

Abstract Submitted
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Examining Physics Students Interpretation and Application of an Ethical Framework During a Unit on the Development of the Atomic Bomb EGLA OCHOA-MADRID, ALICE OLMSTEAD, BRIANNE GUTMANN, Texas State University, TEXAS STATE PHYSICS EDUCATION GROUP TEAM — The societal implications of technology developed through physics are not always clear. Physicists need to use ethical reasoning skills to maneuver through morally ambiguous situations. For this reason, curricula for physics students should also be geared towards developing these skills. My research focuses on the effects of ethical discussions in the physics classroom. I will present an examination of how students interpret and apply an ethical framework to conversations about the development of the atomic bomb and current STEM research. Using both student written work and video-recordings of in-class discussions, I analyze how the subject matter and interpersonal dynamics may influence students' interactions. I will present preliminary evidence that students avoid discussing the negative implications of the ethical framework, but also demonstrate a range of productive approaches to applying the framework which contribute to strong ethical arguments.

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