The following “computer science in education” talk is part of our celebration of Computer Science Education Week (December 8-14, http://csedweek.org).

Computer Science departments constantly struggle with issues of enrollments (whether on the way up or down), diversity, and broadening participation in their curricula. Much time and energy has been devoted to the design of introductory courses that serve as entry points into the programs. Beyond the enrollment and diversity issues, the community has experimented with different programming languages, platforms, and environments in the quest for designing courses that would help broaden participation and present a rigorous syllabus that prepares students for advanced study in computing disciplines. For the past several years, my colleagues and I have experimented with several different contexts to bring the learning of computing to students. These include the use of personal robots, graphics, data and information-centric approaches. In this presentation, using the backdrop of different contexts, I will reflect upon the bigger picture of the challenges of introducing computing to students of all ages.

Deepak Kumar is a Professor of Computer Science at Bryn Mawr College. His research interests include Artificial Intelligence (Knowledge Representation, Planning & Acting, Developmental Robotics, Personal Robots), Science of Information, Information Visualization, Creative Computing, Computer Science Education. He is the Associate Director for Education & Diversity of the Center for Science of Information (soihub.org, an NSF STC Center). He is a member of the ACM Education Council. He has a PhD in Computer Science from University at Buffalo.