Evidence-based teaching: just the facts or thinking like scientists?

Fostering Academic Success in STEM
CEITL - University of New Hampshire
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WHY do we do something in class?

= Transparency with our students
Filing System
Carbonless Notebook

Hayden McNeil
Grand Rapids, MI
Why transform?

Student feedback and performance
Learning in the field to ...
“Teach science as science is practiced at its best”

AAAS 1990
Scientific Teaching

Teach science as it is practiced – using evidence-based approaches

Policy Forum

Education

Scientific Teaching

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A wide range of institutions demonstrated better problem-solving ability, conceptual understanding, and success in subsequent courses compared with students who had learned in traditional, passive formats (3).

These results are neither isolated nor discipline-specific. At the University of Rochester, students who engaged in deep cognitive learning across multiple courses were eight times more likely than their peers to declare a major in the sciences, regardless of their gender or race/ethnicity (4).
More student feedback....
Part 1: Transforming Teaching
Part 2: Improving Learning