



Building a framework of a supportive pedagogical culture for teaching and pedagogical development in higher education

Siru Myllykoski-Laine¹ · Liisa Postareff² · Mari Murtonen¹ · Henna Vilppu¹

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Abstract

The teaching and pedagogical development of academic communities is influenced by different contextual elements, which may not be apparent in everyday community practices, but may become evident through deeper reflection of the context. This study approaches these elements from the perspective of a supportive pedagogical culture for teaching and pedagogical development. The data consist of Finnish university teachers' descriptions of teaching and its development in their work communities through thematic interviews ($N=51$). Through inductive qualitative content analysis, meaningful elements of the communities' pedagogical culture were identified, which represent (a) values and attitudes, (b) norms and principles, and (c) practices and structures in the community. The study proposes a framework of supportive elements of pedagogical culture that should be acknowledged when promoting the development of teaching in university communities. Based on the findings, it is especially important to establish a *culture of sharing* and to promote the value of teaching through various cultural elements.

Keywords Pedagogical culture · Pedagogical development · University teaching · Community

Introduction

To support pedagogical development in university communities, it is important to understand the influence of contextual aspects and the interrelation of different contextual elements in university teaching. Research on higher education teaching and learning has widely emphasized individual perspectives, with a lesser focus on the importance of context (Trowler, 2008, p. 18–19). Nevertheless, teaching and its development in higher education communities occur through teachers' relationships with one another in a specific sociocultural context. Such context includes the organizational cultural environment and social

✉ Siru Myllykoski-Laine
sipamy@utu.fi

¹ Department of Teacher Education, University of Turku, Turku, Finland

² HAMK Edu Research Unit, Häme University of Applied Sciences, Hämeenlinna, Finland

contexts, which, for instance, influence the ways teaching is valued and practiced (Mårtensson & Roxå, 2016). From this viewpoint, it is important to acknowledge the relationships between the individuals and the context in which their reality is socially constructed (Trowler, 2008, p. 17–19). Thus, when exploring communities' practices and development opportunities, the focus is on shared understanding rather than individual meaning (Alvesson, 2002), occurring at a certain moment and a specific place, including behavior, values, and attitudes as key elements to explore (Välilä, 2008, p. 12). In this context, communities are seen as being able to build and share knowledge through interaction and commitment to common interests (Wenger & Snyder, 2000).

The present study focuses on pedagogical culture in university communities. The study does not investigate culture as it is but explores elements that are indexical of it (see Trowler, 2008, p. 13) and contribute to possibilities for pedagogical development in the community. The underlying assumption of the study is that the context in which teachers operate influences their opportunities to engage in teaching practices and pedagogical development. The purpose of the study is not to describe the culture in a specific community, but to find elements that are identifiable in different Finnish university communities, thus indicating their meaningfulness for teaching and pedagogical development. Even though the importance of the cultural context for pedagogical development has already been recognized, there remains a paucity of research identifying supportive elements of pedagogical culture in academic communities perceived by the teachers themselves. Thus, this study takes a qualitative approach and explores the ways university teachers perceive social and cultural elements in relation to teaching and its development in their communities and, consequently, proposes a framework for the supportive elements of a pedagogical culture.

Pedagogical development in the context of university communities

Pedagogical development is not only limited to the development of an individual teacher's expertise but can also be considered the development of overall teaching communities. Thus, the concept is understood here as improvements in teaching skills and pedagogical thinking, changes in educational practices, and the establishment of a "culture of learning" (Jääskelä et al., 2017; Postareff et al., 2008).

Research has shown that the cultural context of universities influences teachers' opportunities for pedagogical development (Englund et al., 2018; Van Schalkwyk et al., 2015). University teaching takes place in a context where there are different academic roles, organizational values, and expectations (Arvaja, 2018; McCune, 2019). Faculty members' perceptions of the university's mission and their attitudes toward teaching and research may influence their behavioral patterns, such as how much effort they extend to their teaching activities (Ekecrantz & Schwieler, 2016; Tang & Chamberlain, 1997). The dominant discourse and organizational structures taking place in the university environment may also direct how teaching is valued and encouraged (Van Schalkwyk et al., 2015). In addition, the high demand for research by universities may influence the ways in which individual teachers are able to value teaching through their professional identity (McCune, 2019). Academic communities' power structures can also be unclear for academics and "diversely spread over a wide mix of teaching, research, and funding objectives..." with unclear resource control (Nagy & Birch, 2009, p. 241). Furthermore, as an effect of global changes and the implementation of new public management, higher education organizations are

faced with challenges of efficiency and competition, which may cause tension with the tasks of the academic profession (Siekkinen et al., 2019). The challenges may be realized through reduced funding opportunities and an increased workload, which can result in limited possibilities for overall professional development (Åkerlind, 2005). All in all, university communities have special contextual features, which influence the ways teaching is valued and practiced (Mårtensson & Roxå, 2016).

