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Teacher-Facilitators' Job-Crafting: Making Meaning and Relevance in Authentic Learning Environments

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Purpose: Higher education institutions are being challenged to sustain their relevance in a disruptive world by moving from ego-systems to ecosystems. Teachers, as key actors, are required to redesign their work, shifting from traditional teacher-led processes towards the facilitation of student-driven learning in authentic environments. In ecosystems, with students, colleagues, and work-life partners, teachers need to modify their work by crafting their tasks, relationships, and mindsets. This study aims to make the change in teachers' work transparent on a practical level.

Study design/methodology/approach: A qualitative and practice-based approach was used to explore teacher facilitators experiences of their job crafting.

Findings: The findings reveal the new meaning and relevance of the teacher facilitators work and can raise the awareness of higher education institutions to cultivate the future competencies of teachers.

Originality/value: The study introduces the new nature and purpose of teachers' work as a part of ecosystems. We suggest higher education institutions nurture an experimental learning culture and support teachers to go out of their comfort zones. Developing collaborative job crafting can be a sustainable way to do that and avoids the disconnection between what we are doing and what we should be doing.

Introduction

Higher education (HE) is faced with a challenge in which there is a disconnect between that which we know we should be doing and that which we are doing. Examples of these knowing-doing gaps according to Scharmer (2018, 4) include the ecological divide (resulting in the loss of nature), the social divide (resulting in the loss of society—the social whole), and the spiritual divide (resulting in the loss of meaning). The rapid disruption of industry and business based on technological, environmental, political, and social development, as well as the Covid-19 pandemic, has already pushed HE into making changes. Furthermore, HE has been challenged to change its way of operating to cultivate meaningful competencies for the future workforce, such as critical thinking, problem-solving, and self-management skills including active learning, resilience, stress tolerance and flexibility (World Economic Forum, 2020). However, there is still work to be done in shifting the mindset from the traditional teacher-centred approach of filling students with knowledge (as if they were empty vessels) to more relevant, transformational, sustainable and co-creative forms of HE (Giesenbauer & Müller-Christ, 2020; Scharmer, 2019).

To succeed in the change and reduce the knowing-doing gaps, a shift from ego to eco thinking (Danon, 2019) and from ego-systems to ecosystems development (Scharmer, 2018) is required. One manifestation of ego thinking and ego-systems in HE is the individual working culture in which teachers work in disciplinary silos focusing on teaching contents without a clear connection with real-life phenomena. This means that the reality within higher education

institutions is based on their own bubbles, and the impacts on reducing ecological, social, and spiritual divides are limited. This individual working culture also threatens the holistic view of student learning by fragmenting the meaningfulness and authenticity and weakening the relevancy of learning outcomes. As illustrated in Figure 1, a teacher's work that is based on an ego-system is quite different compared to work as a part of the ecosystem.

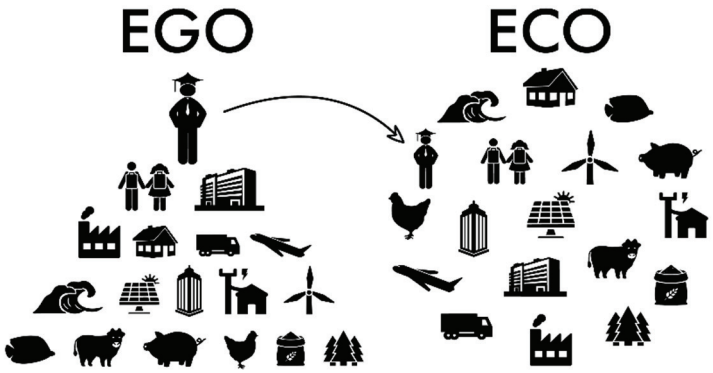

Figure 1: A teacher's work shifting from ego- to an ecosystem adapted from Danon (2019).

