

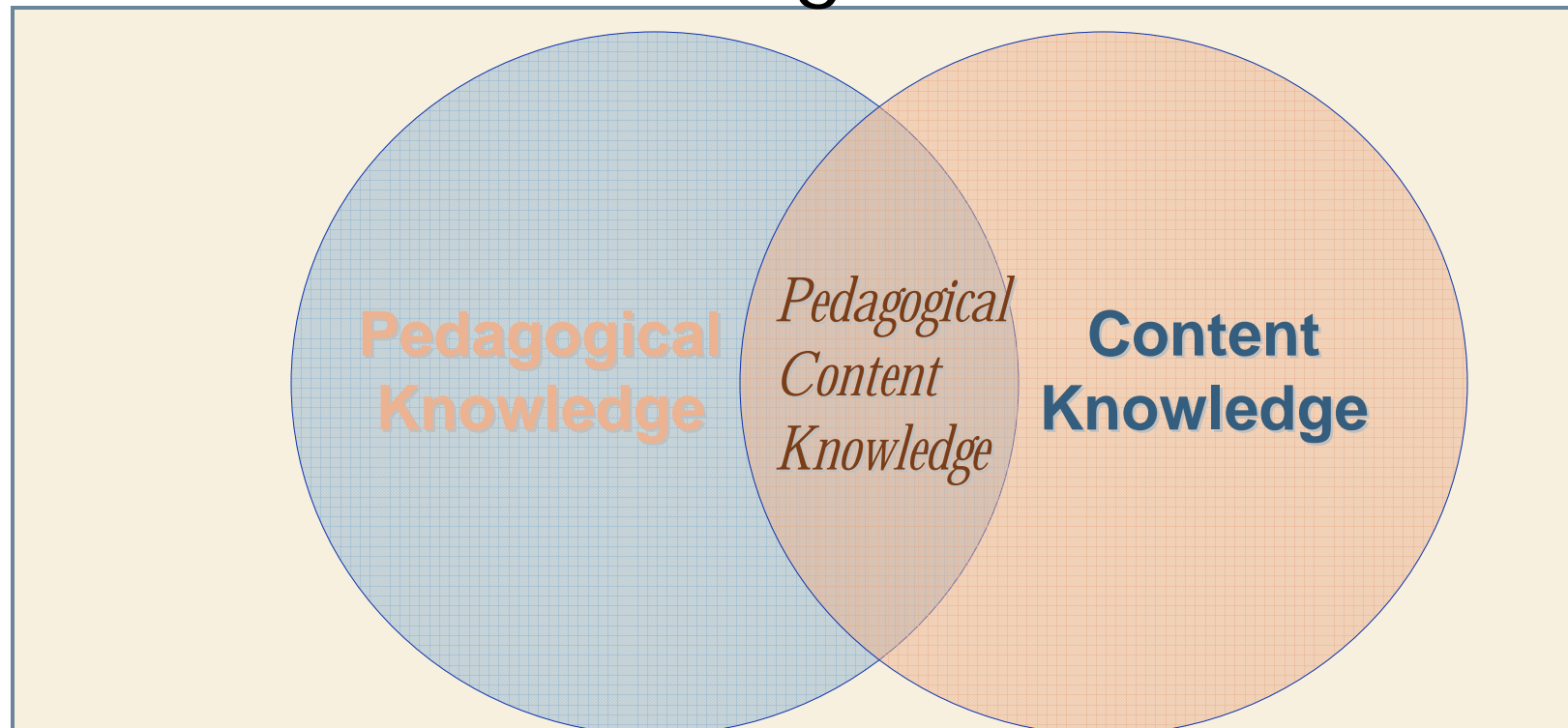
# ASSESSING TEACHER KNOWLEDGE OF EFFECTIVE PRIMARY GRADE READING AND WRITING INSTRUCTION

## *Measurement Issues and Concerns*

Panel Presentation by D. Ray Reutzel and Richard Sudweeks  
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# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

The field of professional education has yet to adequately define the broad construct of teacher knowledge?



# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

The field of professional education has also yet to adequately define the narrower construct of teacher knowledge needed to teach young children to read and write?

- ❑ What content knowledge do primary grade reading and writing teachers need to possess to provide instruction to increase student achievement?
- ❑ What pedagogical knowledge do primary grade reading and writing teachers need to implement in classrooms to increase student achievement?

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

The field of professional education has also yet to adequately define the narrower construct of teacher knowledge needed to teach young children to read and write?

- ❑ Is pedagogical knowledge distinct from content knowledge or is content knowledge so embedded in pedagogy that these constructs are practically inseparable when primary grade teachers instruct reading and writing in classrooms?
- ❑ How does PCK differ from CK and PK?

