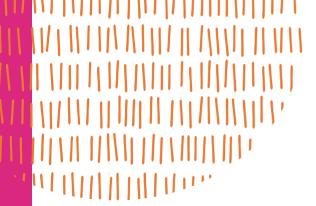


## DIGITAL WELLBEING REPORT DWEL

Report of the digital wellbeing in higher education institutions







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### 01 | INTRODUCTION

"Today, digital tools are like keys to the classroom. If you don't have access to digital tools, it's like standing outside the classroom without your keys."

-unknown lecturer-

This is how one of the interviewees described the importance of digital skills and digital tools as part of modern working life skills in HEI organization. The quote is a great metaphor for how important digital tools are in higher education today. The staff of higher education institutions can and have to use more and more digital tools and methods in teaching, but also for example in the communication of the work community. Digitalization undeniably has its benefits, but its harmful effects on the wellbeing of employees are also increasingly being recognized. In this report on Digital wellbeing, we explore the phenomenon of digital wellbeing in the context of higher education institutions.

This digital wellbeing -report is written as part of the Erasmus+ funded Digital wellbeing for Higher Education Lectures (DWEL) -project. The "Digital Wellbeing for Higher Education Lecturers" -project is coordinated by the Slovak University of Technology in Bratislava in collaboration with the South-Eastern Finland University of Applied Science - Xamk, the European universities continuing education network - eucen, the European E-learning Institute - EUEI, the University of Chemistry and Technology Prague and Momentum Marketing Services Limited. The Digital wellbeing report has been coordinated by South-Eastern Finland University of Applied Science (Xamk), in strong collaboration with the project consortium.

The material was gathered through the Digital wellbeing survey, semi-structured interviews, and desk research during the spring, summer and autumn of 2022. A total of 81 responses were submitted to the survey (June 2022). The English version of the survey was distributed through eucen's newsletter and in the project partners' own networks. In addition, in the Czech Republic and Slovakia, the survey was carried out in their own language. The survey received the following number of responses:

Czech Republic n 39 Slovakia n 25 Finland n 13 Other countries n 4

In addition, 30 semi-structured interviews were conducted as part of the report. HEI lecturers, teachers, managers, department managers, researchers and experts in digital education participated in the interviews. The semi-structured interviews were based on four themes: 1) skills and competence 2) sense of community 3) management 4) working conditions. The desk research also had the same themes.

The Digital Wellbeing Report is a study which introduces and analyses the challenges to digital wellbeing as experienced by HEI lecturers and managers as part of the wider current digital transition. The Digital wellbeing report will be an introduction to the meaning, scope, and application of digital wellbeing in HEI. The report aims to raise understanding and awareness of the digital wellbeing among HE lecturers. More specifically, the aim is to raise awareness of the importance of achieving a balance between digital teaching and the wellbeing of lecturers when they are suddenly exposed to risks to their physical and mental health that they have not had to face before.

The DWEL report offers up-to-date information on digital wellbeing specifically from the perspectives of teaching staff, researchers, and management staff in the higher education sector. It investigates the experiences and perceptions of those working in the higher education sector on the themes of digital wellbeing. The results of the DWEL report serve as a good basis for, among other, planning future actions. The report also offers a brief overview good practices from other fields, which can also be applied to the higher education sector. Moreover, it proposes measures and tools that can be used to strengthen digital well-being in the HEI sector.

The impact of digitalization and technology on working life and wellbeing has been studied thoroughly but the concept of digital wellbeing is quite new. Technology and digitalization have changed education and everyday practices of educational organizations, but as of now there are only a few sources of information on digital wellbeing for HEI.

Keywords: digital wellbeing, wellbeing at work, higher education lectures, digital pedagogy, management

### 02 | DIGITAL WELLBEING

Digitalization and technological development have rapidly changed the nature of work in almost all industries. The changing work environment is part of a larger social change. The significance of the change caused by digitalization and technological development is illustrated by the fact that the phenomenon is described as the fourth industrial revolution. Employees and organizations have had to adapt to unprecedented changes in working life, which were further accelerated by the COVID 19 pandemic. In particular, the expansion of remote work put organizations' digital capabilities to the test, but digital wellbeing is not just part of remote work. Digital wellbeing is a phenomenon that is part of an individual's overall wellbeing - or wellbeing at work, as defined in this report.

The concept of digital wellbeing is poorly understood and there are various definitions (Themelis and Sime 2019, 32). According to one definition, digital wellbeing is a state where a person or employee has the ability to maintain subjective wellbeing in digital environments. The person or employee is able to manage the negative effects of digitalization (information overload, etc.), but at the same time is able to utilize digital environments to achieve, for example, professional goals (Gui & Carradore 2017). The definition usually takes into account mental, physical, emotional and social aspects. Digital wellbeing has been described, among other things, as follows:

"Digital wellbeing is a term used to describe the impact of technologies and digital servies on people's mental, physical, social and emotional health" (Digital crossroads. Digital wellbeing for enterprises - project" 2022)

In the DWEL -project, the definition of digital wellbeing is based on four key areas (figure 1), which affect HEI employee's overall wellbeing. Digital wellbeing areas are: skills and competence, the sense of community, management and working conditions.

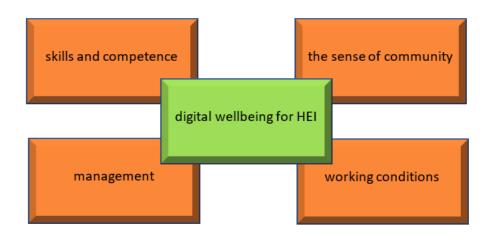
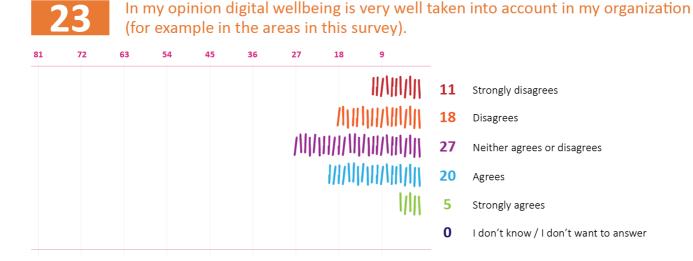


FIGURE 1 presents the four areas of digital wellbeing of the DWEL project: skills and competence, sense of community, management and working conditions

In the Digital wellbeing report the skills and competences section includes, for example, competence in digital pedagogy, training and support, as well as attitudes towards digital methods and tools. The second part includes maintaining a sense of community, but also digital interaction and communication. The management area discusses

issues related to digital management and organizational practices and the working conditions section ergonomics and cognitive ergonomics. In the report prepared the DWEL project team have considered digital wellbeing especially from the perspective of the higher education sector. Essential perspectives are 1) the phenomenon and its background in the higher education sector 2) the main drivers and barriers of digital wellbeing 3) effective and good practices in the HEI organization.

Based on the DWEL survey, it can be stated, that digital wellbeing development work should be increased in the context of higher education institutions. In the DWEL survey, respondents were asked to evaluate how well digital wellbeing is taken into account in their own organization. Only 6 % of the respondents strongly agreed that digital wellbeing is very well taken into account in respondent's own organization.



### Digital wellbeing generally

Although there was some variation in responses, they indicated that awareness and practices need to be developed to strengthen digital wellbeing in the HEI sector. As the use of digital work and technology increases, more attention should be paid to digital wellbeing in organizations as part of overall wellbeing at work. One of the key challenges is that digital wellbeing is not identified and recognized as its own area of work wellbeing. Moreover, digital wellbeing is not yet familiar enough as a concept or phenomenon.

Technology, digital methods, and digital tools have been in use in the higher education sector for a long time. However, COVID-19 forced the higher education sector to adapt to new approaches and practices at an unprecedented speed. Over the past couple of years, new methods, practices, and innovative approaches have been developed. The digital wellbeing report shows that several challenges have emerged in the higher education sector, but also successful development work and experiences have been achieved. In the following sections, the DWEL report deepens the understanding of the existing digital wellbeing practices, challenges, and opportunities from the perspective of higher education institutions.

