Innovation and Sustainability in the Project of Skyscrapers: A Case Study Focusing an Educational Approach

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Abstract

This paper describes an experiment of proposing the early stages of design of skyscrapers, questioning how those mega-structures will interfere over contemporary and future living and respective urban scene. A politic and economical background framed the context but was also flexible enough to not narrow students’ imaginations and decisions.

It starts describing the main problems skyscrapers in the 20th Century, proposing new approaches with new technologies and programmatic interpretations of those structures.

A case study presents three significant projects which were considered satisfactory as to represent the pedagogical bias adopted, which was describe as "Problem based Learning"

It ends observing that 70% of the projects collect during 3 years adopted traditional approaches to project, despite the scenario described. It finally suggests that new research should take in consideration not only the module, but the stages where the students are, comprising other modules that can be highly influential.

Keywords: architectural projects, skyscrapers, technological innovation, sustainable buildings, education towards cleaner production