



Introduction to UDeL Camp 4 online 12-16 April 2021

Elinor Olaussen and Kjetil Knarlag, Universell/ NTNU

UDeL Camp 4 – purpose, expectations and content

If you read this note you have either applied for or confirmed that you want to participate at our forth UDeL Camp. So far you already show that you are motivated to develop your practice to become more inclusive, regardless if you are a teacher or have another role in higher education.

This Erasmus+ project (TINEL, Towards Inclusive eLearning) will arrange four UDeL Camps. The purpose of the UDeL Camps is to develop a training model and learning material for teachers in higher education. The material will be developed iteratively and tested throughout four UDeL Camps, and you have signed up to participate in one of these Camps. Early versions of the learning material have been used in the first Camps and will be improved based on the feedback from the Camp participants.

The **learning material** consist of:

- **UDL context cards** showing a wide variety of situations a proactive teacher is prepared for. Each card shows a headline and an image on one side and a description of the situation on the other side. The UDL context cards can be used as a tool for teachers to test a course in advance to see if the teacher has thought of most situations that could occur, especially in relation to student diversity and different learning situations and preferences.
- **Videos with students** and their experiences from different learning situations
- **Videos with teachers** and their experience from different UDL solutions
- **A collection of scientific/ conference papers** about teachers' experiences of UDL. These papers can be used as a base for discussions when training teachers in UDL.

The **training model** will focus on two levels:

- The practical level will consist of **instructions how to use the learning material** used in the UDL Camps (UDL Context Cards, videos and scientific/conference papers). These instructions will be iteratively developed using feedback from the UDL Camp participants.
- At the meta-level, the training model will consist of **methods on how to implement UDL in practice**. The methods will be based on the experience and participant feedback from the UDL Camps and the subsequent webinars and workshops. It will also include the participants' experiences from developing their own eLearning or blended learning courses. The training model will be reported in a scientific paper.



In order to develop this learning material, we need your perspectives to move forward. Your thoughts and experiences are extremely important for us, because you are crucial for students learning conditions.

To kick-start the camp, we have written a brief introduction on UDL and tools for inclusion in higher education. We hope this overview could be supportive when reflecting over a case and provides a common baseline before we meet in April.

Introduction to UDL and tools for inclusion

How do you respond to diversity in the student population in your own practice? What example of good practice are you most proud of?

These are some of the questions we want to dive into during our UDeL-Camp. How are the questions related to the idea of creating an inclusive (e)learning environment for all based on the principles of Universal Design? What is universal design and universal design for learning in higher education?

Imagine yourself creating an ideal learning environment where all students can use their strengths as learners, use techniques that suits their specific needs, in a learning context so flexible that the students can learn whenever and wherever they want. How would your classes look like? What methods and approaches would you use? How would it affect your work and what will it require of you as a teacher or administrative staff? Perhaps you see this as an unrealistic situation at the higher education institution where you work, and perhaps an ideal world for each individual learner is still a future dream. However, we believe that the principles of universal design are the best tool for addressing diversity in the student population, and the differences between all learners. We also believe that this will motivate your learners, and make the learning more interesting and enjoyable for both students and teachers.

Having a disability in Higher Education

Until recently, teaching, learning and the curriculum itself has been designed to meet the needs of the mythical “average student”. The traditional approach to learning is dominated by printed text, traditional lectures, and a strong focus on written examinations on paper in the end. This was thought to be a good learning framework for most students.

Having a disability in this learning environment could be quite challenging. It highlights the differences between students, between students with or without a disability, and the differences among the variation of disabilities in the student population. Student were dependent on a documentation, to get special and individual accommodations to compensate for their disability. This led to many applications for special arrangements, stigmatizations of the individual students and a strong focus on the disability itself.



Many students experience that their learning environment still is like this at their university – and even though shifts has been made towards a recognition that context and self-awareness plays an important role for students learning outcome – they are probably right.

