

EMPOWERING LEARNERS

Learning objectives:

Teacher is able to use digital technology

- to teach topics in a motivating and engaging way
- to enable different learning pathways

Challenge:

Digital environments are too challenging for learners with special needs

There is still very little experience of online teaching in special education. Previously, it has been seen that digital environments and distance education would not be suitable for students with special needs.

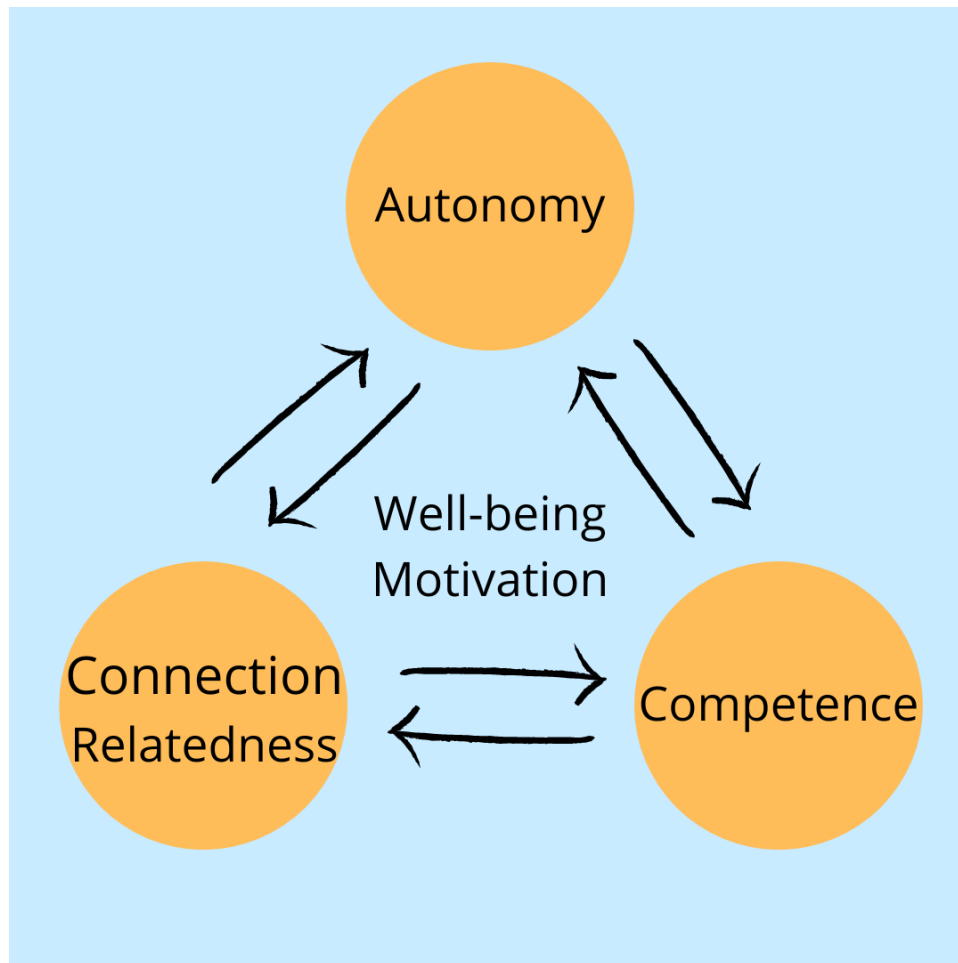
However, many good experiences were gained during the Covid pandemic, when almost all teaching groups had to switch to distance teaching. Eventually, the teaching staff found that some special needs students performed even better in their studies compared to classroom teaching. What was thought to be impossible was not impossible after all. However, the use of digital pedagogical methods requires lots of planning, know-how and preparation.

Empowerment and motivation

The goal of education, especially special education, is to increase students' ability to function (performance), skills for everyday life and well-being. We want the students to learn and gain experiences of success and strengthen the feeling of competence. Above all, the aim is to strengthen study motivation and ensure the passing of the education.

