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Integrated Elements of an Action Plan Leading to Institutional Change

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Physics education research (PER) has shown that many aspects of teaching can be systematically studied and improved using scientific methods. There is now a convincing body of research demonstrating that active learning instructional strategies consistently improve student learning and other desired outcomes when compared to traditional instruction. However, there is a substantial gap between the research-based knowledge about effective teaching and the actual practices of instructors. This is not surprising given that PER has historically focused its attention on developing instructional strategies, but has only recently begun to pay similar attention to scientific study of how to scale and sustain these instructional strategies. One important issue that has emerged from this research is that change agents typically develop change activities intuitively and do not connect these activities within a coherent change strategy. In this talk I describe ways that change agents can think more systemically and strategically to develop a strong action plan for successful and sustainable institution-level change.