

## **Title**

The need for STEAM in Society 5.0, an era of societal and technological fusion

Aki Yamada

*Tamagawa University, Liberal Arts Program, Japan*

*E-mail: akiyamada124@lba.tamagawa.ac.jp*

## **Abstract**

In today's information driven society, technological advances in computing, communications, information handling, etc. have become strongly integrated into our everyday lives, to the point where it would be extremely challenging to imagine our modern lifestyles otherwise. The Japanese government envisions the next societal revolution as Society 5.0, where advanced technologies and service platforms integrate with and empower individuals in a human-based society. This paper will examine "next generation competencies" needed to carry out this vision. Where Science, Technology, Engineering, and Mathematics (STEM) education has traditionally focused on technical skills and knowledge, this paper will look at the potential role and benefits of incorporating liberal arts education into these technical studies. This concept of integrating the liberal arts into STEM education is known as STEAM. In this regard, Japanese higher education is currently facing the challenges of overcoming an educational structure that is rigidly compartmentalized by discipline. The purpose of the study is to create a foundation for clarifying the role of interdisciplinary education in overcoming the vertical division of academic disciplines and restoring the "integrated nature" of scholarship. This study seeks to contribute to an understanding of how the humanities, social sciences, and arts can be used to enhance STEM education, and furthermore, how this STEAM approach to education is key to enabling the vision for Society 5.0.

## **Keywords:**

Education, STEM, STEAM, Interdisciplinary, Society 5.0, next generation competencies, global skills