

Slide 1

UNIVERSITY OF SKÖVDE

Flexi-Comp
Digital Competences for
adaptive, flexible and inclusive VET

SELFIE
for **TEACHERS**

MIC MAC
Media & Information Literacy

Diana Stark Ekman, MPH, Ph.D
Docent/Associate Professor, Public Health
Informations- och kommunikationsteknologi/
Information and communications technology
IT & Säkerhet (SITS)/Service, IT & Security

Hi, I am Diana Stark Ekman. I am a teacher with public health sciences, and on loan to the Information and kommunikationsteknologi group at Högskolan i Skövde.

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It is a pleasure to be with you tonight- and as you hear, I will be presenting in English. I am an immigrant to Sweden and Swedish is my fourth language. I grew up on a little island, Guam, in the Pacific Ocean, where we spoke English, Chamorro (the language on Guam) and a sort of creole Spanish. I did not learn Swedish until I was a mature adult, and as a result, my accent is quite hard for many Swedish speakers to understand. Jag talar svenska men som ni hör har jag en mycket stark brytning. Generally, after you hear me speak a few sentences, everyone agrees that it's easier for us all if I switch over to English!

And just one last thing about language. I use a pretty basic form of North American English. We say ped a gog gick and ped ah gog ee. But my pronunciation wanders all over the place when I say pedagogical because I work quite a bit with colleagues from the UK, so please forgive me in advance.

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In this presentation I wanted to share with you some results from projects we did at the University of Skövde (www.his.se) . I'll be briefly covering a project to translate and publish a Swedish version of the Selfie Tool based on the DigCompEdu framework developed by the Joint Research Centre of the European Commission. Then, I'd like to share some findings from an Erasmus Plus project to promote digital competences, called Flexicomp. I'd also like to share some things we learned from MIC MAC, a project we and our Erasmus Plus partners did in partnership with the European Media and Information Fund.

Links


DigCompEdu Selfie main page: https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-self-reflection-tools_en

Flexicomp Moodle Site: <https://training.flexi-comp.eu/>

MIC MAC Moodle Site: <https://moodle.agid.pt/>

European Media and Information Fund: <https://gulbenkian.pt/emifund/>

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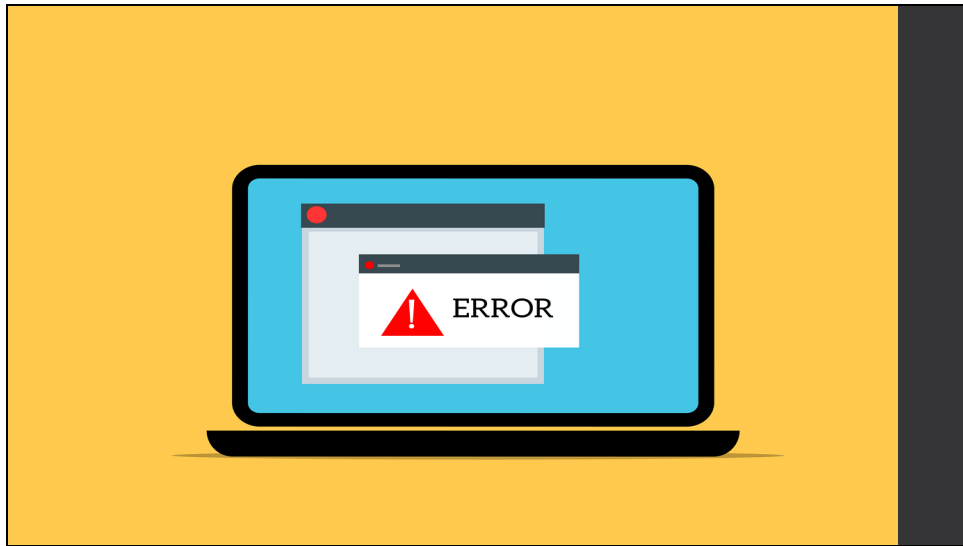


Presentation

- Overview of digital stress
- Quick look at self-assessment tool
- Quick look at two teacher training frameworks
- What can we learn from our projects

I know how dry it can be to listen to someone go on and on about their own work, so I am also going to be sharing some ideas related to digital stress, the value of instructional frameworks, and make some general suggestions for how projects like AGIL2 and the ones we did, can reduce digital stress and improve professional development for instructors. BTW-I will make this presentation, and related links, available via conference organisers.

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I was very glad to get this invitation to speak with you all tonight- it always fun to talk about digital competence with people who are digitally competent! Now watch and see what happens after I say that- I'm sure that my powerpoint will crash or my camera will stop working and I'll be stressed beyond belief.

Digital stress is real, colleagues! It's especially noticeable for those of us who work with online learning environments, and-or use digital tools and programs in our trainings and classrooms. I've been teaching online since the early days of Ping Pong at Karolinska, back at the turn of the century, and I've seen things! Needing to learn a new LMS every few years, introducing students to new tools and programs, helping colleagues trouble shoot digital issues, and now, trying to help learners and colleagues understand why everything they find online isn't always trustworthy-our work comes with some real challenges, digitally speaking!

