

# ICED 2020 proceedings:

## A practical workshop on Universal Design for Learning and shared experiences

Viveca Olofsson<sup>1</sup>

*Högskolepedagogiskt centrum, Örebro University  
Fakultetsgatan 1  
701 82 Örebro, Sweden*

### **Abstract**

Higher educational institutions worldwide are facing the challenges of having diverse student groups. Inclusive teaching using universal design is a means of meeting these challenges. This article gives an introduction to inclusive teaching through universal design. It describes the design and intended outcomes of a pre-conference workshop on Universal Design for Learning (UDL), originally planned for ICED 2020. Lessons learned from a Swedish course in Universal Design for Learning are provided.

### **1 Introduction**

Because of the global commitment to provide high quality and equal education (Agenda 2030; UNESCO, 2017) many higher educational institutions (HEI) are encountering increasingly diverse student groups with differing educational needs. Students may vary with regard to their knowledge bases, socioeconomic backgrounds and/or previous experience of higher education. Also, an increasing proportion of the student population may experience learning difficulties that affect their learning, such as depression, hearing impairment, dyslexia and/or ADHD. Thus, the challenges faced by HEIs in providing equal and high quality education to all the students they have recruited are great, and place high demands on inclusive teaching. The aim of this article is to present a structure and intended outcomes for a pre-conference workshop on inclusive teaching and to share some experiences from a course on Universal Design for Learning for university teachers given at a Swedish university.

Universal design is a proactive approach to teaching which has grown more common within higher education in recent years (Bracken & Novak, 2019; Burgstahler, 2015; Zaloudek, Chandler & Carlson, 2018). Originating from architecture in the 1980s, the universal design approach has been adapted to education, for instance in Universal Design for Instruction (UDI) and Universal Design for Learning (UDL) (Al-Azawei, Serenelli & Lundqvist, 2016; Roberts, Park, Brown & Cook, 2011). Common features in universal approaches are facilitation and enhancement of learning through clear, structured and flexible teaching. In addition, UDL integrates knowledge about cognition, neuro-science and learning (Bracken & Novak, 2019; the Centre for Applied Special Technology (CAST)). UDL is based on three principles:

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

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<sup>1</sup> Viveca.olofsson@oru.se

## **2 The ICED pre-conference workshop**

This practice-oriented workshop had several aims. The participants would have been professionals working with educational development, with varied experiences of UDL. The aims were to discuss the perceived gap between broad recruitment and the need for widened participation in higher education; to enhance knowledge about our students and the (developmental and mental health) factors that affect their ability to learn; and to exchange experiences and/or ideas across national contexts.

In order to share a common understanding of UDL the participants were instructed to acquaint themselves with the UDL's approach to learning. They could choose either to read specific chapters of the book *Transforming higher education through universal design for learning: An international perspective*, or suggested articles. They were also asked to familiarize themselves with the UDL guidelines posted on the CAST website. With a similar level of knowledge about UDL reached, we anticipated informed discussions and valuable exchange of experiences during the workshop.

The 3.5-hour workshop was divided into three parts. The first part was dedicated to gaining some knowledge about students on a group level. Ramsden (2003) claims that it is important to know one's students, and therefore we planned to introduce factors that influence students and their learning, such as brain development, stress, other health factors and their prevalence. Discussions of possible implications for the work of educational developers and an exchange of experiences and ideas were supposed to follow. Knowledge about both developmental and health factors and how they influence learning can support educational developers' arguments for pedagogical development towards more inclusive student-centered teaching strategies.

The second part would have briefly introduced the concept of universal design in education. Universal design for learning is currently being introduced internationally as a means of approaching the varied student group characteristics affecting higher education today (Bracken & Novak, 2019). The introduction would have been followed by discussions about UDL's potential to support inclusive teaching and learning in higher education. The aim of the discussions were fruitful exchanges of knowledge, experiences and practical ideas on how to enhance accessible and sustainable education.

In the last part of the workshop the participants would have been able to work on their own projects, for instance on course specifications or modules, or on "how to change attitudes and motivate pedagogical change."

## **3 Lessons learned from a UDL course for university teachers**

One major aim of the pre-conference workshop was to share experiences. Therefore some of the lessons learned from a mandatory pedagogical course for university teachers at Örebro University would have been shared. That course is part of a set of courses adding up to ten weeks of full-time pedagogical studies for university teachers. This is the recommended minimum level for Swedish higher education and is a requirement at Örebro University. The course comprises two weeks of full-time studies, held part-time over a semester. It was delivered in fall 2019 and spring 2020. Forty-four teachers participated.

In Sweden widened participation has been a sensitive topic. To avoid getting stuck in discussions about the topic we start the course by defining the mission of Swedish universities as governmental institutions. We describe the international and national legislation and agreements that are the cornerstones of teaching in Swedish higher education, and the individual responsibilities of each employee. This strategy showcases the indisputable reasons and motives as to why inclusive teaching is needed and why universal design provides viable

support in educational development. Another aspect influencing how widened participation is received is sustainable development. Integrating sustainable development in education is a prominent task for Swedish higher education, but progress has been slow. We frame widened participation as a means of integrating sustainable development in *how* we teach. By acknowledging the integration of, for instance, quality education and equality, the reasons for widened participation may be strengthened. Due to the clear reasons and motivations for widened participation thus provided, neither the topic nor the need for inclusive teaching have been questioned. The focus is on “how to” instead of “why do”.

We make a point of introducing course participants to our students, at a group level. For instance, we compare admission grade levels with the grades and corresponding knowledge and skills of students with different high-school grades. This illuminates the gap between the actual knowledge and skills of the students admitted and the levels that university teachers expect them to have. The relative breadth of the gap is quite surprising for many of the course participants. When recruiting students a main target group is young adults aged 19 to 25. Research shows that at these ages the pre-frontal cortex, with executive functions such as planning and anticipating consequences, is not fully developed. The influence of stress and major life crises and how they and other stress factors might influence concentration, working memory, the ability to memorize and learning is also introduced. In addition, we show the proportions of students with special needs, talk about the situations of single parents or parents of young children etc. and how these factors relate to learning and possibly our teaching. How these factors influence students, their study situations and learning are discussed together with how they might influence teaching. In sum, at the beginning of the course the participants are introduced to some important characteristics of the student population that influence student learning and the need for inclusive teaching.

A criticism of UDL made by some participants in the fall of 2019 was that UDL might lead to lowered course standards and/or quality by simplifying teaching and learning goals. We argue that UDL does not replace or contradict existing pedagogy. Instead, it serves as a didactic perspective that directs the focus towards the need for clarity, structure and flexibility when planning, conducting and developing student centered, student active teaching activities and curricula. We also referred to research on constructive alignment (CA), which indicates that it is not CA per se that potentially lowers standards and requirements, but how CA is implemented. Those findings probably apply to universal design as well. In light of this experience we consistently refer to UDL as a *perspective on* teaching, instead of a method, and we believe that this might be one reason why such criticism has not continued.

Often teachers perceive that they do not have enough time for course development. Therefore, the examination task for the course is to develop either a learning activity, a curriculum or a study guide according to universal design of learning. This gives participants the opportunity and the time to work on a meaningful project relevant to their own teaching. Overall, we are proud of the quality of the projects the participants have worked on during the course, and of their engagement. Our overall experience with this course has been very positive.

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