A promising step towards achieving ecosystems in HE has been the growing trend of building space for interdisciplinary, work-based, authentic learning environments (see, e.g., Stevenson & Nuottila, 2016). Herrington, Reeves and Oliver (2010) present nine authentic learning design principles, which create an environment for meaningful learning. These are: 1) provide authentic contexts that reflect the way the knowledge will be used in real life, 2) provide authentic activities, 3) provide access to expert performances and the modelling of processes, 4) provide multiple roles and perspectives, 5) support collaborative construction of knowledge, 6) promote reflection to enable abstractions to be formed, 7) promote articulation to enable tacit knowledge to be made explicit, 8) provide coaching and scaffolding by the teacher at critical times, and 9) provide for authentic assessment of learning within tasks.

In these kinds of authentic learning environments, students solve challenges linked to industry and business in active interaction with the challenge owners. It is recognized that complex problems of industry involve multiple domains and require multiple disciplines to reach a solution (Kunnari, Jussila, Tuomela, & Raitanen, 2019), therefore student teams should be composed of multiple disciplines that can work together to integrate information, data, techniques, tools, perspectives, and/or theories from two or more disciplines (Richter & Paretti, 2009). This requires breaking the traditional organizational silos in HEIs and involving different degree programs, schools, and institutions to work on problems together. Design thinking is one approach for organizing authentic learning environments. Following a design thinking process, each student team needs to empathize with the challenge owner and users, define a problem worth solving, ideate and prototype the solution, and finally test it with users (Jussila et al., 2020; Geitz & de Geus, 2019). Student teams receive authentic feedback during the process and all of the proposed solutions are evaluated by the industry. In this approach, teachers work as facilitators as a part of the ecosystem. Work-life partners are essential for ecosystems. Typically, a work-life partner is a representative from the working world with whom the HEI can engage and establish various forms of cooperation. Throughout the rest of this paper, we will use the term authentic learning environment to refer to the concept described above.

Scharmer (2018) states that in making a successful change towards ecosystems in HE, it is not enough to focus on external conditions, but it is important to take the interior source of key actors into account. HE teachers' work in authentic environments is significantly different. With this study, we aim to make the main elements of teachers' work transparent utilizing job

crafting theory. We aim to answer the question: what does the change mean at a practical level in the teachers' work?

Job crafting

The concept of job crafting refers to employees' own proactive behaviour in redesigning and improving their own working conditions to achieve a more meaningful and satisfactory job (Demerouti, 2014; Wrześniewski & Dutton, 2001). When job crafting, employees independently modify aspects of their jobs to improve the person-environment fit between the characteristics of the job and their own needs, abilities, and preferences (Berg, Dutton, & Wrześniewski, 2013). In times of change, job crafting has been recognized as 'something organizations can stimulate to improve the working conditions for their employees by encouraging them to do so themselves´ (Demerouti, 2014). Additionally, Kira, Van Eijnatten and Balkin (2010) argue that job crafting is a beneficial strategy to deal with organizational change and to enhance an employee's sustainable ability to adapt to the demands of the dynamic post-industrial workplace. When employees make changes to their jobs, they can experience the job in another way and craft another purpose for the work (Demerouti, 2014).

There are two main approaches to research on job crafting. In this study, we use the approach by Wrześniewski and Dutton (2001), who specify three types of job crafting: task crafting, relationship crafting, and cognitive crafting. Employees may craft their tasks by including more or different tasks, focusing more on certain tasks, or reducing their investment in other tasks. Relationship crafting refers to the way employees may change the ways they interact with others and with whom they interact the most. Cognitive crafting means how employees may change the ways they think about their jobs. The other approach in job crafting research is related to the Job Demands–Resources model (see, e.g., Tims, Bakker, & Derks, 2013), in which job crafting refers to the changes that employees may make to balance their job demands and resources with their personal abilities and needs.