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Digital stress and the need for digital competence in a complex learning environment are prominent aspects of our work. In both of the larger projects we ran, Flexicomp and MIC MAC, we interviewed and did focus groups with teachers who worked with adults in Spain, the UK, Portugal, Italy and Sweden. We asked our colleagues about their experiences related to digital competence and asked them to describe their experiences in using digital tools to develop better skills related to media and information literacy.

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Digital stress- what teachers say



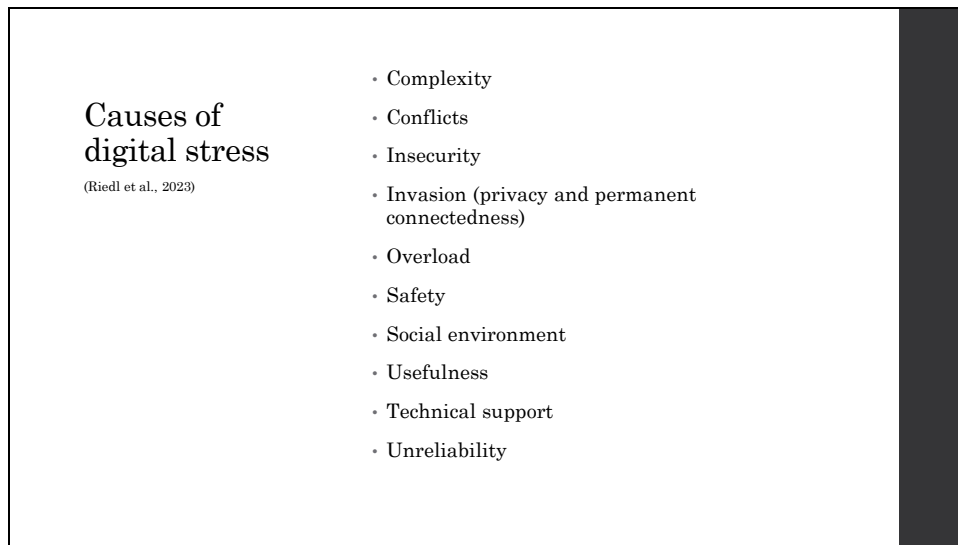
- It's almost impossible to stay up to date on the various tools and programs out there
- It's almost impossible to get training to master the digital tools and programs we are already using
- Resolving technical issues related to digital tools and programs, at the expense of focusing on the subject we are supposed to be focusing on
- And, often, we feel like we have to be permanently connected in order to show our students, colleagues and employers that we are doing our jobs. One of our colleagues expressed it well when they said, the work follows the laptop.

We found, over and over, that instructors said the same thing:

- It's almost impossible to stay up to date on the various tools and programs out there
- It's almost impossible to get training to master the digital tools and programs we are already using
- It feels like we have to use a lot of our teaching time on resolving issues related to digital tools and programs, at the expense of focusing on the subject we are supposed to be focusing on
- And, often, we feel like we have to be permanently connected in order to show our students, colleagues and employers that we are doing our jobs. One of our colleagues expressed it well when they said, the work follows the laptop.

Picture is AI-generated and then edited in Photoshop by Diana.

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Causes of digital stress
(Riedl et al., 2023)

- Complexity
- Conflicts
- Insecurity
- Invasion (privacy and permanent connectedness)
- Overload
- Safety
- Social environment
- Usefulness
- Technical support
- Unreliability

These four concerns, among others, helped us to understand that the amount of digital stress experienced by our colleagues is considerable! According to researchers in Austria (Riedl et al., 2023) digital stress in the workplace can be categorized into ten different causes. These include

Complexity

Conflicts

Insecurity

Invasion-related to privacy and permanent connectedness

Overload

Safety

Social environment

Usefulness

Technical support

Unreliability

Take a second to look at the list again- do you experience any of these factors in your own work? Do you see any of these issues impacting your colleagues, and the learners you work with? We don't even need a survey or Mentimeter for these questions- the answers are going to be yes for just about all of us. As teachers, we are stressed, and we are especially stressed at times because of the online learning environments and the digital tools we work with.

Riedl, R., Fischer, T. & Reuter, M. Measuring digital stress in the workplace context. *Informatik Spektrum* **46**, 235–239 (2023). <https://doi.org/10.1007/s00287-023-01553-9>

What is digital competence?



Digital competence is the "confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It is defined as a combination of **knowledge, skills and attitudes**," (Council Recommendation on Key Competences for Life- long Learning, 2018).

The increasing reliance on digital technologies means that teachers and learners, and actually, everyone on the planet with access to digital tools and platforms, needs to have a basic level of digital competence. Here's a definition of digital competence published by the Joint Research Centre of the European Commission. Note that they emphasize that digital competence is defined as a combination of knowledge, skills and attitudes."

