

Abstract Submitted
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After-school, Activity-based Physical Science in a Low-income, Rural County STACI SMALL, BEN RYAN, NIK VANN, CHRISTOPHER MOORE, Longwood University — Longwood University's Society of Physics Students conducted a six-week, activity-based after-school program for middle-school students in partnership with a rural low-income school system. Hands-on learning activities were designed and implemented to improve content knowledge in typically low-scoring standardized testing areas in the physical sciences. For example, we used colored yarn of different lengths to help demonstrate visible light in the electromagnetic spectrum along with the relationship between wavelength and frequency. Other topics were explored, such as reflection, refraction, sound and inference. At the end of the six-week program, a science exposition was held where the students came to Longwood and participated in more sophisticated experiments, such as liquid nitrogen demonstrations. After the exposition, Longwood University held a small awards ceremony in which the parents were invited to watch their students receive an award congratulating them on completing the program and welcoming them into the Lancer Discovery Club.

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