3D Printing in architecture

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text (article)

Analítica

Currently, there have been significant advancements in technology in all areas of daily life. However, in education, the teaching methods and tools used have remained practically the same for generations. This suggests that although traditional methodology works perfectly, it must be adapted to existing technological advancements. One of the major recent discoveries is 3D printing, which offers the possibility of designing and printing any object, promoting visual-spatial intelligence and cooperative learning in the classroom. The emergence of additive manufacturing provides an opportunity to develop teaching-learning activities for acquiring new knowledge and developing creative and problem-solving abilities. For instance, students can learn to identify the views of an isometric drawing by creating a three-dimensional prototype. The objective of this work is to implement an educational method that promotes learning based on thinking and developing a project from an initial idea to the actual manufacture of an architectural model in an interdisciplinary way. This method will involve all the necessary processes for the model's construction, as occurs in the conception of a real architectural work. This procedure, based on learning by trial and error, is a cyclical methodology that allows the initial parameters to be modified based on the results obtained, both in the design process and in the construction phase. By using this method, students learn to learn with a practical methodology capable of identifying their own errors, correcting them, and giving the model maximum added value
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