When exploring teachers' job crafting in authentic learning environments, it is important to note that job crafting can be collaborative, which is related positively to job performance at the team and individual level, and to high levels of work engagement (Tims, Bakker, Derks, & Van Rhenen, 2013). Collaborative work crafting creates sustainability and enhances engagement by enabling employees to develop their personal resources through learning processes and by translating already existing resources to other valuable assets (Kira, et al., 2010).

Job crafting in teachers' work

A job crafting perspective has a lot of potentials to investigate the changing work of teachers, but as a relatively new concept, it is not yet widely used. Haneda and Sharman (2016) argue that a job–crafting perspective on teacher agency offers a useful way to understand the complexity involved in teachers' agentive actions. They note that when seen as job crafters, teachers go beyond their predetermined roles by actively construing their own purpose and meaning of their work. As crafters, they actively reshape its parameters, including its scope (or responsibilities) and the interpersonal relations involved (i.e., how and with whom they interact).

Some earlier studies of teachers have revealed positive outcomes of job crafting. Teachers' job crafting and work engagement has been found to mediate the relationship between teacher proactivity and student outcomes (Zahoor, 2018), and between meaningful work and teacher resilience (Van Wingerden & Poell, 2019). In addition, Alonso, Fernández-Salinero and Topa (2019) verified the positive influence of teachers' job crafting, both in its individual and collective dimensions on job satisfaction, work engagement, and job performance.

Kunnari (2018) found that the essential element in how to thrive in teachers' work came down to individual and collaborative crafting of tasks, relationships, and mindset. For example, teachers attuned their tasks according to the needs of their students and colleagues and gave up some old traditional tasks which were not so relevant in the new innovative working model. Relationship crafting was found to happen with students, teacher colleagues and work-life partners. Creating relatedness and positive emotions with the students makes it easier to understand their needs better and to be able to attune pedagogical practices accordingly (Kunnari & Lipponen, 2010). Increasing the collaboration with teaching colleagues has also been found to make it easier to succeed in educational innovation, enhance professional development, generate trust in overcoming challenges, and improve the collective efficacy and resilience of teacher teams (Kunnari & Ilomäki, 2016; Kunnari, Ilomäki & Toom, 2018). Furthermore, by intensifying the relationships with the world of work, teachers experienced new aspects and inspiration for developing education to meet the needs of the rapidly changing world (Kunnari & Ilomäki, 2016). In all these sub-studies, the participating teacher-developers experienced cognitive crafting in creating a new kind of growth mindset instead of a fixed one (see Dweck, 2012), relying on a holistic approach and flexibility (Kunnari, 2018).

No qualitative previous studies were found that address how teachers in a new learning environment describe how they craft their jobs. This study addresses this research gap by investigating the experiences of teachers that facilitate the work of students in solving real-life business challenges in authentic learning environments.

The aim of the study

Higher education needs to justify its relevance by building learning ecosystems and leaving some of the dysfunctional traditional practices behind. Teachers as key actors need to find a new meaning for their jobs. This study aims to describe what kind of job crafting teachers recognized in the new facilitator's role while working together with students and work-life representatives in authentic learning environments.

The main research question is based on the job crafting definition by Wrześniewski and Dutton (2001):

- How do teacher-facilitators experience the crafting of their tasks, relationships, and the ways they think about their jobs in authentic learning environments?

Furthermore, as this study was conducted during the time of the Covid-19 pandemic, we will also bring forth some observations on how this special time impacted the teacher facilitators work.

Method

Context of the study

The study was conducted as a part of a Finnish national development project called Work-Integrated Pedagogy in Higher Education (WORKPEDA). Work-integrated pedagogy was investigated in the context of Häme University of Applied Sciences (HAMK), focusing on two concepts that are aimed at research, development, innovation (RDI) and authentic learning activities in collaboration with industry. These concepts, namely the cSchool of Business Design (cSchool) and the HAMK Design Factory (Design Factory) offer distinct approaches to RDI, however, involve partly the same staff and use some common tools and methods in solving business challenges in authentic learning environments.

