). These pioneer systems have similar evaluation criteria, process, reward and status given successful applicants. The criteria are based on the principles of SoTL and include (i) a focus on student learning, (ii) a scholarly approach to teaching and learning, (iii) a clear development over time and (iv) pedagogical leadership/collegial attitude and practice. The application includes a reflective teaching portfolio in which applicants describe their teaching philosophy and practice in relation to the evaluation criteria. Applications are followed by a CV and supporting documentation. With some exceptions, permanent academic staff with teaching duties are invited to apply on a voluntary basis. A criteria-based assessment is done in a peer review process. Successful applicants are awarded a status (e.g. *Merited Teacher* or *Excellent Teaching Practitioner*), get a personal salary increase and in one of the systems also become members of a Pedagogical Academy. In two of the systems, the rewarded teacher`s department gets a financial reward.

Informants and data collection

We conducted semi-structured interviews (Kvale et al. 2009) with 13 academic teachers in the first generation of rewarded teachers from the three Norwegian universities that implemented the first teaching reward systems. Informants were recruited by purposeful sampling (Moser and Korstjens 2018) among successful applicants (21) in the first call for applications at their institutions. All successful applicants were invited to participate, and 13 accepted. They come from a range of academic disciplines, whereof half is from STEM (science, technology, engineering and math) and the rest from disciplines like language, teacher education, art and business. Our study is reported to the Norwegian centre for research data (NSD, reference number 765106) and informed consent was given by all informants.

An interview guide with open-ended questions was developed and tested in three pilot interviews. As preparation for the interviews, the informant's teaching portfolio (application) was read by the interviewer. At the time of the interviews, the informants had held the status as rewarded teacher for 2–2.5 years. Interviews lasted one hour and were done face-to-face in the informant's workplace. Interviews were recorded and transcribed *verbatim*. Informants were given pseudonyms and data de-identified to ensure anonymity.

The informants were asked to describe their teaching and learning network (conversational partners and interactions) using a network map, using the last six months as the starting time frame. The network lens guided our informants to focus on interactions and communication pathways (Roxå, Mårtensson, and Alveteg 2011; Pataraia et al. 2014). The network map had concentric circles representing organisational proximity (group, department, institution and outside) and informants were asked to place conversational partners on the map and say something about the nature and frequency of interactions. They were free to add more connections to their network as the interview proceeded.

Informants were asked about the process of applying, and whether the reward itself or the role 'rewarded teacher' had added or removed connections from their network. As the interviews were done after receiving the status, we were especially interested in whether and how the teachers perceive any change after the reward.

Data analysis

Interviews were analysed using thematic analysis (Braun and Clarke 2006), searching for themes within and across informants and identifying meaningful patterns in both common and different perspectives among participants (Nowell et al. 2017). The process of analysis began with the first author carefully reading transcripts and to familiarise themselves with the data, and then proceeding to create initial codes. Codes were combined into broader themes and sub-themes found across the data. Summaries of each interview were made, structured around the main themes (network, reasons to apply, support and encouragement, application process, perceived changes) and emergent themes (e.g. views on systems and criteria). The summaries were used to generate codes, carefully cross-referencing with transcripts for consistency and reliability, followed by discussions with co-researchers. Themes and sub-themes were then revised and developed into the final thematic map (Tables 1–3). NVivo12 (QSR, released 2018) was used to store and organise data. The network analysis was done by combining the informants' own drawings on the network map and their narrative (Altissimo 2016).

Results

Teaching and learning networks

The local teaching and learning networks informants described (Figure 2) were typically long-lasting and had, in the informants' experience, not changed much after reward. Collaboration and frequent engagement in interactions and conversations about teaching and learning were common. The informants described their networks mainly as clusters – stable groups of people within their group/department with whom they had regular interactions. Also, informants frequently had more distant and short-term connections outside their group/department within or outside their institutions. In contrast to the clusters mentioned above, these more distant and ephemeral connections increased in frequency and number after reward (Figure 2).

