





Special Issue Reprint

# Computer Science and Engineering Education for Pre-collegiate Students and Teachers

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Now more than ever, as a worldwide STEM community, we need to know what pre-collegiate teachers and students explore, learn, and implement in relation to computer science and engineering education. As computer science and engineering education are not always "stand-alone" courses in pre-collegiate schools, how are pre-collegiate teachers and students learning about these topics? How can these subjects be integrated?

Explore six articles in this book that directly relate to the currently hot topics of computer science and engineering education as they tie into pre-collegiate science, technology, and mathematics realms.

There is a systematic review article to set the stage of the problem. Following this overview are two teacher-focused articles on professional development in computer science and entrepreneurship venture training. The final three articles focus on varying levels of student work including pre-collegiate secondary students' exploration of engineering design technology, future science teachers' (collegiate students) perceptions of engineering, and pre-collegiate future engineers' exploration of environmental radioactivity.

All six articles speak to computer science and engineering education in pre-collegiate forums, but blend into the collegiate world for a look at what all audiences can bring to the bout these topics.

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