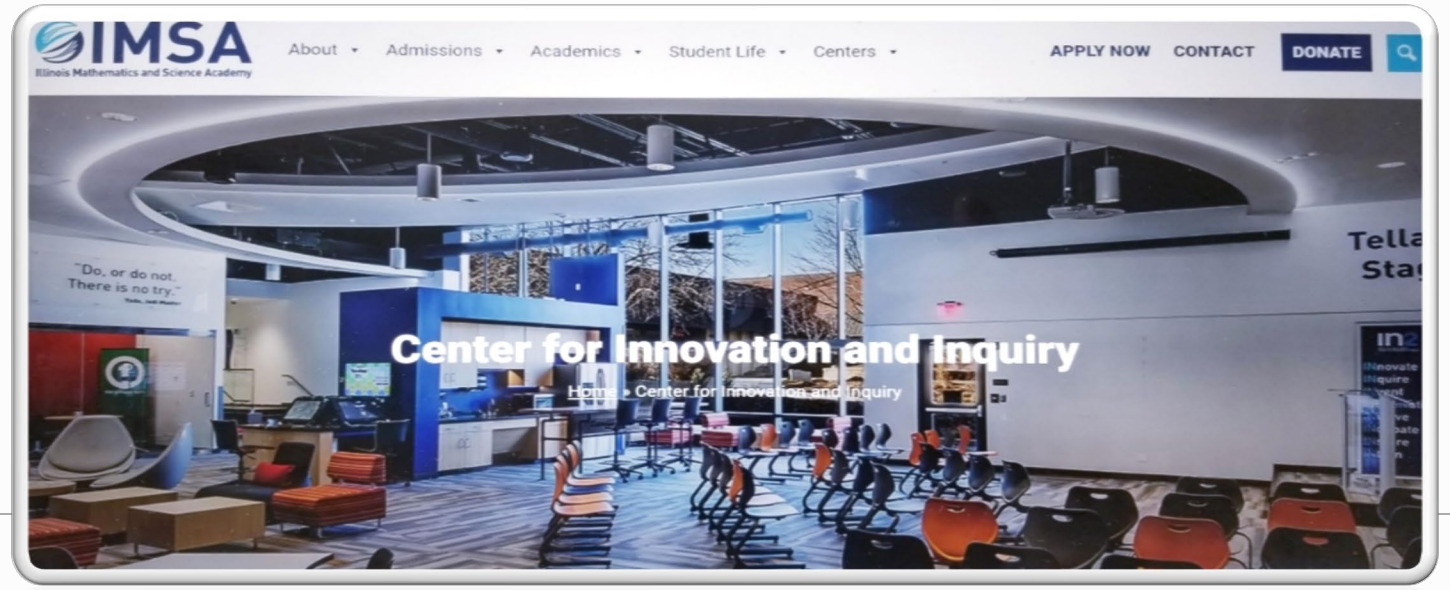
Received BEST BUSINESS MODEL Award

Smart Platform Evolution for Sustainable Open Innovation:

Implications for STEM Youth Programs



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Abstract

After a brief review of the platform economy and expanded open innovation, this study compares the two best STEM high schools (IMSA vs. TJHSST) and suggests future entrepreneurial STEM programs. More specifically, this research examines the missions and curriculums of the best STEM high schools. This study provides five modules of platform and OI for STEM. They propose to include the following modules in STEM education. Module 1 is educating the importance of growth and value in an increasingly digital economy for STEM education. Module 2 is how (exactly) platform-based business models work and how to implement them in the STEM curriculum. Module 3 is to educate case studies and examples from around the entrepreneurial ecosystem for STEM education. Module 4 is to design how to educate the allocation of various resources towards a better mix of business models in the STEM curriculum. Module 5 is how to educate starting an open innovation-based business model for STEM education. Finally, this study suggests an open innovation-based educational curriculum for STEM students and how to apply it in the curriculum effectively.

Keywords: Sustainable Open Innovation, Smart Platform, Platform Ecosystem, STEM education, IMSA, TJHSST