In the DigCompEdu framework, students' well-being refers to the empowerment of learners. Originally empowerment means increasing the self-esteem, courage, social activity and influence of groups of people in a disadvantaged position. It is said that empowerment is increased by encouraging feedback and reflective interaction. In addition, trust and respect, support, and participation are needed. As a result of empowerment, the student is able to set and achieve goals, feels that their own life is under control and their self-esteem has improved. This is also thought to increase hope for the future.

Picture: Components of self-determination (Deci, Ryan)



As well, well-being can be viewed from the perspectives of motivation and competence, which are more familiar in the education. According to self-determination theory, commitment and motivation are influenced by three basic psychological needs:

- **Competence:** The feeling of competence creates the belief that we are capable and know how to complete the task. The clear organization of the activities and the structured learning environment are key factors that increase the experience of competence. Therefore, structure and accessibility of the digital environment is essential.
- **Connection or relatedness:** People need to experience a sense of belonging and attachment to other people. For young people, the need to experience acceptance and belonging with their own age is particularly strong. It has been observed that in a positive atmosphere learners give each other social support, which in turn supports commitment to studying.
- **Autonomy:** People need to feel in control of their own behavior and goals. This sense of being able to take direct action, that will result in real change, plays a major part in helping people feel self-determined.

Motivation, commitment and well-being seem to be prerequisites for learning. Therefore, they must be taken into account already when planning the teaching and digital learning methods.

Solution 1:

Map the digital skills of the students, know their strengths and base the teaching on the skills and tools they have

Picture: Universal design of learning



UDL (universal design of learning) is a teaching approach that takes into account the needs and abilities of each learner. It is important to engage the learners, to make them want to learn more and get them to understand why it is useful for them to learn. Teaching should enhance the learners' digital self-efficacy, their confidence in their ability to use digital technologies effectively and efficiently.

Tools

[Wordwall – Wheel of Fortune](#)

[Boardmaker as a Discussion Starter](#)

Solution 2:

Make studying accessible, lower and remove the obstacles in learning environment and learning material

Digital learning material allows us to adapt the material to each learner. The material can be flexible, it can take into account the learner's personal interests, it can be on the exactly right level for the learner. Individualised material is more interesting and engaging to the learner.

Accessibility can mean several things; make sure you know how to make the learning material accessible to your learners.

- Use plain language. (*link to vocabulary*)
- Check the accessibility of the web pages and applications that you use. (*link to vocabulary*)
- Use assistive technology when it helps your learners. (*link to vocabulary*)
- WCAG accessibility requirement (*link to digital resources*)

Tools

[Wordwall in Finnish Studies](#)

Solution 3:

Create a clear structure, a schedule and instructions for an online course/ online learning environment/distance learning lesson

A clear organisation of online activities and a structured learning environment are key aspects that increase the experience of competence. In the digital environment, the feeling of competence is supported by the fact that the student can focus on using his own skills and solving the task instead of having a hard time grasping the material, understanding the task or navigating the digital learning environment. The repetitive structure and consistent terms also support the parallel use of different environments, blended learning.

Tips for building a virtual learning environment:

- Build a clear and simple overview on the front page of the learning environment, where the student can easily find the tasks set for them.
- Plan the online teaching goals carefully and make them visible to everyone.
- In a digital learning environment, it is good to theme the study topics in the same way as in the classroom. Name the materials in a consistent way.
- If you use a visual work order (timetable) in class, make one for the digital environment as well. What kind of phases and contents does the day include? How long the phases will take? When is it time to work independently and when is it time for collaborative work?
- It is said that on distance learning, attentiveness is maintained for 15 minutes at a time.
- In the distance teaching, teacher assesses how long students can actively take part online lesson and what other activities are needed for the study day at home.