Both the cSchool and the Design Factory follow a pedagogical approach described as co-creation pedagogy (Kunnari et al., 2019). They both provide authentic physical, digital, and

social learning environments for students, teachers, and work-life partners aimed at solving real-life business challenges. On-campus there are dedicated physical environments that are designated as learning spaces where all the actors can openly work together. These environments are built to support engagement and collaboration with open spaces and large movable items of furniture, partly open walls, bright colours, whiteboards, and large screens. There are also social learning environments using tools such as Teams, Zoom, and Moodle augmented with collaboration platforms such as Mural, where teacher teams design and deliver learning events, touchpoints, and experiences. Additionally, real-life working partners are invited to join the social learning environments. In addition, both the cSchool and Design Factory make use of digital learning environments for prototyping. This includes platforms for designing user interfaces, such as Adobe XD, graphical design platforms such as Canva, and website builders such as WordPress. The main difference between the cSchool and the Design Factory is that the cSchool is mainly aimed at business students and the Design Factory by default involves students from multiple disciplines.

Practice-based qualitative case study

The seven participating TFs (four females, three males) represented key practitioners in authentic learning environments and the new knowledge for this study was constructed through their reflections about their work (Heikkinen, et al., 2016). The participants were selected so that they had prior experience as teachers in a more traditional teaching context and they were currently working as facilitators in an authentic learning environment. Furthermore, the authors of this study had a large amount of contextual knowledge as practitioners in developing authentic learning environments, which was volitionally exploited when planning the research, conducting the data collection, and making inferences from the data (Herr & Anderson, 2005, 9-10).

Data collection and analysis

The data collection and analysis were an iterative process aiming to build a comprehensive picture of the TFs' job crafting. As practice-based research, this study emphasized the importance of the pragmatic value of the research, with the choice of methods based on the idea of 'what works' (Creswell & Plano Clark, 2007). The main data were collected in four thematic group interviews embedded in the development work of the TYÖPEDA-project between April 2019–November 2020. The themes were derived from job crafting theory defined as task crafting, relationship crafting, and cognitive crafting (Wrześniewski & Dutton, 2001). The interviews were conducted by the first author and they were informal in nature. The aim was to allow the TFs to reflect on their work in an open manner and for the interviewer to explore themes and responses further. The interviews were recorded, transcribed and content-analyzed to find key elements in each theme. In between the interviews, more data was collected through in-person discussions and analysis completed by collective writing.

Findings

The findings illustrate the new role of the teachers as facilitators in authentic learning environments. In the following, we describe what kind of job crafting TFs did when transforming their work from a traditional teaching context to a new kind of work in authentic learning environments: how they crafted their tasks, relationships, and ways they thought about their job.

Crafting tasks in facilitation

Table 1 illustrates the central findings regarding the TFs' crafting of their tasks. In the following, we elaborate on each element in the same order as in the table.

Table 1: Task crafting by teacher-facilitators

Tasks in a traditional teaching context	Tasks in authentic learning environments
● Individual tasks in teaching ● Working alone	● Collaborative tasks in facilitation ● Working together in open physical and digital environments
● Detailed planning and preparing teaching in advance	● Making a pedagogical manuscript and concurrent co-creation of the process ● Designing and delivering digital platforms for student-driven learning
● Instructing and assessing separated tasks and assignments ● Lecturing, presenting, explaining	● Continuous guidance and assessment - empowering and supporting authentic real-life learning ● Listening, observing, asking questions, being present
● Focus on students' knowledge and skills	● Focus holistically on students' competencies, self-efficacy, and creativity

According to the TFs, they had changed their tasks to become more collaborative, which had many dimensions. They no longer worked alone but as a team. They no longer just instructed individual students but now facilitate the learning of student teams. In addition, there were work-life partners, experts, potential users, and customers involved. As one of the TFs mentioned: "This is truly working together, with everybody involved in solving the challenges, giving support to each other." The TFs explained how they worked together in open physical environments, in which they felt all the stakeholders could make connections freely and naturally. In addition, digital, open environments had impacted the TFs' tasks. This was explained by one of the respondents: "Discussions and designs are documented as shared documents, learning materials like presentations, videos, references, instructions are jointly designed and produced. Both students and work-life partners are present in these environments." The TFs highlighted the importance of openness, which they said created an engaging social environment for their work.