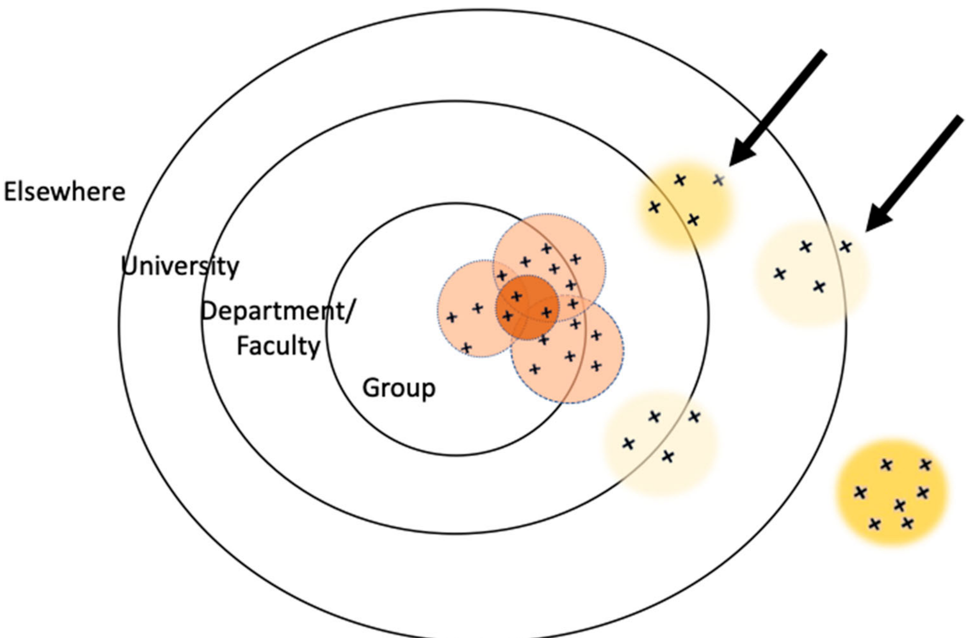

Figure 2. Visualisation of a typical teaching and learning network. The network at the group- and department level was mainly made up of colleagues with whom the informants teach, share an interest, and/or colleagues that informants lead either formally or informally (e.g. leading course development). Among these colleagues, there was a small group of trusted individuals (significant network, dark circle). At the Faculty/University level, networks had a more formal and task-driven character (e.g. committees and working groups), or were more casual connections motivated by similar interests. Outside the institution, there was a research network where teaching and learning conversations also occur. Changes (black arrows) in networks after the reward happened most frequently outside group/department related to formal tasks or new roles.

Becoming a rewarded teacher – reasons to apply and experience of process

All the informants had a long-standing commitment to teaching and appreciated the chance to be recognised for their efforts. Overall, they identified themselves with the criteria and the values reflected in them, and they described teaching practices and attitudes aligned with these criteria. Although many found the criteria vague, they did attach meaning to them that reflected their individual values and practice.

> I knew immediately when I saw the criteria that I could apply. It was like the sum of many things I have spent much time on and reflected on. And finally, someone see it (…) The things I find important are valuable. (Kim)

> It was quite nice for me to go: 'am I doing stuff at that standard?' (…) if there is a movement within [the institution] to promote teaching and excellence (…), then I want to be part of it. But there hasn't been … (Sam)

Strategic reasons were part of the motivation to apply, as the status could potentially add to their authority and reputation and thereby offer opportunities and new connections.

> Being a rewarded teacher could give me authority. It will not last very long, but I did think what I would use it for. (Jaime)

> This is a good way of finding a network or finding a way into it – or even promoting good teaching practice and communication about it. (Sam)

The financial incentive was important but was rarely mentioned as the primary reason to apply.

> There was a financial incentive and I think that is really important, so that did make a difference. But the most important thing is the principle. That a reward system exists … (Taylor).

The existence of a reward system was seen as important, and some felt obliged to apply to promote and justify the existence of this new initiative. Others felt it could be important for their department or discipline to have a rewarded teacher.