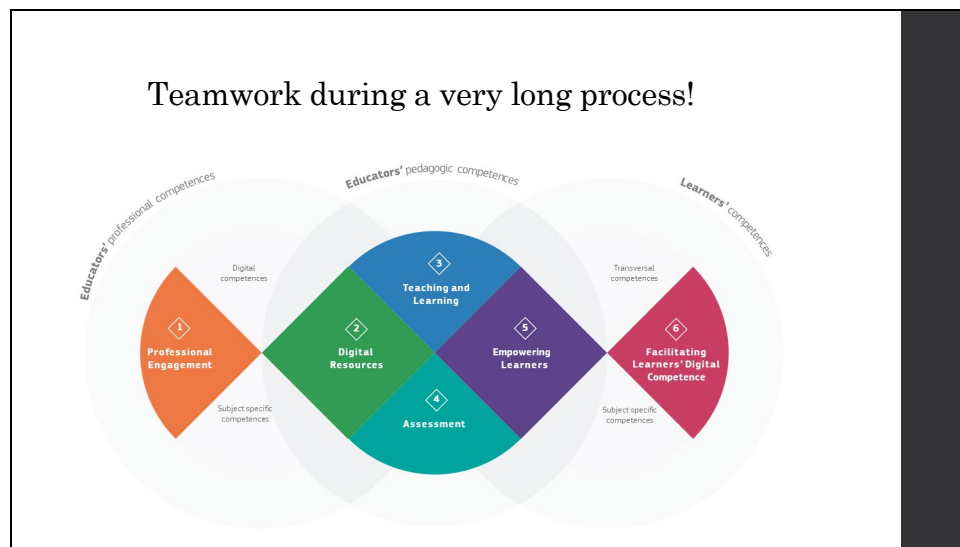
Council Recommendation on Key Competences for Life- long Learning, 2018, available at [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01))



Knowledge, skills and attitudes, the holy trinity of KSA, form the basis of any good learning model, or framework. In the context of our work as teachers, we not only need to help learners gain deeper levels of knowledge in the disciplines or vocations that we teach, we also have to understand how to motivate our learners use the professional and vocational tools that are specific to the training or education we give.

When we are teaching online, we introduce another layer of competence that is needed- that is, we have to be digitally competent with pedagogic tools, AND digitally competent in using the professional tools within our own disciplines and vocations. All that, along with the online actual teaching and designing examinations online and giving learner feedback and mentoring colleagues online and...well, it's no surprise that so many of us spend a lot of our time thinking about how we can improve working conditions for digital teachers!

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Given that teachers have so much responsibility on our shoulders, it is really helpful if we can have some kind of simple self-assessment tool to help us identify where we would benefit from extra training or support. Here's where the Selfie tool, developed by the Joint Research Centre of the European Commission, can be useful. The tool was based on extensive research, involving instructors throughout Europe and elsewhere, and measures digital competence in different areas.

The Selfie tool has been available in English and Spanish for several years. About four years ago, several of us instructors and IKT experts around Sweden formed a subnetwork of ITHU called the PDK network, and in one of our first meetings, we discussed how great it would be if this Selfie was available in Swedish. Two of us at Skövde had translated a version, with help from family and friends. Then Lotta and Pia at MDU took some early translations and improved them so we want to give them a shout out here, along with their colleagues who also did some work. But, even with all this volunteer labour, we weren't quite satisfied with the language.

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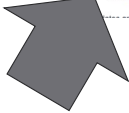
We are now on the JRC website!

CheckIn for Higher Education: updated check-in tool for academics

The CheckIn Higher Education tool has been revised through a revision of the progression levels based on Bloom's Digital Taxonomy (adapted), an increase in answer options, modification of some terminology, and also the addition of a 7th area, Open Education, based on the OpenEdu Framework (JRC 2016, and 2019).

Start a self-reflection now at

- ES: [Spanish version](#)
- EN: [English version](#)
- HR: [Croatian version](#)
- SE: [Swedish version](#)



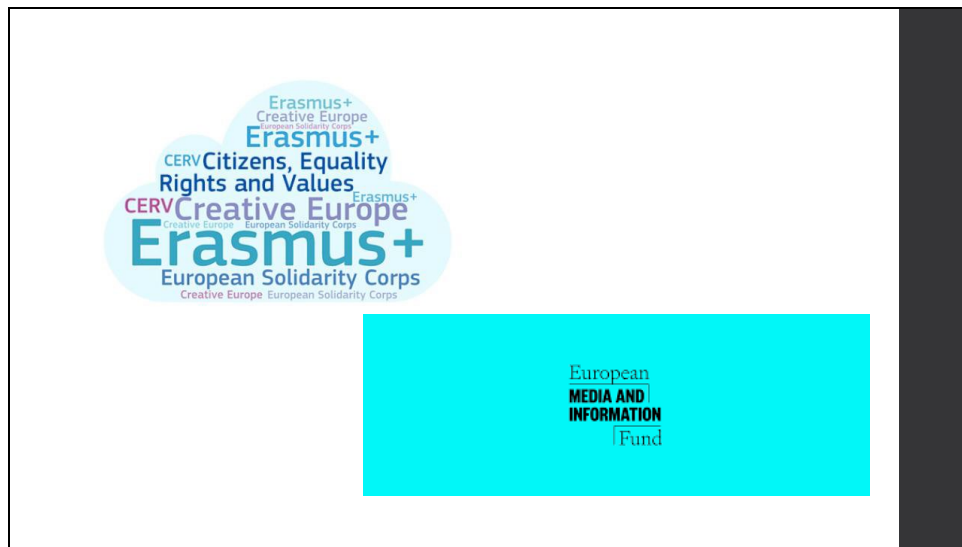
https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-self-reflection-tools_en

