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Flipping the Discrete Mathematics Classroom with Interactive e-Textbooks. Preliminary report.

At Metropolitan State University, discrete mathematics is offered to students in computer science or math teaching, and the prerequisite is college algebra. Because of the diverse student needs and preparations, the math department and its instructors constantly face challenges in choosing textbook and defining expectations. In this presentation, the author talks about his experiment of using zyBook for Discrete Math, an interactive e-textbook, in a flipped classroom. He will demonstrate how zyBooks work, describe his design of flipped instruction, and show the positive student responses and improved learning outcomes measured from the experiment. He concludes the presentation with advice for those who wish to try zyBooks or use flipped instruction in similar courses. (Received June 09, 2015)