### DIGITAL WELLBEING AREAS



### 03 | SKILLS AND COMPETENCE

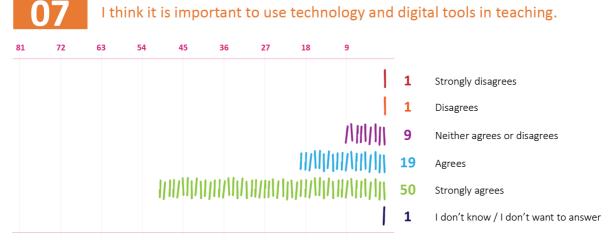
Higher education institutions educate students for the future working life, but we can only guess what working life will look like, for example, in 10 years. What we do know is that the use of digital tools and technology is and will be part of future-oriented education. At best, technology and digital methods can create great opportunities for teaching, but they can also cause extra load, technostress, and uncertainty. The skills and competences -section opens perspectives for the reader that affect the implementation of high-quality digital pedagogy.

### Digital pedagogy

In addition to content knowledge, higher education lectures must also increasingly master digital methods and tools. The core is to combine lecturers' understanding of learning, their own area of expertise and the possibilities offered by digital pedagogy. The combination of teaching and learning with digital methods, tools, environments and learning materials, is referred to as digital pedagogy. The concept covers different forms of teaching, from distance learning to contact teaching, and utilizing different digital methods and environments (Tampere University and Tampere University of Applied Sciences 2021). According to Tampere University and Tampere University of Applied Sciences, TPACK -model created by Mirsha and Koehler (2006) is widely used. THE TPACK model combines technological, pedagogical, and content knowledge. The idea is that combined technological, pedagogical, and content knowledge enhances the quality of digital learning. (Tampere University and Tampere University of Applied Sciences 2021.) Tampere University and Tampere University of Applied Sciences (2021) provides the following definition of digital pedagogy:

"Digital pedagogy is referred to when the specific characteristics of digital environments and their impact on the planning of teaching and the learning process are considered".

According to the DWEL survey, the importance of digital tools and technology as part of higher education is widely recognized. A considerable majority, i.e., 85% of the respondents, agreed or strongly agreed that the use of technology and digital tools in teaching is important. Digital tools are perceived as an important part of the work, although digital pedagogy and digital methods are not easy to apply to all fields or all studies equally well. For example, in nursing work, very practical teaching is also needed, for which digital methods are not always the best solution.

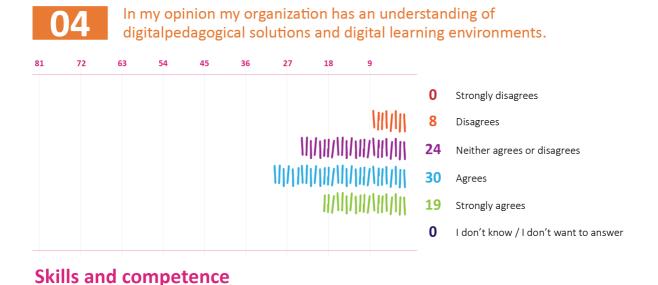


Skills and competence

Although, according to the DWEL survey, the importance of technology and digital tools in teaching is well recognized, several interviewees expressed that stronger support from organizations is needed in relation to the utilization of technology. Some of the interviewees even felt that they do not receive support from the organization to develop their digital skills and competences, which can be considered to increase the risk of overload and technostress.

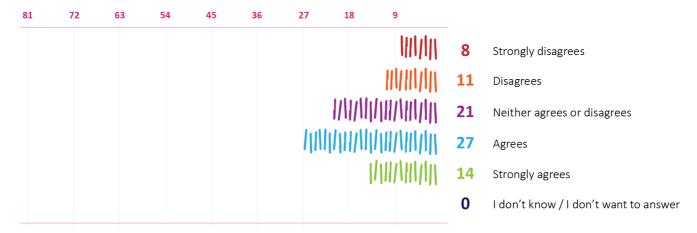
### Support and training in higher education institutions

Digital pedagogy is already an integral part of higher education teaching and future-oriented education, so it is important that organizations sufficiently support the work of the HEI staff. Different support services are needed to develop digital pedagogy. Moreover, higher education institutions must offer sufficient support and training so that high-quality digital pedagogy is not only implemented in online environments, but also in contact and hybrid teaching. In some interviews, concerns were raised that the management level needs a broad understanding of what the implementation of digital pedagogy requires from teachers. In the DWEL survey, more than half of the respondents agreed, or strongly agreed with the statement that "In my opinion my organization has an understanding of digital pedagogical solutions and digital learning environments".



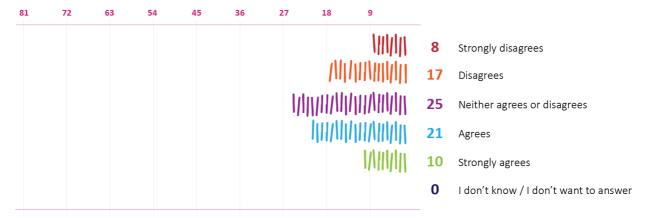
However, it is crucial to remember that digital pedagogy involves more than converting material into electronic format or using PowerPoint slides. Although HEI were considered to have a good understanding of the effects of digitalization on practical work, the interviews revealed several ongoing challenges. According to a few interviewees, managers do not have a sufficient understanding of the requirements of digital teaching. In particular, distance learning was described as slower than face-to-face teaching and it was also considered to require more planning than face-to-face teaching. Some of the HEI teaching staff also mentioned in the interviews that the changes and updates of different platforms and software are burdensome because orientation may not be available. Moreover, digital platforms and digital tools are sometimes introduced without sufficient familiarization. Independent learning was perceived as too time-consuming and difficult. Questions 8 and 9 of the DWEL survey concerned the possibility of receiving training in the use of digital tools and strengthening one's own skills and competence. In the survey there was some variation in the answers to questions on this topic.

There are enough opportunities to attend courses or other training in teaching technology (digital tools and platforms).



### Skills and competence





### Skills and competence

Based on the overall results of the survey and interviews, higher education institutions are expected to provide more opportunities for training and the development of digital skills. In order to develop their own skills and competence, different methods were hoped, such as trainings, peer to peer learning, webinars, mentoring and customized training. In addition, a beginner's toolkit was proposed for new employees, which allows them to familiarize themselves with the platforms and digital environments in use, also independently. In future development work, it would be advisable to increase learning situations where learning together and interaction are possible. Interaction is considered to improve learning because it enables, for example, the sharing of information and ideas (Dochy & Segers 2022, 24).

Peer-to-peer learning was highlighted in the interviews as one of the methods supporting the development of one's own skills and competence. The advantages of peer-to-peer learning are at least partly comparable to the advantages of coaching. Coaching has been identified as a method that not only encourages, but above all supports the application of what has been learned in practice. At the same time, it also generates feedback and the opportunity to evaluate

one's own progress. (Dochy & Segers 2022, 26.) The same benefits could also be achieved by supporting peer-to-peer learning. In some interviews, digital mentors were mentioned as one option for support, in which case professional and capable colleagues could offer peer-to-peer advice and guidance. Digital mentors were also considered easy to approach.

In the interviews, another model based on peer-to-peer support also emerged, which has been found to be a recommendable learning method. One interviewee told that in their organizations, courses are organized for the HEI staff, to which each participant brings their own real-life case. Teaching challenges are therefore solved by working with real-life problems, utilizing cooperation, mentoring and peer-to-peer learning. There are also good experiences with similar methods in other industries, when solutions to real-life challenges and cases have been explored together. This method enables finding new perspectives, receiving feedback, but also learning from mistakes. (Dochy & Segers 2022, 26.)

However, in order for higher education institutions to be able to offer the right methods to develop digital skills and competences, it is extremely important to identify the key skills.

"At the beginning it is important to identify the key skills and competencies"
- unknown department management-

In the interviews conducted for the DWEL report, a few skills and competences stood out. Based on DWEL interviews, core digital skills are:

Creativity and open mindset

Basic technical skills and basic skills to use digital tools

Ability to bring digital engagement in teaching

Digital literacy

Time management

Lifelong learning, motivation to both develop existing and acquire new IT skills

In other words, not all digital skills and competence are related to hard technical competence, but also soft skills such as creativity and lifelong learning are considered important, on the basis of which one's own skills and competence can be built.