Supportive culture for pedagogical development

It is especially important for pedagogical development that there is a supportive community (Boyd, 2010; Clarke & Reid, 2013; Remmik & Karm, 2012) that can promote reflective development through an atmosphere of collegiality (Kurtts & Levin, 2000). Collegiality refers to ways of interacting, showing mutual respect, and collaborating through a common understanding of shared responsibility in the community (Cipriano & Buller, 2012, p. 46).

Therefore, for pedagogical development and knowledge building to occur in academic communities, members must have interpersonal knowledge of each other and opportunities for communication (Nistor et al., 2015).

Research suggests that teachers' participation in a learning community benefits both teachers and students, as the pedagogical culture is improved due to increased collaboration and more attention being paid to student learning (Vescio et al., 2008, p. 88). Thus, the value of teaching promoted through institutional structures and the discourses taking place around teaching will ultimately become evident at the institutional level, as they will be reflected in the quality of teaching and learning at universities (Van Schalkwyk et al., 2015).

Possibilities for collegial support are especially important for novice teachers' professional development, and the community is often an influencing factor in their orientation to "follow the current teaching traditions or acting as agents of change" (Remmik & Karm, 2012, p. 121). The importance of community has also emerged in the pedagogical development of experienced academics. McCune (2018) identified the possibility of having informal conversations about teaching as one of the most important factors in the pedagogical development of experienced academics; however, McCune also pointed out that this aspect is often absent in discourses regarding teachers' development in higher education.

As the supportive role of community for pedagogical development, and how it has been found to promote the development of conceptions of teaching and learning, has been recognized, it is important that these are noted also in academic development strategies (Englund et al., 2018). Higher education organizations have an important role in supporting the development of teaching networks in the faculties, which will also advance the development of expert teachers (Van Waes et al., 2015). In academic development, paying attention to the possibilities of influencing teaching networks and the development of social ties is encouraged; thus, the development also influences cultural aspects, such as norms, values, and shared assumptions, which can affect the ways in which teaching is perceived in academic settings (Benbow & Lee, 2019; Roxå et al., 2011). In the academic development process, institutional norms should be carefully considered, and efforts should be made to promote an academic culture that values reflective teaching (Hubball et al., 2005, p. 78). It is also important to consider the norms of collaboration themselves and the ways of working in the community, which may influence the development (Quinlan & Åkerlind, 2000).

According to McCune (2018), encouraging pedagogy-related conversations is of value if there is a desire to enhance cultural change in relation to pedagogical practices. McCune also highlights the importance of supporting such practices through structural factors, such as offering time and resources to support the change.

Collaboration with other teachers and the attitude of the work community toward pedagogical development also arose in a study in the Finnish context by Clavert et al. (2014), who explored the influence of Finnish higher education teachers' meaningful experiences on their development processes as teachers. A change in Finnish pedagogical culture was reported in a study by Murtonen and Vilppu (2020), who found that teachers who had recently started their teaching careers experienced receiving more help than teachers who had begun their teaching careers several years prior. Similarly, a quantitative study (Kálmán et al., 2020) conducted in Finnish and Hungarian universities showed that novice teachers especially utilized informal methods in their pedagogical development, such as sharing experiences with colleagues. The majority of the teachers in the study also "experienced their departmental culture positively and considered it to be supportive in teaching" (Kálmán et al., 2020, p. 310). However, Laiho et al., (2020) found that Finnish university teachers experienced a lack of collegiality and that there was not adequate time and resources for teaching development. Kálmán et al., (2020) concluded that to enhance teaching and learning in higher education, it is important to acknowledge teachers' approaches to teaching, pedagogical development activities, and the perceived departmental culture, the role of which in the process has been less studied.

Aim of the study

This study aims to explore different elements of pedagogical culture in university communities using a qualitative research method. The study focuses on the phenomenon of a pedagogical culture at a meso level, where the community level elements are in focus. The research question is: What kinds of supportive social and cultural elements do university teachers perceive in relation to teaching and its development in their communities? The elements are explored through teachers' descriptions of their perceptions of teaching and teaching development in their work communities.

Methods

Context

In Finland, all university teaching and research positions include both tasks, but the appreciation of teaching is not as high as it could be (Murtonen & Vilppu, 2020). While many universities are putting effort into improving the quality of teaching, it is often still overshadowed by research. Academics may end up teaching with diverse expertise and experience in the matters of teaching and learning; teaching tasks may be done by a doctoral student beginning one's academic career or a distinguished professor with years of experience. Furthermore, no formal teachers' pedagogical qualifications are required for being able to teach at most universities. However, pedagogical training has been systematically offered for university teachers since the 1990s, and almost all Finnish universities offer pedagogical training for their teachers, often worth 20–60 ECTS credits (European Credit Transfer and Accumulation System).