At the same time, we experience a wave of external influences regarding new ways of teaching and learning– with a variety of teaching methods characterized by a great use of technology, focus on dialogue and cooperation, and new ways of doing exams. In this context, we believe that the teacher has a lot of significance and impact on students learning. Teachers and other staff in Higher education have to make sure that this development won't result in new boundaries for students with disabilities, but rather leads to variation, flexibility, motivational based learning and new possibilities for all students.

Working as a teacher in Higher education

By talking to academic staff, we have learned that teaching in higher education could be challenging because they need to balance their workload between research and teaching. Some of you report a pressure to prioritize the research part, because it's more acknowledged through expectations, deadlines and financial benefits. Moreover, the teaching is perceived as time consuming and traditional lectures are especially hard to change when the class consists of a large number of students. In addition, academic staff working in Higher education does not automatically have pedagogy as a part of their teacher training, nor enough knowledge on how to approach students with different abilities and special needs. Many feels that they need more knowledge and resources to develop an including, accessible and welcoming learning environment for all students.

However, is this academic staff's understanding and experience in Higher Education in general? By joining in our project, we believe you can give us and other academic staff a broader and deeper background for working as a teacher in Higher Education today.

Universal Design – from design and architecture to new pedagogy

Universal Design is a framework originally created to make products and buildings accessible for all. The most used definition is from the UN Convention on the Rights for People with Disabilities (CRPD:2008):

"Universal design" means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. "Universal design" shall not exclude assistive devices for particular groups of persons with disabilities where this is needed.

It is important to understand the ideas of universal design before we try to implement these ideas in a learning context. So how do we use these thoughts and this definition to plan for a diverse student population? What will the practical implications be for students and staff working in higher education?

Universal design of the *physical learning environment* is quite easy to understand. As an example, entering a higher education building should be possible for all. The entrance should be easy to find, without any obstacles or physical barriers, with automatic door openers and with good contrasts at the door. This is the same entrance for everyone, regardless if you use a wheelchair, have your hands occupied with books and study material, or if your hand function is reduced. In a university campus, universal design should be the strategy for forming the physical environment everywhere.

Universal design of the *digital learning environment* has more recently emerged as a strategy in planning for the use of ICT in an educational context. General information, learning management systems, literature and other digital study material should be presented in accessible formats, and in compliance with standards that includes students with difficulties in accessing digital study material. For example, a video used for learning reasons, should be captioned to the benefit for hearing impaired, and better quality for all students.

Universal design for learning (UDL) is a framework for *instruction, dialogue and learning*, which uses the principles from both universal design and from learning science and neuroscience. The result is scientific guidelines for design and development of curriculum – learning goals, means of assessment, teaching methods and learning materials – that are inclusive and valuable for all learners.

The development of guidelines will promote an educational practice that provides *variation and flexibility* in the way *information is presented*, in the way students *respond or demonstrate knowledge and skills*, and in the way students are *engaged in their learning process*.

