Abstract for an Invited Paper for the NWS07 Meeting of The American Physical Society

## **Research as a guide for improving student understanding of time dependence in quantum mechanics**<sup>1</sup> ANDREW D. CROUSE, Physics Department, University of Washington, Seattle

The Physics Education Group at the University of Washington is engaged in a long term effort to investigate student understanding of quantum mechanics. One component of this investigation is to examine student ideas about time dependence. We have identified some specific difficulties, developed curriculum to address those difficulties, and implemented the curriculum in junior level physics courses at the University of Washington. An iterative process of assessing and refining that curriculum is underway. Elements drawn from this body of research will be discussed.

 $^{1}$ This work has been supported in part by the National Science Foundation.