Although it is evident that higher education institutions should invest more in training, one key barrier emerged in the interviews. The key barrier is resources, and especially time as a resource. For lecturers and other HEI staff should be allocated more working time to develop their own digital skills and competence, but also time to update existing ones. Implementing a digital mentoring programme also requires additional resources. However, a few interviewees said that support services exist, but that they are not always fully utilized. On the one hand, the support services are overburdened, but another obstacle is the mindset "I should know how to do this myself". Sometimes employees do not want to disturb the organizations' digital support services with "too small things". However, the digital pedagogy expert who participated in the interviews reminded that the HEI staff should be encouraged to ask so-called stupid questions as well. Moreover, the interviewee pointed out:

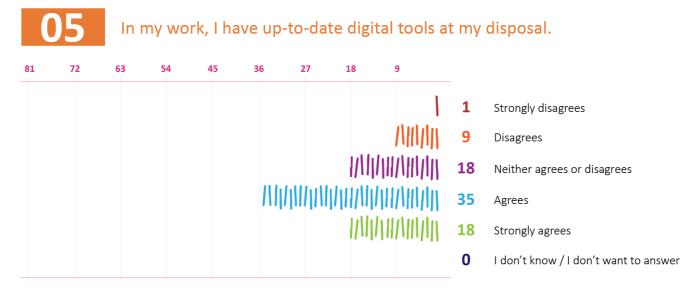
"You also have to remember that there isn't just one right way to do things. You should always take the starting points into account and develop digital teaching from your own starting points. It is important for teachers to know themselves and think about what kind of lecturer I am and what kind of lecturer I want to be"

- unknown digital pedagogy expert -

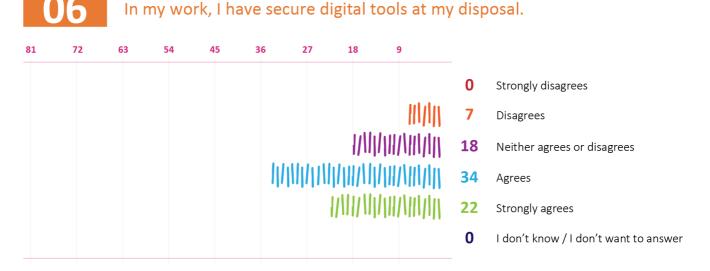
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### **Digital tools**

In the DWEL survey, respondents were also asked to evaluate the quality of digital tools at their disposal. Survey respondents were mostly satisfied with how safe and up-to-date digital tools available to them were. About two-thirds of respondents agreed or strongly agreed with the statements: I have secure, or I have up-to-date digital tools at my disposal (questions 5 and 6). The interviews also support this observation. The interviewees discussed various digital tools and platforms in use, but no significant problems emerged from the perspective of availability. Based on the results, it can be interpreted that the challenge is not so much the quality of the digital tools or their absence. Instead, the barrier is on the one hand insufficient skills to fully utilize digital tools, and on the other hand insufficient time to practice using them

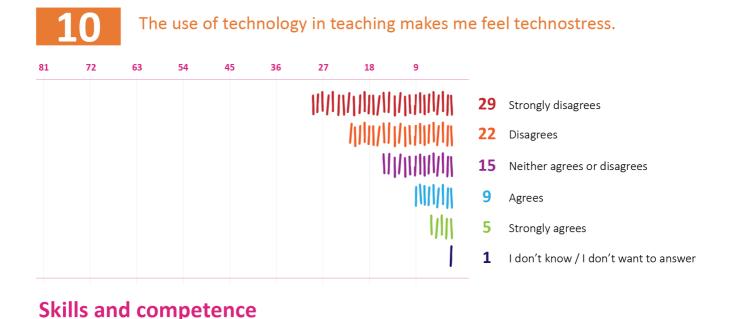


### Skills and competence



Skills and competence

At best, the use of technology and digital methods can be inspiring and support the high-quality implementation of work. The downside is the stress they cause if the employee experiences the use of technology as a burden factor. This phenomenon is called technostress. In the DWEL survey (question 10), the importance of technostress was not highlighted, as only 11% of respondents reported experiencing technostress. The result can be considered surprising compared to the other results of the report, although the result correlates with question 7, which assessed the importance of digital in one's own work. In question 7, 85% respondents agreed or strongly agreed that the use of technology and digital tools in teaching is important.



**Technostress** is a condition where the user experiences stress related to the use of technology (Salo etc. 2022)

### Digitalization and teaching

Especially the transition to distance education during exceptional circumstances revolutionized the interaction with students, and the teaching methods in use had to be changed and developed quickly. Not all teachers and lecturers had previous experience, e.g., of distance education, even if the methods of digital pedagogy would otherwise have been used. One key question that also came up in higher education was the interaction between teachers and students during distance lectures. In the interviews, certain challenges of distance education were identified, such as:

"You also need communication skills, a lot of patience, the ability to take everyone on board"
-unknown lecturer-

"You have to make sure that everything is planned.

You cannot just improvise in the same way you can face-to-face."

-unknown teacher-

"Do all students have the same opportunities to use technology and digital environments? On the other hand, do we assume too easily that all students are digital natives?"

-unknown lecturer and researcher-

Inclusive and participatory methods were and are needed, especially in distance education. However, digital environments can also be challenging environments for students to study and learn in, if the students' own digital skills are not sufficient. Some of the students also need support with digital platforms and environments, but the lecturer's time and own knowledge are not always enough to support the students. One issue to be resolved in higher education institutions is identifying who is responsible for students' digital support, and how it would be possible to offer support to students who need it. Moreover, it is of primary importance to note that not all students have access to the digital tools such as computers or smartphones.

Etiquette and instructions related to distance learning have also raised questions, such as whether students' cameras should be turned on and how communication takes place in digital environments. One of the lecturers said in an interview that he or she and the students had drawn up common ground rules at the beginning of the course, which everyone was expected to commit to. Common ground rules make it easier to work together in a digital environment, when everyone knows what is expected of them.

### Summary of the finding on skills and competence

The importance of digital methods and digital pedagogy is well recognized as part of modern professionalism. Competence in digital pedagogy includes the lecturer's understanding of learning and of their own area of expertise, but also how lecturer utilize digital tools and environments in their teaching. Based on the DWEL survey and interviews, the key driver is to support the development of digital skills and competence in HEIs, but also to allocate sufficient resources to digital skills training.

Along with support and resources, it is important to strengthen the motivation of HEI staff to increase their digital skills. Lifelong learning and self-motivation are working life skills that management and the organization must support. In the end, it must be remembered that the use of digital technology must not become an end in itself. Technology and digital tools are just tools, high-quality teaching content is crucial.

### Summary of the drivers and barriers in the theme of skills and competence

### **TOP DRIVERS**

Identifying key skills and competencies

Organizational level understanding of the requirements of digital pedagogy

Need-based and effective support, guidance, and counseling in digital pedagogy

Appropriate and secure digital tools

Lifelong learning and own motivation to learn new digital tools and methods

### **TOP BARRIES**

Resources

**Technostress** 

New software and platforms and changes in existing ones

"I should know how to do this by myself" -approach

Students do not have proper digital tools (computers, internet connections, etc.) in their disposal or their digital skills need to be developed

### **GOOD PRACTICES**

Co-development and co-learning events related to digital learning aimed at HEI teaching staff

Various training opportunities such as: mentoring, guided trainings, webinars, peer-to-peer learning, and self-study materials (such as manual for digital work)

Consideration of the effects of digitization in resources and in working time planning

# WELLBEING FOR HIGHER EDUCATION LECTURERS

### 04 | SENSE OF COMMUNITY

Traditionally, teaching in HEIs has been interactive and classroom based. In addition, working on campus has enabled important meetings with colleagues in an offline environment. The sense of community has primarily been built through face-to-face interaction. Isolation to home offices during the pandemic, however, revolutionized interaction within HEIs and raised questions about the possibility of maintaining sense of community through remote connections and digital environments. Although the staff of higher education institutions have at least partially returned to the campuses, digital environments will remain an important part of work skills, interaction, and the sense of community in the future.

