Section 05

Co-creation of Interdisciplinary Design Educations

Track 05: Co-creation of Interdisciplinary Design Educations

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In the 'Co-creation of Interdisciplinary Design Educations' track we welcomed contributions that discuss challenges and potentials experienced by researchers engaging in interdisciplinary research involving design and other domains. We discuss these issues in relation to both practice and related research but foremost in education and collaborative curricula development. Collaboration and cross disciplinary creativity are essential 21st century skills and students need to be exposed to these aspects early, however, curricula development always need to be a step ahead. To enable swift and purposeful educational development to facilitate these changes collaborative efforts are needed between disciplines especially in the educational sector. Professionals from several domains thus need to educate each other and form a common language to be able to reach over the disciplinary borders (Groth, Pevere, Niinimäki, & Kääriäinen, 2020). While such co-creation efforts may have significant positive consequences if successful, it is generally acknowledged that collaborations over disciplinary borders is challenging due to differences in epistemology and worldviews (Nimkulrat, Groth, Valle-Noronha & Tomico, 2020). We are interested in analyzing the challenges and possible solutions found in co-creation processes between different domains involving design as one partner and to investigate the consequent need in interdisciplinary education based on these.

Co-creation and co-design are essential in future perspectives of sustainable research and innovation strategies (High Level Group, 2017) thus there are not only local benefits in such collaboration. As problems are global and intertwined, they also need to be approached with a global aim. This includes a variety of collaborative processes and citizens involvement where questions arise about who to involve and how, whether we are on the right track, and how new practical and theoretical insights can influence societal development also on a political and decision-making level. Design education and design practise traditions hold many methods for participation through creative practice that constitute a toolbox of participation methods emerging from health (Sellen, 2016), technology (Medola, Sandnes, Ferrari, & Rodrigues, 2018; Pavel, Medola, Berg, & Brevik, 2020) and the arts (Niinimäki, Kääriäinen & Groth, 2018). Additionally, there is a need to discuss how to decolonize knowledge in design education for better collaboration and communication on a global scale.

The topics that are presented in this track thus mainly concern interdisciplinary education and related collaborative efforts between disciplines to facilitate the design and implementation of learning experiences. Many of them discuss opportunities and challenges in interdisciplinary collaborations and the strategies for navigating through these. Several contributions also offer methods for co-creation and educational designs for learning in interdisciplinary environments and contexts

Stefano Perna and Pietro Nunziante discuss the field of Learning Design in general, giving a concise overview of an emerging field that approaches curricula development through the lens of design. They present a specific type of participatory workshop designed to facilitate the process of co-designing learning experiences by interdisciplinary teams of academics and educators.

Jia Ying Chew points to the challenge in aligning varying epistemic frameworks in interdisciplinary education and discusses a case study of an interdisciplinary graduate programme that was experiencing curriculum (mis)alignment. The paper illustrates how co-design can be adopted in curriculum development processes to overcome existing operational challenges of interdisciplinary teaching.

Santiago De Francisco Vela, Laura Guzman-Abello and Santiago Pardo Rodríguez take on the opportunities and challenges of developing interdisciplinary courses with courts, judges, and administrative organizations to improve access to justice in Colombia, presenting nine projects developed by students, explaining their

approach and their proposed solution.

Melis Örnekoğlu-Selçuk, Marina Emmanouil and Jan Detand gained insights into students' experiences and problems when taking part in a multidisciplinary co-creation process between students from different study disciplines, levels and countries who worked together in groups to tackle societal challenges. By analyzing student's self- and peer-assessment reports they found that soft skills were highlighted as fundamental skills while working with their interdisciplinary peers.

Asja Aulisio, Amina Pereno, Fabiana Rovera and Silvia Barbero discuss systemic design education in interdisciplinary environments through the European Erasmus+ project MULTITRACES that is based on the co-creation of a multidisciplinary online training programme. The learning process focused on the acquisition of both hard and soft skills relevant to the Circular Economy in the rural area. The experience allows for a reflection on how to teach design to students from different backgrounds, how design skills can foster a co-disciplinary approach to complex issues, such as the Circular Economy, and how digital tools can support design education.

Laura Ferrarello and Catherine Dormor tackle the challenge of different mindsets that interdisciplinary collaboration naturally brings with it. Their paper presents an example of interdisciplinary collaboration aimed at growing mindsets capable of dialoguing with other disciplines through boundary learning. They specifically focus upon the role of conversation as a learning method that harnesses different kinds of knowledge at the boundaries of their discipline and thus facilitates interdisciplinary integration.

Bilge Merve Aktaş and Camilla Groth acknowledge that interdisciplinary collaboration requires adjusting to new situations and rapidly changing knowledge systems. Such situations are intrinsic to design practice, and design and making practices lend themselves well to developing such skills. By examining an interdisciplinary group of students' creative processes, they found that navigating unknown situations with the explorative and adaptive mind-set that emerges through creative practices nourish transferrable skills that are useful in interdisciplinary interactions and communication.

Anne Solberg and Ellen Baskår discuss their creative practices during the co-creation of an art exhibition as artist-researchers working with diametrically different materials. The experienced co-creation and collaboration process was a vital force throughout the project, enhancing awareness of the other and learning from each other. The approach forced the artists to give the other and the public access to personal artistic strife and struggle, thus enhancing the transparency that is crucial for a learning process.

Han Shi, Feng Xue, Jing Pei, Yijing Li, Zhihang Song, Chunli Ma and Shangshang Yang combine design education with STEAM education in their new educational approach and present it from three aspects: teachers' activities, teaching links and students' activities. The paper further discusses these teaching methods and the future development of design education.

Kate Sellen, Nav Persaud, Stuart Werle, Mariam Al Bess, Nick Goso, Ruslan Hetu and Habiba Soliman discusses the insights gained from a co-created experiential learning opportunity that was realized through an interdisciplinary project-based learning opportunity offered to an undergraduate advertising and packaging studio class in the context of health design. The paper includes reflections on the adjustments done due to the Covid 19 pandemic.

Finally, **Stefano Perna and Moritz Philip Recke** offer a collaborative workshop in which they introduce a Learning Objective Design Board as a practical tool to make the process of defining Learning Objectives and Assessment Strategies for any type of educational experience easier, more creative, collaborative and even playful.

In short, the themes may be listed as follows:
- Opportunities and challenges in interdisciplinary collaborations
- Collaborative curricula development for transdisciplinary education
- Learning Design as a field
- Systemic design education in interdisciplinary environments
- Decolonizing knowledge through co-creation for interdisciplinary design education
- Learning through dialogues between disciplines
- Creative practice as enabler in interdisciplinary education
- Learning through interdisciplinary artistic collaboration
- STEAM integrated design education
- Co-created experiential learning in design practice
- Methods for co-designing learning experiences

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