So, we formed a workgroup, and many of us volunteered our time during our summer vacation in 2022 to develop a Swedish language Selfie tool. Throughout 2022 and 2023, we kept working on the tool and finally it was published at the EU Surveys platform! We are really excited about this, and so I wanted to let you all know that it's out there, and we are happy to help you use the tool at your own workplace. Just send me an email and we'll get you started.

https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-self-reflection-tools_en

[email: diana.stark.ekman@his.se](mailto:diana.stark.ekman@his.se)

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Selfie is just part of a number of tools and frameworks being developed by Sweden, in partnership with other countries. As I mentioned earlier, Skövde has partnered with several other countries in an Erasmus Plus project we called Flexi-comp, and the same partners, more or less, built on what we learned with Flexi-comp to develop a follow up project, MIC MAC, financed by the EMIF, which used the same type of learning approach to help teachers understand how to teach Media and Information Literacy to young adults and adult learners.



The slide here shows the main project partners. For both Flexi-comp and MIC MAC, we took a co-design approach, meaning that we involved teachers and learners from all partner countries to identify how digital competence and MIL impact our everyday experiences in the classrooms. We asked colleagues to identify key elements of training programs for both digital competence and MI literacy through interviews and focus group questions. All in all both projects reached several hundred instructors and students in Italy, Portugal, UK, Spain and Sweden.

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WHAT ARE THE MAIN DIGITAL CHALLENGES YOU FACE IN YOUR EVERYDAY LIFE?

POST THE CHALLENGES HERE.

WHAT IS YOUR EXPERIENCE OF DIGITAL TECHNOLOGIES IN THESE SITUATIONS?

DOING EVERYDAY TASKS, LIKE SHOPPING

DIFFERENT TIMES OF THE DAY, WEEK OR YEAR

YOUR NEIGHBOURHOOD AND SURROUNDINGS

THE SKILLS YOU NEED TO HAVE TO GET ON IN LIFE

YOUR RELATIONSHIPS WITH OTHER PEOPLE AND WITH THE SYSTEM

In Sweden, to first identify the KSAs that teachers thought were needed for digital competency and MIL, we hosted **co-design workshops using digital whiteboards**, where we posed questions to participants about the challenges they face in working in digital learning environments, and when helping learners address media and information literacy. Participants discussed their experiences and also summarised key thoughts on digital sticky notes. These notes, and transcriptions from the focus groups and interviews, were then analysed and frameworks constructed, based on the competences, KSAs that teachers and students said were needed in today's trainings and classrooms. This was a really cool method, because we had not only transcriptions of the groups and interviews, but also these white boards, which also captured people's concerns.

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Teachers speak out about Digital Competence

- GDPR and regulations around digital learning;
- managing workloads and relationships with colleagues and students online;
- ethics and moral issues associated with using digital technologies; understanding how students themselves consider and engage with digital tools;
- how to adapt classrooms to improve learning outcomes for students with disabilities, including learning challenges;
- how to capture the 'user experience' from the student point of view;
- which tools to use for assessment and the potential challenges around digital examinations;
- broader need for training to increase understandings around digital security and academic integrity.

I've put together a summary of some of the results of focus groups and interviews related to digital competence here- and will give you a few seconds to scan through the lists. How many of these issues have you experienced, or seen happen in your classrooms or with your colleagues?

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Teachers talk about media and information literacy

Educators have limited time and opportunities for training and upskilling;

The impact of rapid technological changes, and the way information changes;

