

Abstract Submitted
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Science Understanding through Playground Physics: Organized Recess Teaching (SUPPORT) RUSSELL KINCAID, Wilmington College — From 1995-2007, U.S. science students in grade four scored higher than the scaled TIMSS average, but their scores did not improve over this time. Moreover, in the area of physical science, the U.S. scored significantly lower than several Asian countries, as well as Russia, England, and Latvia (TIMSS). Methods to enhance student achievement in science are still being sought. An approach to utilizing playground equipment as a teaching tool for a variety of physics concepts was developed as a physical science teaching method. This program established an appropriate set of experiments, coordinated the effort with local school districts, and implemented a brief pilot study to test the teaching methodology. The program assigned undergraduate middle school science education majors to teach small groups of fourth grade students. The experimental group used the newly developed “Playground Physics” methodology while the control group used traditional approaches. Follow up activities will include an expansion of the duration and the scope of the program.

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