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30 years of Physics Education Research at the University of Washington

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Over the past 30 years, members of the UW Physics Education Group have examined student learning in courses serving a wide range of populations. Most of the focus has been on elementary, middle, and high school teachers and students in introductory university physics courses, but more recently, the effort has expanded to include physics majors in upper-division courses on quantum mechanics and electrodynamics. In general, the group has taken a practical approach that focuses on identifying instructional strategies that are effective at promoting conceptual understanding and student reasoning ability. Examples will be drawn from across these courses to illustrate common themes and connections.