> Finally, a formal scheme to recognize excellence in teaching … So, you must apply, right? (Robin)

> It is important that our department has a reputation for excellent teaching. (Taylor)

Writing the reflective teaching portfolio was described as a rewarding and positive experience. It offered them a chance to reflect on their development and accomplishments as teachers, making them aware of their values and teaching philosophies.

> The main reason why this [system] is good, is how happy it makes you when you evaluate and present yourself. (…) I wish everyone had the opportunity to make a teaching portfolio. You get this holistic view. (Kim)

> It was a very interesting process for me. First, I just wanted to show them. Defend my program. But then along the process, I realized that I had done all this. This isn't bad at all. It was amazing really. (Jody)

The reward systems studied here were all new and there were factors unknown to the applicants in advance; like how applicants would be assessed, what expectations would follow, and how others perceived the new status. These uncertainties, as well as the risk of failure, were the main reasons for having doubts about applying.

> … does it mean that you become known as an excellent teacher, but not an excellent researcher? We all know what is important. (Jaime)

> Did I really want to do it? I feared it would lead to more work. (Sasha)

> There is of course a possibility to fail. (…) it would be a bit unfortunate (…) (Robin)

In addition, many of the informants were uncomfortable with the self-promotion involved, in particular the focus on individual accomplishment, as their position was that excellence and quality in teaching depends on a collaborative effort.

> This process is quite personal. I did not share it. In contrast to other applications you write, this is so personal. It is about me. (Charlie)

> I do not want to seem self-satisfied. Be better than others. (Reese)

Most informants had some support from their local leader and colleagues, although only few sought discussion or feedback from colleagues on their application.

In sum, the experience of applying is multifaceted (Table 1). It is risky, but also rewarding and meaningful. The reward is personal, as it entails exploring years of a

Table 1. Thematic map, experience of application process.

Theme		Description
1. Reasons to apply		
a.	Criteria fit my values and practice	Described teaching practices, attitudes and values that align with them. Although many found the criteria vague, they filled them with meaning.
b.	Recognition and reward	A chance to be recognised for their effort, get assessed and get feedback.
c.	Financial reward	Secondary motivation – incentive for some, disincentive for others.
d.	Sense of responsibility	Recognised the importance of having reward system and apply to promote and justify the existence of system. Reward important for reputation or standing of department/ discipline.
e.	Future opportunity and influence	Strengthen chances of getting funding for educational development and connect with people of similar interests for collaboration.
2. Experience of application process		
a.	Valuable process and new awareness	Rewarding and valuable to write application. Chance to reflect on development and accomplishments. Awareness of values and teaching philosophies.
b.	Unknown factors and risk	New, untested system, unknown factors and consequences of reward. Risk of failure.
c	Application as personal and self-promoting	Uncomfortable with self-affirmation and focus on individual excellence. Expressed need to explain to others. Application was private and personal.

Table 2. Thematic map, perceived changes following reward.

Theme		Description
1. Perceived changes and impact of reward		
a.	No perceived changes in local network and interactions, some new connections	Local and significant network remained the same, not affected by reward. Some new connections made, mainly outside department, sometimes as result of new role (d).
c.	Added authority and visibility	Being listened to more in matters of teaching and learning. Speaking with more authority and feeling of legitimacy. Attention following reward (temporarily) gave visibility.
d.	New roles and responsibilities	Some roles and responsibilities could also be held before reward (i, ii, iv) while others were a direct consequence of reward (iii).
	i. Mentor/advisor	Mentoring colleagues seeking promotion or reward. Advising leadership.
	ii. Expert teacher	Serving as expert on, e.g. committees, seminars
	iii. Representative for reward system	Serving as assessor for reward system, informing others about system
	iv. Formal leadership	Educational leader
e.	Expectations from others – students, colleagues, and institution	Feeling the pressure of increased expectations from others because of status.
f.	Lack of opportunity/commitment	Feeling disappointed or disillusioned due to lack of support, resources, institutional commitment or opportunity. Directed at institution and leadership.

practice, but also strategic as it defends teaching as a practice where applicants assume some responsibility for this new organisational feature.

