



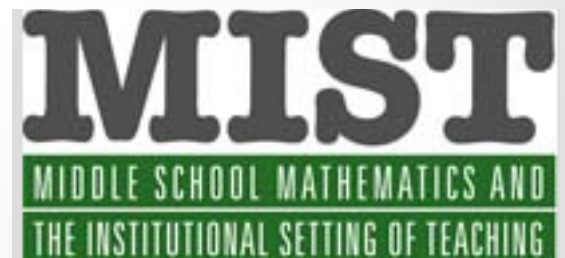
Teacher Learning Opportunities: changes in the framing of teacher instructional talk in collaborative meetings

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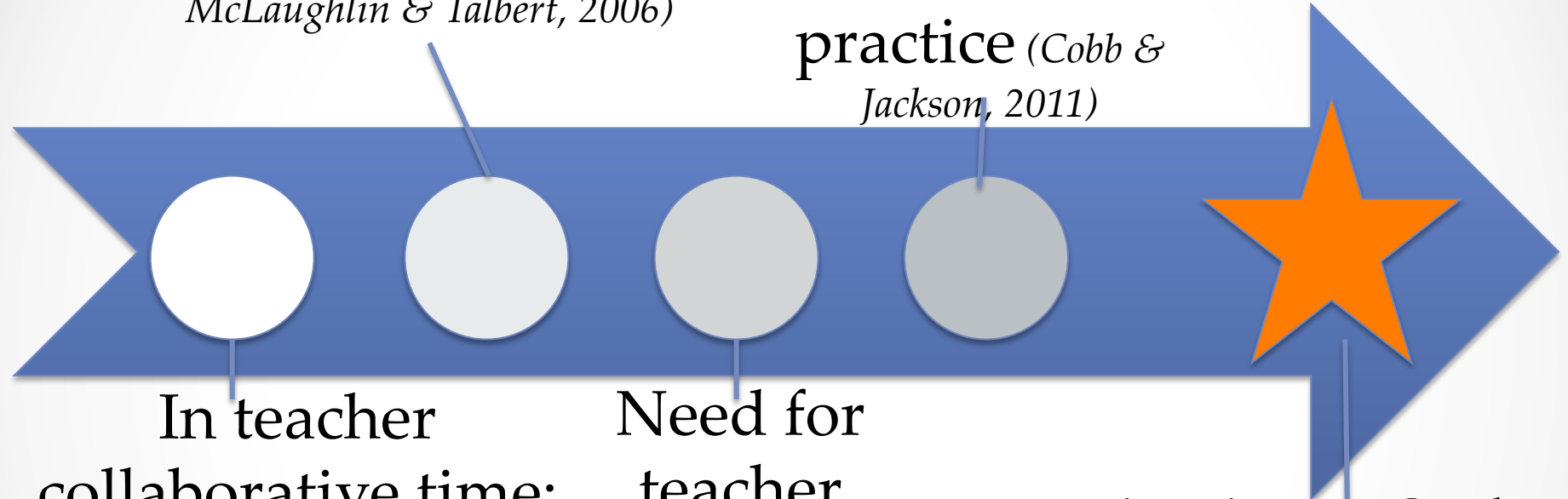
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Florida State University

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One mechanism:
teacher
collaborative time
*(Louis & Kruse, 1995;
McLaughlin & Talbert, 2006)*

Significant
reorganization
of teacher
practice *(Cobb &
Jackson, 2011)*



In teacher
collaborative time:
opportunity to think
about, talk about, and
plan mathematics
and math pedagogy

- conceptually

Need for
teacher
learning

Big Picture Goal:
support district
implementation of
high quality,
inquiry-oriented
math instruction

MIST: *Middle School Mathematics and the Institutional Setting of Teaching*

- What does it take to improve middle school mathematics instruction at the scale of a large urban district in the US?
- Relevant data sources:
 - *Interpersonal*: informal advice networks and audio transcripts



Study Sample

- Case study (Yin, 2003): Creekside Middle School, 2009-2011
- Primary data sources:
 - Audio recordings of teacher collaborative time (TCT) focused on instruction
 - (Informal Advice Network Surveys)

Conceptual Frame

Framing Theory (*Cress & Snow, 2000*)

Diagnostic Framing:

- How to help students learn math
- How to help students succeed on tests
- Students can not learn

Prognostic Framing:

- Adjust Instruction
- Cover topics
- Other

Nature and Depth of Talk about Mathematics

(Horn & Little, 2010; Stein & Lane, 1996)

How Teachers Talked about Mathematics

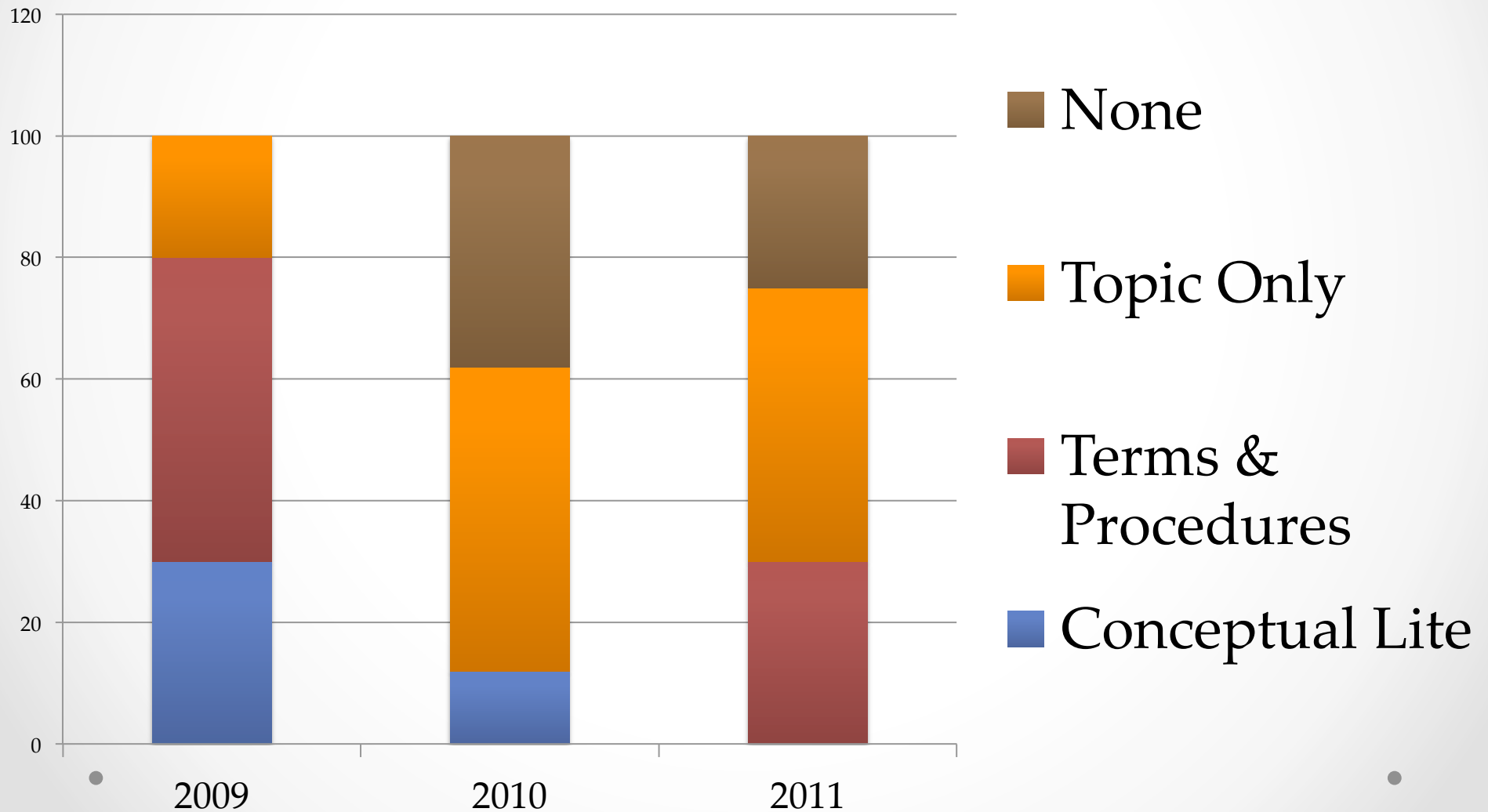
- 1) Concepts and Explanations
 - a. *“Conceptual Lite”*
- 2) Terms and Procedures
- 3) Topic Only



