World Academy of Science, Engineering and Technology
International Journal of Educational and Pedagogical Sciences
Vol:18, No:03, 2024

# Summer STEM Camp for Elementary Students: A Conduit to Pre-Service Teacher Training to Learn How to Include a Makerspace for an Inclusive Classroom

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**Abstract :** Many students such as students from linguistically or culturally diverse backgrounds and those with a disability remain chronically underrepresented in higher level science and mathematics disciplines as well as many hands-on-lab-based activities due to the need for remedial reading and mathematics instruction. Makerspace labs can be a conduit for supporting inclusive learning for these students through hands-on active learning strategies that support equitable access to STEM disciplines. Makerspace is a physical space where individuals gather to create, invent, innovate, and learn while using hands-on materials such as 2D and 3D printers, software programs, electronics, and other tools and supplies. Makerspaces are emerging across many P-12 settings; however, many teachers enter the field not prepared to harness the power inherent in a makerspace, especially for those with disabilities and differing needs. This paper offers suggestions on teaching pre-service teachers and practicing teachers how to incorporate a makerspace into their professional practice through guided instruction and hands-on practice. Recommendations for interested stakeholders are included as well.

**Keywords :** STEM learning, technology, autism, students with disabilities, makerspace
**Conference Title :** ICSERT 2024 : International Conference on Special Education Regulations and Technology
**Conference Location :** New York, United States
**Conference Dates :** March 18-19, 2024