

The Role of Design Thinking and Creative Thinking in STEM Education

Chin-Chung Tsai

Program of Learning Sciences and Institute for Research Excellence in Learning Sciences,
National Taiwan Normal University, Taipei Taiwan

Previous studies have explored various factors influencing the success of STEM education. In this talk, I will highlight the importance of design thinking and creative thinking in the process of STEM education. The definitions of design and creative thinking will first be introduced. The international trends for research in design and creative thinking will be presented. More importantly, the role of design and creative thinking in STEM education will be discussed in different perspectives. Future relevant research issues will be proposed for STEM educators.