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Science Education Research Using Web-based Video¹ LISA TAR-MAN, William Penn Senior High, PAMELLA FERRIS, Riverside Middle School, DAN BRUDER, Rensselaer Polytechnic Institute, NICK GILLIGAN, The Pingry School, JAMES MORGAN, JOHN DELOOPER, Princeton Plasma Physics Lab—The Princeton Plasma Physics Laboratory in collaboration with teachers and students has developed a variety of educational outreach activities to demonstrate basic physical science principles using a variety of instructive and entertaining science demonstrations at elementary, middle and high school levels. A new effort has been initiated to demonstrate this material using web based videos. This can be a resource for the teacher, parent or student. In addition, the video is coupled to web-based lesson plans for the educator. The goal of these videos and lesson plans is to create enthusiasm and stimulate curiosity among students and teachers, showing them that science is interesting, fun, and within their grasp. The first video demonstrates a number of activities one can accomplish using a half-coated fluorescent tube. Additional demonstrations will be added over time.

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