The TFs mentioned that they had given up detailed planning and preparation in advance. They experienced that this saved their time for more valuable tasks in student guidance and support. Instead of planning exactly what to teach and when, they focused on enabling the students' learning by creating a pedagogical manuscript, as well as designing and delivering digital platforms.

The central meaning of the pedagogical manuscript was illustrated by one of the TFs: "The manuscript is like a playbook providing an overview for learning, teaching, and facilitating through learning objectives, themes, methods, possible tools, and possible outcomes. It allows changes, turns, pivots, and iterations in learning that are a natural part of every real-life challenge and every learner team." The TFs mentioned that designing the manuscript was a true co-creation process of a TF team and it helped the TFs to sort out their thoughts, intentions, and interests and helped them to communicate with business partners. The usefulness of the manuscript as a flexible tool was especially recognized when adapting to remote work during the Covid-19 crisis.

The TFs emphasized that they wanted to provide digital platforms for student-driven learning following methodological processes that respect real-life phenomena and are relevant to them. They described that the platforms included instructed learning assignments, sets of alternative learning tools that learners could choose and apply, discussion forums for submitting

assignments and activating feedback, visual elements supporting learning, and materials such as videos, links, canvases, calculation and projection models, spreadsheets, application links, eBooks, reference reading material, lecture presentations, session recordings, etc. The TFs highlighted that this kind of platform respects authentic learning challenges and allows learners to be the owners of the process. This was explained by one of the interviewees: "The processes are clear and materials ready, but the rhythm and the order depend on the challenges and the learners." The role of digital platforms was felt to be crucial when suddenly adapting to the pandemic situation. They mentioned that it was easy and quick to make changes since the platforms had already been used.

The TFs also noticed how they had crafted the students' guidance and assessment to become a form of continuous interaction embedded throughout the whole process when solving real-life challenges. There were no longer separate assignments submitted solely to the teachers to be assessed. As one of the TFs noted: "We need to get rid of this 'school playing'. There is no point that students are doing some assignments solely for the teacher and the school, but they need to take the ownership into their own hands." They also recognized that even though the pandemic situation was challenging for the students, the real-life challenges motivated students to complete the tasks. In addition, the TFs highlighted the significance of varied methods and tools which made learning transparent, so that the students' themselves could recognize their own development and be empowered. They mentioned that real-life working challenges required collaborative problem-solving including reframing and defining challenges, iterative knowledge building and the discovery of the context, solution testing and experimentation, as well as continuous discussion and dialogue. Furthermore, to keep the students' energy up, a positive, relaxed, and playful approach was felt to be fundamental. This involved having a sense of humour, physical exercise such as standing up and taking power poses, walking and talking, enjoying fruit, beverages, and taking breaks. Especially during the pandemic, this aspect was felt to be even more important, and it required the agility of the facilitators to create new ways to implement these aspects in the online environment.

In comparison to traditional teaching focused on lecturing, presenting, and explaining things, the TFs mentioned that the ability to be fully present and available was the key thing. They felt it was important to carefully listen and observe the work of students, and not just listen but support the students' own reflections by asking questions and being interested in their work.

In the TFs' descriptions of their new tasks, it was clear that the TFs approached the students' competence development holistically. This was explained by one of the interviewees: "It is not just guiding the students' knowledge and skills, it is so much more." They mentioned that their actions were focused on cultivating students' competencies including self-efficacy and creativity. One of them mentioned: "I think we try to unlock their potential, help them to see their learning opportunities, and enable them to experience authentic and even transformative learning."