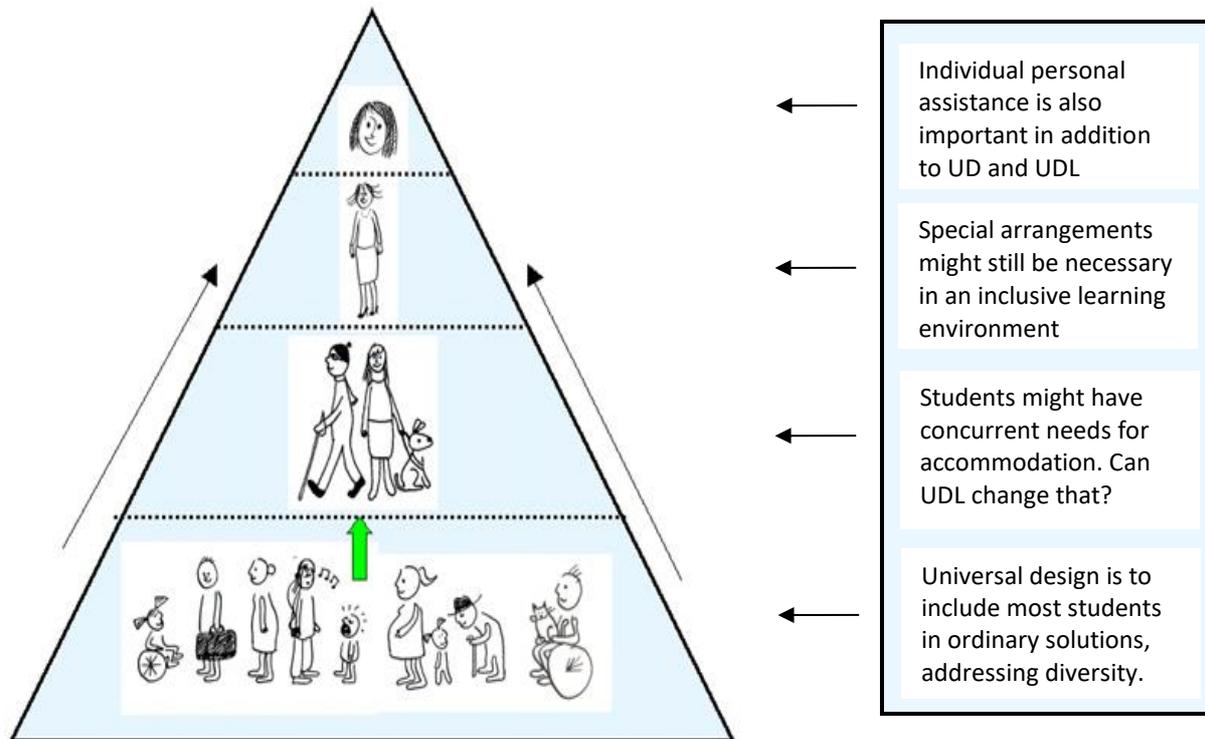
UDL will reduce barriers in all kinds of instruction, and provide support and challenges to the diversity of learners, regardless of disabilities of any kind. The UDL principles will be important to the development of new teaching and learning methods, and affect how we look at teaching in the classroom, in group activities at campus, and at all kinds of digital learning, as well as at assessment.

All learners are different, they learn differently and the diversity that truly exists in your class is a normal variability that actually reflects the population. The differences in how students learn are expanding, and the context – the learning environment – is itself complex and dynamic. UDL addresses the variations between the *learners* and focuses on the learning process by providing

- Multiple means of engagement
- Multiple means of representation
- Multiple means of action and expression

In this context, the differences between students in any context is an actively positive force in learning. UDL will provide an approach for designing learning environments that support high expectations and results for all students.

UD and UDL – the “Users Pyramid”



We can explain Universal Design and UDL through the “users pyramid”. Imagine that all students in a group, like a class in your course are within the borders of the pyramid. Every class or group of students at a university or a university college has a diverse group of learners. In any educational situation, for example during an examination, students with different learning styles and a variety of abilities might have needs for reasonable adjustments in the examination situation (which is most likely to be an ordinary written exam on paper for some hours). Some of these needs are concurrent and some of them are quite individual. Altogether, the students with or without needs for accommodation or adjustments represent the different levels in the pyramid. Let’s take a closer look at each level with descriptions and examples to illustrate the pyramids content.

- Level 1:** The majority of students
 The majority of students can accept the planned form of examination, even though it is not their preferred way of showing knowledge.
- Level 2:**
 At a classical written examination, some students will have concurrent needs for examination. For example, most students with writing difficulties or dyslexia need a

computer and a text editor program with a spellchecker. In almost any group of students of a certain size, there will be offered adjustment to groups of students with similar needs.

- **Level 3:**

In a group of students, there also must be room for individual accommodation. In our example, a written examination, there might be students who need more than just a computer with a spellchecker. These students might need special ICT equipment or assistive technology, like a screen reader or a speech synthesizer.

