The right moves?
How student feedback informs faculty teaching decisions
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RESEARCH QUESTIONS:
How does feedback from students influence instructor’s pedagogical decisions in the classroom and to what extent are student’s concern reflective of the learning that occurs in the classroom?
To what extent do students’ rating of instruction correlate with normalized gains on a conceptual survey and pass rates for the course?

New Faculty Workshop
• Created to improve the quality of physics teaching on a national scale, supported by the American Association of Physics Teachers (AAPT).
• Each workshop presents research-based pedagogical techniques that can be implemented with minimal time and effort have proven to be effective in a variety of educational environments.
• Participants are flown to Washington for three days and often funded by their home departments.

Participating faculty
• Were petitioned to participate at NFW
• 14 total faculty participated
• Selected their own conceptual survey
• 9 total faculty used the Force Concept Inventory

Students’ rating of instruction…often the only measure of “Instructor Quality”

Force Concept Inventory
• 30 question MC survey
• Valid and Reliable
• Used before and after all instruction to measure gains

Normalized Gains
\[ g = \frac{(\text{post}) - (\text{pre})}{100 - (\text{pre})} \]

Some faculty chose other surveys, i.e., Brief Electricity and Magnetism Assessment (BEMA) and Conceptual Survey in Electricity and Magnetism (CSME), and they, similarly, yield no clear trends.

These data represent all faculty (N = 14) over all semesters (N = 37). GPA calculated as a weighted average of course performance.

Conclusions
• Although correlations between “conceptual learning” and instructor ratings are implicit in Hake’s graph. The results in this sample explicitly suggests there is no correlation.
• In addition, it was hypothesized that there may be a correlation between instructor’s ratings and course pass rates however in this sample no correlation was shown.

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