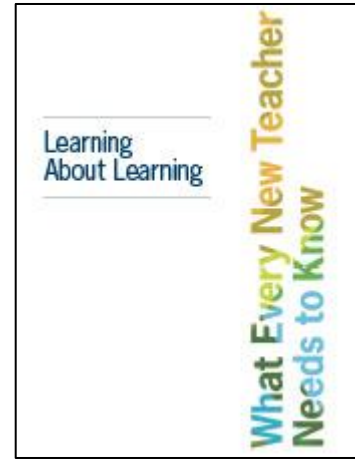

Learning About Learning

**What Every New Teacher
Needs to Know**

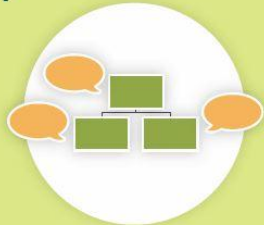
The Report



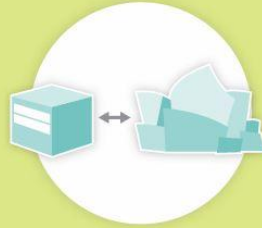
We combed through 14,000 pages of teacher education textbooks for discussion of six specific research-based strategies that every teacher candidate should learn to make learning stick.

The Six Fundamental Instructional Strategies

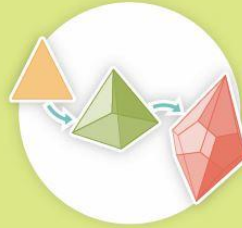
They are:



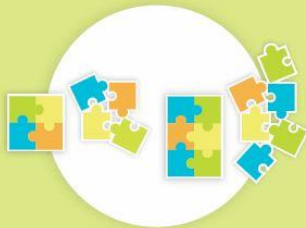
1. Pairing graphics with words.



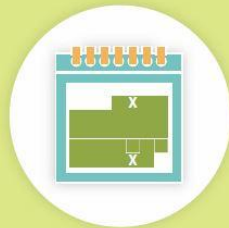
2. Linking abstract concepts with concrete representations.



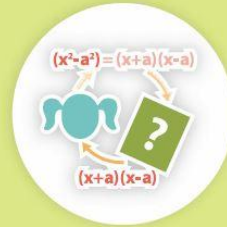
3. Posing probing questions.



4. Repeatedly alternating solved and unsolved problems.



5. Distributing practice.



6. Assessing to boost retention.

Identified by the
Institute of Education
Sciences in

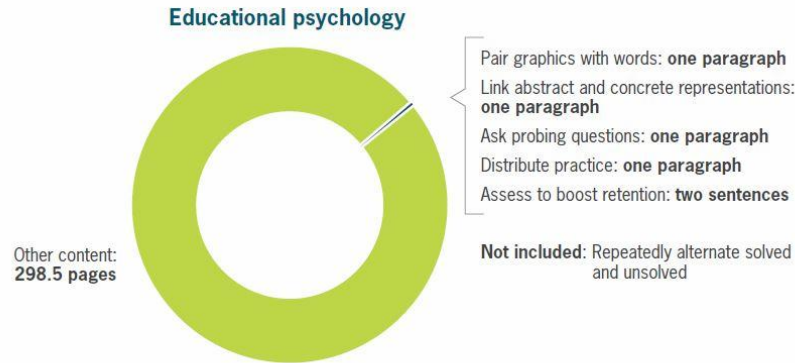
*Organizing Instruction
and Study to Improve
Student Learning: A
Practice Guide (2007).*

Here's What We Found in Our Textbook Search for the Six Strategies....