### Digitalization and the sense of community in the HEI institutions

Functional workplace relations are considered central to an organization's functionality. Effective communication, on the other hand, is one of the most essentials factors that supporting workplace relations. (Sias & Shin 2020, 187.) Effective communication is also a key factor on which the sense of community among the organization's members is built. In the digital age, the importance of various digital environments as part of communication and information sharing has grown significantly. This has also significantly changed the environment in which HEI staff work.

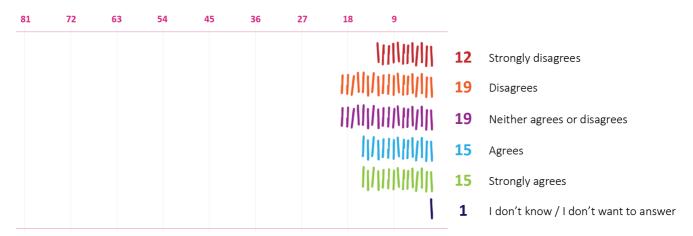
"Digital communication environments are various types of integrated communication and collaboration platforms in the workplace that enable information transfer and social interaction between employees through text, audio, video, and graphics" (Sivunen & Laitinen 2020, 41).

The benefits of digital environments in communication are indisputable, but not completely problem-free. Various digital tools, such as e-mails and shared calendars, are widely used for communication between employees. On the other hand, challenges have arisen, for example, choosing the right means of communication depending on the situation and communication between colleagues. In addition, users' attitudes and experiences have been found to strongly influence the use of communication technology. (Sivunen & Laitinen 2020, 43–44.) Maintaining the sense of community with digital tools has also sparked discussion, especially in the last couple of years.

It is worth noting that the question of the impact of digitalization on the sense of community divided opinions greatly in the DWEL survey. The dispersion of the answers indicates that not all teams and organizations have yet found tools to also maintain the sense of community. On the other hand, the individual characteristics of the respondents and the general attitude towards remote work and digitalization can also be considered as one explanatory factor. The interviews also revealed that, on the one hand, the wishes and needs of employees maintain a sense of community vary greatly, but that there are also significant differences in how organizations to maintain the sense of community. Instead, 13.5% of respondents agreed or strongly agreed that digitalization makes them feel isolated. Similarly, the interviews do not suggest that digitalization causes a feeling of isolation.



### Increased digitalization has reduced the sense of community in my HEI organization.



### Sense of community and distant work



Strongly agrees

I don't know / I don't want to answer

0

### Sense of community and distant work

In the survey, respondents were also asked to evaluate (question 15) the key HEI challenges are concerning digitalization and the sense of community. Based on the open answers, no single answer clearly stood out above the others, but the following factors were considered to have a particular impact on the sense of community:

lack of training in digital tools the change of face-to-face teaching to distance teaching cyberbullying the need for the latest technology and efficient support services deficiencies in communication

GHER EDUCATION LECTURERS

Digital communication issues were not emphasized significantly in the answers to the survey, but in several interviews the challenges of digital communication were highlighted. In the interviews, it was hoped, among other things, that organizations would invest more in the planning and planned utilization of digital communication channels. The digital communication channels themselves were not perceived as problematic, because sufficient platforms mostly existed, and they were considered good. Instead, the carefully planned use of digital channels was perceived as lacking. All in all, based on the interviews, it can be concluded that in terms of digital communication, more effort is needed to develop common ground rules. The lack of common ground rules in digital communication channels can, for example, cause confusion or even frustration. One of the interviewees brought up an interesting observation, which describes well the differences between offline and online encounters:

"When a colleague walks down the hall towards you and says hello, you say hello back. When you see the message in a digital environment, how do you act? Do you respond, do you click, or just ignore the message?

-unknown lecturer-

Common ground rules are needed at the organizational level, but above all, the development of an organizational culture that also considers digital interaction and communication. The challenges of digital communication do not only apply to the higher education organization, but also other industries that may be looking for solutions and good practices based on the experience of the last couple of years. It is very important to recognize the effects of the digital environments on interaction and communication. Once the effects have been identified, there is an opportunity to start developing properly targeted measures to improve digital communication and thus also the sense of community.

Empathy or the lack of empathy in digital environments has been identified as one of the key factors, which affects people's experiences in digital environments. For example, cognitive neuroscientist Katri Saarikivi (2016) has argued that the most important human skill of the digital age is empathy, the importance of which will increase further in the future. According to Saarikivi, digital environments are not designed to consider human emotions. In other words, emotions, which are central to human interaction, are not transmitted. (Saarikivi 2016.) Empathy in the online environment has also been identified as one of the important new skills in working life. Comparable observations were also made in some interviews, and it was argued that emotions are central in working life, for example when building mutual trust.

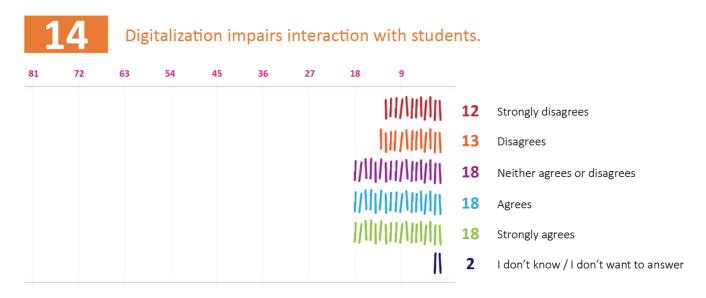
Although remote work is not unequivocally considered problematic according to the DWEL survey and interviews, several interviewees mentioned that they miss face-to-face meetings with colleagues, and that especially face-to-face meetings with students were considered even more important. The opportunity to build and maintain relationships with colleagues and interpersonal communication with students in a physical environment is seen as an important part of work and the sense of community in HEIs. Efforts have been made to develop various methods of maintaining a sense of community in digital environments as well, but they were mostly considered substitutes when there are no opportunities for face-to-face meetings. Some of the interviewees also experienced, for example, virtual remote coffees as artificial moments where equal communication is challenging. However, the interviewees who felt that their own organization has succeeded in creating good practices and sufficient platforms for digital communication were more satisfied with remote work. All in all, based on the interviews, it can be generalized that the hybrid work model is considered the best solution in terms of building the sense of community. If the work is mainly done remotely, face-to-face meetings should at least be planned and organized carefully.

### **Digital communication and students**

Especially due to the rapid transition to distance education caused by the COVID-19 pandemic, many questions related to digital education were raised around the world. Various communication issues with students were commonplace for many teachers and lecturers. The impact of the COVID-19 pandemic on distance teaching has been described using

the concept emergency remote teaching. (Oittinen, Háhn & Räisänen 2022, 16–17; 25.) The phrase describes how significant the change was in the end, even though digital pedagogy has been used for some time. Although we have returned to a so-called normal state, distance education and hybrid education are here to stay. It is therefore important to look at the effects of digitalization and distance learning from the teaching point of view.

In addition to the work community, one of the key issues in higher education organizations is the interaction and communication between teachers and students. When the DWEL survey considered the impact of digital technology on interaction with students (question 14), the answers were clearly divided. Based on the survey, only a third part disagreed that digitalization impairs interaction with students.



### Sense of community and distant work

Distance education and hybrid education have been studied especially in recent years. Pedagogical solutions and participatory methods (such as polls and digital whiteboards) have been found to be important for distance learning because they help students, among other things, to focus on teaching. In other words, a clear relationship has been found between versatile task planning and engagement. (Oittinen, Háhl & Räisänen 2022, 22; 28.) Consequently, participatory methods in digital environments increase engagement and it is important to invest in their planning and development in the future as well.

