

Abstract Submitted
for the APR20 Meeting of
The American Physical Society

An improved course for non-scientists and preparing educators¹

GAY STEWART², West Virginia University — Effective teaching resulting in useful learning in large lecture formats is a critical challenge. The Next Generation Physical Science and Everyday Thinking (Next Gen PET) grew from Physics and Everyday Thinking (PET), shown to significantly affect both future teacher content knowledge and understanding of how students learn science. Developed with NSF support, it has been taught at two-year and four-year institutions, adapted for science methods courses, and offered as a workshop for practicing elementary teachers. However, it did not fit the the most widely used general education science class model (lecture and lab) that fulfills general education requirements at most colleges. With NSF support, in collaboration with PET creator Fred Goldberg, WVU faculty adapted Next Gen PET to work as a general education course which empowers faculty to easily implement education research in their physics courses by providing a well-tested and refined version of the curriculum that fits the lecture/lab format and makes full use of the rich supporting faculty resources developed for PET. The course serves particularly well for future high school teachers of other disciplines to gain required knowledge. Implementation details and some findings will be presented.

¹This work has been funded in part by the National Science Foundation, DUE-1611738

²this talk cannot conflict with Ted Hodapp's invited talk on the Effective Practices for Physics Programs, which I am helping present.

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Date submitted: 08 Jan 2020

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