- On distance learning, it is recommended to instruct students to organise a suitable and peaceful place for studying at home. What to keep on the table? How to user a timer to schedule day and to take breaks?
- It is recommended to agree together the group's common rules for the use of digital tools and distance learning. How to request a turn? How do we behave?
- Use as clear and simple language as possible.
- Use multimodal materials (e.g. image, animation, audio and video and their written equivalents).
- Monitor student progress regularly and adapt content to meet student needs.
- Guide students to use additional materials (e.g. website / application tips) and to ask the teacher for help in various problem situations.
- Tell how the student receives feedback about his learning, both to the student himself and to the guardian.
- More information: Guidance for the Inclusion of Students with Special Educational Needs for Online Learning <https://helda.helsinki.fi/handle/10138/326641>

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PICTURE: Pictorial and plain language schedule for distance education/Live's preparatory training

Tools

[Padlet](#)

Solution 4:

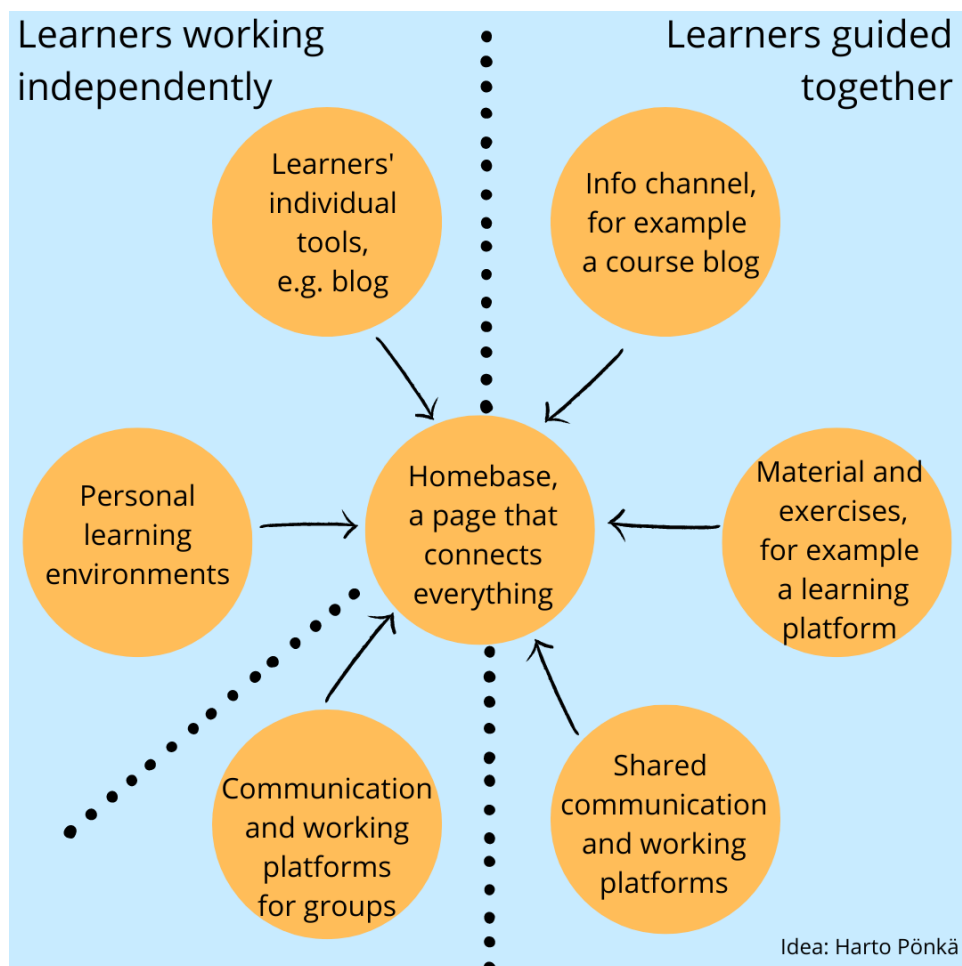
Give the learners instructions for the digital tools that you are using (tell them how to use them)

Consistent, regularly repeated use of equipment and methods and taking into account students' experiences promotes online learning. Students who need special support often benefit from long-

term committing to the use of digital technology or new methods before they benefit from them, and the disadvantages become apparent.

It's good to choose the digital tools carefully and introduce them at a suitable pace and in appropriate phase. What functionalities and tools are necessary? More tools can be added as the skills increase. When new tools are introduced, it is advisable to create instructions for the basic functions and working methods that will be used in teaching. It is always good to prefer visual instructions.