Data and participants

The data consist of thematic semi-structured interviews with university teachers, which were conducted as part of the HowUTeach research project during 2018 and 2019. Participants were able to state their interest in participating in this interview study through a survey that was carried out in the project. The survey was delivered to different faculties at three universities by choosing faculties representing different disciplines. The survey was delivered through the faculties' email lists, or it was collected from teachers who had enrolled in a pedagogical development course. Around 60 percent of the participants in the present study were contacted through pedagogical development courses and 40 percent through the faculties' email lists. The teachers were contacted via email, and more information on the interviews was given. The interviews were organized with the teachers who wanted to participate in the study. Participation in the study was voluntary, and informed consent was obtained from the participants. The interviews were conducted by five researchers (including the first author) working on the project in three different universities. It was ensured that the researchers had a mutual understanding of the interview questions, themes, and aims. The interviews were recorded and transcribed verbatim. The interviews lasted from 25 to 116 min, with an average duration of 68 min.

The interview framework was developed based on previous studies on university teaching and teacher development (Murtonen & Vilppu, 2020; Postareff et al., 2008). In the interviews, the teachers were asked to describe themselves as teachers, their teaching processes and teaching development. The aim was to detect individual teachers' approaches to teaching and their development as university teachers. In addition, community-related aspects were included in the interviews since these have been recognized as important for teaching and pedagogical development in the higher education context.

In the interviews, teachers were asked about their work community's views regarding teaching and its development, whether they discussed matters related to teaching in their community, and whether they experienced receiving support from their work community for their teaching. They were also asked to describe their opportunities for influencing their teaching, and what kind of work community and environment would be most supportive for their teaching.

The participants in the study were 51 university teachers at 3 Finnish universities; 28 were from the first university, 18 from the second, and 5 from the third. Altogether, the participants were from 20 different faculties, and even participants from the same faculties, in most cases, represented different academic subjects. Therefore, it is assumed that the participants represent more than 20 different communities when considered from a unit or department level. More specific information was not gathered regarding the participants' work communities or with whom they worked in general.

The participants' background information was gathered from the survey responses (N.B. Some information was missing). Most of the participants were university/senior lecturers ($n=19$). Other work positions included university teachers ($n=8$), assistant professors/tenure-track ($n=7$), professors ($n=6$), post-doc researchers ($n=3$), Ph.D. researchers ($n=4$), and others ($n=3$). Twenty-two participants had a permanent contract at the university, and 21 participants had a fixed-term contract. All participants reported having teaching tasks (ranging from 5% of work time to 100%; the average percent of teaching was 44% of work time). Of the participants, 3 reported not doing any research, 19 participants reported emphasis on research tasks, 18 reported emphasis on

teaching tasks, 2 reported emphasis on administrative or other tasks, and 5 participants reported that their work hours were split evenly between teaching and research. The participants were from the fields of natural sciences and technology ($n=30$), social sciences and humanities ($n=13$), and medical and health sciences ($n=7$). The majority of the participants had several years of teaching experience and almost all had completed some pedagogical studies. Table 1 presents the participants experience in teaching and the number of completed pedagogical studies.

Method and process of analysis

As the aim of the analysis was to identify the participants' perceptions and to search for frequently occurring perceptions, a qualitative content analysis was chosen as the method of analysis (Krippendorff, 2004; Mayring, 2014). The analysis was conducted inductively without predetermined categories (Graneheim et al., 2017). However, even this kind of inductive approach demands some deductive procedures in the analysis process, such as determining the criteria for categories and themes (Mayring, 2014, p. 79–97). Therefore, during the analysis, it was important to consider how to relate the content in the data to the overall context of the phenomenon (Graneheim & Lundman, 2004). In this process, the research question and the understanding of the role of organizational cultural environment and social contexts in teaching (e.g., Mårtensson & Roxå, 2016) played important roles in helping to specify the viewpoint for the examination of the data (Schreier, 2012).

The teachers' answers included broad descriptions of their communities in relation to teaching and its development, and through these descriptions, the teachers' perceptions of supportive elements of pedagogical culture were explored. As noted, the teachers were not asked explicitly to describe how they perceived the pedagogical culture in their communities. Hence, the focus was on the researcher's interpretation of content that was considered relevant in relation to the research aim (Kleinheksel et al., 2020). Thus, the content of interpretation included both the manifest content (clear and explicit) such as "We don't have anything like that in our culture in here that we would even discuss these matters together" and the latent content (unexplicit, *hidden*) such as "I imagined that part of being a teacher would be having a clear goal at which we are aiming. This has not once been clear to me or that we ever would have gone through it together."

