



Use of rapid prototyping for volumetric analysis of architectural object

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When elaborating an architectural project, the studies of volumetric relationships, compositions and plastic issues are extremely important for the quality of the object to be designed. When teaching how to design, the teacher has the need to synthesize his experience and develop studies with students for projective guidance, stimulating the practice of form compositions and observation of models. The objective of this research is to study and propose a projective technique to stimulate compositional thinking and analyze architectural forms in the early stages of creation of plastic studies with the use of modeling and rapid prototyping as part of the creation process. Methodologically, digital modeling was used in SketchUp, extraction of model views and preparation of laser clipping planes. The adopted process approaches the initial phase of creation of volumetric studies with the use of new technologies of graphic representation and prototyping in counterpoint of strictly two-dimensional thinking in a low plant. As a contribution this work studied new techniques of project teaching with the introduction of modeling and prototyping technologies to aid creative processes in the teaching of architecture design, having achieved success in the parameter of perception and spatial understanding of the initial studies of architecture

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