

Facilitating the Concept of Universal Design Among Design Students – Changes in Teaching the Last Decade

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Abstract. This short paper describes and reflects on how the teaching of the concept of Universal Design (UD) has developed in the last decade at the Institute of Design at the Oslo School of Architecture and Design (AHO). Four main changes are described. Firstly, the curriculum has evolved from teaching guidelines and principles to focusing on design processes. Secondly, an increased emphasis is put on cognitive accessibility. Thirdly, non-stigmatizing aesthetics expressions and solutions that communicate through different senses have become more important subjects. Fourthly the teaching of UD has moved from the second to the first year curriculum.

Keywords: Teaching, inclusive design processes

Teaching the concept of UD

Teaching the concept of UD to design students is argued and motivated by four main pillars: The overall benefits for the society and the individuals, laws and regulations, UD thinking as a creative tool and increased marked potential [1]

Knowing what and how to teach UD is a rather complex and diverse task to solve. First one has to decide and describe what the overall learning outcome is, what specific knowledge, skills and experience the students should obtain. Then one has to influence the students' attitudes and ethical values related to the design practice and profession in a UD perspective? Further, what kind of design theory and literature is the teaching based on? What are the most relevant themes and tasks for the students to work on and when are they mature enough to this kind of teaching?

Through years of experience on UD teaching the development on the field can be summed up in four main changes.

1 From UD as basic principles, to UD as inclusive design processes. The teaching has evolved from applying UD principles and guidelines in development of products, services and environments to a closer focus on the design processes itself. A holistic model associated with user- and people-centered approaches and inclusive design processes [1,2,3] is taught. The students are, as an example, encouraged and instructed to involve users with reduced capabilities into their first year projects.

2 From physical to cognitive accessibility. From challenges previously connected to physical barriers, a greater emphasis is now placed on cognitive accessibility due to

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increased complexity in a digital society, such as social media. Accessibility related to information and communication technologies (ICT) is a growing field and needs to be further incorporated in the curriculum.

3 *From usability and technical functionality to non-stigmatizing aesthetics expressions and solutions that communicate through different senses.* A greater focus is aimed at the aesthetics, seeking for relevant, non stigmatizing expressions. We need solutions that communicate through different senses independent of our sensory capabilities. How the products appear and how we experience them through their aesthetic expressions, is important for our identity and self esteem [4].

4 *From the second to the first year curriculum.* The teaching of UD at AHO has moved from the second to first year curriculum. From being a separate course, UD is now taught and incorporated in the first year studio course "Introduction to design". This means that UD has become a more basic and fundamental part of the designer's education within all the directions of design at AHO, including industrial, interaction and service design.

Reflections

Although a greater focus now is put on UD in the design process, cognitive accessibility and non-stigmatizing aesthetics expressions, the most important change is that the teaching of UD has moved from the second year to the first year. As the first basic method and way of thinking the students learn, this will have a great impact on their attitudes and a base to build on. In their first year they learn that user centered and inclusive design processes is *the* way to work as a designer. This is *the* method for design projects. The students experience that insights into the context of use and needs and wishes from the end users and users with reduced capabilities is a central and important tool to creativity and to improve products and services. They learn that values based on equality, non-discrimination and inclusiveness is the ethical base the design study is grounded on.

To conclude, this early implementation of the UD concept has developed a better understanding among staff and students that UD is a natural part of design thinking.

References

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