



# DEVELOPING EARLY LITERACY: RESEARCH-BASED TEACHING FROM THE START




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# The inside stuff

- “The purpose of the meeting is to encourage collaboration of early childhood educators with K-3 educators to improve early literacy and language development, leading to proficiency at grade 3.”
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# The case against teaching

“Childhood has its own way of seeing, thinking, and feeling, and nothing is more foolish than to try to substitute ours for theirs.”

-Jean-Jacques Rousseau




# The case against teaching

Early mental excitement will serve only to bring forth beautiful but premature flowers, which are destined soon to wither away, without producing fruit. (cited in Kaestle & Vinovskis, 1980, p. 59)




# The case against teaching

- Morbid precocity
  - Imbecility or premature old age
  - Hurried child
  - Developmentally-incorrect practice
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# But...

- Actual studies don't find these problems
  - Recent studies show that increases in reading instruction in preschool years lead to improvements in early skills AND improved social skills (Bierman, Domitrovich, etc.)
  - Aileen Tobin's study on early readers
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# To work together...

- We need to reject the idea that “teaching” young children is harmful (or developmentally inappropriate); it is not
  - We need to reject the idea that teaching literacy to young children is harmful or useless (it is neither)
  - We need to reject the idea that the surest way to success is teacher lore (it is not)
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# Research as the basis of practice

- National Reading Panel (2000)  
Examination of ~450 studies on teaching reading in K-12
  - National Early Literacy Panel (2008)  
Examination of ~500 on literacy development and teaching Birth through Kindergarten (age 5)
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# Using the research

- Public review of research by panels without financial interest
  - Relying on large numbers of published research studies
  - Systematic and replicable review of the studies (meta-analysis of data)
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# Alphabetics



# Phonemic Awareness

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Phonemic awareness refers to the ability to hear the individual sounds in words and to manipulate these sounds.



# Phonemic Awareness

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The NRP panel reviewed 51 studies on the teaching of phonemic awareness and found:

- Teaching PA is highly effective with learners in kindergarten and grade 1.
- Systematic PA instruction improves children's reading and spelling skills.
- PA helps normally achieving children learn to spell, but not disabled readers.



# Phonemic Awareness

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- About 18 hours of phonemic awareness instruction was enough for most children.
  - Phonemic awareness instruction was most effective when it was kept simple and when it included letters.
  - It is useful to teach students to segment and blend individual phonemes.
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# Phonics

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Phonics refers to knowledge of sound-symbol correspondences and ability to use this knowledge to “decode” from print to pronunciation.





# Phonics

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NRP reviewed 38 independent studies on the teaching of phonics and found:

- Systematic phonics helps students in Grades K-2, and benefits students Grades K-6 who are having difficulty learning to read.
- Phonics instruction had the greatest impact in Grades K-2.
- Older children receiving phonics did better with spelling and oral reading, but their comprehension did not improve.



# Phonics


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- No single sequence of instruction was best.
  - Virtually all phonics programs worked.
  - Phonics alone does not impact comprehension in the upper grades.
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# National Early Literacy Panel

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- NELP reviewed ~300 correlational studies looking at which early skills and abilities predicted later reading achievement
  - Found early development of alphabetic skills were moderate to strong predictors of later literacy across large numbers of studies with large numbers of children, and that they predicted later literacy even when various statistical controls were in place
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# Decoding

Predictor	Average r	N of studies	N of children
Decoding nonwords	.72	8	763
Spelling	.60	7	1,184
Invented spelling	.58	10	778
Reading NOS	.57	3	1,739
Decoding NOS	.53	5	877
Decoding words	.52	21	4,121
Reading comprehension	.52	5	700
ABC knowledge	.50	52	7,570
Readiness	.50	5	1,988
Writing/writing name	.49	10	1,650
Arithmetic	.45	14	3,929
IQ	.45	13	2,015
Phonological awareness	.40	69	8,443

# Decoding (cont).

Predictor	Average r	N of studies	N of children
RAN letters/digits	.40	12	2,081
Concepts about print	.34	12	2,604
Oral language	.33	63	9,358
RAN objects/colors	.32	16	3,100
Phonological NOS	.31	3	174
Performance IQ	.30	15	2,792
Print awareness	.29	6	683
Environmental print	.28	6	1,042
Phonological STM	.26	33	4,863
Visual motor	.25	14	1,316
Visual memory	.22	8	1,708
Visual perception	.22	16	2,551

# Comprehension

Predictor	Average r	N of studies	N of children
Readiness	.59	3	348
Concepts about print	.54	3	535
ABC knowledge	.48	17	2,038
Print awareness	.48	4	347
Phonological awareness	.44	20	2,461
RAN letters/digits	.43	3	333
RAN objects/colors	.42	6	1,146
Decoding nonwords	.41	3	282
Decoding words	.40	6	1,091
Phonological STM	.39	13	1,911
Arithmetic	.35	8	1,197
Performance IQ	.34	5	253

