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THE U_CODE APPROACH: USER-DRIVEN DESIGN IN ARCHITECTURE AND URBAN PLANNING - NEW WAYS TO CO-CREATE

This abstract reports the U_CODE Approach developed within the granted EU H2020 U_CODE – Urban collective design environment, and refers to its applicability towards its usage in architectural education. The U_CODE project was coordinated by Jörg Rainer Noennig, Director of Wissensarchitektur – Laboratory of Knowledge Architecture.

The Wissensarchitektur – Laboratory of Knowledge Architecture investigates in the basic interlink of humans and the physical environment on different scales in order to understand the impact of architecture and design for knowledge production and the accomplishment of current work tasks. The U_CODE project (02/2016 -07/2019) aligned seven international Partners (Germany, France, UK, Netherlands) from research and practice to answer the question on "How massive participation – tool-wise and method-wise – can to be done in Architecture and Urban-Planning?"; "How to avoid planning & communication disaster?", and "How to foster safer urban planning, massive involvement and digital co-design" (Figure 1).

Figure 1 – Ambition of the U_CODE H2020 Project

During the 36 month duration the three step U_CODE Approach and a large variety of tool-set (see Figure 2) were developed to reach the wisdom of the crowd. To align the sketched, developed and tested tools the Minimal Viable Process defined as the core to ensure a real, digital participation.

From June until September 2020, a piloting of U_CODE Approach and tools happened in collaboration with the City Planning Department of Dresden Municipality. Here the three-step approach and the core co-design tools were piloted under real life conditions and in line within the Dresden City Planning strategies.

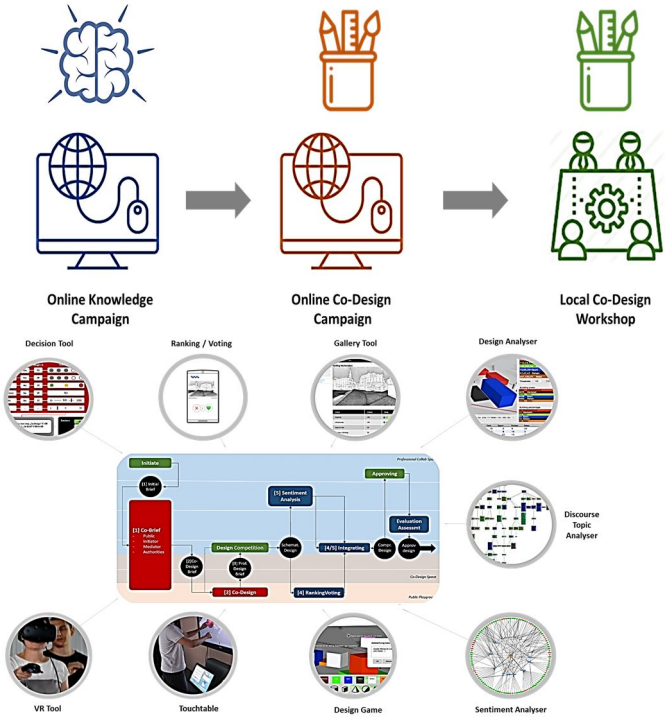

Figure 2 – U_CODE three-step approach and Tool-Set

In the first phase – Online Knowledge Campaign – over 1761 online entries from broad public (residents, TUD employees, students) were collected, expressing facts and knowledge as well as ideas on better usage of the Fritz-Foerster-Patz, a main junction and gateway to Dresden University Campus. These entrees were condensed and translated into a short Co-Design Brief. This based the second phase – Online Co-Design Campaign. Here the participants could express their Ideas in a 3-D Environment (Figure 2) and also comment other peoples design (Figure 3). Around 80 designs were presented in the public Co-Design Gallery.