NVivo 12 Plus (QSR International Pty Ltd, Australia) was used as a tool for the analysis. The analysis utilized a variable-oriented approach instead of a person-oriented approach (see Schreier, 2012, p. 33, regarding categories as equivalents of variables). Thus, the focus was not on identifying the experiences of individual teachers but on finding unifying elements through their descriptions. The analysis began with reading through the interviews several times. The units of analysis (sentences and paragraphs) were extracted from the data based on the research aim of identifying (supportive) elements of pedagogical culture. One answer could include several different coding units, which could be meaningfully interpreted in relation to the categories formed (Schreier, 2012, p. 131). As such, the analysis of the descriptions is understood here not simply as a classification or a *description* of the data but as entailing *interpretation* (Sandelowski, 2010; Vaismoradi et al., 2013). The coding units were identified through opposite descriptions of their occurrence in the community. For instance, one teacher could describe their community's eagerness to develop teaching, whereas another teacher could describe their community's disinterest in teaching development. During the analysis, it was identified whether the occurrence or lack of occurrence of the element was experienced positively or negatively for teaching and its

Table 1 Teaching experience and number of completed studies (ECTS credits)

	Teaching experience				Completed pedagogical studies			
	4 years or less	5–9 years	10–14 years	More than 15 years	No studies	10–15 credits	20–40 credits	60 credits or more
Number of participants	11	6	12	21	1	9	22	13

development, thus being able to identify the supportive elements (of which the opposite would be unsupportive). The coding units were categorized into sub-categories (e.g., existence/lack of common goals, clearly/unclearly defined common goals) in several steps by going back to the material and reviewing whether the categories were extensive in relation to the data and whether several participants described the elements in the categories. In the final phase of the analysis, the sub-categories were united and organized into larger categories representing supportive elements of the pedagogical culture (e.g., common goals and shared understanding). Finally, the categories were organized under broad themes that described the cultural aspects they represented (e.g., principles and norms in the community in relation to teaching and its development). However, the analysis did not proceed linearly. A broader interpretation of the coding was already done during the analysis process to understand what kinds of themes the content represented. Graneheim et al., (2017, p. 32) have also pointed out that “when data is rich and the codes are expressive, it can be appropriate to begin the interpretation after coding and move straight on to formulating subthemes and themes.” The first author analyzed the data. The analysis and categorizations were discussed with the other authors during and after the analysis process.

Findings

Through the teachers’ descriptions, different supportive elements of pedagogical culture were identified, which were interpreted to be related to the following themes: (1) attitudes and values in the community in relation to teaching and its development, (2) the community’s principles and norms in relation to teaching and its development, and (3) the practices and structures in the community in relation to teaching and its development. Table 2 presents an overview of the findings.

Before providing a detailed description of the three themes, general notions concerning the findings are presented. First, different elements were described on different levels, such as (a) immediate work community (with closest colleagues), (b) unit-level work community (staff of the same department, faculty, or subject), (c) leadership-level in the community, including supervisors and leading academics (personal supervisors and professors in significant roles in the department), and (d) broader community and management level (faculty and university level). The findings here are not considered to be based on these different levels; however, some of the elements were more strongly related to certain community levels. Furthermore, strong interrelations are seen to occur between the different themes and elements, as they generally represent the same phenomenon. As the elements are seen as strongly interrelated, the findings are presented in the next sections in a narrative manner under the three main themes. Data quotations are presented to illustrate the

different elements of the themes. Participants were given numbers, which are presented in brackets to illustrate the variety of responses.

The attitudes and values in the community in relation to teaching and its development

The teachers' perceptions included a variety of teaching-related attitudes and values in the communities, as the following quote illustrates:

There are those who teach in the same way from year to year and it is this necessary evil that needs to be dealt with, with old materials, and then there are those... who put in effort so that their teaching is of good quality and that the students learn. And they try to develop it all the time and within the faculty, they try to develop teaching and learning. (Participant 1)

From the findings, it was clear that a general valuing of teaching is vital for teaching and its development in communities; this could come from the appreciation of teaching in itself, from the staff's interest and enthusiasm toward teaching, from the willingness and ambition to develop teaching, or from different ways of balancing teaching and research. According to the findings, it seems that even if different attitudes exist, development can occur if the value of teaching is promoted: "Everything depends on the people and that there are enough people who consider these matters important. Thus, then they become important in general" (Participant 2). The leaders' role was especially emphasized as conveying the value of teaching: "Maybe the leaders themselves should really think teaching is important. If our leaders are not really taking teaching seriously, then I don't think teaching quality will improve" (Participant 3).

