



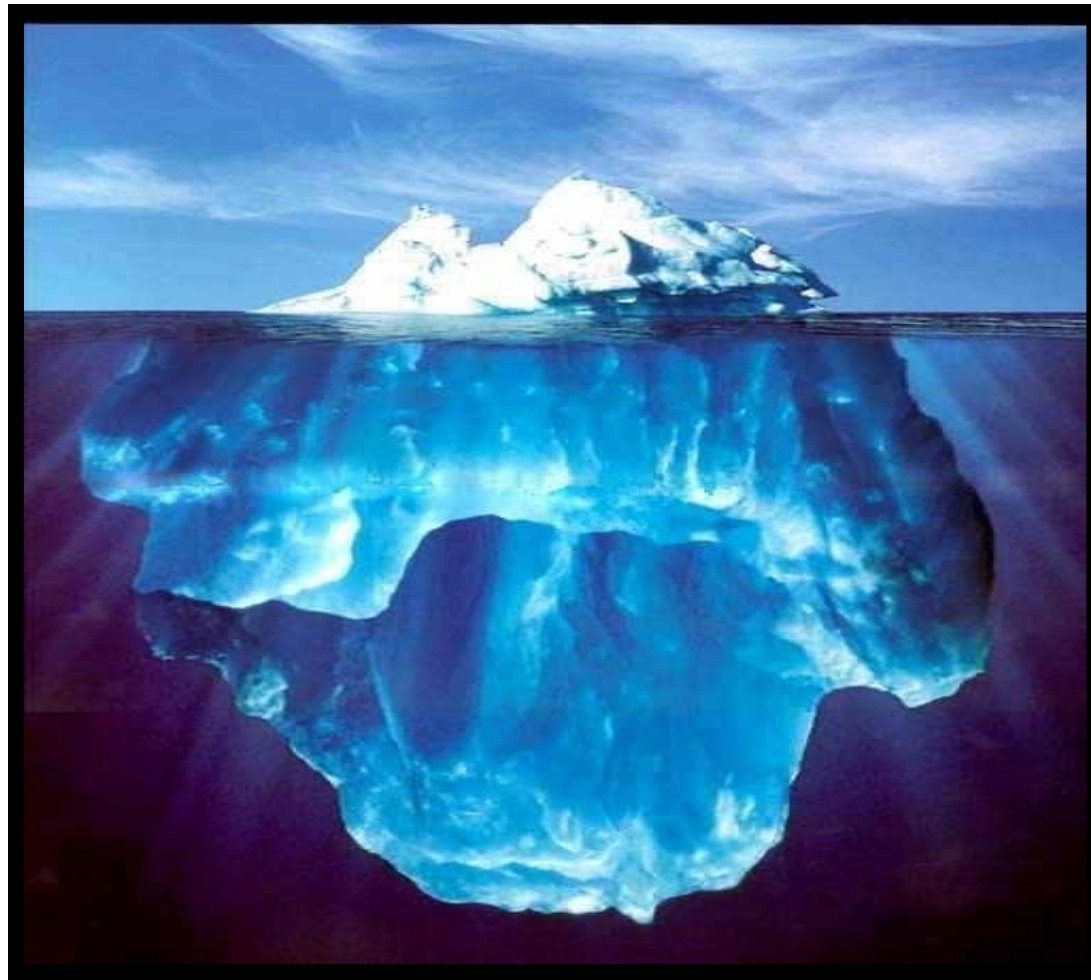
# The Effects of Vocabulary Interventions for children at risk: Evidence from a meta-analytic review

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- Essential to making meaning of text
- Size of one's vocabulary predicts ability to gain vocabulary
- Strongly predicts reading comprehension

# Why is vocabulary important?





Tip of the iceberg



ready to read

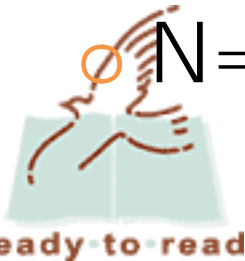
- Which words should we teach?
- How many words to teach?
- How should we cluster words in our instruction?
- How do we assess what children learn?
- How do we potentially accelerate instruction?

# Challenges of teaching vocabulary



- Vocabulary interventions, prior to conventional literacy
- Targeted to at-risk children (e.g. poverty, ELL, minority status; language delay)
- Birth through age 6
- Published and unpublished studies
- Outcomes: receptive and expressive language
- N=39, with 2,927; 112 effect sizes

# Meta-analysis



- To what extent are vocabulary interventions effective for at-risk children?
- Is the magnitude of gains from vocabulary interventions differentiated by type of risk factor?
- Are there certain pedagogical, or instructional characteristics that moderate effect sizes for children at risk?



# Questions

- Yes
- Overall effect size =  $g = 0.94$

Are vocabulary interventions effective?



- All students regardless of risk benefited from interventions;
- Poverty was the most devastating risk factor



# For whom?



- Explicit instruction

- Neuman et al., : Multimedia

- Coyne and colleagues: “magic words”

- Silverman, “multidimensional instruction”

- Beck and McKeown: ‘rich instruction’



# What works

- Explicit and implicit instruction had the largest effect sizes
  - Coyne et al., 'extended instruction'
  - Silverman, 'play and acting out'
  - Beck, 'discussion'
  - Neuman, 'multiple media contexts'

Powerful  
instruction



- Identify words
- Give meaning: exemplar
- Practice (in other contexts)
- Review
- Monitor children's progress along the way

# Instructional regime



Instructional Element	A	B	C	D	E	F	G	H	I	J
1. Identifies words to be learned <i>Vocabulary Instructional Elements in 10 Preschool Literacy Curricula</i>	+	+	+	+	+	+	+	+	+	+
2. Specific teaching techniques to address these words	-	+	-	-	+	-	-	-	+	-
3. Provides opportunities to use/practice words	-	+	-	-	+	+	-	-	+	-
4. Provides opportunities to review previously learned words	-	+	-	-	-	-	-	-	+	-
5. Provides strategies for ongoing progress monitoring of vocabulary development	-	-	+	+	-	-	-	-	+	-



# Instructional Features....

- Programs that carefully target the words to be learned had the largest effects
  - Strategies for selecting words
    - Biemiller
    - Beck and McKeown
    - Neuman



# Target words

- Change, relative, celebrate, eager,
- Granddaddy, sharing, protect, crate, scary sneaked
- Activity, cooperate, exciting, exhausted
- Platypus, around, lost, found, groceries
- Another way: elbow, shoulder; heart; organs

# Examples



- Group size was less important than the quality of the program
- Fidelity to program and program quality
- Professional preparation matters

# Contextual features



- The good news: Vocabulary interventions can yield powerful effects
- The not-so-good news:



# Conclusions



N=55 Kindergarten Classrooms in 55 Schools, ranging in low SES communities to high

- 4 observations per classroom
- 3 hours per visit
- Trained observers
- "Typical day"
- All language of the teacher was recorded



# In school study

- More vocabulary instruction is needed
- Should follow an instructional regime
- Children in low income groups need more intensive vocabulary interventions



# Implications

Project Website:

<http://readytolearnresearch.org/>

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contact

information