The interviews revealed different experiences with the use of digital tools and technology, as well as experiences related to distance education. Some of the interviewees defended the advantages of digital technology (such as flexibility) and reported that they perceive communication with students in digital channels as natural. On the other hand, various concerns and negative effects were also brought up. One interviewee summarized the concern as follows:

"...there is an increasing risk of losing interaction with students and their interest, as I have already stated"
-unknown interviewee / management-

Overall, however, it became clear in the DWEL interviews that interaction, communication, and teaching require more effort in digital environments than in a classroom. Among other things, communication was considered slower and the ability to perceive important non-verbal messages was also considered poor. These issues significantly affect the

lecturers' work, which is based specifically on interaction and communication with students. In the future, the higher education institutions still have many unsolved questions regarding teaching in digital environments

### Summary of the findings regarding the sense of community

During the COVID 19 pandemic, digital pedagogies were applied to deal with the sudden and unprecedented shift to online learning, but now is time look ahead and examine the challenges and successes that have emerged. HEIs are in a state of change, and new operating methods and ways to work are being developed. However, development work is made challenging by the different needs and wishes that occur in organizations. In the post-Covid era, it's worth considering what good experiences have been gained from remote work, hybrid work and digital environments and look at them in relation to traditional ways of working. Based on observations and experiences, the organizational culture can be renewed in such a way that digital environments are taken into account better than before. In addition, based on experience, common ground rules can be drawn up, for example, regarding digital communication.

The sense of community is one of the most important questions that have sparked discussion in higher education institutions, especially from the perspective of remote work. This is understandable, because the experience of belonging to a working community is important in terms of wellbeing at work. The feeling of being together and doing things together. At its best, the sense of community is supportive of the positive working environment, as expressed in one interview:

"We were all in the same boat, trying to support each other. Some colleagues who were familiar with technology were brilliant: they offered to help and mentor other colleagues and solved a lot of issues".

-unknown lecturer-

### Summary of the drivers and barriers in the theme of the sense of community

### **TOP DRIVERS**

Hybrid work

Regular and planned offline meetings alongside remote work

Agreed ground rules and commitment to them

Empathy in digital environments

Well-planned communication channels and clear instructions for use

### **TOP BARRIES**

Lack of common ground rules

Lack of empathy in digital environments

Different wishes and needs in organizations

The impact of the digital environments on teaching and insufficient solutions

Deterioration of interaction between students and lecturers

### **GOOD PRACTICES**

Pedagogical solutions and participatory methods

Regularly organized informal meetings for the HEI staff or team, either face-to-face or in digital environments

Agreed ground rules (digital) for communication and interaction with the HEI organization's employees, students and stakeholders

### **05 | MANAGEMENT**

The change in work caused by digitalization and the increase in remote work have also greatly influenced the management practices of higher education institutions. This section briefly explores management practices in digital transformation, but also experiences related to change in higher education institution. All in all, it can be said that there has been an ongoing learning process at the management level as well. The organizations and management teams have tried to build new practices and support employees in digital work, but there is still work to be done in the future.

### Daily support of employees

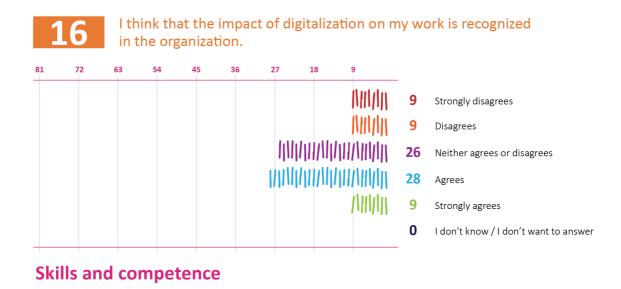
One of the topics covered in the DWEL interviews was the understanding among HEI management teams of the requirements of digital work and the allocation of resources to support digital work. It became apparent that the additional work caused by digitalization and technology is not always understood at the level of the organization and management.

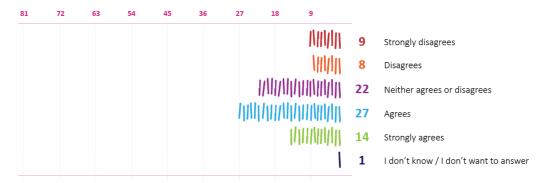
"However, teaching more digitally has increased the amount of time that is spent prepping for a lecture.

I find the amount of work required to prepare for a digital lecture is greater than an in-person lecture. It is important that our management team factors this need into our timetables."

-unknown lecturer-

The challenges discussed earlier in this report, for example, related to the planning of digital education and the need for training were also mentioned in relation to management practices. Recognizing the challenges caused by digitization, adequately training personnel to utilize digital tools, considering the effects of digitization in teachers' working time planning have not yet been implemented sufficiently in all higher education organizations. The DWEL survey also supports these findings. Questions number 16 and 17 concerned organizational support and identifying the effects of digitalization. Based on the responses to the survey, it can be concluded that there is still room for improvement in both identification and support at the management level. Only about half of the respondents answered that the impact of digitalization is recognized, and the organization supports efforts to cope with digitalization.





### Management

HEIs recognize the impact of digitalization and strive to give their support to employees, but there are some gaps remain. Therefore, based on the results of the DWEL survey, it can be recommended that higher education institutions do more work in the future to support digital work and thereby also support digital wellbeing. The growing importance of development work and training in organizations is also supported by research from other industries. According to research, the atmosphere of organizations should support different forms of training and learning, which is expressed, for example, by resourcing time. Training and development work is known to increase, among other things, commitment to the organization, work efficiency and job satisfaction. (Dochy & Segers 2022, 15 & 26.) Training opportunities are therefore also one way for the HEI to invest in the future.

It is important to start the development work with an investigation of the state and needs of one's own organization, so that the resources will be allocated correctly. Allocating resources requires management to have a good understanding of key skills, digital platforms, and environments, but also the effects of digital technology on teaching. In addition, in order to support the development work, it would be important to identify good practices that can be applied in one's own organization. Comprehensive understanding also requires open communication across the HEI. On the other hand, supporting digital work is a complex challenge for management teams, which is affected by many factors. For example, management teams must consider costs, and be mindful that sometimes new technologies move in and out of fashion fast (Thomas 2011, 2–3). The DWEL interviews revealed that the digital work also put a strain on the management level. One interviewee stated:

"I'm still learning how things could be improved. Peer support is a vital area"
-unknown team leader-

In addition to peer support, it is also important to provide various training opportunities at the management level so that they also have sufficient basic skills and understanding of digital tools and environments. This requirement was also referred to in some interviews. Management was expected to know how to use digital tools, especially in terms of digital communication.

The Finnish Institute of Occupational Health (2022b) made interesting observations in its own research, which provide a good basis for the organization's development work. According to the research, lower wellbeing at work and work-related workload are one of the most significant factors that increase employees' desire to work remotely. The same research also revealed that good management practices and the sense of community attract employees to the

workplace. (The Finnish Institute of Occupational Health 2021.) In development work, it is therefore important to also invest in those factors that increase the attractiveness of working on campus.

### Management and organizational communication

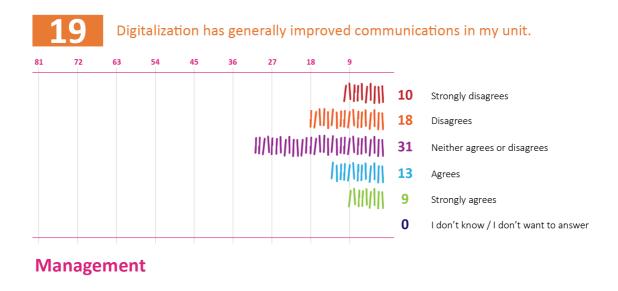
If the management fails to support and maintain good communication (especially when working remotely), it can cause several problems. In the DWEL interviews, for example, the experience of being left out and the difficulty of reaching a superior came to the fore. In addition, the transmission of tacit knowledge and good practices can become difficult, which negatively affects the functioning of the entire work community. Before the large-scale increase in remote work, good internal communication in the organization was supported by, among other things, informal meetings on campus. For example, one interviewee described informal meetings as follows:

"On campus, there is an opportunity to knock on the door or run into a supervisor in the hallway. This is not possible in an online environment."

