

Editorial

Design Learning for Tomorrow

This special issue of *TechneA* includes papers that were first presented at the ‘2nd International Conference for Design Education Researchers: Design Learning for Tomorrow - Design Education from Kindergarten to PhD’, which was held in Oslo, Norway in 2013. The conference was hosted at the Faculty of Technology, Art, and Design at the Oslo and Akershus University College of Applied Sciences under the joint auspices of the Design Research Society (DRS) and the CUMULUS organization. The conference had 278 delegates from 43 countries. Researchers from more than 70 universities were involved in the double blind review process. The 165 papers presented at the conference were included in the conference proceedings. Research on all levels of design education and from all over the world was represented in the papers and sessions. The conference brought together a community of engaged educators and researchers that through various topics highlighted the conference’s main focus, which is summarised below:

Designed artefacts and solutions influence our lives and values, both from a personal and societal perspective. Designers, decision makers, investors and consumers hold different positions in the design process, but they all make choices that will influence our future visual and material culture. To promote sustainability and meet global challenges for the future, professional designers are dependent on critical consumers and a design literate general public. For this purpose design education is important for all. We propose that design education in general education represents both a foundation for professional design education and a vital requirement for developing the general public’s competence for informed decision making (Conference call).¹

TechneA is a journal that focuses primarily on craft and craft education, and this special issue highlights that design education is one of the areas included in this scope. The conference hosted by DRS and CUMULUS brought together all levels of education from kindergarten to PhD, which furthered discussion about design education as a continuous building up of design capabilities. This discussion extends from the lower educational levels, highlighting awareness about things around us through basic skills and knowledge of materials and consumer choices, to the professional level, where design is viewed in terms of complex systems and requires a much more comprehensive understanding of the forces of society.

Articles in This Issue

The conference highlighted how future global challenges can be met through collaboration between professional designers and a design literate public. The discussion as to what is relevant at different levels and why for qualified choices in consumption, design processes, and policies is an ongoing one that we find important to continue in this special issue. We have therefore chosen to invite papers that present different views on design education at the primary and secondary school levels and for non-designers.

In the article ‘Learning by Watching: Iñupiaq-Iniut Design Learning and Inspiration for Academic Design Education’, Janne Reitan explores the practice and learning of design for contemporary Iñupiaq-Inuit clothing. Based on observations and interviews with seamstresses as well as her own participation in designing and sewing, Reitan introduces the concept of learning-by-watching, a concept of value for

¹ <http://www.hioa.no/eng/About-HiOA/Faculty-of-Technology-Art-and-Design/DRS-CUMULUS-Oslo-2013>

both design education in compulsory school and for academic design education. Learning-by-watching is discussed in regard to Schön and Wenger's theories of learning.

As a K-12 art and design educator in the US, Delane Vanada focuses on middle school students in 'Practically Creative: The Role of Design Thinking as an Improved Paradigm for 21st Century Art Education'. Her research, including both a mixed model study conducted in middle school art classrooms and a literature review, addresses how design thinking can meet the demand for 21st century skills by treating students as innovative, balanced, and synthetic creators and thinkers. In the article, Vanada presents a conceptual framework and explores design thinking as an aesthetic, inquiry-based process that integrates complex intelligence theories.

Liv Merete Nielsen addresses the issue of drawing as a basis for citizenship in her article 'Debunking Teachers' Resistance to Teaching Children to Draw: A Companion to Citizenship for the Future'. Nielsen challenges the notion of verbal text being the dominant form of communication, and she introduces the concept of 'design literacy' as a necessary complement. Through this concept, Nielsen discusses drawing and visual communication as part of formal education and as necessary knowledge for future generations.

Finally, the issue also contains 'Educating the Creative Citizen: Design Education Programs in the Knowledge Economy' by Natalie Wright and Rebekah Davis. They address the ability of design education as a framework to deliver on the 21st century competencies required for participating in the creative knowledge economy. A study was conducted to identify the value of design education programs from primary school to the professional development level. The article focuses on the role of the tertiary education sector as the central actor in the creative economy in the development of generic design/design education capabilities.

Design Learning for Tomorrow - Design Education from Kindergarten to PhD

Though this issue contains only four articles, they each represent a strong voice in the discussion on how design education can be improved. The importance of all levels of education in this endeavour is the common denominator of these articles. If research into informal and formal primary, secondary, and tertiary education can inform a continuous design education, the aim of developing the skillsets needed by tomorrow's citizens and designers is closer to being achieved than ever before. We hope that these articles, through their different approaches, add to the debate that will continue in the '3rd International Conference for Design Education Researchers: LearnxDesign' in Chicago on 28-30 June 2015.

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