Does Instructional Sensitivity + Growth = Growth Sensitivity?

Instructional Sensitivity Conference
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Alternate Title -- Is Measuring Growth a Surrogate for Measuring Instructional Sensitivity?
Polikoff (2010) defines instructional sensitivity as a property of an item or test that enables the item or the test to be able to detect differences in instruction received by a student.
Instructional Sensitivity

• Measuring instructional sensitivity with a large-scale assessment poses unique challenges.

• Challenges can be addressed in a variety of ways.
  – design feature of the item and test development process
  – design feature in the establishment of a vertical growth scale
Competing Priorities?
A Coherent Assessment System?
Item and Test Development

• Items shown to be highly sensitive are included in the final test and used to guide further item development.

• Items that are insensitive are discarded from test assembly.

• Data from the same students across years is used to validate the sensitivity.

• Data from the simultaneous administration of the same item across years.
Four friends decided to meet each other at the park. Kate walked $\frac{1}{4}$ mile. Terry walked $1 \frac{3}{4}$ miles. Denny walked $\frac{1}{4}$ mile. Sondra walked $1 \frac{3}{4}$ miles. What is the best estimate of the total miles they walked?

A 2  
B 4  
C 8  
D 10
A total of 80,750 people attended 18 tournament games played. Which gives the average number of fans per game?

A  80,750 × 0.18
B  0.18 ÷ 80,750
C  18 ÷ 80,750
D  80,750 ÷ 18
Vertical Growth Scale
Growth Assumptions

- Learning is a continuum
- Students start at different places
- Growth expectations vary with the starting place
- Growth can be measured and reported
Growth Model Assumptions

Learning is a continuum
Growth Model Assumptions

Students start at different places
Growth Model Assumptions

Growth expectations vary with the starting place
Complementary?

Growth

Instructional Sensitivity