The staff's interest and enthusiasm were one of the most frequently described elements in the interviews, both when there seemed to be enthusiastic staff members and when there was a lack of interest in teaching in general in the community: "We have quite enthusiastic teachers in the permanent staff so maybe it conveys to the whole atmosphere of the faculty" (Participant 4). As the previous quote also implies, the perceptions reflected the idea of pedagogical change agents in the community who could also influence the pedagogical culture through concrete actions: "We have a few, especially this one really enthusiastic professor, who might, every now and then send us some pedagogical publications, [suggesting] that this worked well in our course" (Participant 5). However, they could especially promote a developmental approach in the community: "Just within the last few years, we have had this one active [person] who is seriously interested in teaching and is also in a leading position in the faculty, so this has initiated an active development of teaching" (Participant 6). According to the findings, the opposite of change agents would seem to be those members of staff who lack any interest in teaching and its development, who possibly have an influencing role in the community and therefore hinder development:

And you can see very clearly in most senior professors, very few of them are interested in doing any teaching... and you often see very young tenured professors, usually when a young professor joins, they want to do something, but after a couple of years, they just give up. This is sad, but it happens. (Participant 3)

Some communities seemed to be in a transitional phase with regard to their interest in teaching development:

Table 2 Supportive elements of pedagogical culture for teaching and its development

Theme	Element	Sub-categories
Attitudes and values in the community in relation to teaching and its development	The value of teaching	-Teaching is valued in itself -Balance between teaching and research
	Willingness and ambition	-Willingness to put effort into teaching and its development -Teaching development as a goal
	Interest and enthusiasm	-Community's interest to teach and develop teaching -Positive atmosphere and staff enthusiasm
Principles and norms in the community in relation to teaching and its development	Shared responsibility	-Shared responsibility in teaching development -Knowledge about others' work
	Common goals and shared understanding	-Existence of common goals and shared understanding
	Permissiveness and expectations	-Teaching and its development allowed, expected, and encouraged
	Power and influence	-Possibility to influence -Development occurs openly and in a fair manner
	Respect and trust	-Work and expertise are respected and trusted
Practices and structures in the community in relation to teaching and its development	Systematic practices and development	-Actors and channels (e.g., forums, committees, responsible actors) -Actions (e.g., organized training, encouragement actions, development initiatives, official educational outlines, rewards)
	Formal and informal interaction opportunities	-Cooperation around objectives (co-teaching, co-development, co-creation) -Collaboration and sharing (peer support, supervisor support, dialogue, sharing knowledge and experiences, the establishment of teams)
	Resources	-Financial resources -Physical resources -Social resources
	Career opportunities	-Teaching acknowledged in career advancement
		-Teaching acknowledged in recruitment -Teaching acknowledged in merit

Elements are interrelated, may, or may not be in congruence, and can be considered from different community levels (immediate, unit-level, leadership level, broader community, and management level).

It hasn't really been taken seriously; our professor has been teaching in a particular way and is not really interested in developing their teaching anymore... and the others haven't experienced the development as being really important, so I am the first one that has really started to do this. (Participant 7)

According to the findings, one element relating to the values and attitudes in the community seemed to be the level of willingness and ambition to make an effort or develop teaching: "We don't have anything like that in our culture here that we would even discuss these matters together because no one cares about teaching, and no one wants to use any more time than is necessary for it" (Participant 8). Thus, the findings suggest that interest and enthusiasm are not enough, but the community needs to have teaching development as

a goal: “The management level really has ambition and will... so it is not only that can we do this but there are expectations for the development of teaching” (Participant 9).

The teaching-research nexus was widely described in relation to the value of teaching. This emerged from several perspectives. First, the general interest of individuals toward teaching and research was described: “Well, the view is that teaching is something obligatory, everyone wants to do research but now we have to deal with this teaching also” (Participant 6). Second, the participants described the issue of a balance between teaching and research:

There are attitudes that are not really based on anything, like why would we only want to do research and not teach at all. Maybe those are some old structures... my generation really feels that they [teaching and research] support each other and maybe it is that there is some kind of balance between them. (Participant 10)

Third, the research requirements and the pressure they may bring to academic work were described: “Even though we have the same pressures for gaining results and we should get publications... in here the whole staff feels that teaching is really important” (Participant 11).

Some participants further described the influence of the wider academic context on teaching:

This is a universal feature of universities that research overrules teaching... It is a long cultural matter, but of course, publication pressure is its manifestation... it may have been that the appreciation of teaching was even higher before... before the international English language peer-review tradition wasn't so powerful. (Participant 12)

The community's principles and norms in relation to teaching and its development

Elements of the principles and norms were mainly related to the realization of shared responsibility, common goals and shared understanding, permissiveness and expectations, power and influence, and respect and trust.

The element of shared responsibility was related to the extent to which teaching, and its development, was a matter for and the responsibility of an individual teacher or a matter for the community through shared work: “We have also developed the courses together within this subject and, it has been so that, that they are by no means the responsibility of an individual teacher but we have developed these as a community” (Participant 13). Moreover, the level of knowledge about others' work seemed to be related to the existence or lack of shared responsibility in the community. According to the findings, this could also have a concrete influence on educational quality: “The community would probably get more done if everyone had some interest... We would have better programs in a way because the courses would be more related to each other” (Participant 14).

