Stuck in the Shallow End: Education, Race, and Computing (MIT Press)

Jane Margolis
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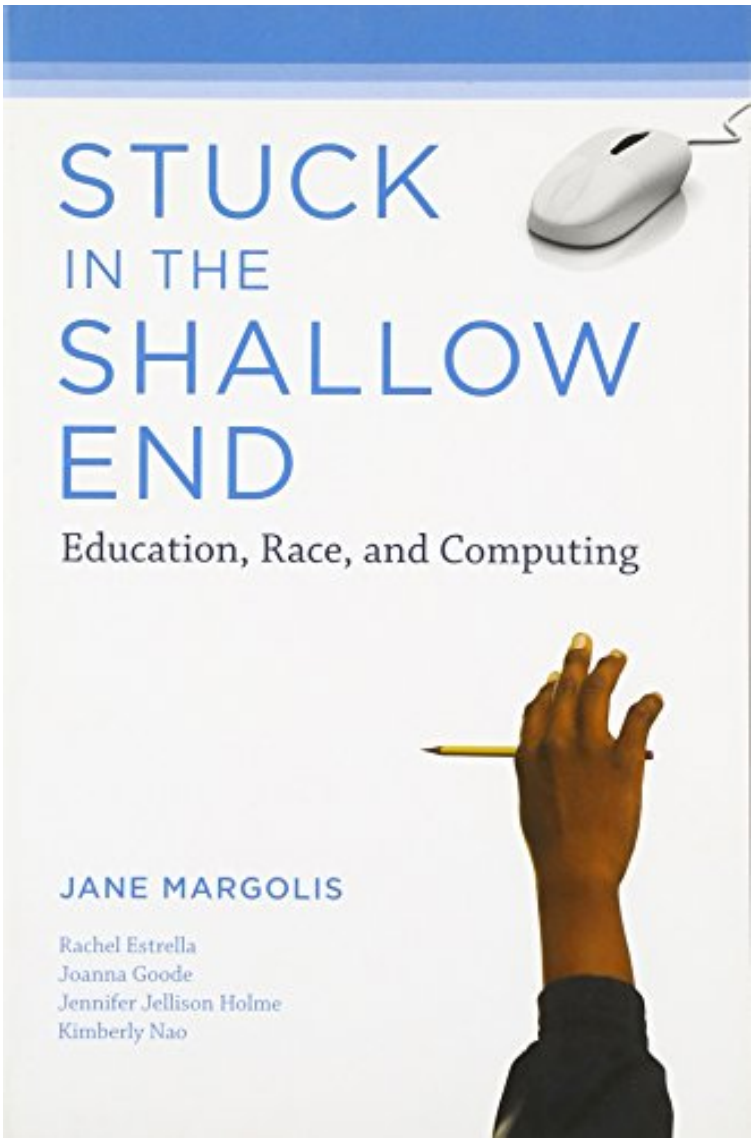

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Jane Margolis : Stuck in the Shallow End: Education, Race, and Computing (MIT Press) before purchasing it in order to gage whether or not it would be worth my time, and all praised Stuck in the Shallow End: Education, Race, and Computing (MIT Press):

0 of 0 people found the following review helpful. Stuck in the Shallow End: Education, Race, and ComputingBy The Kwanzaa Coloring BookDuring the summer of 2014, I attended a Tapestry Workshop, a program designed to attract

diverse students to computing, on the campus of the University of California, Irvine, at the Donald Bren School of Information and Computer Science. At the weeklong training program, teachers and professors presented strategies that they have found to be effective in recruiting African American, Hispanic, and female students into computer science; the speakers were inspirational. The teachers who attended the workshop were provided with resources, too, such as the book Stuck in the Shallow End. More important, I decided to read the book to find out how I could recruit diverse students to my AP Computer Science class. At the beginning of the school year, I approached my administrators about offering an AP computer science course. I met with the principal and assistant principal of instruction to present the benefits of the class. The principal had taught science, which is rare; most administrators do not have a background in STEM, and it didn't take much to convince her of the importance of the class. In addition, I convinced counselors of the importance of getting underrepresented students into the AP Computer Science class through casual conversations. It was harder to convince the assistant principal of instruction because I don't think she had a STEM background, and she had to consider the scheduling implications of offering the class. In the end, the principal of instruction decided to offer the class to a group of 22 students who were African American, Hispanic, and females. Surprisingly, it is not hard to get students interested in computer science, especially if I can show them some of the applications of the subject. For example, I developed a presentation about computer science using information I obtained from the Tapestry Workshop that included Sphero, a robot that is controlled by an app on a smartphone. I think the students were impressed by the salaries of computer scientists and the future prospects of computer science as a career field, but Sphero was a rock star. More than that, after my presentation to an analytic geometry class, students from all over the school heard about Sphero and would interrupt my class to see Sphero perform. I used some of the strategies in Stuck in the Shallow End to offer AP Computer Science to students who I think would not otherwise have taken this course. Yet as I taught them, I noticed one glaring weakness in the book and my teaching: we had both completely ignored the students. Frederick Douglass speech said it best in 1883 to a congressional church in Washington D. C.: "If we find, we shall have to seek. If we succeed in the race of life, it must be by our own energies, and our exertions. Others may clear the road, but we must go forward, or be left behind in the race of life." What I think he was trying to say is that students have the most responsibility for their success. The book and the national debate on how to increase the number of underrepresented groups in computer science have ignored the fact that students, regardless of their background, have some accountability for their success.3 of 3 people found the following review helpful. A must-read for teachers in all STEM fields.By Bennett BrownMargolis and company have led an incredibly effective program to engage Black, Hispanic, and female students in computer science. This book reveals how the underlying problems they discovered were causing minorities and women to be underrepresented in the CS pipeline. Profiling three very different schools, they find that each school channels the majority of talent away from computer science, but in different ways. Teachers from any school will find unexpected reflections of themselves and their school in Stuck in the Shallow End, and in the end will put down the book with greater insight into how their school's programs might be contributing to the problem. An important book to read for educators and systemic thinkers, its lessons apply not only to computer science but to all fields in which women and minorities are under-represented.I've mentioned my high regard for Stuck in the Shallow End to several leaders in computer science education. All gave a surprisingly similar response: "That book changed my career." Through this book, our efforts to address a national crisis -- in which we find ourselves devastatingly short on people with the skills or interest in computer science -- become a direct descendant of the civil rights work that inspired a generation. A must-read.0 of 0 people found the following review helpful. Great BookBy Raymund C. VergaraGreat book all teachers should read