Being a rewarded teacher – perceived changes and implications

None of the informants feel that the status had led to any major changes in interactions or status within their group or department. Among the closest colleagues, there were stable relationships and established ways to interact.

> They [the group] have been along for the ride and seen this from all sides all along, so it doesn´t matter. Outside it means a lot more I think, than locally. (Charlie)

However, a common feature across informants was the formation of new connections outside their department after their reward, when representing rewarded teachers or while serving as 'teaching experts' in various fora (Figure 2). These wider connections were often more short-term, and task-driven. Some formed more stable, long-lasting relationships, for example in a community of rewarded teachers supported by the institution.

New connections arose due to increased attention, authority and opportunities for involvement. The rewarded teachers contributed to various processes and initiatives and assumed new formal or informal roles. They used the attention and opportunities in different ways, from drawing attention to certain issues, to initiating development or taking on formal responsibilities. However, they did not flag their status unless the situation required them to.

Typical new roles were mentoring and assessing peers for promotion or teaching rewards at their own or other institutions. Some were recruited to be spokespersons, sharing knowledge about the reward system and their own experience. Another common role was that of 'expert teacher' in various institutional processes related to educational quality, professional and teaching development.

> I have been given mentoring responsibilities (…). That is a direct consequence of the status. At the department I often get asked for advice (…) like an informal pedagogical advisor for leadership. (Ali)

> Quite a few people have asked me about things, but it is not a formal supervisory role. But I do mentor people that are developing their teaching portfolios … (Reese)

> I said yes to be in a Steering Group assessing applicants for reward (…) that is a consequence [of the status]. (Robin)

It was difficult for the informants to separate whether new roles and opportunities were a consequence of the status as rewarded teacher, or a result of them being experienced and competent academic teachers independent of the status. One informant expressed it like this:

> … well, I was an excellent teacher before I got the status Excellent teacher … (Jaime)

A common experience was getting more support for their initiatives and that opinions were taken more seriously. The informants attribute this to an increased legitimacy and authority associated with their new status.

> I am taken more seriously when we talk about teaching and learning (…) I sort of have more authority when I speak on those issues. (Ali)

> The big difference now – compared to before – is that now they actually listen to me. Before, when I talked about things (…), nobody listened. (Kim)

> Not that the institution uses me, exactly. But they listen to me. (Jody)

Some had a more cynical view and thought new opportunities might be a result of the institution's need to show that they 'use' the rewarded teachers.

> In my more cynical moments, I think it is a box ticking exercise. (…) At the university and faculty level … nothing much came of it. I genuinely don't think the motivation is there. (Sam)

The rewarded teachers felt they were expected to contribute to teaching and institutional development, although *how* they should contribute was unclear. They expressed concerns about the status adding to an already heavy workload. The additional work, although meaningful and readily accepted, was not always visible or appreciated by their colleagues and local leaders. Extra resources or allocated time to take on the extra responsibilities that followed the reward were rare.

> I think it is unclear what we are supposed to do, and what is expected from us. (Sasha)

> I am very critical of the fact that the university flags that there is a strategy to improve educational quality, but do not follow up with strategic measures. (Jaime)

When opportunities or recognition were rare or absent after the reward, some of the informants felt disappointed or disillusioned. This depended on the specific context and was linked to a perceived lack of resources or support from local leaders, colleagues, or institutional and departmental commitment.

> It is meaningless to use the status at the department when it isn't recognized by the most important leader. I think that is sad …. (Taylor)

> I have felt the expectations. I have the status, and now I should change the department. But the department does not want to be changed. (Andy)

In sum (Table 2), informants maintain their status in previously existing networks but gain visibility and status in wider networks. They also gain a key-role in the organisation in relation to reward systems. They were the first to formulate the criteria into practice and many are now engaged in mentoring or assessing applicants, enhancing their importance within the organisation. In addition, they recognise the importance of institutional commitment to advance teaching and education.