Common goals and shared understanding in the community were also a vital element of pedagogical culture, and in its absence could have negative influences on teachers' work:

I imagined that, as part of being a teacher, it would be so that everyone would have a clear goal that we were aiming at. This has not once been clear to me or that we would ever have gone through this together... I gradually start to understand what my own role is in all this and where we are aiming, but this was something I was really disappointed about. (Participant 15)

Permissiveness and expectations as elements of pedagogical culture were strongly related to the extent to which teaching and its development were encouraged in the community. However, permissiveness and expectations seemed to also be elements without relation to encouragement per se, but to the principles of whether teachers were expected to actively do something: “And in relation to personal ideas, it is not just that can I do this, but there are also expectations that effective teaching is developed” (Participant 16), or whether it was allowed in the community: “In our department, there has been this kind of allowing principle, so that everyone can do things and is allowed to try things out. They are not particularly encouraged or pushed in that direction but allowed” (Participant 17).

Power, as an element, was strongly related to the structures and hierarchies in the community and was evident in several ways. Most commonly, it was described through the influencing possibilities in the community. Openness and perceptions of fairness seemed to be related to elements of power and influence possibilities in the community:

I can one hundred percent influence my own teaching, and I can also influence the bigger picture as much as I want. So it works extremely well. Then, when taking it a step further, there comes these responsibilities and transparency which could be in better shape... so if I think about my own work environment with the research group, colleagues, subordinates, supervisor, then it works really well, but on a faculty level, maybe, there are many developmental issues. (Participant 18)

Another participant specified, “There should be professors who do not just look at the work from their own perspective... because in the end, nothing happens before a professor approves something... So, ideally, we would not have such a hierarchical system” (Participant 5).

According to the findings, respect and trust were important elements of pedagogical culture. Although the teachers’ perceptions generally highlighted the view of an academic employee as someone whose expertise is trusted, there were perceptions that the work of academic teaching was not respected or that the expertise was somehow downplayed:

It is so frustrating that my colleagues and I share the same views about how certain skills are developed... but it is not even heard [in the organization] so then how is it that professional expertise can be respected so little. (Participant 19)

The practices and structures in the community in relation to teaching and its development

The practices and structures were mainly related to systematic practices and development, formal and informal interaction opportunities, resources, and career opportunities. Systematic practices and development included descriptions of actors and channels, such as teaching-related committees, responsible actors, and forums for interaction and development: “[An ideal would be] that we would have a clear forum for teachers... something such that you would know when to go where and there is always something” (Participant 5). In addition, specific actions were described, including organized or offered training, encouragement actions, development initiatives, and teaching-related rewards: “Now we clearly have a positive environment for teaching, we have different kinds of pedagogical awards, and different kinds of financial project possibilities and such, and teaching related evaluations” (Participant 16). In addition, official educational outlines were described in relation to building a shared understanding of teaching and its development.

The teachers described collaboration opportunities through informal and formal practices, and these were not always possible to examine separately in the data. The interaction practices were categorized under (1) cooperation around objectives and (2) collaboration and sharing. The first category included descriptions of cooperation, which had a certain objective around which the cooperation was carried out, such as co-teaching and co-development with concrete aims and tasks. The latter category included descriptions of collaboration and sharing, which focused on broader aspects, including peer support, dialogue, and sharing of knowledge, ideas, and experiences. The following quotation includes elements of formal and informal interactions that mention systematic practices and development (a forum) and formal and informal interaction opportunities (sharing experiences and co-development).

We do talk about teaching, maybe less about the students, but particularly about the good moments, when something has gone really well, and the workload. But we also develop together and that should happen more. There used to be a kind of forum for that here, but, well, time is limited, so maybe it has declined. So, that would probably be a matter that should be promoted. (Participant 20)

According to the findings, the lack of informal and formal interaction possibilities had negative influences on teaching and its development, as the following quote illustrates:

I think that it is really difficult to try to change something alone. Second, I am not very confident as a teacher so I can't make many changes independently. I would want to have the social environment there, so that even if I did make decisions by myself, I would want to hear others' comments about what could be done. (Participant 15)

Even if the community had interaction, many of the participants seemed to desire to have even more through a variety of ways but especially focusing on teaching-related issues: "I think that of course there could be even more of that kind of discussion, common discussion about the teaching methods and about the development of teaching" (Participant 21).

