Research on Student Learning of Thermal Physics* David E. Meltzer, Arizona State University

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I will review recent research on student learning of thermal physics, with an emphasis on issues related to students in upper-level courses. Broadly, it is found that students beginning upper-level physics courses share many of the same ideas, and difficulties with basic concepts, as students in introductory courses. In addition, certain problematic student ideas specific to the upper-level courses have been identified. These findings should be of particular interest to those planning instruction or curriculum development targeted at upper-level thermal physics students.

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