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**Physics Teaching Assistants' Experiences in Teaching Nature of Science (NOS) in Physics Laboratories** MEHMET AYDENIZ, KUBRA YETER-AYDENIZ, The University of Tennessee — The purpose of this study is to investigate physics teaching assistants' experiences with teaching the nature of science to their students. The participants consist of 10 teaching assistants who had taught various undergraduate physics lab sections at least one semester. Data were collected through an open-ended questionnaire, one semi-structured interview and document analyses. The results show that majority of students have difficulty in appropriating the epistemic norms of science in their laboratory reports. The analyses of lab reports show that students fail to develop robust scientific explanations for the data they gather through experiments. The discussion focuses on enhancing teaching assistants' pedagogical content knowledge for promoting students' adequate understanding and use of NOS in their reports.

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