

BOOK REVIEW

An Interdisciplinary Approach towards Academic Education on Sustainable Building Design

Editors: Vanja Skalicky Klemenčič, Vesna Žegarac Leskovar and Maja Žigart (University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture, Maribor, Slovenia)

The manuscript entitled “Interdisciplinary Approach Towards Academic Education on Sustainable Building Design” consists of contributions written by various scholars, Vesna Žegarac Leskovar, Vanja Skalicky Klemenčič, Marko Renčelj, Maja Žigart and Miroslav Premrov, from the Faculty of Civil Engineering, Transportation Engineering and Architecture of the University of Maribor (UM FGPA), Slovenia.

The topic of the book is very complex and comprehensive, since, as the title implies, it covers three broad and very significant topics which multiply their significance when correlated. Although the significance of education on sustainable development was already recognized in the 1970s, it is still a very current topic in scientific and teaching circles, and has become a new field of study and research.

The intention of the publication is to present the importance of an interdisciplinary approach towards academic education on sustainable building design, which is systematically presented through the topics covered in the book chapters. The publication contains theoretical knowledge on sustainability at different planning and design levels with a prominent scientific approach, as well as an overview of their practical application.

The first chapter indicates the importance of an integrative approach in education on a sustainable built environment, with an emphasis on the educational process with a multilevel interdisciplinary approach implemented at the UM FGPA in Slovenia. The following chapters cover various topics on sustainable building design (energy-efficient buildings, timber construction for low environmental impact, liveable environments and sustainable traffic design to achieve human well-being) that are relevant to achieve a broad range of knowledge in the subject area for further planning and design processes. Accordingly, the final chapter elaborates the application of acquired knowledge from various aspects of sustainable building design, presenting works made by students at the “Punkt Podlehnik” workshop, which discussed the design of a new mixed-use residential area in Podlehnik, Slovenia. The workshop was designed based on an interdisciplinary approach and represents the basic starting point of the publication and the connecting element through all topics. In addition to interdisciplinarity, the importance of teamwork in the planning and design process is highlighted here, which is another important topic for science and teaching as well as for the profession.

All chapters have a scientific character and are provided with appropriate figures, tables and references. From the topics covered, it is clear that this publication wishes to emphasize that the

living environment should be planned in a holistic manner, relating the building to the environment and vice versa. Despite the different research topics presented, it is possible to detect challenges and goals common to all disciplines and consequently addressed from different perspectives.

The above-mentioned findings allow me to recommend this manuscript for publication as a scientific monograph that can be used in university teaching and which could serve as an incentive for academics to think about starting new courses based on different forms of teaching while engaging experts from different scientific fields.

Based on the above-mentioned conclusions, I recommend this scientific monograph for publication with the conviction that it will contribute to understanding the comprehensiveness of education and sustainable building design topics, and will contribute to promoting awareness of the importance of interdisciplinarity and a holistic approach in the education of future architects and engineers.

A handwritten signature in blue ink, consisting of stylized, overlapping loops and lines, positioned below the main text.

Dr. Lea Petrović Krajnik, Assistant Professor

University of Zagreb, Faculty of Architecture, Department of Urban Planning, Spatial Planning and Landscape Architecture, Zagreb, Croatia