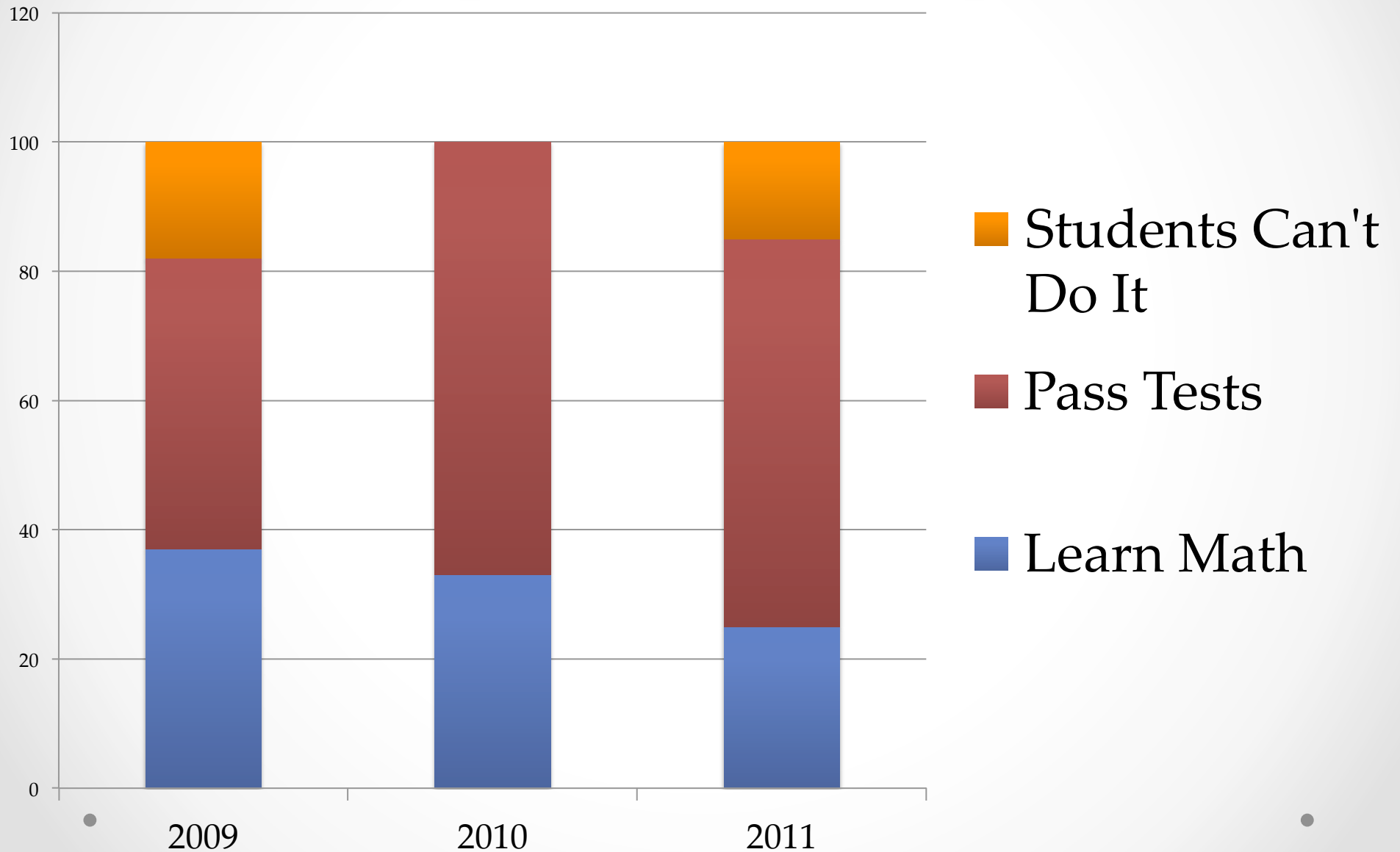
Methods: Analysis

- Qualitative Analysis of Audio Transcripts:
 - *Coded in NVivo with deductive and inductive codes*
 - *Memos, matrices*
- Analysis of District Context
 - *Examined qualitative and quantitative data across all schools in the district over the same time period to contextualize the findings*