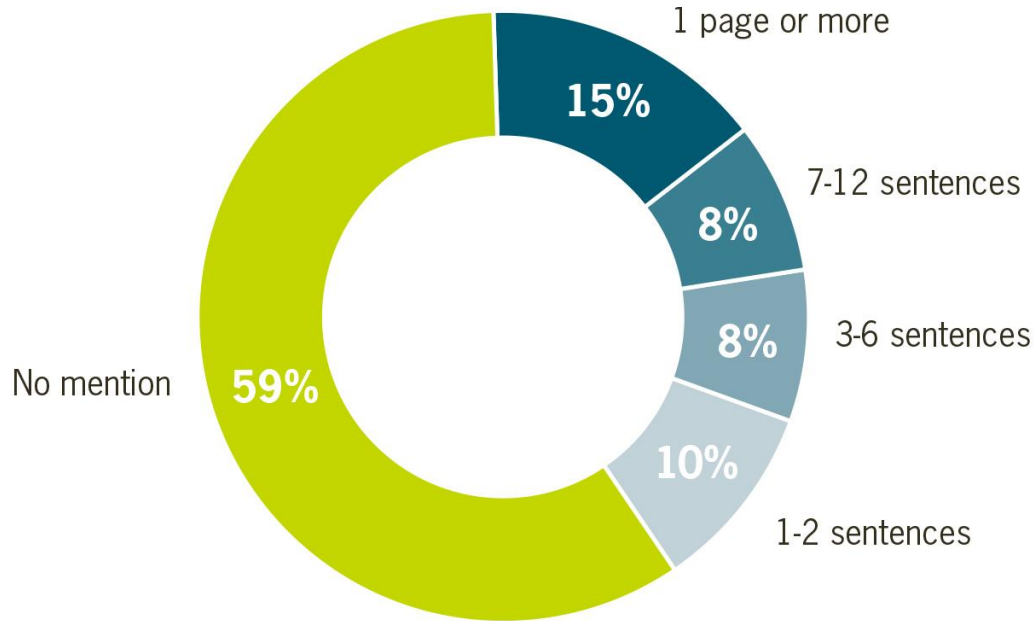
- None of the textbooks in the sample of 48 accurately describes all six fundamental instructional strategies.
- At most, only two of the six strategies are covered in any particular text.

Texts don't give the strategies the emphasis they deserve

- When textbooks do mention any of the six fundamental instructional strategies, the discussion can be as brief as 1-2 sentences in textbooks that are often hundreds of pages in length.



Frequency and length of mentions of any of the six fundamental instructional strategies (n=288)



Nearly 60% of the 288 mentions of the six strategies that the sample's textbooks should contain (if each textbook addressed all strategies) are simply not found. If a mention is found, in almost all cases it is much shorter than what's needed to adequately explain a strategy.

It shouldn't be this hard for teacher candidates to learn how children learn



And the Textbooks Aren't Cheap

- We estimate they cost teacher candidates **\$40 million annually**

Teacher candidates shell out millions for textbooks that teach about learning.

