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*Connecting Discrete Mathematics to School Mathematics.*

Future high school teachers are among the population of undergraduates frequently enrolled in Discrete Mathematics courses, so it is appropriate to address topics that attend to the needs of future teachers. For example, the Binomial Theorem has direct connections to multiplying polynomials, a skill students use throughout their mathematical studies. In this session, we will share an annotated lesson plan on the Binomial Theorem that emphasizes student thinking and highlights connections between the mathematics content and content used in secondary teaching. This lesson motivates the Binomial Theorem and examines how it arises in various contexts such as Pascal's Triangle, multiplying polynomials, and binomial coefficient identities. The lesson offers an opportunity for undergraduates to learn combinatorial proof techniques and compare them to the algebraic techniques they are often more familiar with. (Received September 23, 2018)