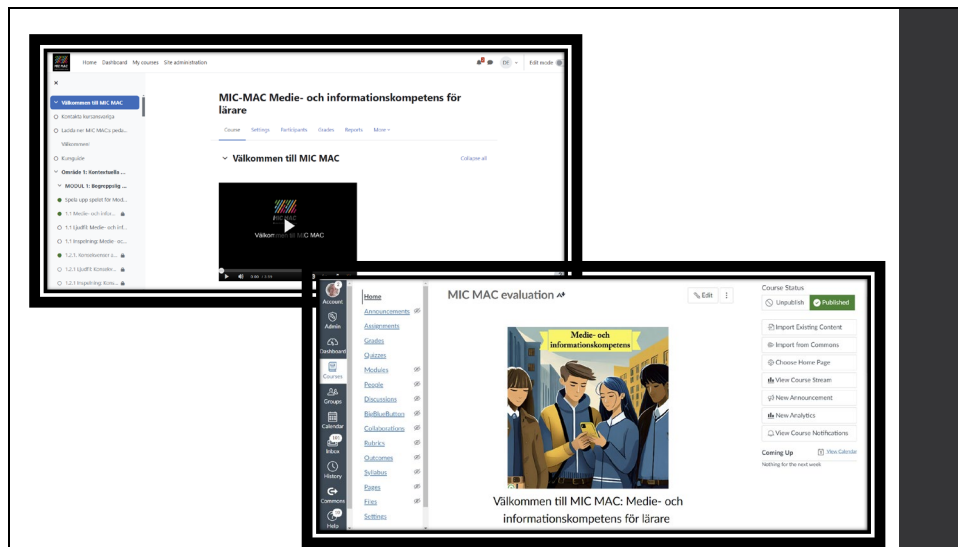
Focus on exams and academic progress means that many students may be under-prepared for appraising real-world issues and learning how to think critically;

Knowing when to use mobiles and AI in the classroom, large increase in the number of students with learning challenges; but most of all,

The never-ending exposure to disinformation.

And here's a summary of the results of focus groups and interviews related to MIL, from a group of teachers and adult learners. Do these findings feel familiar to you?

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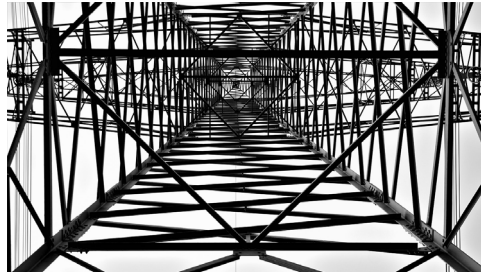


Based on the results from our interactions with teachers and learners, we developed train-the-teacher frameworks that identified the various competence areas and specific competences and KSAs that teachers said were important to increase their digital competence and to be better equipped to help learners increase their MIL.

And, then, using our frameworks, we developed and pilot tested mini-courses on both topics with colleagues who are teachers or working with IKT. Mats was a volunteer pilot test participant in both courses, and honestly, I owe him at least a year of lunches for this.

Frameworks

Research-informed models for course design that help instructors align learning goals

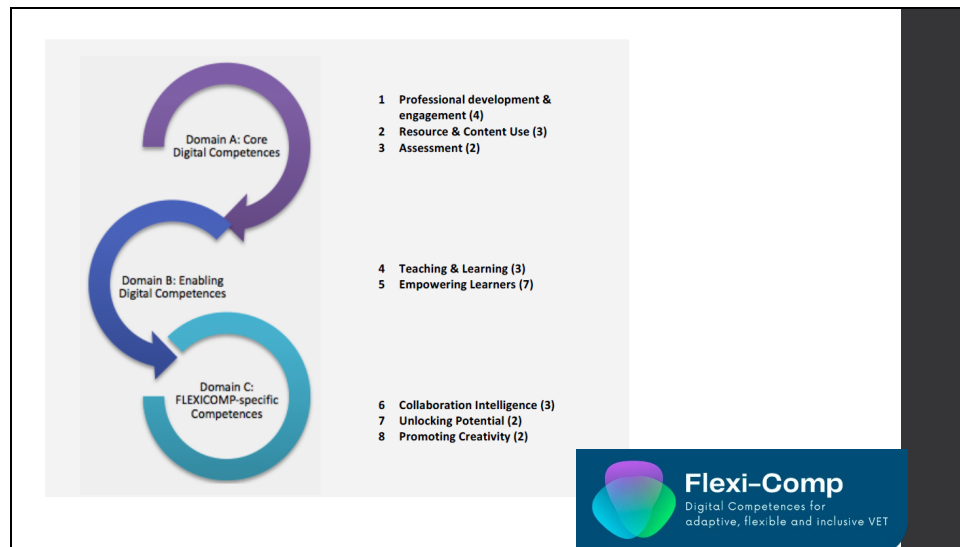


You might be wondering why our projects started by developing frameworks.

According to Yale University, instructional or pedagogic frameworks are research-informed models for course design that help instructors align learning goals with classroom activities, create motivating and inclusive environments, and integrate assessment into learning. Frameworks help us to help learners to develop knowledge, skills and attitudes associated with not only deep learning, but also the ability to apply that learning to real life. Since many of us here today are instructors, or help instructors develop digital learning material, I wanted to give you some very brief summaries of the frameworks for both FC and MIC MAC, as I hope you find them useful. We are going to just be scanning through the general frameworks, with one or two examples from the more detailed frameworks, however- I am mindful that the clock is ticking!

Yale University. 2017. **Teaching and Learning Frameworks**. Available at: <https://poorvucenter.yale.edu/BackwardDesign>
Licensed for reuse by Creative Commons.

