

Abstract Submitted
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Zoom In! A Nanoscience Claymation Video Project Designed for Students K-3¹ NANCY SANDLER, SERGIO ULLOA, KATE RANEY, Ohio University — Nanoscience concepts are somewhat new and strange to the general public, and although simple to explain, have not permeated through the various information channels available for public education. This is particularly true for children. Because young people in levels K-3 are exposed to digital media on a daily basis, we recognized the importance of reaching them using a familiar format. Hence, we developed a claymation Zoom In! movie that follows the “adventures” of Gwen Pym, a girl “nanoscientist,” in her quest for a dress that cannot be stained. The pilot video presented in this talk provides a novel and imaginative way to capture young children’s attention while focusing on basic nanoscience concepts. By reducing Gwen to a sub-millimeter scale, concepts of scale, surface tension, hydrophobicity induced by roughness, are all exemplified in simple terms accessible to this age range. The movie is accompanied by supporting material aimed at schoolteachers, covering the physics concepts involved in the various aspects of the adventure, and including suggested on-class activities that expand on these points. The final product is contained in a DVD that was distributed to the local elementary schools in the South East Ohio area.

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