WHAT INFORMATION AND COMMUNICATION SKILLS DOES A TEACHER NEED?

Teachers need many kinds of information and communication skills and understanding when using digital tools and learning resources, both while teaching and when supporting learning processes. These skills are also needed when teaching and guiding in a web-based learning environment.

Teacher skills can be divided into three main categories. First are the skills of a digital citizen, second are the skills of a digital teacher, and third are the skills of the digital pedagogue.

What are the general digital skills, i.e. the skills of a digital citizen?
A teacher needs the same skills as any other citizen to survive in today's digital world. Electronic services are constantly increasing in health, banking, taxation and shopping. A digital citizen also needs to know how to look after his or her security and data protection, including the legal use of digital material. Skills also include how to use one's own devices, and their apps and other software.

What are the skills of a digital teacher?
Every teacher must be able to use information and communication technology in an effective and productive way. The teacher must know the basics of computers and smartphones interfaces so that they can be used safely and ergonomically.

Basic digital skills include the use of one's own tools as well as information retrieval and archiving skills. Any digital citizen must know how to look after his or her security and data protection, and be aware of the legal use of digital material, but teachers must know even more about these matters, because they need to teach these things to their students.

Teachers must be able to use not only their own devices and programs, but also those at the school, especially the ones used every day. A teacher should also be familiar with the programs and digital material of his or her specialist subject, as well as the learning environment(s) used in his or her school. Teachers should also be able to produce digital learning material for use in their teaching.

Collaboration is power. Individual teachers do not have to learn every possible application and program. Instead teachers can decide together who will learn what, and what each teacher will use in his teaching.

What are the programs and applications used in your school that everyone should be able to use?

Which programs and applications are specialized in your subject and teaching content, and for which of them are you responsible? When one creates learning material, sharing and collateral development bring the best results. What kind of material have you produced? Have you shared your material with other teachers? What material have you received from other teachers? What kind of production would you like to specialize in? Do you know where you can get support for producing learning material?

Networking is a key skill of a digital teacher, and is also key in learning on the web. Networking enables one to follow the trends of development in digitalization. Networks for collaborative learning can be built within your institution, and also with other teachers on a national or an international level. There are many experts in virtual networks who are willing to share their expertise; if you know who or where to ask, answers can be found to almost any question or problem easily and quickly. The area of information and communication technology is so vast that one person cannot be an expert on everything. The content also changes so quickly that the only way to stay informed is to find appropriate peer learners to help. Luckily, there are often also tutoring teachers and digital teaching resource persons in many educational institutions. You can always ask them for help.

Who is your peer support and co-learner in your educational institution?
What networks do you belong to? What virtual networks do you follow? What problem have you solved by getting help from a network? How have you actively helped other members of a network? Have you shared your experiences?

Your skills include a positive attitude and curiosity and a willingness to learn new things. A teacher can, through his or her example, encourage students to find new ways of working, and help them endure uncertainty and gain acceptance. There aren't always ready-made answers in the digital world; technology may malfunction; there is often a degree of messiness. The most important thing is to know how to find solutions, and each one of us is part of finding those solutions. Digitalization can be a great tool for learning, but it is not an end in itself. That's why digital pedagogy forms an essential part of a digital teacher's skills.

So, what are the digital pedagogy skills?
Every teacher has pedagogical skills, the know-how to plan and carry out teaching and learning. These skills include planning a learning process, planning a learning activity, guiding learning processes, guiding the development of metacognitive skills, and planning and/or selecting content material and evaluation. One

must be able to evaluate both the learner's development, and the further development of the teacher's own skills.

When these skills are combined with information and communication technology, the result is digital pedagogy. The teacher constructs learning processes where information and communication technology and digital material is used to guide and support student learning in the best possible way. Digital pedagogy is required both in web-based teaching and in classroom teaching.

More information on this can be found on the web by searching under 'digital pedagogy'.

Good luck on your journey as a digital teacher!