# Comprehension (cont).

Predictor	Average r	N of studies	N of children
Oral language	.33	30	4,015
Writing/writing name	.33	4	565
Visual perception	.26	9	1,438
Visual motor	.22	9	1,333
Concept knowledge	.20	3	873
Visual memory	.17	5	875



# National Early Literacy Panel


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- NELP reviewed 83 studies that examined the effectiveness of interventions aimed at teaching aspects of the alphabetic principle
- Included studies of instruction in phonological awareness, alphabet, phonics
- 36 of these studies considered the impacts of the training on reading (.41); also positive outcomes on ABC knowledge, phonological awareness, print knowledge, spelling and writing
- Combinations of PA and phonics had the biggest payoffs on all measures



# National Early Literacy Panel

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- No proof that ABC knowledge alone matters (like NRP found that ABCs together with phonological training made a difference)
  - Less emphasis on phonemic awareness than phonological awareness (development goes from large to small)
  - No studies found code training worked when it wasn't taught in small groups or individually (no preschool or kindergarten whole class instruction studies)
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# Oral Reading Fluency


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The ability to read orally with speed, accuracy, and proper expression.



# Reading Fluency

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- *Guided repeated oral reading* encourages students to read passages orally with systematic and explicit guidance and feedback from teachers.
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# Reading Fluency

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NRP reviewed 16 studies on guided oral reading and found:

- Repeated oral reading with feedback has a significant and positive impact on word recognition, fluency, and comprehension.
  - These results apply to all students -- including those having difficulty reading.
  - Round robin reading was not supported.
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# Reading Fluency

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- NELP did not look at oral reading fluency (since most preschoolers and kindergartners are not reading)
- However, fluency has a place with younger children too
- Activities like pretend reading, and finger-point reading are the beginnings of early fluency work



# Vocabulary Instruction

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Vocabulary instruction refers to the teaching of word meanings to students




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# Vocabulary Instruction

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NRP reviewed 45 studies on the teaching of vocabulary and found:

- Vocabulary instruction improves reading comprehension.
  - Wide range of vocabulary instruction procedures worked (except for dictionary work).
  - Need for active building of rich word meanings, emphasizing connections, and lots of review.
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# National Early Literacy Panel

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- NELP examined the relationship between vocabulary and later reading achievement and found it to be an important predictor
- But not as important as more complex measures of oral language
- NELP also looked at studies of teaching language explicitly (12)

# National Early Literacy Panel

	Decoding	Comprehension
Overall language comprehension	.58	.70
Receptive language comprehension	.52	.63
Expressive language comprehension	.48	.59
Grammar	.47	.64
Definitional vocabulary	.38	.45
Verbal knowledge	.36	.45
Verbal IQ	.35	.35
Receptive vocabulary	.34	.25
Listening comprehension	.33	.43
Vocabulary	.33	.31
Expressive vocabulary	.24	.34

# National Early Literacy Panel


- Language interventions varied greatly (adult-child interactive play, storybook reading, physical education, etc.)
- Such efforts worked better at preschool than kindergarten (large outcomes for 4 year olds: .54, but even larger ones for 0-3: 1.07).
- Play based interventions did slightly better (but not significantly)



# Reading Comprehension

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The cognitive process of extracting and constructing meaning through interaction and involvement with written language.






# Comprehension Instruction

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The NRP reviewed 205 independent studies on reading comprehension and found:

- Text comprehension improves when readers actively relate the ideas in print to their own knowledge.
  - Teachers can teach students to actively engage meaning in text by teaching them comprehension strategies.
  - Successful strategies included questioning, responding to question types, summarizing, graphically summarizing, using story maps, cooperative work, and monitoring.
  - Combinations of strategies were best.
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# National Early Literacy Panel

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- NELP provided data on the importance of early oral language development and reading comprehension (30 studies, more than 4,000 children)
  - NELP examined the impact of reading aloud to children
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# National Early Literacy Panel

- 16 studies showed that reading aloud to children had positive impacts on oral language (.66) --inflated
- Some evidence that it helps print knowledge as well (4 studies, .51)
- No demographic differences
- Dialogic reading did better than non-dialogic (but not significantly)




# What unites preschool and primary?

- Deep commitment to the well-being of children
  - Recognition of the value of early literacy instruction
  - Willingness to discipline ourselves to what has been proven by research to be beneficial to children
  - Dedication to teaching a curriculum that includes phonological awareness, phonics, fluency, oral language including vocabulary, and reading and listening comprehension
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# What unites preschool and primary?

- Ultimately, it will be the curriculum issues that we connect through and communicate around, through our professional development activities, our curriculum selection and development efforts, and our shared appraisals of children's progress
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