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Let's start with FC, the project aimed at developing teacher training to promote digital competence. Extracting knowledge, skills and attitudes needed to address the various challenges that teachers described took several weeks. These different aspects of digital competence were then grouped together, using a 'phenomenological' content analysis approach. Key ideas emerged, identifying competences in three main domains. Each of the domains was broken down into areas, and each area had related competences. It got a little ...detailed and hard to understand each other at times as we tried to translate domains, areas and competences into five different languages, but we ended up with a very useable framework. I'm going to briefly show you how the framework is organised, with the idea that the full framework, and copies of this presentation, are available after this talk.

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Domain A: Core digital competences		
Area	Competence	Description
1. Professional development & engagement	1.1 Organisational communication	Using digital tools for communication with colleagues, learners, stakeholders
	1.2 Professional collaboration	Using digital tools to collaborate with colleagues, learners, stakeholders
	1.3 Reflective practice	Assess and actively develop one's competence and practice.
	1.4 Digital personal development	Use digital sources and resources for continuous professional development
2. Resources & Content Use	2.1 Selecting digital resources	Identify, assess and select digital resources for teaching
	2.2 Creating and modifying digital resources	Identify, assess, modify, select and create new digital resources for teaching
	2.3 Managing, protecting and sharing digital resources	Organise digital content and make it available to learners and other stakeholders
3. Assessment	3.1 Assessment strategies and tools	Make decisions about which digital tools to use to help educators and learners identify how they are progressing
	3.2 Using assessment results for feedback and reflection	Use digital tools and their assessment results to give better feedback

Areas, competences and descriptions of competences.

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Domain B – Enabling Digital Competences		
Area	Competence	Description
4. Teaching & Learning	4.1 Learning design & planning	Design and plan effective teaching & learning activities using digital education methods
	4.2 Digital learning environments	Choose and configure the right digital tools for different learning situations
	4.3 Guidance and support	Provide appropriate digital guidance and support to learners
5. Empowering learners	5.1 Accessibility and inclusion	Ensuring accessibility to learning and development resources and activities, for all learners , including those with complex needs
	5.2 Actively engaging vulnerable learners	Use digital technologies to create a rich and relevant learning environment
	5.3 Information and media literacy	Support learners to address their information needs
	5.4 Understanding on-line life	Keep up to date with digital needs of learners and provide support to meet them
	5.5 Digital content creation for empowerment	Use innovative tools to help learners meet their goals
	5.6 Responsible use	Apply strategies to ensure online safety of learners
	5.7 Digital problem solving	Help learners acquire skills to use digital tools to solve problems

This part of the framework addressed the responsibilities that we teachers have to help learners to develop their own digital competences, we found that there were two main areas to address. Note the number of competences related to learner empowerment- this was clearly an aspect of online teaching that our colleagues identified as important!

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Domain C – FLEXICOMP-specific competences		
Area	Competence	Description
6. Collaboration Intelligence	6.1 Inter-personal competences	Apply empathy, social responsibility and relationship-handling in teaching activities
	6.2 Conflict management	Avoid and resolve classroom conflict situations
	6.3 Resilience building	Use active listening and inter-cultural awareness to help vulnerable learners overcome barriers
7. Unlocking Potential	7.1 Supporting employability and development	Use digital tools to support learners' employment, entrepreneurship and development
	7.2 Subject and Industry- specific teaching	Use digital tools to identify and take advantage of new practices and opportunities in your field
8. Promoting creativity	8.1 Working with hidden talent	Use digital tools to surface and valorise the talents of disadvantaged learners
	8.2 Promoting creativity and out of the box thinking	Designing and running activities that enable disadvantaged learners to solve problems in radical ways

We also uncovered a great deal of concern about how to engage learners in online environments. How do we encourage collaboration, develop learning activities that lead to employment, and how do we help learners develop creative responses? This section of the framework adds on some different aspects of online learning that are not often found in more 'traditional' instructional frameworks.



You just saw a very fast tour of the general overview version of the framework. For both of the frameworks, we developed more detailed versions of each of the competence areas, where we provided more information on the knowledge, skills and attitudes instructors need to develop and progress in that specific competence. Here's an example of one of the competences broken down into more detailed information.

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Competence Area	A1: Professional development and engagement
Competence title	1.1 Organisational communication
Competence description	To use digital technologies to enhance organisational communication with colleagues, learners, stakeholders and other third parties
Knowledge examples	Knows how to elect the most appropriate channel, format and style for a given communication purpose, audience and context.
Skills examples	Make use of digital technologies for communication e.g. with colleagues, learners, stakeholders
Attitude examples	Willing to reflect on and discuss how digital technologies are used effectively for organisational communication

Note how we give definitions of each competence, and examples of knowledge, skills and attitudes. Doing this for all 26 competences in the framework was a challenge, but we ended up with very good understanding of the multiple factors that contribute to teachers' digital competence.

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Competence Area	C6: Collaboration Intelligence
Competence title	6.2 Conflict management
Competence description	Ability to express ones' thoughts, feelings and beliefs without violating the rights of others
Knowledge examples	Being aware of and understanding the different behaviours that people can apply in social anxiety situations
Skills examples	Ability to assert one's rights while offering consideration for others.
Attitude examples	Take ownership of one's feelings and not blaming others. Recognise that people should not take responsibility for the behaviour of others or for situations which are beyond their control.