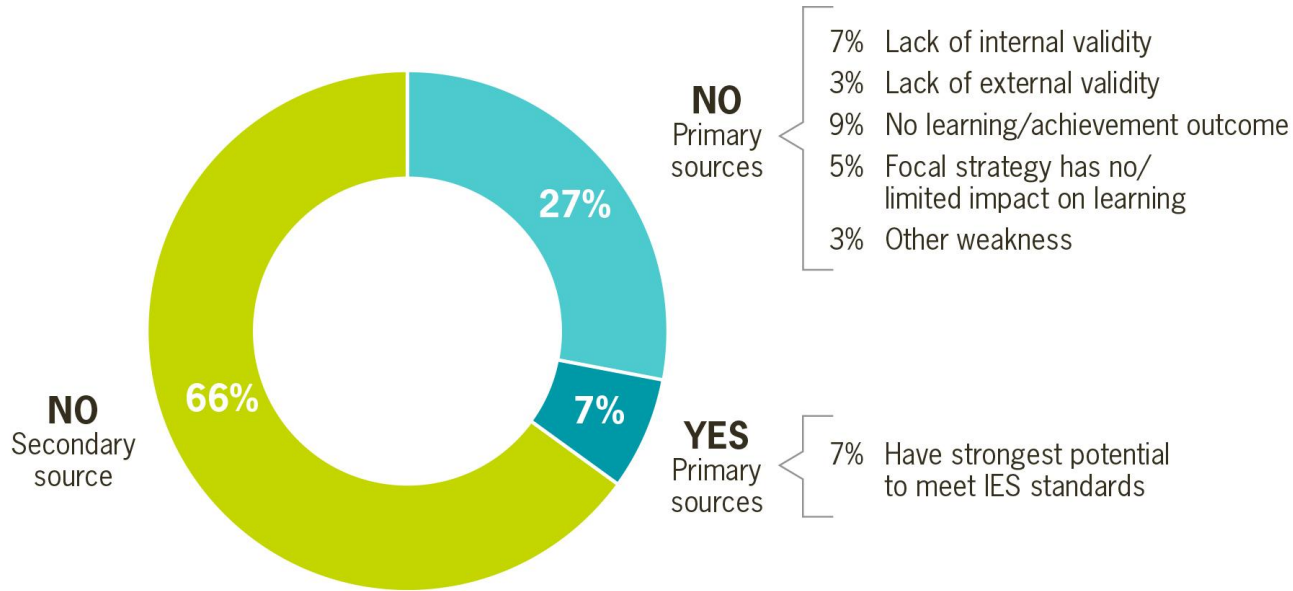


Shouldn't we at least make sure they cover the basics?

Texts ignore essential research discoveries

- Fewer than 10 percent of textbook references to studies on instructional strategies explicitly connect to research of the highest quality
- As a result, texts advise teachers to use instructional strategies that are unproven or have been shown to have little effect.

Scientific rigor behind textbook references (n=58)

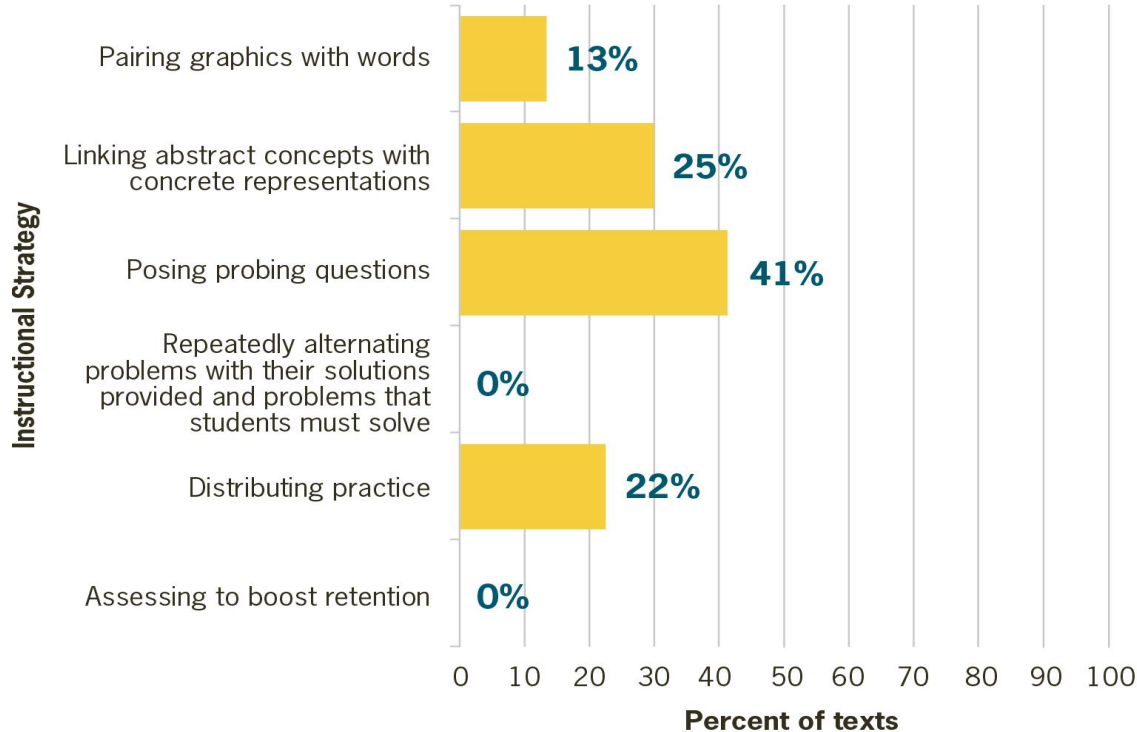


Almost all of a sample of references (n=58) used to support discussion of instructional methods would not meet IES standards for research.

What do teacher candidates learn?