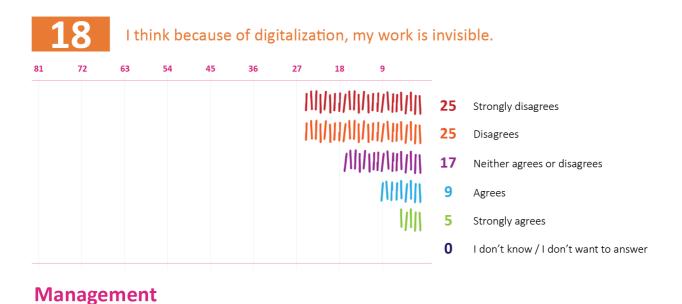
-unknown researcher and lecturer-

According to the interviewee, previously it was possible to discuss small matters casually on campus, but when working remotely, meetings with a supervisor require planning. On the other hand, an open agenda is one way to support good internal communication, as one interviewee pointed out. An open agenda enables to communicate by offering opportunities to get in touch without an officially arranged meeting. However, it is apparent that the digital communication instructions made at the organizational level are also key to effective management work, as stated earlier in the report.

For management to be able to support successful digital communication, it is important to find out the possibilities, purposes and limitations of digital communication environments. It is essential that, for example, the existing need and the digital environment meet properly. (Sivunen & Laitinen 2020, 43.) In several interviews, it was mentioned that organizations mainly have good digital communication channels at their disposal. On the other hand, when the survey investigated the impact of digitalization on the unit's communication (question 19), only a third thought that communication had improved due to digitalization. This is an important observation, because one of the most important problems raised in the interviews was the good and effective communication. On the other hand, evaluating the whole is challenging. Whereas digitalization has reduced face-to-face communication, it has increased communication in digital environments.



Although the result of both the survey and the interviewees suggested there is room for improvement in the digital work practices of HEIs, it is encouraging to note that digitalization has not made the respondents feel that their work is invisible. Based on the survey (question 18), only 15% felt that digitalization makes their own work invisible. The same observation can also be made based on interviews. Only in individual interviews did the experience emerge that, for example, when working remotely, the employee must make an extra effort so that he or she feels that his work is visible to the organization. The experience that the work is visible and therefore meaningful is also important for the employee's wellbeing.



Anu Sivunen and Kaisa Laitinen (2020, 50–51) have compiled factors that workplaces should take into account in relation to digital communication environments. These factors should also be considered in HEIs, when management plans and develops digital communication environments. According to Sivunen and Laitinen, the following factors are important:

- 1. How and where is it possible to access the digital communication environment?
- 2. Opportunities to collaborate in a digital communication environment
- 3. Control and management of the digital communication environment, which includes the agreed practices
- 4. Is there also an opportunity to do external collaboration?
- 5. Recognizing different attitudes and expectations concerning digital communication environments
- 6. (Secure) possibility to share and storage information and data
- 7. General design of the digital communication environment
- 8. Visibility

### Challenges of management in the digital era

The open question 20 of the survey asked the respondents: "How digitalization has impacted your organization's day-to day management practices?". The answers highlighted, among other things, the growing importance of digital tools, efficiency, and flexibility. However, an interesting finding is that, although the need to enhance communication and interaction was emphasized elsewhere in the DWEL survey, in the context of management practices recognition was given to the rapid distribution of information. To sum up, it can be cautiously stated that digital channels improve the

sharing of information but challenge the internal interaction of the organizations.

Although the DWEL interviews and survey called for more efficient management and support related to digitization, the interviewees were also understanding towards management. In particular, the changes caused by COVID-19 brought a crisis to most HEIs, as there were no ready-made operating models to respond to the remote work revolution. Consequently, management practices also had to be rethought. On the other hand, management is also considered to suffer from many disadvantages of digitization, such as the information overload of the digital age. All things considered, comprehensive development work is needed, which takes into account all levels of the organization.

In the face of the new, it is important to remember that every member of the organization is part of the change. Management steers the big ship, but as Joanna Keyton (2005) argues, management cannot change the organizational culture alone. The management must act as a role model and lead the change, but everyone's contribution is needed as part of the organizational culture change, and in this case the work culture change. (Keyton 2005, 144–145.) In the post-pandemic period, it is important that the management creates structures and develops practices related to digital environments in which the effects of digitalization are considered comprehensively, but it is also of paramount importance that all members of the organization commit to development work.

### Summary of the section on management

The importance of digital wellbeing as part of overall wellbeing at work will certainly be emphasized in HEIs in the future as well. The DWEL report has shown that it is important for management to build an overall strategy around digital work and remote work that also supports the digital wellbeing of the individual and the organization. To this end, it is important to find out the current state and needs of own organization and to pay attention to own special needs sufficiently. All in all, it can be stated that in many HEIs, the overall development of processes is still in progress.

### Summary of the drivers and barriers in the theme of management

### **TOP DRIVERS**

Identifying the needs of own organization

Comprehensive management understanding of the impact of digital technology and environments on work Information-based support for everyday work

Build an overall strategy to support digital wellbeing

Training and peer to peer learning at management level

### **TOP BARRIES**

Insufficient understanding or know-how of digitalization and digital tools and environments

The management's own load and flood of information

The challenges of supporting and maintaining good digital communication

Insufficient resources

The personnel do not commit to digital practices

### **GOOR PRACTICES**

Handbook of digital wellbeing

Building an overall strategy and developing digital work culture and remote work

Managers train themselves regarding digitalization and utilize peer-to-peer support

### **06** | WORKING CONDITIONS

Digitalization has had a great impact on working methods, but also on working conditions. More and more employees spend their working days sitting passively in front of a screen, and additional stress is caused by, for example, a constant flood of information. The transition to remote work during COVID-19 made the situation even more difficult for many. Not all employees had an ergonomic home office, and furthermore, many working methods had to be relearned, because ready-made models for remote work did not necessarily exist. In this section, we examine the working conditions of higher education staff from the perspective of digital wellbeing. According to the DWEL project's definition of digital wellbeing, "working conditions" refers to physical ergonomics and cognitive ergonomics.

The challenges of working conditions were also brought up in several interviews. Although, according to most interviews, new ways of working have been gradually learned at the individual and organizational level, based on the interviews and survey, it can be estimated that there are still unused opportunities to improve working conditions in terms of physical ergonomics and cognitive ergonomics. The same observation is supported by the survey question (question 22), which asked to evaluate: How is digitalization taken into consideration from the perspective of working conditions in your HEI organization?

### **Physical ergonomics**

Most workplaces already take physical ergonomics into account, but the transition to remote work in 2020 was a quick and unexpected change. Employees' remote work in home offices increased, but not everyone had an ergonomic work environment in their home office. At the same time, employers' support for remote work varied greatly. The change weakened the work ergonomics of many employees and thus also their wellbeing at work. According to several interviewees, employers were expected to provide stronger support for better working conditions even in remote work. Many felt that the working conditions in remote work were too much the responsibility of the employee. However, it should be noted that opposing views were also presented in the interviews, according to which the employer was considered to support remote work well. All in all, based on the interviews and the survey, it can be concluded that it would be important to achieve an organizational level understanding of the requirements of remote work, the expected support, but from the employer's point of view, the possibilities for providing support in reality.

In addition to the work environment, the interviews also discussed the effect of remote work on the organization of one's own work, especially in the early stages of remote work. Some of the interviewees reported that, for example, they had to learn to reorganize their work and to schedule their own work. In the early stages of the remote work phase, for example, not enough breaks were taken. Breaks that would naturally come on campus between face-to-face meetings and lectures. Moreover, teaching in a purely virtual environment was considered burdensome. The effects were described, among other things, as follows

"Taking enough breaks is important so that working at the computer does not become too burden."
-unknown lecturer-

"Teaching solely in a virtual setting, the feedback we received was that participants felt that their energy was drained compared to learning in a physical classroom. A virtual teaching environment is definitely not the same as offline, and as a lecturers, it led to extra stress."

-unknown lecturer-

It is known that working in front of a screen is passive, so employees should make sure that they take enough breaks from their own work. Adequate breaks are known to increase concentration and productivity, but they also help you cope at work. In addition, excessive sitting has been scientifically proven to be a health risk, so it is important to reduce

inactivity (Pesola 2016). Especially when organizing remote work, attention should be paid to the work rhythm and to integrating sufficient breaks. Routines are one way to maintain a good work rhythm. In addition, there are various digital methods which can be used to support, for example, the regular exercise breaks of employees who do sedentary work.