And here's another example. Both the general framework and the more detailed framework are available upon request.



That is Flexicomp in a nutshell. By the time we got to MIC MAC, we were more experienced in building frameworks. We used the same information gathering process as before, with co-designer workshops and deep analysis of teachers' critical incidents in classrooms, to identify skills related to media and information literacy. Here's a quick overview of what the MIC MAC teacher training framework includes. Three domains, nine main areas, and under each area, there are three competences described, listed progressively, with basic competences first, and more advanced ones coming after.

Domain A: Contextual competences		
Area	Competence	Description
1. Conceptual and analytical competences	1.1 Media and information systems and structures	Understanding how media and information works and who are the key players in the field
	1.2 Misinformation causes and consequences	Understanding and applying theories and concepts of misinformation, how it works, its impacts and how it can be addressed
	1.3 Critical thinking	Understanding and applying critical thinking, including logic and argumentation
2. Collaboration intelligence	2.1 Empathy	Ability to sense other people's emotions and imagining what someone else might be thinking or feeling
	2.2 Emotional self-awareness and self-confidence	Ability to have a positive view of oneself, and understand one's own emotions and their effects on one's behavior
	2.3 Adaptability	Ability to cope with and adapt to challenges
3. Conflict and relationship management	3.1 Assertiveness	Ability to express ones' thoughts, feelings and beliefs without violating the rights of others.
	3.2 Intercultural communication	Ability to develop a positive and productive interaction with people from different cultural backgrounds and perspectives
	3.3 Conflict management	Ability to recognise and manage conflicting positions and behaviors in a constructive and ethical manner

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Domain B – Core M&IL competences		
Area	Competence	Description
4. Sourcing and evaluating information and media	4.1 Media and information sources and evaluation and assessment platforms and tools	Understanding the sources of online media and information, their validity and authenticity and what platforms and tools are used to validate and assess sources
	4.2 Online media and information access and evaluation	Access, analyse and compare online media and information
	4.3 Working with evidence	Understanding and being able to apply evidence to evaluate online media and information
5. Identity, safety and security	5.1 Understanding on-line life	Keep up to date with the online behaviors and M&IL needs of vulnerable learners and provide support to meet them
	5.2 Online safety and security	Take measures to ensure vulnerable learners' physical, psychological and social well-being online
	5.3 Responsible use	Support learners to use digital technologies and behave responsibly online
6. Resources and Content use	6.1 Selecting online M&IL content and resources	To search, identify, assess and select online resources for M&IL teaching. To consider the specific objective, context, engagement approach, and user group, when selecting resources and planning their use
	6.2 Creating and modifying online M&IL resources	To modify and build on existing openly-licensed resources for M&IL teaching and other resources where this is permitted. To create or co-create new resources for M&IL teaching with vulnerable groups.
	6.3 Managing, protecting and sharing online M&IL resources	To organise online M&IL content and make it available to learners and other stakeholders. To effectively protect sensitive digital content

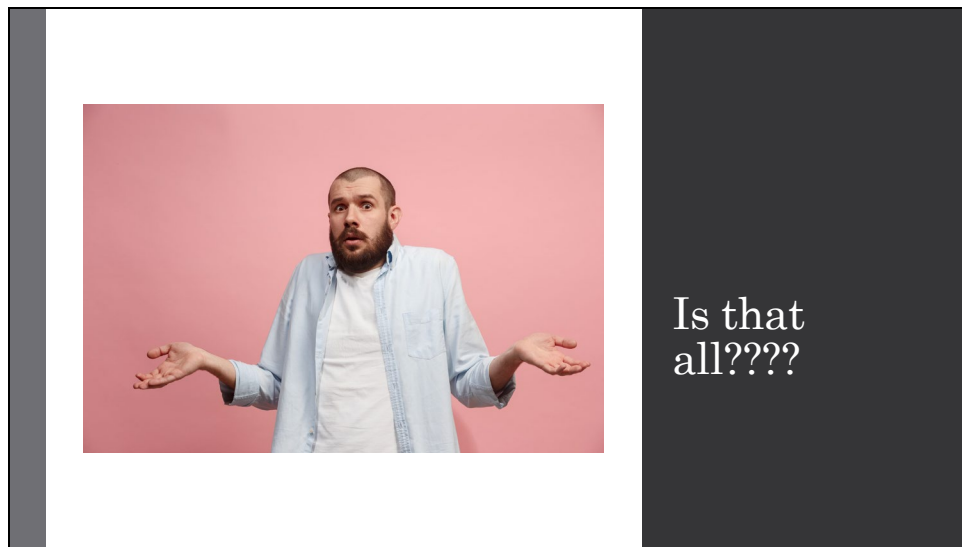
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DOMAIN C – TECHNO-PEDAGOGIC COMPETENCES		
Area	Competence	Description
7. Teaching and learning	7.1 M&IL Learning design and planning	Knowing how to design activities that support the acquisition of M&IL competences by vulnerable learners
	7.2 M&IL learning environments	Understand, choose and configure the right M&IL teaching tools for different learning situations
	7.3 M&IL Guidance and support	Actively look for ways to help learners develop their capacities, choices and decision-making through appropriate guidance and support
8. Empowering vulnerable learners	8.1 Accessibility and inclusion	To ensure accessibility to M&IL learning and development resources and activities, for all vulnerable learners, including those with complex needs
	8.2 Actively engaging vulnerable learners	To use pedagogic methods, particularly, digital technologies to support vulnerable learners' active and creative engagement with M&IL subject matters
	8.3 M&IL content creation for empowerment	To incorporate learning and development activities in teaching which require learners to express themselves through digital means, and to modify and create digital content in different formats to support their empowerment
9. Learning environments for digital citizenship	9.1 Digital citizenship concepts and values	To support learners in understanding the human rights, citizenship, ethical and democratic values underpinning digital citizenship
	9.2 Digital citizenship-building skills	To acquire and apply 'soft skills' like social responsibility and resilience to support learners to become digital citizens
	9.3 Teaching and learning for digital citizenship	To apply relevant methods and tools in teaching and learning activities to support the digital citizenship of learners