- **Level 4:**

Sometimes students might have the need for more personal assistance, in addition to reasonable adjustments and assistive technology. To stay with our example, in a traditional written exam, a student might need practical assistance for eating or other elementary needs.

The brilliant idea of this model is that all academic staff, in cooperation with the students, should try to include as many students as possible in the ordinary solutions. Planning for all learning differences will ensure a high-quality learning environment for all students, also for the students who needs individual adjustments.

Further learning about UDL and UDeL

It is produced several books and websites about UD and UDL. If you want to learn more about the concept you can look at the following resources;

- Nora Tomas, a student with a disability at Norwegian University of Science and Technology, talks about her experiences with flipped classroom as a means for inclusion: <https://www.youtube.com/watch?v=cNqhwXg0D6A>
- Gagan Chhabra, sharing experiences as a student with a visual impairment: https://youtu.be/Ca4zE_2sUTs
- Gagan Chhabra, sharing experiences as a professional lecturer, public speaker and researcher with a visual impairment: <https://youtu.be/IL1oU12DDQI>
- Gagan Chhabra, reflecting on “Universal Design of a learning environment: A Journey and not a Destination”: <https://youtu.be/AzoE9uk2eNo>
- UDeL Camp 1 experiences from two teachers:
 - Lotta Åbjörnsson: <https://youtu.be/FPHWLcXwk1s>
 - Lars Harrysson: <https://youtu.be/f8vQKmy7rsM>
- Katie Novak’s EDtalk – an introduction to UDL: <http://edtalks.org/video/katie-novak-universal-design-learning-introduction>

Articles from the UDeL conference in Jyväskylä 2019

- Saarela, M., Eftring, H., Petrie, H., Torkildsby, A. B., & Ladonlahti, T. (2019). Improving Accessibility of eLearning in Higher Education from Universal Design for Learning Perspective. In M. Saarela (Ed.), Universal Design for Learning (UDL). HAMK Unlimited Journal 28.8.2019. Retrieved [date] from <https://unlimited.hamk.fi/ammattillinen-osaaminen-ja-opetus/improving-accessibility-of-elearning>
 - Lehtonen, M. J., Chew, J. Y., Schilli, K. S., & Varadarajan, A. (2019). Nordic Rebels: A Blended Approach to Fix Higher Education. In M. Saarela (Ed.), Universal Design for Learning (UDL). HAMK Unlimited Journal 29.8.2019. Retrieved [date] from <https://unlimited.hamk.fi/ammattillinen-osaaminen-ja-opetus/nordic-rebels>
 - Háhn, J. (2019). Crossing Borders Without Travel: Virtual Exchange Practices for Students. In M. Saarela (Ed.), Universal Design for Learning (UDL). HAMK Unlimited Journal 29.8.2019. Retrieved [date] from <https://unlimited.hamk.fi/ammattillinen-osaaminen-ja-opetus/crossing-borders-without-travel>
 - Matre, M. E., Andersen, R., Thormodsæter, M. S., & Cifuentes, M. O. (2019). Digital Competence – Providing Tools to Create an Inclusive eLearning Course. In M. Saarela (Ed.), Universal Design for Learning (UDL). HAMK Unlimited Journal 29.8.2019. Retrieved [date] from <https://unlimited.hamk.fi/ammattillinen-osaaminen-ja-opetus/digital-competence>
 - Romppanen, M. (2020). “Songs of Life” – Video-documentary as a part of Bachelor’s Thesis. In M. Saarela (Ed.), Universal Design for Learning (UDL). HAMK Unlimited Journal 11.5.2020. Retrieved [date] from <https://unlimited.hamk.fi/hyvinvointi-ja-sote-ala/songs-of-life-video-documentary/>

By joining in our project, we believe you can contribute to change both curriculum design, students learning environment and their learning outcome. Join in and welcome to UDeL Camp in April.