Resources as an element of the pedagogical culture were described in relation to physical, financial, and social resources for teaching and its development. There is no further focus here on physical resources, but according to the participants' perceptions, they played an important role in teaching, for instance, through the spaces, environments, and equipment available for teaching. Financial support was described, for example, concerning support for teaching development through work hours specifically allocated for that purpose or through overall financial resources designated for the development of teaching: "I get paid for development... so there are really investments and efforts put into teaching here" (Participant 22). Social resources included the possibilities for assistance support: "If there were good assistants [available]...because there is a lot of routine matters...I could basically use the time to do something else, to develop the course in some direction. But now it takes so much time. I think the time issues will be even more problematic in the future" (Participant 23).

The organization of teaching through dividing the workload evenly within the community was also discussed. Resources were described in relation to student group sizes and students' levels of knowledge when beginning their studies, both of which could influence the arrangement of teaching and the experienced workload. Time limitations were also described in relation to the teaching-research nexus: "If there were less pressure from other work tasks... It is a huge issue that there is no time to prepare [for teaching] as well

as one would like to” (Participant 24). The teaching-research nexus was also related to the descriptions of career opportunities in the community. The career opportunities included requirements from new employees; for instance, whether teaching was considered important when new employees were recruited or in career advancement possibilities:

Our management level appreciates teaching and the knowledge of teaching development a lot...we have these career paths, so every few years, teaching competence is also checked... and if it has not developed enough, then it is not possible to go further. (Participant 25)

These descriptions also included considerations of research merits versus teaching merits and how they influence career opportunities.

Discussion

This study aimed to identify supportive elements of the pedagogical culture for teaching and pedagogical development in the context of Finnish universities. The study acknowledged the role of context in the pedagogical development of university communities by exploring cultural and social elements through teachers’ perceptions. Since the identified elements are those that the teachers themselves described, they can be considered to convey *meaningfulness* through their occurrence.

The analysis resulted in a categorization of supportive elements of the pedagogical culture under the themes of (1) attitudes and values, (2) principles and norms, and (3) practices and structures in the community in relation to teaching and its development. The themes resemble classical definitions of organizational culture, which may include beliefs and values, visible structures and processes, observed behavior, and basic underlying assumptions, which are interrelated but not necessarily congruent (Schein & Schein, 2016). However, definitions of organizational culture vary, and Alvesson (2002), for instance, has critiqued studies for sometimes being too vague and unfocused when approaching the matter. Hence, the current study did not seek to define *culture* but identified elements that are indexical to it, involving social interactions taking place in a specific context (Trowler, 2008, p. 13). Annala et al., (2021) have identified similar elements contributing to academics’ work in the Finnish university context, although from the perspective of agency in curriculum development. Similar to the present study, some of the enabling and restricting elements in their study were related to community’s support and shared values, power issues, shared understanding of the key aims, and balance issues between teaching and research. In the present study, the value of teaching was often discussed in relation to research (see also McCune, 2019).

Implications for teaching and pedagogical development in the university communities

Even though the purpose of the study was not to explore the individual teachers’ experiences of their communities and defining these specific communities, the findings suggest important elements for teaching and its development in general. When the identified elements occurred in the community, they were experienced as positive for teaching and its development. On the contrary, the lack of such elements referred to negative perceptions in respect to teaching and its development. That is, the teachers’ opportunities to engage

in teaching and pedagogical development were influenced by the organizational cultural environment and social contexts (e.g., Mårtensson & Roxå, 2016). Based on the identified elements, it was possible to propose *the framework of supportive elements of pedagogical culture for teaching and its development*.

As the identified supportive elements were interpreted to be intertwined, some general implications are presented based on the findings. The main implications, from the perspective of enhancing a supportive pedagogical culture, include establishing a *sharing culture*, encouraging pedagogical change agents, ensuring interaction possibilities, and promoting the value of teaching through all the elements of pedagogical culture.

A common concept in the data had to do with *sharing or lack of sharing*. Whether this is regarded as *practices* (such as sharing ideas and experiences), sharing of *values and attitudes* (such as general appreciation of teaching and common interests), or sharing of basic *principles* (such as shared responsibility and common objectives), opportunities for communal sharing seem to be of value if there is a desire to support teaching and pedagogical development. Thus, the idea of supporting shared learning in university communities seems vital (Decuyper et al., 2010; Vescio et al., 2008).

Even though the focus of the study was not a change in the pedagogical culture of the university or how individual teachers may influence the change, the findings imply important elements to be noticed if the change is to be promoted. The findings support the idea of pedagogical “change agents” in communities to enhance change in pedagogical culture (Clavert et al., 2018; Remmik & Karm, 2012). The teachers described change agents as key individuals who were enthusiastic about teaching and who actively made an effort to develop teaching in the community. Through these informal change agents, the whole atmosphere toward teaching had changed into being more positive and one in which concrete development actions could be proposed. Thus, it can be concluded that the existence of these change agents in the community can have a positive influence on the process of change. It has previously been suggested that, if the pedagogical development of the university community is to be supported through the establishment of informal pedagogical change agents, attention must be paid to collegiality in the community (Clavert et al., 2018).