One of the things I really liked about this framework, is the emphasis that is placed on ensuring that learners can participate in digital democracy, that we are all digital citizens. This section of the framework supports human rights, and the digital citizenship initiative promoted by the Council of Europe.

See <https://www.coe.int/en/web/education/digital-transformation>

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So, we developed these frameworks, based on teachers' experiences, and then we used the frameworks to develop short training courses. Great! What else did we do?

Although we don't have time to go into details, we also developed game-based learning in both courses that were popular with participants.

Other deliverables included self-assessments to measure how competent participants felt that they were in both topics.

We have made both courses available via Canvas Commons, in both English and Swedish, in their pilot forms and are happy to share them with you. The films, podcasts, text and most of the graphics that were developed for the projects all come with Creative Commons licenses and you're free to adapt the material as you like for your own uses. Please get in touch with me if you'd like to know more.



We started this presentation by discussing digital stress, and then moved into a review of three projects where HS was active- the DigCompEdu self-assessment tool, and the Flexi-Comp and MIC MAC train-the-teacher projects. I've learned a bit about AGIL2 and think that our work has a great deal in common. Because we have all worked hard to promote digital competence for teachers and others who work with young adults and adult learners in Europe, we have some expertise that is needed, especially for those who are in charge of workplace environments and digital education policies for learning organisations around Sweden.

The main challenge we face, as I see it, is tying in what we've learned to effective development of policies, and effective changes in the way we teach and train online. The big question we should be asking right now, at least one of the big questions, is: How can we use the outcomes from our projects to reduce digital stress in online learning environments? We can't reduce all digital stress, but we can certainly apply the things we've learned from AGIL2 and projects like FC and MM, to not only help teachers, but to also help learning organisations create work environments that help promote professional development, and thereby lead to less stressful work.

Here's some suggestions:

Develop **more assessment tools**, based on our combined research findings and ensure that these tools are used to design professional development opportunities for instructors

Create more opportunities for **train-the-teacher minicourses**, offering badging or formal certification, and whenever possible, ensure that projects supported by EU funds make their results accessible via open courses

!!! Ensure that **organisational policies** support digital competence and MIL


Here's some suggestions:

- Develop more assessment tools, based on our combined research findings and ensure that these tools are used to design professional development opportunities for instructors
- Develop more train-the-teacher minicourses, offering badging or formal certification, and whenever possible, ensure that projects supported by EU funds make their results accessible via open courses
- Ensure that organisational policies support digital competence and MIL
 - Over and over again, our research pointed to organisations as the big players in being able to reduce digital stress, and increase digital competence, amongst teachers. Offering good trainings, good technical support, and ensuring that teachers have a good work-life balance, are just a few of the things that digitally competent organisations can provide.

Questions we need to ask

- How do we ensure that people find frameworks like the ones we've developed, and use them?

- How can we collaborate to ensure that every learning organisation in Sweden provides ongoing professional development /teacher training to increase digital competences?



I know it's traditional for us to end presentations like this, with the presenter asking if there are any questions. But, it's just about time for the networking and restaurant! Instead of running the risk of going over time, I thought I would end this presentation by asking YOU some questions- things we should all be asking each other. Projects like ours always get asked about transferability and sustainability- that is, how we can make sure that people actually use the things we've developed and build upon them. As I see it, we have two main target groups we need to influence. One is people like us- teachers and people who help teachers develop KSAs. Here, we need to ask our colleagues:

How do we ensure that people find frameworks like the ones we've developed, and use them?

But mostly importantly, we need to look at the cultures and ways that our learning organisations work, and how they do or do not support digitally competent, and less stressed, teachers. The question we all should be asking our political leaders and administrators is:

How can we collaborate to ensure that every learning organisation in Sweden provides ongoing professional development /teacher training to increase digital competences?