Views on the wider importance of the system and educational quality

A recurring emergent theme from the interviews was the informants' views and reflections on teaching reward systems (Table 3). They experience that the reward system and the associated criteria represented a new ways of describing and assessing educational quality and excellence in teaching.

> Many thought it was about excellent teacher – like, excellent lecturer. But people understand when they read the criteria (…) It is not enough to say what you have done, you must

Table 3. Thematic map, views on educational quality and reward systems.

Theme		Description
1. Views on educational quality and reward system		
a.	A new way of describing and assessing teaching excellence	The teaching reward system through the criteria, application and assessment process can inform and build new understanding of what constitutes excellence in teaching.
b.	Raising awareness about teaching quality	Reward systems contribute to maintain a conversation and attention on teaching quality in higher education.

> document and reflect. It is not about only highlighting the excellent things you do but seeing the potential for improvement – why something happened and what you want to work on improving. That being rewarded is not about *having arrived*, but about being in a process where you develop teaching and quality all the time. (Reese)

> It is useful for those that are new teachers (…) it gives them a compass in a way. One that is better than the one we had. (Charlie)

> [the institution] have emphasized that this is not a charisma test. It is not a student satisfaction reward, which is easy to game (…) you must have taken some type of leadership and initiative – been a teacher that develops something. Something that is about the whole. (Taylor)

The criteria emphasise a scholarly approach to teaching, and this was seen as an important message from the institution that over time could influence culture and inform teachers and leaders. The diversity of practices made visible through rewarding very different teachers was seen as a strength. The informants also experienced that the introduction of a reward system had led to increased attention, discussion and awareness about teaching quality in general at the institution.

> One of the good things with this scheme is that leadership now must learn all these concepts [in the criteria] and try to understand them. They have not had that understanding of quality that lies within this system (…) so it is educating the leadership in many institutions. (Charlie)

Having been the first to connect the criteria to experience and teaching practice, and later the mentoring and assessment of new applicants, places the informants in a privileged position in relation to these reward systems. In some sense, they ‘own’ the meaning of this system as they have been the first to interpret it into practice. This permeates the experience of being the first with a sense of responsibility for something new, for teaching, and for the continued development of educational quality. Furthermore, because these teachers had to, in the process of applying, position themselves in relation to the rather vague criteria, the process secures a strong link between theoretical perspectives on excellence in teaching (e.g. the evaluation criteria) and the lived experience of teachers who embody years of teaching experience.

Discussion

Our informants provided rich descriptions of their experience as pioneers in seeking recognition and being rewarded in newly established reward systems for excellence in

teaching. They felt encouraged and positively challenged by this system and valued the existence of such a system. The process was both personal and strategic, and informants were motivated by both personal (i.e. recognition) and professional (e.g. opportunity and influence) goals to engage with the reward system. After receiving the status as rewarded teacher, informants described how they gained authority and legitimacy in matters of teaching and learning. They gained visibility and became known as someone who had succeeded in this new system for recognition and reward. The informants also expressed a concern about unclear expectations, and some even expressed disappointment. These feelings seemed to originate from a perceived lack of support, strategy or plans from the institution beyond establishing a reward system and appointing rewarded teachers. A possible interpretation of this is that even though the rewarded systems were introduced as a top-down initiatives, they allowed the applicants to invest their varied personal experiences while responding to the criteria. Through this process, the teachers' lived experiences (Jay 2006) formed the flesh and blood of the system. The criteria express the institutions' view of what constitutes quality and excellence in teaching, namely a scholarly and collegial practice and approach that systematically develops teaching to enhance student learning – and can thus be seen as an indirect definition of pedagogical competence (Winka and Ryegård 2021). Being first gives a certain power to define the criteria, and influence how the reward system, and in turn educational quality and pedagogical competence, are understood by colleagues and leaders.