An investigation into why so few African American and Latino high school students are studying computer science reveals the dynamics of inequality in American schools.The number of African Americans and Latino/as receiving undergraduate and advanced degrees in computer science is disproportionately low, according to recent surveys. And relatively few African American and Latino/a high school students receive the kind of institutional encouragement, educational opportunities, and preparation needed for them to choose computer science as a field of study and profession. In Stuck in the Shallow End, Jane Margolis looks at the daily experiences of students and teachers in three Los Angeles public high schools: an overcrowded urban high school, a math and science magnet school, and a well-funded school in an affluent neighborhood. She finds an insidious "virtual segregation" that maintains inequality. Two of the three schools studied offer only low-level, how-to (keyboarding, cutting and pasting) introductory computing classes. The third and wealthiest school offers advanced courses, but very few students of color enroll in them. The race gap in computer science, Margolis finds, is one example of the way students of color are denied a wide range of occupational and educational futures. Margolis traces the interplay of school structures (such factors as course offerings and student-to-counselor ratios) and belief systems -- including teachers' assumptions about their students and students' assumptions about themselves. Stuck in the Shallow End is a story of how inequality is reproduced in America -- and how students and teachers, given the necessary tools, can change the system.

Forty years after Brown v. Board of Education, Jane Margolis exposes a barely recognized fact: minority children are

still stuck in separate and unequal educational settings. Margolis points out why having high-tech equipment without a system in place to foster critical thinking does little to close the achievement gap in poor communities. (Geoffrey Canada, President/CEO, Harlem Children's Zone, and author of Fist Stick Knife Gun: A Personal History of Violence in America)This a highly compelling book that should be read by everyone interested in the future of science and engineering education in the US. (Maria Klawe, President, Harvey Mudd College) Stuck in the Shallow End is at once heartbreaking and inspiring. Its close up look at three high schools shines penetrating light on how well-meaning educators construct social inequality through unquestioned assumptions and everyday practice. At the same time, it also reveals their eagerness to become righteous change agents, if given hope, opportunity, and support. From swimming pools to computer science labs, Margolis and her colleagues have much to teach educators and policymakers about urban schools. (Jeannie Oakes, Presidential Professor in Education Equity, UCLA)Students of color may be stuck on the educational 'shallow end' now, [Margolis] writes, but it is possible to end their segregation through systemic reform. (Education Week) Stuck in the Shallow End is an insightful, nuanced view into a complex set of problems. In the end, this book gives us hope that there are solutions. Jane Margolis and her colleagues show us the insights that social science can offer us in trying to understand (and meet!) the challenge of broadening participation in computing. (Mark Guzdial , School of Interactive Computing, Georgia Institute of Technology)In Stuck in the Shallow End, Jane Margolis and her team explore racial disparities in computer science by studying structural details as well as the belief systems and psychological aspects that influence 'true access.' This book shows that having physical access to computers is not the same as having intellectual access to computer science. Stuck in the Shallow End should be required reading for all educators who care about our children and their futures. (Indira Nair, Vice Provost of Education, and Professor, Engineering and Public Policy, Carnegie Mellon University)About the AuthorJane Margolis is a Senior Researcher at the UCLA Graduate School of Education and Information Studies and the coauthor of Unlocking the Clubhouse: Women in Computing (MIT Press). She was a 2016 White House Champion of Change for her work addressing underrepresentation of students of color and women in computer science.Joanna Goode is a Professor of Education at the University of Oregon and is coauthor of the Exploring Computer Science program.