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Physics teacher preparation: The conflict between recommendations and reality¹ DAVID E. MELTZER, Arizona State University — For most of the past 200 years, one of the recognized objectives of college physics instruction has been to prepare teachers of high school physics. The physics community has long debated the appropriate nature and content of such preparation, and over time has arrived at various consensus recommendations. These recommendations have in fact been issued and re-issued at various times over the past 130 years but have been, nonetheless, highly consistent from one decade to the next. The recommendations include (1) physics content knowledge equivalent to that associated with a major or minor in physics; (2) experience and preparation adequate to guide students to deduce physical models from observations and experiment; (3) taking specialized courses designed specifically for prospective physics teachers. For the majority of U.S. physics teachers, these recommendations have not yet been realized. .

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