Infusing Plasma into the High School Curriculum through Teacher Professional Development

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A 2004 report submitted by the Fusion Energy Sciences Advisory Committee noted a critical need for action to prevent a shortage of fusion researchers, specifically highlighting the need for more students to enter the field. In an effort to expose students to plasma physics early on, PPPL created a professional development program for teachers, which provides the resources for infusing plasma into high school curricula. Over the last 15 years, teachers from across the country have participated in a one-week Plasma Camp course including lectures, labs, tours, curriculum planning, and classroom equipment funding opportunities. A 2005 survey indicated that at least 75% of program alumni used material from the workshop annually, primarily in the form of demonstrations.\footnote{D. Nuzzolese, et al. \textit{A Decade of Plasma Camp}. APS DPP 2008.} In a 2013 survey, participants were asked to detail how they use the workshop information in their classrooms, how the program has altered their teaching methods, and what factors, if any, have hindered the implementation of a plasma curriculum. Results of the 2013 survey will be presented.

\footnote{D. Nuzzolese, et al. \textit{A Decade of Plasma Camp}. APS DPP 2008.}