### **Cognitive ergonomics**

The change in working life has affected the physical nature of work, but the change has also sparked a discussion about cognitive ergonomics. The physical ergonomics of work have been studied for a long time, and organizations are already paying attention to the physical functionality of offices. Cognitive ergonomics is still a relatively little-known term, but through digital work, its importance has grown. One key factor has been the transformation of work into so-called brain work, which strains the brain in many ways. Unnecessary interruptions, multitasking and a flood of information are commonplace for many employees. (Finnish Institute of Occupational Health 2022.) This can also be seen in the higher education sector. As a result, alongside (physical) ergonomics, an understanding of cognitive ergonomics is needed.

According to Finnish Institute of Occupational Health (2022a):

"Cognitive ergonomics means designing work to suit a person, so that its cognitive requirements, that is, the demands of working with information and conditions promote smoothly flowing work. The most common challenges: distractions, interruptions, and information overload"

When the DWEL survey asked which aspect of ergonomics should be given the most attention, most answers related information overload. Managing information overload is important, as it is known to increase stress among employees, but it can also manifest itself in, for example, perception as memory errors (Finnish Institute of Occupational Health 2022).



### **Working conditions**

Regarding other challenges they face at work, the interviewees also discussed the separation of work and free time. Digital tools and work in digital environments have make it easy to work outside of working hour. The line between work and free time becomes blurred and work can easily become overwhelming. The phenomenon cannot be considered new, but the digital environment has further exacerbated it. For example, some of the interviewees

reported that they read e-mails outside of working hours and even while on vacations. Some interviewees also felt that they were expected to be digitally available to students 24/7.

The concepts FOMO (fear of missing out) and JOMO (joy of missing out) are usually associated with youth culture, but they can also be applied to working life. From the employee's point of view, FOMO can be connected, for example, to the experience that something essential related to work is missed. Organizations have the opportunity to influence this with clear instructions on, for example, compliance with working hours.

FOMO = Fear of missing out. In the context of working life, FOMO means that something essential in terms of work or work-related communication will be missed. It is difficult for an employee to limit the use of work-related digital channels to working hours (Pirkkalainen, Tarafdar, Salo & Markkonen 2022).

Technology has been identified as one of the main reasons why the boundaries between work and free time have become blurred. For example, thanks to smartphone applications and notifications, but social media work-related networks may be tempting to check in one's free time as well. (Sivunen & Laitinen 2020, 49.) Joy of miss out (JOMO) can be interpreted in the context of working life as a condition where an employee is able to limit the use of e.g. work-related communication channels in their free time. Ultimately, it's about the ability and desire to make a clear distinction between work and free time. The challenges of work-life balance are not new. However, researchers have found that poor separation between work and free time affects, among other things, recovery, which is important from the point of view of wellbeing and health (e.g. Kinnunen et al. 2016). Free time is important for an individual's mental and physical recovery, and also affects the individual's performance at work. In organizations, there should be a serious discussion about the separation of work and free time and the possibilities to influence it.

When evaluating the overall theme of working conditions from the point of view of digital wellbeing, the need for information and training emerges once again. Higher education organizations must offer more support, training and instructions that support and strengthen the digital wellbeing of the staff. One interviewee justified the need for training, among other things, as follows:

"It cannot be assumed that the employees will figure out all these things themselves in addition to their own work. The employee doesn't even always know what he or she should find out. That's why more training is needed for employees because solutions are available."

-unknown lecturer-

Digital wellbeing is still a relatively new concept, so its overall impact on one's own work is not yet sufficiently understood. HEI staff should first be introduced to digital wellbeing and its importance in terms of overall wellbeing at work. When understanding and knowledge increase, it can be assumed that commitment to instructions and training will also increase. In the instructions, it would be particularly important to consider, for example, the burdensome nature of the teaching work done in a digital environment compared to teaching in a classroom environment. One interviewee described the situation as follows

"And I find myself much more tired after an hour or two of teaching online than of teaching in person".
-unknown teacher-

In terms of maintaining a sense of community, hybrid work has proven to be a good practice. On the other hand, in terms of working conditions, remote work was considered a good option in the interviews, even though there have been challenges. In several interviews, it was reported that remote work has even increased wellbeing at work.

Working has become more flexible, which makes it possible, for example, to combine work and family life better than before. In addition, the opportunity to focus on one's work without interruptions was appreciated. All in all, there is a lot of individual variation between employees, especially in remote work and related experiences, which should also be remembered in the future when developing digital wellbeing. One key question is how much organizations are able and willing to recognize individual differences.

### Summary of the section on working conditions

One key observation of the DWEL report is that organizations do not yet pay enough attention to cognitive ergonomics and ergonomics from the perspective of digital work and remote work. There are tools for maintaining ergonomics and cognitive ergonomics, but they are not well known, or their introduction requires stronger support. By supporting the maintenance of cognitive ergonomics and good work ergonomics, digital wellbeing in organizations can be strengthened.

Both physical ergonomics and cognitive ergonomics are an important part of a person's overall wellbeing at work. The right solutions strengthen a person's ability to work, their health and their overall wellbeing. The transition of work to digital environments and home offices has occurred rapidly, and it has not been possible to consider all the effects on working conditions in advance. On the other hand, during the last few years, experience has been accumulated in digital work both in the home office and on campuses, which is a good basis for designing solutions that support both physical and cognitive ergonomics. Research findings, evidence-based recommendations and technical solutions exist, but they must be implemented effectively in the workplaces. This requires training and support provided by the organization, but also the employees' own commitment and motivation.

### Summary of the section on working conditions

### **TOP DRIVERS**

Clear separation of work and free time (JOMO)

Sufficient breaks and individual work rhythm

More information and training on the importance of ergonomics and cognitive ergonomics for occupational well-being

Organization with stronger support for remote work and working methods at home (e.g. work equipment and the functional and comfortable work environment)

The employee's own motivation and commitment to the instructions

### **TOP BARRIES**

Inadequate support from the organization for remote work

The suitability of remote work varies according to work tasks and individual characteristics Inadequate or poorly known solutions to support cognitive ergonomics.

**FOMO** 

Inactivity

### **GOOD PRACTICES**

The organization recognizes the need for support and supports remote work, for example with regard to work equipment

Work-life balance (e.g. limited access to intra outside the working hours or clear instructions on working hours)

Stronger utilization of various digital tools and features that can support ergonomics and cognitive ergonomics (adjusting notifications etc.)



### 07 | CONCLUSION OF RESULTS AND FUTURE PROSPECTS

The COVID-19 pandemic revolutionized the everyday life of higher education institutions, and many new organizational practices had to be implemented without comprehensive groundwork. In the most difficult moments of the pandemic, working life was mostly about maintaining working life in spite of the exceptional circumstances. Now, at the latest, the time has come to reflect on experiences and start forming an overall strategy and common rules, in which digitization and strengthening digital wellbeing as part of everyday working life are examined more thoroughly. Digital wellbeing requires comprehensive solutions, customized recommendations, but also goal-oriented, planned, and consistent development work. In addition, training and the resources allocated to it were emphasized significantly and in all themes of the DWEL report.

But what is ultimately expected from management and the organization in terms of developing digital wellbeing? Question 24 summarizes areas for improvement and development considered to be most important by DWEL survey respondents. Based on the DWEL survey, it can be observed that supporting work-related digital skills and competences is the area that clearly needs the most investment. Respondents were particularly interested in the best digital solutions and digital teaching skills, i.e., their own professional growth and development. In addition, the balance between work and free time and questions related to interaction were emphasized.



### Digital wellbeing generally

During the exceptional circumstances, a lot has been learned about digital work and many great solutions have been developed in the higher education sector. On the other hand, many questions remain. Working life has gradually returned to normal after the pandemic, so it is important that organizations analyze their own successes and failures.

