

How stem education improves student learning

[Education](#)



According to Sanders, the STEM system, introduced in the 1990s, had all along been used by NSF to refer to separate subjects of “ science, technology, engineering, and mathematics while some people thought it STEM education referred to interaction among the stakeholders” (2009, p. 20). However, due to the global challenges and competition faced by the U. S from other countries like China and India, the STEM program was heavily backed up by the government by providing funds and advocating the integration of the STEM subjects to other ordinary school subjects (Clemson University, n. d). As a result, the current education system of K-12 in the U. S implements the STEM curriculum and education policy.

On the other hand, several forms of integrative stem education can be identified in the American education system. Firstly, integration of engineering with high school education subjects, particularly science and mathematics, is one form of integrative learning that enables and tutors to address problems in the real world (North Carolina State University, 2011). Further, North Carolina State University states that various strategies have been implemented to enable instructors to incorporate engineering concepts when training students on science and mathematics (2011). This form of integrative learning is important not only to the students but also to the nation as a whole. This is because students are able to identify problems in the real world and provide solutions based on ideas from a multi-disciplinary approach.

Another form of stem integration is the inclusion of arts and literary subjects to the main STEM subjects. According to North Carolina State University, students need to have an array of diverse skills in order to effective engineer solution to the problems existing in the current society (2011). In this form of <https://assignbuster.com/how-stem-education-improves-student-learning/>

integration, students get to learn effective communication skills through literary subjects something that is important for higher education or for effective working relations. In addition, students gain art skills that can be related to STEM subjects in this form of learning integration. This is arguably a good format of learning integration because it enables students to develop creativity when engineering solutions to economic problems.

Finally, integrative STEM education involves the incorporation of technological learning modules in the school curriculum. The inclusion of technology in the education system enables students to not only learn effectively by providing a wide base of education resources particular through the internet but also enables students to understand entertainment aspects that form part of the society needs (North Carolina State University, 2011). In addition, incorporation of technology in training education provides a platform for students and tutors to effective exchange information during the learning process. This is essential for implementing current social, economic and political issues in school curriculum hence promoting creativity in providing solutions among students.

In collusion, integrative STEM education system was introduced with the aim of providing solutions to current developmental issues in the U. S. From the above discussion, it is evident that the various forms of integrative STEM education address on issues that are key to development in various sectors in the U. S. In addition, the different forms of STEM provide better opportunities for students by aligning their education to the industry needs hence enabling them to easily gain employment opportunities.