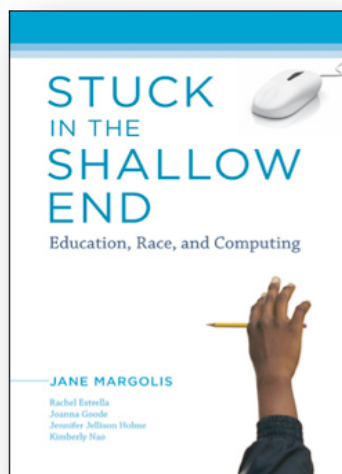


## BOOK ANNOUNCEMENT



Please consider Jane Margolis' (with co-authors Rachel Estrella, Joanna Goode, Jennifer Jellison Holme, and Kim Nao) new release, *Stuck in the Shallow End: Education, Race, and Computing* (MIT Press 2008), as its research is pertinent to your program and will be of considerable interest to your organization. This NSF-funded research is a compelling case study of how students of color are denied access to higher-level educational opportunities. (See Summary Points at end).

Lead author Jane Margolis is a Senior Researcher at the Institute for Democracy, Education, and Access at UCLA's Graduate School of Education and Information Studies. She is the co-author of the award-winning *Unlocking the Clubhouse: Women and Computing* (MIT Press 2002).

### **EDITORIAL REVIEWS:**

"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*

"*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

"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

"This is a highly compelling book that should be read by everyone interested in the future of science and engineering education in the US."

—**Maria M. Klawe**, President, Harvey Mudd College

"*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

### **STUCK IN THE SHALLOW END SUMMARY POINTS:**

Researchers funded by the National Science Foundation have found that African American and Latino/a high school students are being denied access to learning computer science – one of the critical new fields of the 21<sup>st</sup> century. Their research tells a detailed and compelling story of disparities in learning opportunities that fall along race and socioeconomic lines. This is happening at a time when national policy has declared an urgent need for increased math, computer science and engineering expertise and for the participation in these fields to be more diverse.

#### o Challenging the Myth of Technology as the "Great Equalizer"

While students in white, more affluent neighborhoods are more likely to be given access to the college preparatory problem-solving and deep logical thinking of computer science, schools with high concentrations of students of color are commonly offered only the rudimentary "point and click," "shallower" end of computing expertise. And so, despite a pervasive hope that technology can level the educational playing field, disparities in computer science learning opportunities in schools often fall along racial and socioeconomic lines, and a wide gap exists between which students are learning what about technology.

#### o Uncovering "Virtual Segregation"

At a time when computer science is touted as a gateway to advancement across fields and careers, this research identifies "virtual segregation" as an insidious phenomenon that allows us to believe that we are moving towards equality, that everyone has a chance and a choice, while in reality, as evidenced by the schools in this study, the playing fields are still so uneven that different groups of students continue to receive different and very unequal types of education, opportunities, and levels of knowledge.

#### o Beliefs Mask Unequal Access: A Lens on a Much Larger Issue

This research challenges beliefs that low participation in computer science is the result of individuals' lack of motivation, interest, capacity, and other innate characteristics. Through an unexpected metaphor that draws connections between the racially-biased beliefs that contribute to the race gap in computer science and those that rationalize segregation in swimming, the researchers show how low participation of people of color in very different activities has been falsely attributed to innate characteristics rather than a history of denied access. This metaphor vividly illustrates the processes by which students of color have been and continue to be "stuck in the shallow end," not just in computer science or swimming, but also in broader terms. Ultimately, the research serves as a lens on a much larger issue - the production and reproduction of inequality in our society.

#### o Taking Action in Response to the Inequities

Refusing to let their research become just a report sitting on a shelf, the researchers drew on their findings to form an interdisciplinary, K-12/university partnership with a mission of increasing rigorous computer science learning opportunities at the high school level, especially in schools with high concentrations of students of color. *Stuck in the Shallow End: Education, Race, and Computing* (MIT Press, 2008) includes a full account of how these inequities need to be addressed, making the text relevant not only to those interested in computer science education from afar, but also to those educators and policy makers seeking models of intervention for more equitable experiences and outcomes for our students.

### **FOR MORE INFORMATION:**

<http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=11550>