

STEM Education System in South Carolina

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STEM education involves a curriculum focused on specific disciplines that include science, technology, engineering, and mathematics. It is also considered an integrative STEM education that involves students learning the meta-discipline and transforming the traditional classroom into a more practical and engaging process. The STEM education system was developed and implemented in the U.S and specifically in South Carolina in the early twenty-first century through the National Science Foundation to enhance the careers that involve the integrated knowledge from the STEM subjects.

STEM education implemented in the South Carolina school system is essential for students and the careers in these fields. The STEM education system's major importance is on students by enhancing creativity, improving their literacy in these fields, and promoting innovation for their future careers (Burrows et al., 2017). The system transforms the class into experiments and research in the different fields of the fields involved in the STEM system. Students also get a chance to understand how research is conducted for topics in these subjects, thus enhancing knowledge and skills that they can use in the workplace.

The STEM education system also improves the South Carolina state curriculum while improving its competitiveness within the U.S. In turn, U.S education is enhanced rapidly, thus enhancing the position of the U.S in science and other STEM-related fields globally. The STEM system helps the U.S maintain a good score in the subject, making it highly competitive for jobs and opportunities in these fields (Starks & Matthaesus, 2018). The U.S economy is highly improved through the STEM subjects where students pursuing these subjects become efficient in research and experiments that help produce new advancements and innovations that help in the global ranking.

STEM education is effective in society when it maintains a high quality that offers the best results to the students and the society. A quality STEM education allows students to connect between the academic concepts taught in class with the real-world applications and situations. The academic concepts taught in the classroom are directly and also indirectly applied in real-world applications. The STEM education system is considered high quality when it can instill knowledge, skills, and experience in students on different theories and experiments (Kloser et al., 2018). It is also of high quality when it can prepare students for the workplaces that require skills and knowledge in the subjects involved in the STEM system.

STEM system, compared to the traditional K-12 classrooms, offers a higher quality education due to the transformation of the students' interaction between themselves, teachers, and professionals in the STEM fields. Through the system, students can learn about teamwork and collaboration between themselves and peers and with teachers. Students conduct researches and experiments with individuals who help them understand both the concept and skill of how the researches related to real-world applications. A quality STEM education is also the one that enhances the connection between students and society by allowing them to interact with professionals involved in the fields that the STEM system focuses on, including science, technology, engineering, and mathematics. The connection and interactions help them identify their strong areas in the fields, thus deciding on the areas they would like to be involved in to help the society.

A statistic I'd like to share about STEM education in South Carolina is the difference in teachers' pay in the STEM major and those in non-STEM major.

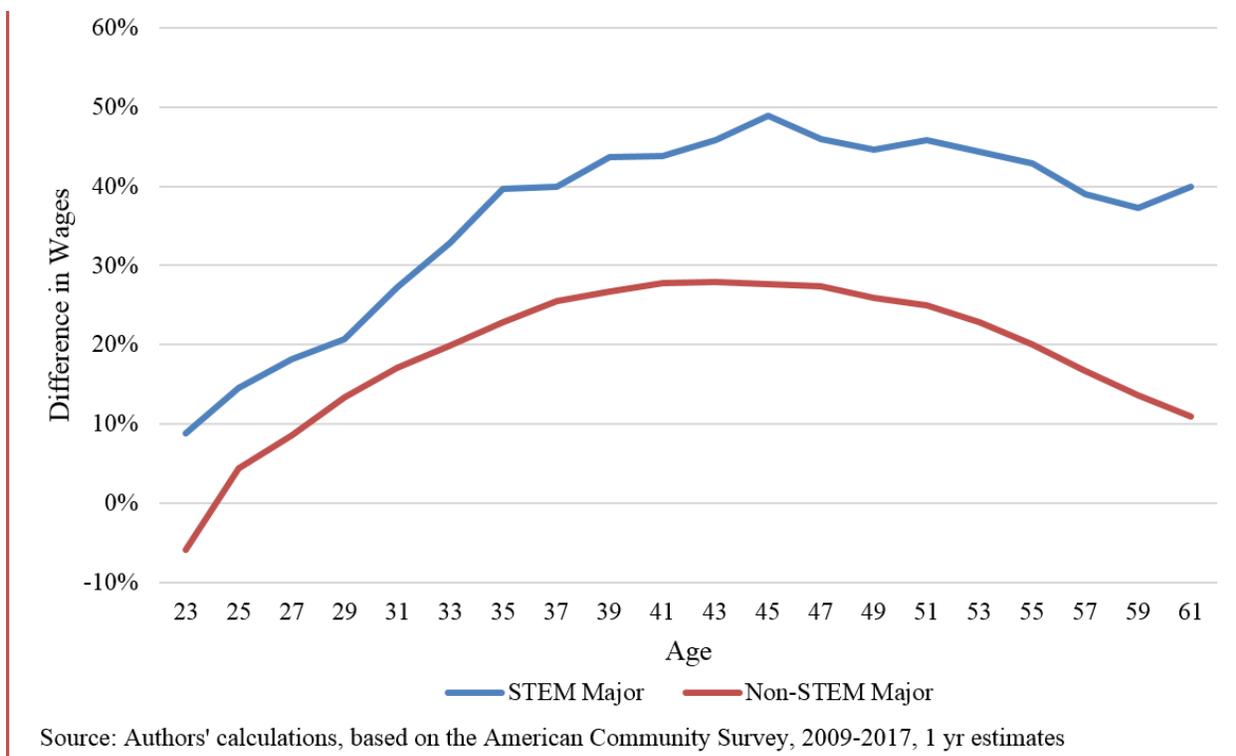


Figure: Estimated Teacher pay in South Carolina

According to Tran (2017), the difference in teachers' pay, as illustrated in the figure, demonstrates the STEM system's importance to the teachers and students. It illustrates that education quality through the system is enhanced to a level that students acquire a high level of knowledge and skills required in the workplace. Institutions in South Carolina have changed their traditional system into the STEM system that allows students to acquire most from the STEM system subjects. Jobs related to STEM are also estimated to have increased in South Carolina since introducing the system in the institutions within the state. This is due to an increase in the number of students competent to performing efficiently in the fields.

In conclusion, the STEM education system in South Carolina has improved the education quality within the state and improving the fields involved in the system. Through the system, students acquire enough skills, knowledge, and experience in performing researches and

experiments that contribute to the research in the past. The STEM education system has also enhanced the demand for these fields in workplaces and contribution to the national economy. The U.S remains one of the leaders in the science, technology, engineering, and mathematics fields globally due to the STEM education system's contribution that prepares the students in works for these fields.

References

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