- Instruct how to navigate the learning environment and how to move around there. Also go through the types of activities in the learning environment.
- Make pictural instructions for logging in and key functions that will be used. Use screenshots.
- A screenshot video is a good way to show and illustrate navigation and show meaningful and applicable usage patterns for a particular student.
- If you use multiple digital tools and platforms, make it clear which one is used for which purpose.



- Make sure that the student knows how to use the basic functions of the devices and knows where to ask for help and where to find instructions. This is even more important when it comes to distance teaching. It is recommended to practice the skills of using digital tools in face-to-face teaching.

Tools

[Padlet](#)

[Google Forms](#)

[Classroom in Common Units](#)

Solution 5:

Engage the learners by making the learning interesting, individual and illustrative

Every learner has their own way of learning, but most learners benefit from multimodal teaching material. Provide multiple means (visual, auditory etc.) of representation. By presenting information in several ways, more learners have access to the learning material and feel that the material is for them.

One efficient way to teach and learn is games. **Gamification** means bringing game-like elements, such as rewards and competition, into teaching and learning. This increases engagement and motivation. Learners want to get the rewards, compete against each other or beat their own record. Learners become more engaged when they find educational activities fun and more interactive. Games can improve social and emotional development as well as cognitive and motor skills. Often gamification can help to improve learners' focus and attention. However, gamification should be carefully tailored to the needs and abilities of individual students to maximize its effectiveness.

Any topic can be gamified, and there are a lot of ways to turn education into games. The easiest way is to use an educational game application, and toolkit contains examples of several applications and programmes. Anyhow, it is possible to use the methods of gamification in all kinds of teaching, and the following mechanics inspire the learners to engage with the learning content:

- Goal setting – gamification starts with defining clear objectives that are specific, measurable and achievable.
- Game elements – points, badges, levels, leaderboards, progress bars, avatars, challenges etc. enhance motivation, create a sense of progression and provide immediate feedback.
- Rewards and feedback – making progress in the game motivates the learners and keeps them engaged to the game.
- Community and social interaction – players can be put into pairs or groups to solve problems and complete activities – and on the other hand there can be competition between players or teams.
- Emotional engagement – games often evoke emotions like excitement, curiosity and sense of achievement – and these are the emotions that make also learning powerful!

Digitality and digital platforms enable **connection and coworking** in a different way than studying in the classroom. Chats and discussion forums give a possibility to be connected for learners with social anxiety or physical limitations. Utilise social digital platforms that your learners find easy to use. Sometimes they can be ones that don't acquire logging in. It may be easier to give an answer or share your own opinion if you can answer anonymously. Nevertheless, one can feel relatedness and sense of being part of the group.

Digital tools also allow coworking much better than traditional tools. When learners work together and collaborate, it enhances the feeling that they are in control of their learning, which engages them to their class or group as well as to the topics and the learning process. Collaboration can be a lot of different things: discussion about a common topic, building a visual presentation as a group or writing a joint document.

When every learner can participate in their own way, they feel valued, respected and included. This creates a safe environment and helps learners to commit to the learning.

Tools

[Seppo.io - Amazing Race](#)

[Wordwall – Wheel of Fortune](#)

[Wordwall in Finnish Studies](#)

[Boardmaker as a Discussion Starter](#)

[Coding with Mbots](#)

[Kahoot – Chill Friday](#)

Solution 6:

Make learning personalised and differentiated

Digital tools often allow to modify the material according to each learner's needs. It is possible to give different tasks to different learners, leave something out for one and add something extra to another. This means that everyone can have personalised material that is suitable for their needs. The content of the material can vary, and it is possible to take everyone's special needs into consideration.

This gives learners autonomy: they have to take the responsibility of their own learning. On the other hand, getting to use suitable material makes learning meaningful and satisfactory. With digital tools it is truly possible to build an individualised learning path to each student.

Tools

[Wordwall in Finnish Studies](#)

[Howspace](#)