

## Module 4.5 Fluency

### Fluency

- Typically defined as:
  - Fast
  - Accurate
  - Expressive
    - Prosody involves the voice's pitch and emphasis, delivered at the right time
    - Typically served best when one is comprehending what is read as one goes along (not guaranteed)
- Fluency is highly correlated with reading comprehension
  - When word-level reading is fluent, the reader's attention and working memory can focus on the meaning of what is being read
- Reading faster is not sustainable as our normal reading speed has been optimized for comprehension, and changes based on text comprehension difficulty

### Word-Reading is Not Paired-Associate Learning

- Learning letter names and sounds is paired-associate learning
- Word reading involves orthographic memory
  - Different brain activation patterns are involved
  - Notice how you may forget a familiar person's name or block on the name of a familiar object, but never "block" on familiar written words

### Fluency is Not Paired-Associate Recall

- We often assume speed of identifying words has to do with speed of retrieval
  - Barring a problem with rapid automatized naming, this is not a fair assumption
- Correctly identifying a word will be based upon phonic decoding, guessing from context, or recall of a familiar word
  - The first two are slow and strategic, the third is fast and effortless
- Assumptions
  - Do we think the words are in memory but are not being recalled fast enough?
  - Do we think phonic decoding should be fast and effortless?
  - Do we think guessing is easy and integrates well with reading?

### The Reading Panel's "Big 5"

- 6 chapters
  - Methodology
  - Alphabetics (phonemic awareness and phonics)

- Fluency
- Comprehension (vocabulary and text comprehension strategies)
- Teacher education
- Computer Technology
- Reconfigured and presented to educators as
  - Phonemic awareness
  - Phonics
  - Fluency
  - Vocabulary
  - Text Comprehension Strategies

## Problems with the NRP on Fluency

- Problematic assumptions about fluency
- Limited research
- Subsequent research has shown that oral reading practices to be of limited usefulness; no studies show they close the gap between weak readers and skilled readers
  - Current studies show limited standard score gains, and little or no long-term benefit or generalization to unpracticed passages (repeated readings)

## The Nature of Reading Fluency

- Word reading fluency is primarily a byproduct of the size of one's sight vocabulary
- Students with large sight-vocabularies read fluently
- Students with limited sight vocabularies do not read fluently
- Rapid automatized naming is also associated with poor reading fluency in ways that are not yet fully understood

## Research Regarding Reading Fluency

- Three examples of types of research supporting the sight-vocabulary hypothesis of reading fluency
  - Studies comparing timed list reading vs. timed paragraph reading
  - Studies altering text difficulty
  - Studies of the relationship between phonic decoding and fluency

## Rethinking Reading Fluency

- When students are good at orthographic mapping, reading practice is the only way for them to improve reading