Crafting relationships with students, teachers, and work-life partners

When asked about what kind of relationship crafting the TFs had been involved in, they did not solely speak about their own individual relationships with other individuals, but they described the nature of all relationships in the learning ecosystem. According to the TFs, their connections had increased in quantity and improved in quality. They felt that the connections had also become more informal and livelier, and many connections were unscheduled and took place spontaneously. Furthermore, the TFs emphasized the meaning of trust in all relationships. For example, one explained: "When I am trusting myself, I can trust the others." The TFs highlighted that all the actors in open and inclusive environments, students, colleagues, and work-life partners were equal peer learners.

Relationship with students

Regarding increased connections with the students, the TFs highlighted that the students were encouraged to contact the TFs online and at the campus also out of actual teaching and facilitation sessions. The TFs said that they were proactive in making contacts with student teams during sessions. They felt that the nature of the relationships was more informal than formal and more like a relationship between co-learners than a traditional student-teacher relationship. There was a shift from the teachers' authority to the students' empowerment. The TFs felt that it was important that the students were not seeking knowledge to perform assignments for the teachers, but that they were searching for knowledge to solve real challenges. Students were also mentioned as leading the process: "Individual students take the responsibility for their own learning and at the same time take the responsibility to support the others". The TFs also noted that for some students this kind of relationship could pose challenges, especially at the beginning, as they were not ready to be agents of their own learning and expected teachers to serve them traditionally.

Relationship with teachers

The TFs elaborated on the relationships with their TF-colleagues and noted that besides increased interaction, their connections had also changed in that there was more discussion, dialogue, visual thinking, and the co-creation of contents, phenomena, and methodologies. They felt that moments together were effective and productive, as they had managed to create a common language and understanding. In addition, the TFs observed that the relationships between the TFs and other teachers with a more traditional teaching approach were sometimes challenging when it came to finding a common language and meaning of words.

Relationships with work-life partners

Concerning the TFs' experiences of how they had crafted the relationships with work-life partners, they noted that the interaction had become more intensive and long-term. They felt that expectations, objectives, working methods, communication practices, and actual learning challenges had become familiar, and a common language had been established. Therefore, they felt that it was easy to discuss and agree on the next authentic learning challenge. When the pandemic started, the TFs felt that it was meaningful for all to redefine the challenges to match the new business needs of the work-life partners.

According to the TFs, one common principle in all relationships was the "freedom to act". As team members, they felt that they had a right and responsibility to contribute to designing, delivering, and assessing learning experience for students. However, they said that this was not always self-evident, if a person's motivation, interest, or preferences were focused somewhere else. The TFs also mentioned that students and work-life partners had been encouraged to be initiative and actively participate. In addition, the TFs highlighted that the role of their supervisor was significant. One of them mentioned: "It is so important that our boss gives us room and encourages us to experiment."

Teacher-facilitators crafting their mindset

In the following, we describe the cognitive crafting concerning how the TFs changed the way they think about their work. The main themes arising from the data are described.

Trust in learning and development

The TFs described the changes in their thinking by saying that they had started to truly believe in the human capacity to learn and develop referring to all the actors in the environment. They

expressed great trust in the students' abilities saying: "Students are capable of unbelievable achievements if they are just encouraged." When talking about how the students had overcome challenges, the TFs felt they had become inspired and empowered themselves. Furthermore, they said it was important for them that as facilitators they were genuinely interested in how each individual could learn from their own starting points. They mentioned that they needed to respect the learners and give space for them to challenge themselves and succeed in their own way. The TFs also highlighted the meaningfulness of continuous learning as a team with their colleagues by reflecting on their work together and continuously collecting feedback from students in guidance sessions. Concerning the trust in their own learning and development, one of them mentioned: "I learn all the time while working."