The perceived misalignment of expectations from rewarded teachers to institutions, and from institutions to rewarded teachers, also surfaced in evaluations of reward systems in Sweden and Norway. These evaluations found that rewarded teachers expect to be 'used' by their institutions (Geschwind and Edström 2020; Raaheim et al. 2020; Stensaker et al. 2021). Few institutions meet such an expectation in a systematic way, which can be interpreted as lack a strategy on the institutions part on how the reward system and the rewarded teachers could contribute to the institutions educational quality work. On the other hand, many of the rewarded teachers in our study have formal or informal responsibilities and roles after the reward, and through their roles, and increased visibility and authority they influence their institutions on matters of teaching and learning. More formal measures to use rewarded teachers or pre-defined roles might challenge a productive balance between a top-down system and academic teachers' lived experiences. Recent evaluation reports from two of the institutions included in this study conclude that reward systems seem to be successful in rewarding and acknowledging excellent teaching practitioners, and less successful influencing culture and educational quality. They call for a stronger institutional commitment, and measures to use the competence of rewarded teachers more systematically in the institutions' work to enhance educational quality (Raaheim et al. 2020; Stensaker et al. 2021).

Here, we would like to return to one initial aim expressed in these reward systems: to influence teaching cultures within higher education towards a scholarly and collegial approach to teaching and learning. In our second research question, we ask whether it is possible to detect signs of cultural influence after only a few years. We argued that this requires a specific perspective on cultural influence, which we adopted from network research in higher education and wider contexts. Through this perspective academic teachers allow themselves to be influenced through often local networks of significant others (Roxå and Mårtensson 2009). Teachers' professional development often

includes widening patterns of personal networks (Van Waes et al. 2016; Pyörälä, Korsberg, and Peltonen 2021) and changes of behaviour in social systems are linked to wider networks of significant others (Centola 2018).

The informants reported few changes in local networks of significant others but described how new connections are being created in their wider networks (Figure 2). They reported how the reward increased their visibility and authority, and led to new connections which added to what in most cases was an existing large and diverse teaching and learning network. We argue that in relation to cultural influence, the informants report early signs of what in previous research has been linked to cultural change (Roxå, Mårtensson, and Alveteg 2011; Centola 2018). We also argue that detection of such early signs is difficult unless one applies a distinct perspective on cultural influence. This in turn can potentially explain why some early evaluative reports have not found a clear influence on culture (e.g. Raaheim et al. 2020; Stensaker et al. 2021).

We see that our informants have been known for engagement and passion for teaching within their existing local significant networks over time. The new connections and opportunities expanded their network and increased interactions, and these are to a large extent seen as productive and meaningful. This widening of their teaching and learning network is a first step and could over time become a wider *significant* network that is important in influencing cultural change.

Therefore, we conclude that a productive measure to support rewarded teachers and thereby potentially strengthen the cultural influence, is to provide support for expanding their significant networks further and thereby bridging the boundaries between teaching cultures. This could counter the tendencies that teaching cultures become isolated silos within the organisation and allow the scholarly and passionate teachers that are being rewarded to continue what they have already done locally: influencing colleagues through significant relationships. Finally, we emphasise that influencing teaching and learning cultures in higher education is a complex and difficult endeavour that requires several inter-related initiatives (Roxå, Mårtensson, and Alveteg 2011), and rewarding scholarly teachers is but one way of contributing to a cultural shift. Interviewing the pioneers add to the knowledge about the potential of reward systems to influence teaching and learning cultures.

Limitations and future research

This study is limited to a small group of academic teachers among the first to get rewarded through institutional systems for excellence in teaching. As the number of informants were small, they were analysed independent of institutional affiliation, discipline or other characteristics. We acknowledge that their local context has influenced their experience, and this can be seen in the diverse set of experiences they describe. The purpose of this study is not to generalise, but to contribute to the understanding of reward systems through an analysis of the experience of the first rewarded teachers in newly established systems.

In this paper, we have chosen to focus on the experience of a group of academic teachers that chose to engage with new reward systems – and were successful in attaining the status as rewarded teacher. In future research, it would be valuable to widen the scope and investigate how these systems are perceived by non-successful applicants, and

those that did not apply. Also, we could pursue how these systems change and challenge the current view and definition of teaching excellence and contribute to professional and quality development.

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