

# STEM EDUCATION FROM THE PERSPECTIVE OF THE UNIVERSITY OF SYDNEY STEM TEACHER ENRICHMENT ACADEMY

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While STEM education is attracting much attention and is strongly advocated for, delivering on the promise of STEM education is still being researched (Rosicka, 2016; Margot & Kettler, 2019). The quest is on for understanding the essentials of STEM education and how to prepare teachers to capture the essence of STEM education in their professional practice. Drawing on ongoing research, the STEM Teacher Enrichment Academy, established within The University of Sydney in 2014, has developed in-service programs for teachers of both primary and secondary schools. The Academy is driven by the belief *that STEM education is not a 'fad' and has the potential to transform pedagogy, thus motivating and enthusing students to participate more fully in the STEM disciplines, continue into senior secondary STEM subjects and beyond, ultimately addressing a shortage in STEM-related careers.* With an expanding alumnus, currently at 800 teachers from 139 high schools and 370 teachers from 90 primary schools, the Academy has gathered scholarly evidence for the effectiveness and impact of its programs (Anderson, 2019; Anderson, Wilson, Tully, & Way, 2019).

This presentation will share the design and structure of the Academy's evidence-based programs as well as research on its efficacy.

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