1035-Z1-789   **Michael David Smith*** (`smithm@morningside.edu`), Department of Mathematical Sciences, Morningside College, 1501 Morningside Avenue, Sioux City, IA 51106. *"In America", the combinatorics are not "as simple as pie".* Preliminary report.

In Morningside College's "Introduction to Mathematics Systems" course, I am using combinatorics as the topic to bridge the gap into higher mathematics. I made this choice because combinatorics:

(a) Starts out concrete enough to be tractible for students. (b) Contains plenty of conceptual and computational proofs. (c) Has many tangible applications, especially in probability. (d) Is not likely to be covered in modern algebra classes.

In this talk, we analyze the mathematics in the carnival game scene of Jim Sheridan's poignant movie "In America". In doing so, we explore a way to incorporate technology, guided proofs, and plenty of combinatorics (both abstract and concrete) in a final assignment for a "bridging the gap" course. (Received September 15, 2007)