

Abstract Submitted  
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**Content knowledge for teaching energy: An example from middle-school physical science**<sup>1</sup> AMY ROBERTSON, RACHEL SCHERR, LANE SEELEY, STAMATIS VOKOS, Seattle Pacific University — “Content knowledge for teaching” is the specialized content knowledge that teachers use in practice – the content knowledge that serves them for tasks of teaching such as making sense of students’ ideas, anticipating conceptual challenges students will face, selecting instructional tasks, and assessing student work. We examine a middle-school physical science teacher’s interactions with a group of students for evidence of content knowledge for teaching energy (CKT-E). Our aims are to develop our theory of CKT-E as well as criteria for its observational assessment. We identify CKT-E as potentially including elements of consensus energy models, elements of alternative energy models, elements of a sophisticated understanding of the nature of science, and a repertoire of instructional tasks or activities that exemplify or support instructional goals.

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