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Using research-based assessment to improve teaching in your classroom and department: New resources on the PER User's Guide
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Often physics faculty want to know how their students are doing compared to other “students like mine.” As part of the PER User's Guide (<http://perusersguide.org>), we are developing a national database of research validated assessment results (like the Force Concept Inventory) and an accompanying data explorer. Here faculty can securely upload their students' anonymized assessment results and compare them to students from peer institutions, the national dataset or before and after a change in teaching method. “One-click analysis” allows faculty members to visualize their data and view statistics such as gain scores and statistical significance and then download a report of the results. Results can be used to improve teaching, to make a case for more resources, for accreditation reports, or for promotion and tenure. Additionally, we are developing guides to these research validated assessments including background, guidelines for administration, and access to the test itself. We will showcase our new online system and provide information about how you can use it.