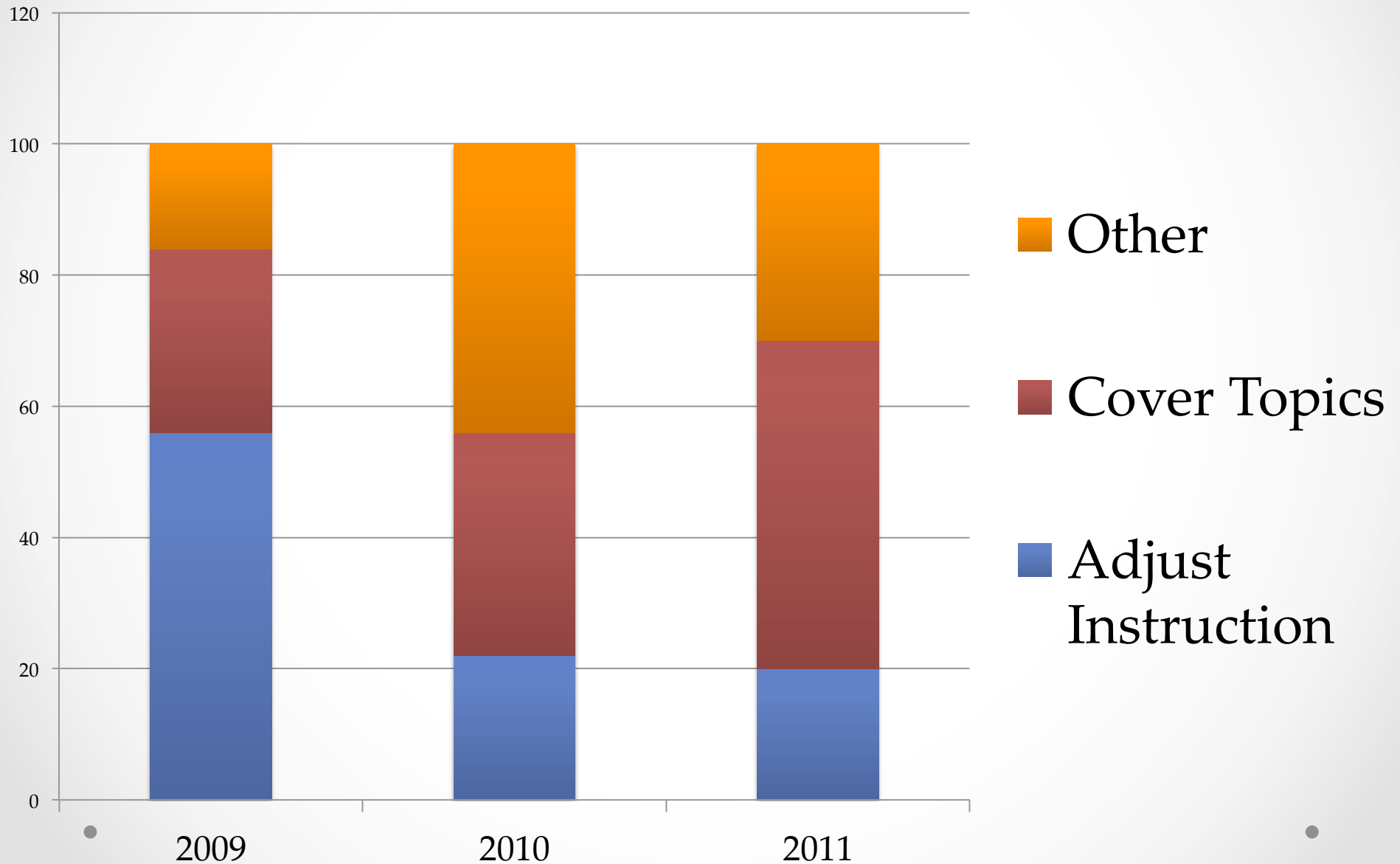
Finding One: Content of Mathematics



Finding Two: Prognoses



Finding Three: Diagnoses



Finding Four: Role of Administrator



Administrative Framing

Administrator Presence



Implications for Design: *Teachers*

- Kind of math mattered
 - *Conceptual lite is unlikely to help students know how to apply mathematical concepts to standardized tests.*
 - *Given administrator (and district and federal) press on student success on standardized tests, teachers will likely revert to teaching procedures.*
 - *Need to build teacher capacity to concepts & explanations.*



Implications for Design: *Administrators*

- Administrator press can shift teachers' attention
 - *Provide aligned PD for principals (and APs) as well as teachers, so that they are able to either*
 - A) *give substantive support in implementation (if they have deep content knowledge)*
 - B) *press for ambitious practices (if they don't have deep content knowledge)*

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Thank you!

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