Collaborative work

As noted already in the section discussing task and relationship crafting, the TFs found that individual work had changed and become collaborative when facilitating authentic learning. In their mindset, this was an asset. One noted: "Together it is easier to take risks and make decisions, to have courage." They also felt that a collaborative working style enabled them to feel engaged and competent in their challenging and uncertain environment. They highlighted that working closely together with other TFs was fruitful. Working with students was also meaningful because of the intensive interaction. According to the TFs, the ability to be present physically, mentally, and virtually was the key element. The TFs also described a change in their thinking about what kind of meaning the collaboration with work-life partners had. Without authentic real-life challenges from the work-life partners, there would be no challenging learning experiences. The TFs felt good relationships with them were crucial.

Experimental attitude with the joy of uncertainty

The experimental attitude was emphasized in the way the TFs thought about their work, compared to more traditional approaches in which teachers were more engaged in managing, even controlling, the learning process and its outcomes. The TFs mentioned that their role was not to make everything ready for the students but to empower them to experiment and explore. They felt that the whole process invites experimentation, and it could be comforting as they all learned from mistakes.

According to the TFs, the feeling of uncertainty was closely connected to the experimental attitude. They highlighted that learning is risk-taking, and when you are confronting new, unexpected things, you can even enjoy the uncertainty. They mentioned that uncertainty generated possibilities, as one of the TFs pointed out: "The feeling of uncertainty often comes from the fact that we do not know or cannot yet do something, and that is the most fruitful starting point for learning." The TFs also mentioned that an experimental attitude is a prerequisite for creativity. They felt that experiments were challenging and rewarding at the same time.

Acceptance of incompleteness

While working as a facilitator in authentic learning environments, solving real-life problems, the TFs elaborated how beneficial it was to accept the feeling of incompleteness and not to reach for perfect solutions or outcomes concerning students' outputs. For instance, one of them noted: "Students will produce their own kind of solutions. They are all different, and that is a richness." They illustrated the difference between their earlier mindset as teachers, with one saying: "Before, I was really worried about whether the students would achieve the right kind of end result, but that is not the point… prototypes do not need to be ready or perfect, but they can be really valuable for the companies." They felt that everything and everybody was

incomplete, but that it did not matter. The TFs also highlighted that in this kind of working model, when they are exposing their work and thinking in progress to others, they have to accept their own incompleteness. They said this empowered them to learn and find the true meaning of their work. As one explained: "To sustain relevance, I recreate myself all the time."

Discussion and conclusions

Higher education needs to move from ego-systems to ecosystems to sustain its relevance in the rapidly changing world (Giesenbauer & Müller-Christ, 2020; Scharmer, 2019). Authentic learning environments can support this shift, but teachers need to craft their work and find new meaning and relevance. The novel findings of this study introduce the new nature and purpose of teachers' work as a part of ecosystems.

We can recognize clearly that the tasks in the facilitators' work are significantly different from the traditional work of teachers and are aligned with the principles of authentic learning environments (Herrington et al., 2010). The TFs' tasks focus on enabling learning and empowering students to take the lead in the process, which requires a great amount of flexibility, adaptability, and creativity to attune the tasks according to the emerging needs of the students, as well as the business challenges. The TFs' experiences regarding their task crafting reflect proactivity, meaningfulness, and work-engagement, as found in previous studies (Alonso et al., 2019; Van Wingerden & Poell, 2019).

In the findings on relationships crafting, it is notable that the intensive collaboration in authentic learning environments between all the stakeholders is fundamental. This demonstrates an ecosystem-thinking based on the we- approach, instead of the I- approach in ego systems (Danon, 2019; Scharmer, 2019). In the ecosystems, students are not just objects of education (Giesenbauer & Müller-Christ, 2020), but they are partners and active solution creators. Teacher colleagues are co-creators. Furthermore, work-life partners are not just passive receivers of the results but are actively collaborating and contributing to solving the challenges. From the teachers, this requires new competencies as fruitful collaboration in an interdisciplinary educational environment are not self-evident and it does not happen without effort. Scharmer (2013) argues that in building infrastructures for a sustainable ecosystem, we especially miss the ability to co-sensing and co-inspiring. The findings of this study note that if TFs value increased informal and lively collaboration, based on inclusiveness, encouragement, and empowerment, this can make it easier to sense the needs of others and find ways to unleash the collective potential for creativity.

