

In November 2014 in the series “The Library of the Educational Studies Journal» a new book by Edward F. Crawley, Johan Malmqvist, Soren Östlund, Doris R. Brodeur, Kristina Edström «Rethinking Engineering Education: The CDIO Approach» (2nd ed., translated by S. Rybushkina, science editor A. Chuchalin) will be out. Since an original work of professor Edward Krawley and his team was published by “Springer” in March 2014, experts overseas have already formed their opinions about it, so we offer you two reviews—by professor Mats Hanson from Sweden and professor Kleman Fortin from Canada.

Review of the book: Crawley E. F., Malmqvist J.,
Östlund S., Brodeur D. R., Edström K. (2014)
Rethinking Engineering Education: The CDIO
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Mats Hanson

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Mats Hanson

Professor, Emeriti Royal Institute of
Technology, KTH Sweden; Dean of Ed-
ucation, Skoltech. Address: 100, Novaya

str., Skolkovo, Odintsovsky district, Mos-
cow Region, 143025, Russian Federa-
tion. E-mail: hanson@skolkovotech.ru

The CDIO initiative started in the late 1990's with the collaboration of MIT, KTH, Chalmers and Linköping and is now established as a methodology that helps educators in the field of engineering to enhance the quality of engineering education.

Already the first edition gave a comprehensive introduction to Rethinking Engineering Education and the CDIO approach. It was successfully used at KTH when we redesigned the Bachelor's and Master's programs in Mechanical Engineering, Design of Materials, Vehicle Engineering and Design and Product Realization. CDIO as a concept and methodology is now well integrated in many programs at KTH.

The idea that CDIO is non-prescriptive and leaves a lot of freedom for local implementation and improvement is fundamental to the concept and is thus normally well received by faculty members.

Although the book focuses on engineering programs on a bachelor's level, it can be used in all levels of education, even at the PhD level, and the CDIO approach can be adopted more broadly to other programs, such as Mechanical Engineering.

The second edition has included new sections on leadership and entrepreneurship. This is a natural step, as almost all universities have innovation and entrepreneurship high on the agenda.

One particular strength of the book is that it explains the rationale for specifying learning outcomes in personal and interpersonal skills. This essential component is normally left out of many engineering programs.

The CDIO approach is a cornerstone at the Skolkovo Institute of Science and Technology, Skoltech, Moscow, Russia where we are designing and implementing a cross-disciplinary international graduate curriculum in Science, Engineering and Innovation from scratch.

In summary, the second edition of Rethinking Engineering Education, The CDIO Approach is of great value for all faculty members, educators and even students to better understand how to develop and implement engineering education program on all levels in higher education.