

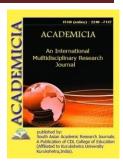
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AN OVERVIEW OF 3D PRINTING IN EDUCATION

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ABSTRACT

In a variety of topics and educational contexts, the development of additive manufacturing and 3D printing technology is creating industrial skills shortages and possibilities for innovative teaching methods. As a result, research on these behaviors is developing across a broad variety of education fields, although frequently without reference to other disciplines' research. To address this issue, this article brings together disparate sources of research to offer a current literature overview of where and how 3D printing is being utilized in education. Six use categories are identified and described as a result of research into the application of 3D printing in schools, universities, libraries, and special education settings: (1) to teach students about 3D printing; (2) to teach educators about 3D printing; (3) as a support technology during teaching; (4) to produce artefacts that aid learning; (5) to create assistive technologies; and (6) to support students. Although evidence of 3D printing-based teaching methods can be discovered in each of these six areas, adoption is still in its early stages, and suggestions for future study and education policy are offered.

KEYWORDS: 3D Printing, Education, School, Student, University.

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