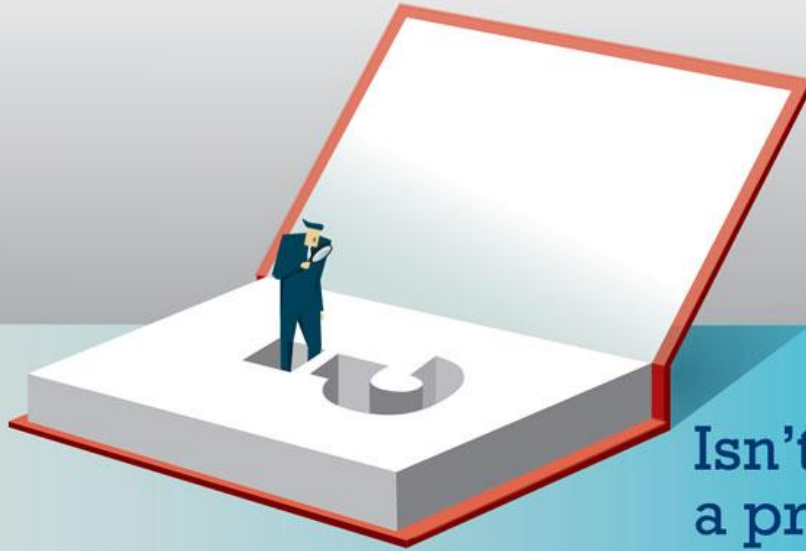
- The strategy of **posing probing questions** is the only one of the six fundamental strategies that is frequently discussed in textbooks.

Textbook coverage of fundamental instructional strategies (n=48)



No fundamental instructional strategy is covered by even half of the sample of 48 texts.

Teacher prep textbooks don't cover the 6 teaching strategies that boost learning and retention.



Isn't that a problem?

Textbooks Drive What's Addressed in Coursework

- Textbooks are assigned in more than 85 percent of courses that teach about instruction
- Almost four-fifths of instructors who assign a text for their courses use the text as a framework for instruction

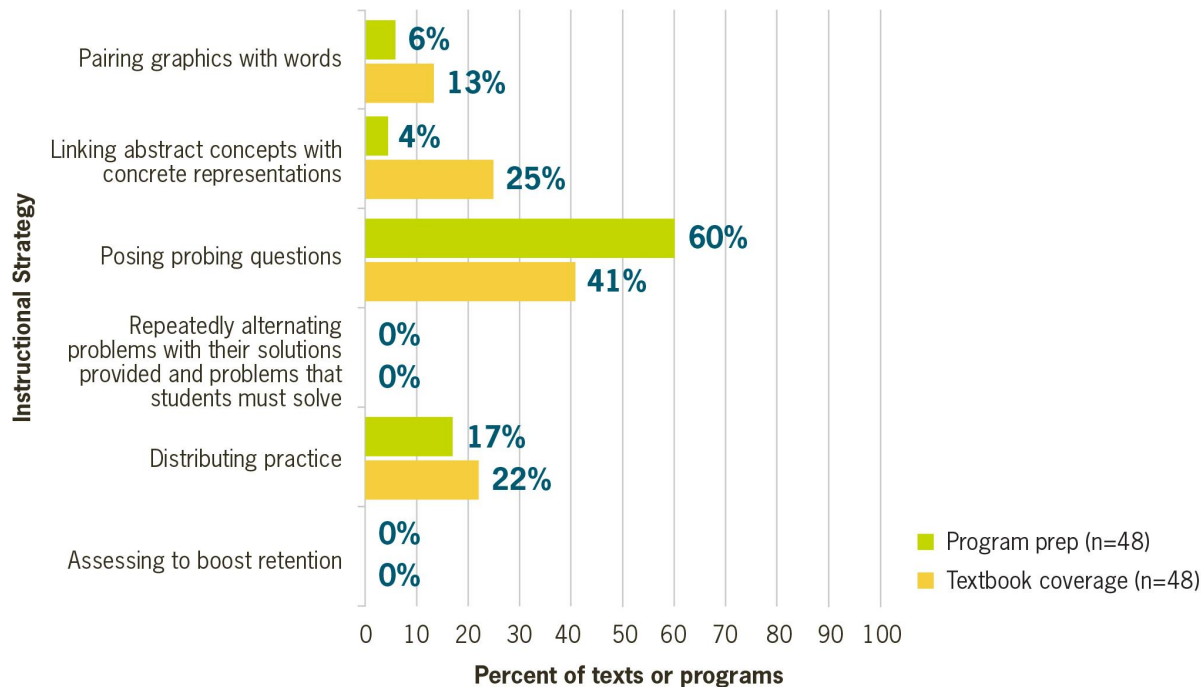
Course Outline

Week	What is Due?	Topic of the Day
1/23		Chapter 1 – Learning, Teaching and Educational Psychology
1/30		Chapter 14 – Teaching Every Student