Based on the results of DWEL report, it can be summarized that more information, instructions, and training are needed, especially from the point of view of digital skills and competence, but also from the perspective of all aspects of digital wellbeing. Moreover, based on the lessons learnt, good experiences and develop practices, it is important that the organization develops its own digital strategy and ground rules, to which the members of the organization commit. However, the comprehensive development of digital wellbeing requires more resources and investments from higher education institution. The last few years have produced good practical information as a basis for the development of digital well-being in the higher education sector. All in all, the COVID-19 pandemic was described in many contexts as a learning process from which lessons have also been learned but work still needs to be done in the future. As a starting point, it is good to consider the summary of digital wellbeing made by one of the interviewees:

"In short, in order to be able to talk about digital wellbeing of teachers, it is necessary that employees are motivated by using digital technologies, feel support, a positive culture, but especially feel personal and professional satisfaction with their work".

-unknown interviewee / management-

Based on the Digital wellbeing report, it can be stated that the HEI sector's key opportunities and challenges are divided as follows

### **TOP 5 DRIVERS CONCERNING DIGITAL WELLBEING**

An overall strategy for digital work, remote work and digital wellbeing Agreed ground rules in the organization, which apply to both staff and students Supported training, peer to peer learning, guidance, and counseling Organizational level understanding of the requirements of digital pedagogy Hybrid work or regular and planned offline meetings alongside remote work

### **TOP 5 BARRIERS CONCERNING DIGITAL WELLBEING**

Digital well-being is not known well enough as part of overall wellbeing at work Resources

Maintaining a sense of community

Work-life balance

The workload of both personnel and management

### **08 | SUMMARY OF THE RESULTS AND SUGGESTIONS**

	DRIVERS	BARRIERS
SKILLS AND COMPETENCE	Identifying key skills and competencies  Organizational level understanding of the requirements of digital pedagogy  Need-based and effective support, guidance, and counseling in digital pedagogy  Appropriate and secure digital tools  Lifelong learning and own motivation to learn new digital tools and methods	Resources  Technostress  New software and platforms and changes in existing ones  "I should know how to do this by myself" -approach  Students' insufficient digital skills
SENSE OF COMMUNITY	Hybrid work  Regular and planned offline meetings alongside remote work  Agreed ground rules and commitment to them  Empathy in digital environments  Well-planned communication channels and clear instructions for use	Lack of common ground rules  Lack of empathy in digital environments  Different wishes and needs in organizations  The impact of the digital environments on teaching and insufficient solutions  Deterioration of interaction between students and lecturers
MANAGEMENT	Identifying the needs of own organization  Comprehensive management understanding of the impact of digital technology and environments on work  Information-based support for everyday work  Build an overall strategy to support digital wellbeing  Training and peer to peer learning at management level	Insufficient understanding or know-how of digitalization and digital tools and environments  The management's own load and flood of information  The challenges of supporting and maintaining good digital communication  Insufficient resources  The personnel do not commit to digital practices

### **WORKING CONDITIONS**



Clear separation of work and free time (JOMO)

Sufficient breaks and own work rhythm

More information and training on the importance of ergonomics and cognitive ergonomics for occupational well-being

Organization with stronger support for remote work and working methods at home (e.g. work equipment and the functional and comfortable work environment)

The employee's own motivation and commitment to the instructions

Inadequate support from the organization for remote work

The suitability of remote work varies according to work tasks and individual characteristics

Inadequate or poorly understood solutions to support cognitive ergonomics.

FOMO

Inactivity

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	SUGGESTIONS FOR IMPROVING DIGITAL WELLBEING IN HEI SECTOR
SKILLS AND COMPETENCE	Stronger support from organizations such as: mentoring, guided trainings, webinars, peer-to-peer learning, and self-study materials (such as manual for digital work)  Ensuring sufficient resources (including e.g. working time planning)  Co-development and co-learning events related to digital learning aimed at HEI teaching staff
SENSE OF COMMUNITY	A hybrid work or remote work that includes the possibility of spontaneous and organized face-to-face meetings  Planned use of digital communication channels and clear instructions for their use  Agreed ground rules (digital) for communication and interaction with the HEIs employees, students and stakeholders
MANAGEMENT	A comprehensive analysis of the state and needs of own HEI organization as a basis for development work  Building an overall strategy for digital work, remote work and digital wellbeing  Management-level training related to digital work and the possibility of peer-to-peer support
WORKING CONDITIONS	Stronger support from the organization to ensure a high-quality remote work environment  Stronger utilization of various digital tools and features that can support ergonomics and cognitive ergonomics  Recommendations and training on ergonomics and cognitive ergonomics

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### SURVEY QUESTIONS

2. My position in my organization is (you can choose several options)

Lecturer

HEI manager

Head of department or unit

HEI stakeholder group

Researcher

Other

I don't want to answer

3. Country of response

Slovakia

Czech Republic

Denmark

Belgium

Ireland

**Finland** 

Other

I don't want to answer

4. In my opinion my organization has an understanding of digital pedagogical solutions and digital learning environments

Strongly disagree - Strongly agree (I don't know or I don't want to answer)

5. In my work, I have up-to-date digital tools at my disposal

Strongly disagree - Strongly agree (I don't know or I don't want to answer)

6. In my work, I have secure digital tools at my disposal

Strongly disagree - Strongly agree (I don't know or I don't want to answer)

7. I think it is important to use technology and digital tools in teaching

Strongly disagree - Strongly agree (I don't know or I don't want to answer)

8. There are enough opportunities to attend courses or other training in teaching technology (digital tools and platforms)

Strongly disagree - Strongly agree (I don't know or I don't want to answer)

9. I get enough individual skills development training or peer to peer training from my organization to use digital tools and teaching technology effectively

Strongly disagree - Strongly agree (I don't know, or I don't want to answer)

10. The use of technology in teaching makes me feel technostress

Strongly disagree - Strongly agree (I don't know, or I don't want to answer)

- 11. In my work, I have up-to-date and secure digital tools at my disposal

  Strongly disagree Strongly agree (I don't know or I don't want to answer)
- 12. Increased digitalization has reduced the sense of community in my HEI organization

  Strongly disagree Strongly agree (I don't know or I don't want to answer)
- 13. Digitalization in my work has made me feel isolated

  Strongly disagree Strongly agree (I don't know or I don't want to answer)
- 14. Digitalization impairs interaction with students

Strongly disagree - Strongly agree (I don't know or I don't want to answer)

What are the key HEI challenges concerning digitalization and the sense of community in your opinion?

- 15. What are the key HEI challenges concerning digitalization and the sense of community in your opinion? (open and not mandatory)
- 16. I think that the impact of digitalization on my work is recognized in the organization

  Strongly disagree Strongly agree (I don't know or I don't want to answer)
- 17. In my opinion, my HEI organization supports my efforts to cope with digitalization

  Strongly disagree Strongly agree (I don't know or I don't want to answer)
- 18. I think because of digitalization, my work is invisible

  Strongly disagree Strongly agree (I don't know or I don't want to answer)
- 19. Digitalization has generally improved communications in my unit

  Strongly disagree Strongly agree (I don't know or I don't want to answer)
- 20. How digitalization has impacted your organization's day-to day management practices? (open and not mandatory)
- 21. Working conditions involve for example cognitive ergonomics (such as data overload, interruptions and disturbances) and ergonomics (physical ergonomics).

What issues should be given more attention in your organization? If you want, you can give some examples.

Information overload

Interruptions

Disruptions

Ergonomics (such as work environment design)

Other

- 22. How is digitalization taken into account from the perspective of working conditions in your HEI organization?
- 23. In my opinion digital wellbeing is very well taken into account in my organization (for example in the areas in this survey)

Strongly disagree - Strongly agree (I don't know or I don't want to answer)

24. Which of the following topics related to digitalization and digital wellbeing are you interested in learning? Choose the three most appropriate options

Best digital pedagogical solutions

Digital teaching skills

Ability to use technical / digital tools

Challenges of social interaction in distant work

Strengthening sense of community in distant work

Digital interaction with students

Good management practices related to digitalization

Good management practices related to distant work

Support in daily work related to distant work

Effective and efficient organizational communication with digital applications and tools

Work-life balance

New working life skills

Cognitive ergonomics

Ergonomics and breaks

Other