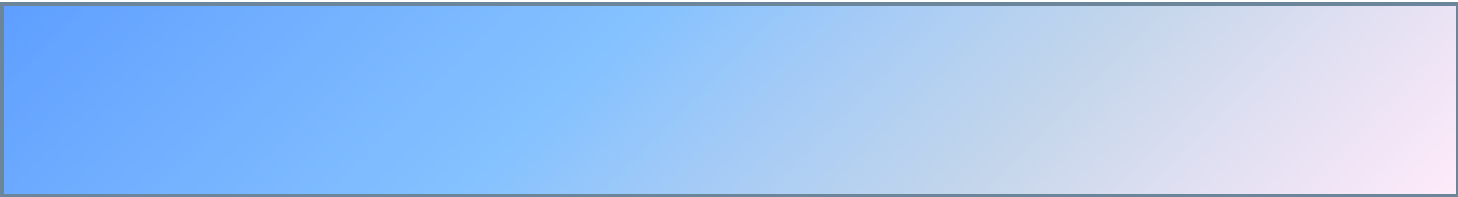
# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

Can the impact of teacher knowledge on student achievement be adequately assessed without attending carefully to issues of ecological validity?

- ▣ **Inert Knowledge** – A body of knowledge that is stored and accessible in the mind but not implemented in the classroom setting (Talk the Talk)
- ▣ **Enacted Knowledge** - A body of knowledge that enables implementation of instruction in the classroom setting that leads to student learning (Walk the Walk)

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

Inert and enacted teacher knowledge are not a dichotomy. They are better represented as opposite ends of a continuum.



**Inert Teacher  
Knowledge**

**Enacted Teacher  
Knowledge**

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

Which criteria or combination of criteria can be used to adequately define the construct of teacher knowledge?

- ▣ Analysis of Teachers' Roles (Jobs Analysis)
- ▣ Curriculum Content, Professional Societies, and Standards-based Benchmarks
- ▣ Outcome Assessments
- ▣ Evidenced-based Research
- ▣ Expert Opinion

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

What single or combination of assessment approaches is/are needed to adequately measure construct of teacher knowledge?

- ▣ Written Tests
  - Selected Response Items
  - Constructed Response Items
- ▣ Real Time Direct Observations
- ▣ Recorded Observations
- ▣ Artifact Collection and Analysis
- ▣ Self Appraisals, Interviews, Perceptions
- ▣ Structured Performance Assessments
- ▣ Exemplar lesson evaluation

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

How possible is to assess teacher's enacted knowledge through the use of written test items that simulate necessary classroom instructional shifts and decision making?

- ▣ Testlets
- ▣ Case Analysis
- ▣ Contextualized Multiple Choice Questions
- ▣ Video recorded lessons coupled with written responses, think-aloud protocols, etc.?

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

- What will the field of professional education accept as evidence for adequately assessing the construct of teacher knowledge?
  - ▣ Correct test answers
  - ▣ Defensible solutions to case problems
  - ▣ Defensible classroom practices
  - ▣ Defensible coding systems
  - ▣ Inter and Intra rater agreement

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

- What is the appropriate “grain size” to be used when assessing teacher knowledge to adequately account for variance in student achievement?
  - ▣ Instructional shifts within lessons
  - ▣ Complete lessons
  - ▣ Dedicated instructional blocks containing multiple lessons
  - ▣ One day
  - ▣ One week
  - ▣ Unit Plans

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

Is the construct of teacher knowledge sufficiently stable to rely upon measures at single points in time or should teacher knowledge be measured longitudinally modeling changes in teacher knowledge on student achievement?

- ▣ How does teacher's knowledge develop and change over the span of their career?
- ▣ What factors lead to change in teachers' knowledge over the span of their careers?

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

To what degree does teacher knowledge predict important student outcomes in reading and writing?

- ▣ Motivation to read and write
- ▣ Achievement
- ▣ Social adjustment
- ▣ Strategy and skill acquisition
- ▣ Content or domain knowledge acquisition

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

If we are able to develop technically adequate and sufficiently complex ways of assessing teacher knowledge,

- ▣ How will these assessments be used?
- ▣ What may be the unintended consequences of assessing teacher knowledge?
  - ▣ For whom?
  - ▣ How serious?

# Issues and Concerns in Measuring Primary Grade Teachers' Knowledge of Effective Reading and Writing Instruction

- At a theoretical level, is teacher knowledge but a part of a larger set of characteristics that influence teaching effectiveness?
  - ▣ Dynamic systems theories?
    - Context/Environmental influences
    - Social influences
    - Cultural influences
    - Personal beliefs and attitudes

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## Primary Grade Reading and Writing Teacher Knowledge Project

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