Coursework parallels textbooks

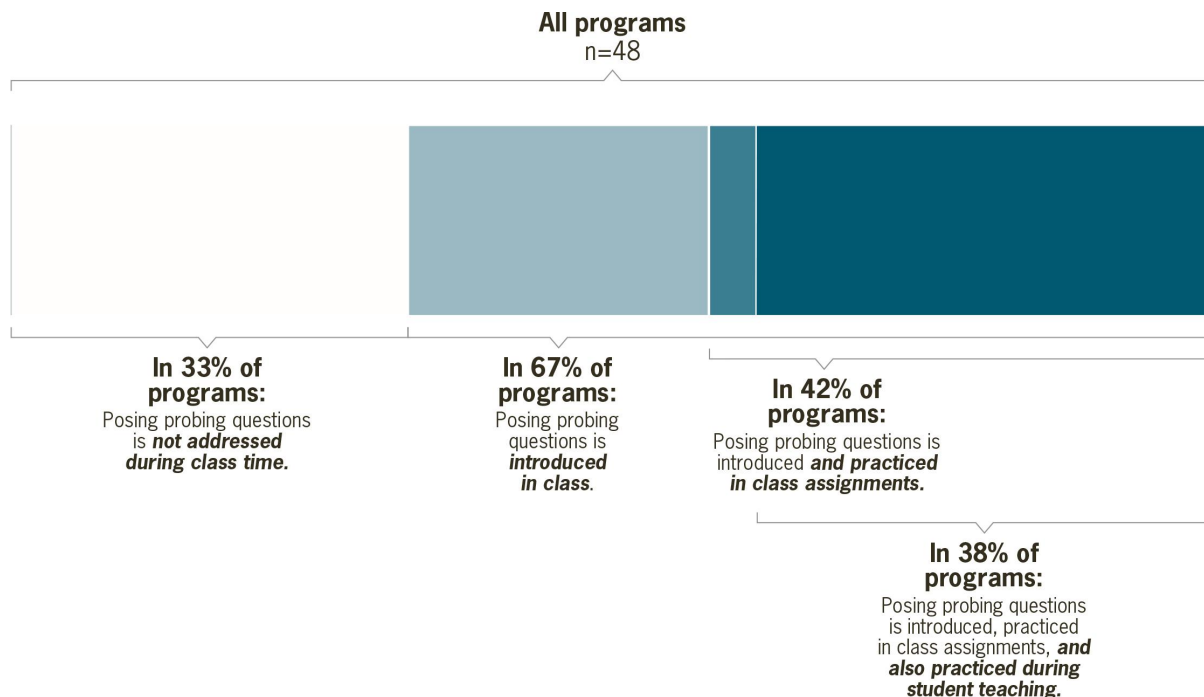
- Instruction in the strategies also is virtually non-existent in coursework and clinical practice in the 48 teacher prep programs in which the textbooks we examined are required in coursework.
- Even when the strategies are taught, teacher candidates are rarely given opportunities to practice them.

Comparing coverage of strategies in textbooks and prep in coursework



Comparing attention to the fundamental instructional strategies, teacher educators largely mirror textbooks. Only the strategy of **posing probing questions** is addressed by more than half of programs.

Looking across preparation, how *intensely* do programs train candidates on posing probing questions?



In only 38% of programs is instruction and practice on this strategy anywhere near adequate because it is discussed in class, and then practiced both in class assignments and in student teaching.

Are we
setting up
students for
success
if we're not
training our
teachers
the
fundamentals
of teaching?



Conclusion

Textbook publishers and authors are failing the teaching profession, students and the public by neglecting to provide our next generation of teachers with the fundamental knowledge they need



To view the report:

Visit:

http://www.nctq.org/dmsView/Learning_About_Learning_Report

Questions?

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