The findings of the study emphasize the importance of collegiality, as those teachers who described many interaction opportunities in their community highlighted its importance, whereas the many teachers who described a lack of opportunities for collaboration perceived this as being negative for teaching and its development. Englund et al., (2018) reported similar results, describing a teaching culture in which the supportive community included many informal and formal communication opportunities, and the members shared similar teaching-related beliefs and employed team teaching. Previous research has suggested that opportunities for peer support should also be reinforced through formal practices, as the importance of this has already been recognized through collaboration (Katajavuori et al., 2019). Mårtensson and Roxå (2016) pointed out that it is not just the formal practices that should be promoted in academic development, such as formal training for teachers, but it is also important to promote informal practices and jointly offer academics possibilities to “bring members together.” Consequently, to support teaching and pedagogical development, the pedagogical culture concerning the structures and managerial elements should be such that the responsibility for establishing collaboration does not rest solely with the teachers themselves (McCune, 2018; Wenger & Snyder, 2000).

One of the main implications of this study is the need to promote the value of teaching through a variety of cultural elements in the community. Regarding the possibilities of pedagogical development for academics, an acknowledgment of the status of teaching, as

well as creating an enabling and supportive environment, has been recognized as important (Van Schalkwyk et al., 2015). The findings of the present study suggest that for an environment to be supportive for teaching and its development, it is not enough that the value of teaching is promoted only through a few elements, particularly when there is no congruence between the elements, as the environment may then hinder development. Thus, it can be concluded that, with more support from the different elements, the pedagogical culture in the community may be more supportive for teaching and pedagogical development.

Cultural elements may eventually become unnoticed, as they are a natural part of the context (Schein & Schein, 2016). Mårtensson and Roxå (2016) have argued that it is important to increase awareness of the contextual factors influencing teachers' development. The purpose of the current study was precisely to make taken-for-granted and invisible matters visible through their identification. Accordingly, the development of a more supportive pedagogical culture requires intentional endeavors to influence abstract and possibly invisible cultural elements in the community. Hence, it would be of value for the formal actors in pedagogical development (see, e.g., Mårtensson & Roxå, 2021) or the more informal pedagogical change agents to consider the current state of different cultural elements in the community and aim to recognize the more invisible ones. Once these are acknowledged, implementation efforts to promote the value of teaching can be encouraged. However, the implementation efforts are likely to require the consideration of balance issues between teaching and research.

Conclusions and suggestions for future studies

This study examined unifying elements that, based on teachers' perceptions, contribute to the understanding of pedagogical culture in universities. The data consisted of a large number of rich descriptions of university teachers' perceptions. The phenomenon itself requires a broad conceptualization and represents, to some extent, unconscious and invisible matters. Based on the perceptions of teachers, similar content was identified in the interviews, which supports the trustworthiness of the findings. However, while interpreting the findings, it is important to note that most of the teachers who participated in the study seemed to be interested in developing themselves as teachers. The majority of the teachers had completed a large number of pedagogical studies and had been recruited for the study through pedagogical development courses. In addition, over half of the participants had more than 10 years of teaching experience. However, only a few participants had solely teaching-focused work positions, and both teaching and research were reported as being emphasized during work hours. In addition, the participants' work positions varied. Thus, the participants' perceptions are seen to represent diverse perceptions of the academic context.

Regarding the analysis as it proceeds, there is a possibility that something has been ignored and that the focus is on similar content that has already been found. To prevent coder fatigue (Kleinheksel et al., 2020), the iteration of coding and reflection on the coding content were done several times during the process of analysis. In addition, special attention was paid to present accurate reporting of the different proceedings (Graneheim et al., 2017). Overall, the reported findings represent the researcher's choices about what should be considered the most important elements on which to report and elaborate. Consequently, the interview quotations represent a restricted glimpse of the broad data.

One of the limitations of the study is the limited possibility to elaborate the specific elements on a more profound level. The underlying assumption of the study was that the context in which teachers operate influences their opportunities to engage in teaching practices and pedagogical development. Thus, it is seen that the identification of different elements was first needed, and it is left to future studies to explore these elements in more depth, for instance, by taking a person-oriented approach and consider the role of pedagogical culture in professional identity or in academic agency.

In addition, as a *sharing culture* that values teaching through different cultural elements is seen to be important for the pedagogical development of communities, examining concrete implementations supporting these elements would be valuable. Overall, the current study offers direct implications for pedagogical development by identifying important elements of pedagogical culture in a university context.

Author contribution

- Conceptualization, methodology, formal analysis, and investigation, writing and editing the original draft and the final version: Siru Myllykoski-Laine
- Supervision and review: Liisa Postareff, Mari Murtonen, Henna Vilppu
- All authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

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Declarations

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