All the elements of the TFs' job crafting are interconnected. The new kinds of tasks enabled changes in relationships and supported the development of a new mindset. On the other hand, we can notice that the TFs' mindset relying on trust, collaboration, experimentation, and incompleteness created a solid ground for new tasks and a new nature of relationships. Furthermore, the findings of mindset crafting shed light on what a growth mindset (Dweck, 2012) means in practice. To maintain their relevance and meaning, the TFs emphasized their ability to learn every day while acting collaboratively and they saw an experimental attitude, uncertainty and incompleteness as necessary preconditions for their development.

The Covid-19 pandemic and its impacts exposed and highlighted how effective the new nature of the TFs work was. Flexible learning designs and the pedagogical manuscript made it possible to adapt and act in an agile way. The shift from campus-based teaching and learning was quickly and cheaply shifted to remote and online learning in large part due to previous experiences using digital platforms in learning. Based on these findings, we can say that the collaborative job crafting of TFs can be a very sustainable way to work even during very difficult times.

In this study, we focused on exploring how the TFs crafted their tasks, relationships, and mindsets (Wrześniewski & Dutton, 2001). We did not specifically investigate the TFs' job crafting experiences regarding job demands or resources (see, e.g., Tims, Bakker, & Derks, 2013;). However, some demands can be recognized that the TFs found challenging. It was noted Tims, Bakker, Derks, & Van Rhenen, 2013that the new way of student-driven learning was not easy for all of the students, which emphasize the TFs' ability to be present, explore the students' perspectives, and creatively find solutions as to how students can be supported to play an active role. Another demand, in line with the previous study by Kunnari (2018), was related to other teachers' traditional approaches to teaching work, which the TFs found challenging. This is a highly essential observation for supervisors and leaders in the educational environment. We believe that when working in educational ecosystems there is room for a variety of teacher competencies, so it might be the case that the facilitator's role is not optimal for all teachers. However, higher education institutions should increase their awareness of how a successful ecosystem can be sustained and how much it allows different approaches from teachers.

Limitations

This study draws a picture of TFs whose job crafting seems to happen naturally and without any special interventions from the workplace. It is important to note that the participating TFs represent teachers who had voluntarily chosen or drifted into working in authentic environments with close connections to work-life partners. They all had very constructive approaches to developing their work and that is why their experiences were mostly positively oriented. The findings could have been quite different if we had studied teachers who were not interested in this kind of change.

The other limitation of this study is that it is based on one specific context and a limited number of participants. Additionally, combining and analyzing both the TFs' and students' experiences would have created a more comprehensive picture of the phenomena. However, we argue that the findings can increase the awareness of teachers' inner sources as facilitators and can be utilized in developing HEIs towards ecosystems in similar contexts.

Practical implications for higher education institutions

The findings highlight the new meaning and relevance of teachers' work as a part of ecosystems. It also leaves us to ask how new competencies of teachers are possible to achieve. As a practical implication, we suggest higher education institutions nurture an experimental learning culture and support teachers to go out of their comfort zones. Developing job crafting can be a sustainable way to do that and avoids the disconnection between what we are doing and what we should be doing. In collaborative job crafting, it is crucial to include the perspectives of students and work-life partners, and also engage the closest managers in this ongoing process (Kira, et al., 2010). Related to individual teachers, the humility to challenge one's own thinking and competencies with the willingness to search for new and unknown developments can enhance job crafting. The success in the ecosystem approach, according to Scharmer (2018, 25), is based on "an open mind, open heart and open will".

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