Figure 2 – Online Co-Design – Design function Figure 3 – Online Co-Design - comment

The collected designs and comments briefly being analyzed and depict the Co-Design brief as base for the final phase – the Local Co-Design-Workshops. Here over 70 participants took the opportunity to co-design in groups and discuss with the experts from architecture and Urban Planning Departments. Several Stations with U_CODE tools (Figure 4)

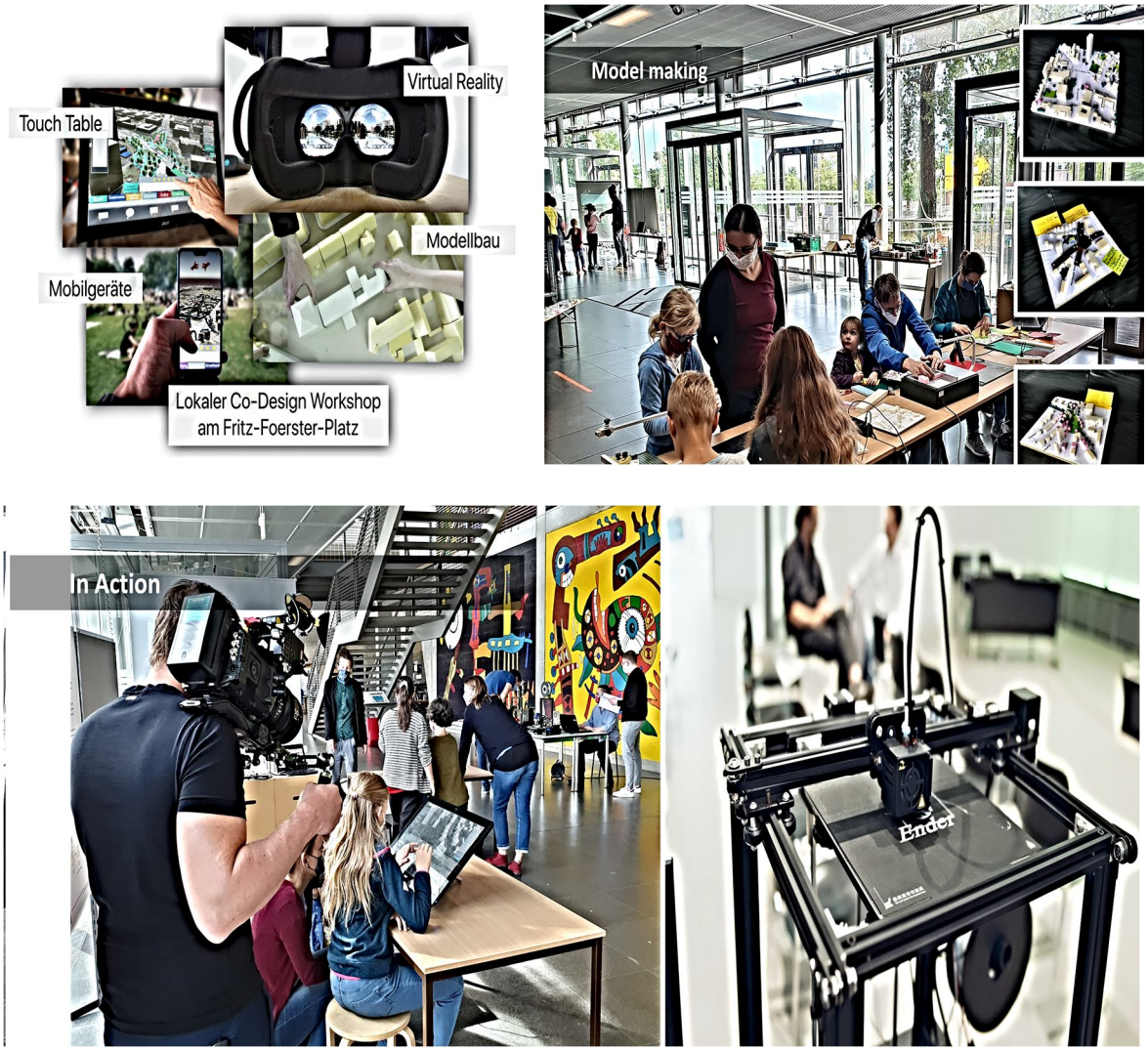

Figure 4 – U_CODE Local Co Design – Tools in action

All U_CODE approach and tools has been tested and further developed with Students from the Faculty of Architecture during the last years. Implementing the researched U_CODE procedures, tools and methods within the architectural education is an ongoing process. Moreover, it will further enhance the skills of future architects to co-create better cities together with citizen based on local knowledge.

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