

## **[Keynote Speech]: Curiosity, Innovation and Technological Advancements Shaping the Future of Science, Technology, Engineering and Mathematics Education**

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**Abstract :** We live in a constantly changing environment where technology has become an integral component of our day to day life. We rely heavily on mobile devices, we search for data via web, we utilise smart home sensors to create the most suited ambiances and we utilise applications to shop, research, communicate and share data. Heavy reliance on technology therefore is creating new connections between STEM (Science, Technology, Engineering and Mathematics) fields which in turn rises a question of what the STEM education of the future should be like? This study was based on the reviews of the six Australian Information Systems students who undertook an international study tour to India where they were given an opportunity to network, communicate and meet local students, staff and business representatives and from them learn about the local business implementations, local customs and regulations. Research identifies that if we are to continue to implement and utilise electronic devices on the global scale, such as for example implement smart cars that can smoothly cross borders, we will need the workforce that will have the knowledge about the cars themselves, their parts, roads and transport networks, road rules, road sensors, road monitoring technologies, graphical user interfaces, movement detection systems as well as day to day operations, legal rules and regulations of each region and country, insurance policies, policing and processes so that the wide array of sensors can be controlled across country's borders. In conclusion, it can be noted that allowing students to learn about the local conditions, roads, operations, business processes, customs and values in different countries is giving students a cutting edge advantage as such knowledge cannot be transferred via electronic sources alone. However once understanding of each problem or project is established, multidisciplinary innovative STEM projects can be smoothly conducted.

**Keywords :** STEM, curiosity, innovation, advancements

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