

Connecting Literacy Assessment with Instructional Improvement: P-O-S-E©* Response to Intervention

(*Phonological-Orthographic Substitution Evaluation)

A Plainview-Old Bethpage CSD and Mineola UFSD Project

Literacy challenges for Special Education

- Students who make poor progress developing reading and written language.
- Demands for reading programs which consume significant years of intervention.
- Standardized testing which elicits test outcomes which do not sufficiently reveal progress.
- Pressure for increased reading intervention services despite poor progress.
- Differentiating students who are ESL vs. learning disabled or language impaired.

Solving the problems

- Identifying students in the early stages who are slow to acquire phonemic skills for RTI.
- Ascertaining students who are struggling with second language problems.
- Determining the foundational skills where a student is at risk.
- Specifying targeted goals for literacy development.
- Forming teams who have common goals despite different approaches to teach the skill.

What is the relationship of reading and spelling?

- It requires a bi-directional mapping between orthography and phonology.
- At the early stage of reading development, short vowels are the core elements of reading and spelling of monosyllabic words
- The silent /e/ rule provides the boundary between short vowel monosyllabic words and the onset of the long vowel in words

A goal for readers

"What I think I can say, what I say I can write"

Virginia Berninger, Ph.D. University of Washington School of Education

- Skills needed for writing: access to the phonological code, word identification
- Listening precedes Reading
- Reading precedes Writing

Phonemes that are critical to early reading development

Short vowels: Core phonemes of speech utterances

- Short vowels are the nucleus of every syllable
- Vowels are produced within the mouth with no visual cues
- Vowel perception is influenced by the presence of noise
- Short vowels are present in all words taught in the early phases of reading development

Why are short vowels important?

- Short vowel sounds not pre-existing in native languages will not be heard in the classroom
- ▶ CCSS targets 2nd grade for *instruction* of short vowels.
- Failure to acquire accurate short vowel knowledge inhibits development and differentiation of long vowels.
- Short vowels are not present in Spanish and other languages

The Five Spanish Vowels

Spanish/English Short Vowel Conflict													
U.S. English Vowel Phonemes AHD	U.5. English word	Common Alphabet	Reading Spanish Pronunciation (expected)	Spelling Spanish (examples)	Spanish Vowel Phonemes AHD								
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wĭ	quit (wĭ)		kweet (wē)	quet (?)	wē								

How do we measure the phonological code when applied to reading and spelling?

- The code which is acquired through native language exposure and educational experience is combined to make a composite source of "phonetic rules".
- It is measured when challenged by tasks presented with non-words and low frequency of occurrence words which require the students to tap into their phonetic storage.

Phonological-Orthographic Substitution Evaluation:

P-O-S-E_©

Test development by Carol A. Sullivan, Roy F. Sullivan, PhD, Rebecca Kooper, AuD

- ▶ The P-O-S-E[®] is a criterion-referenced test designed to assess short vowel substitutions in monosyllabic words.
- Test items are non-words and low-frequency-of-occurrence real words designed to probe the student's underlying phonology when applied to spelling and reading.
- Silent /e/ words are administered as a boundary metric between short and long vowels.

P-O-S-E_© test administration and reports

- Can be performed both to individuals or groups of children up to 4 classes
- A spelling test is administered which takes 25 minutes
- The reading test is given outside the classroom, 4 minutes per child
- The words on both tests are identical
- Test results are entered into a computer program
- Reports are both individual and group by class
- Remediation is prescriptive based on test results

P-O-S-E_© Grade 3 Spelling Test

Multiple Grade 3 Classes



Individual Grade 3 Student



P-O-S-E© Raw Data Spelling

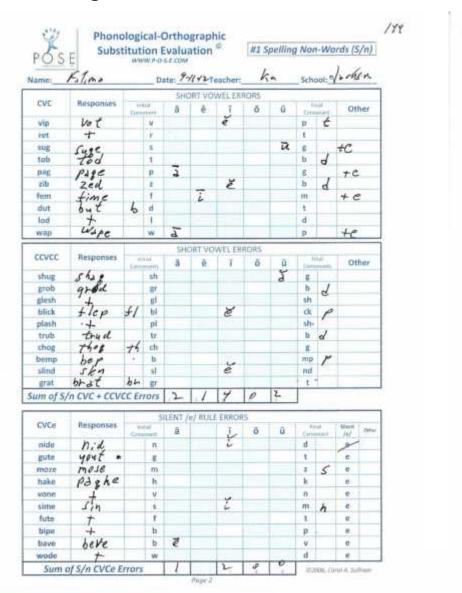
non-words

Phonological-Orthographic Substitution Evaluation ® Spelling Non-Words FA - Portuguese Directions: Listen and spell the words you hear. (nid) (ret) (gout) (mouse) (suge) (glesh) 73. (pagkc) (tod) (vone) (page) (zed) (sin) (trud) (fute) (fime) (but) (bipe) (lod) (wode)

real words

Phonol	ogical-Orthographio Spelling Real		tion Evaluation [©]
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P-O-S-E_© Test Form Transcription of non-word / real word Spelling Responses

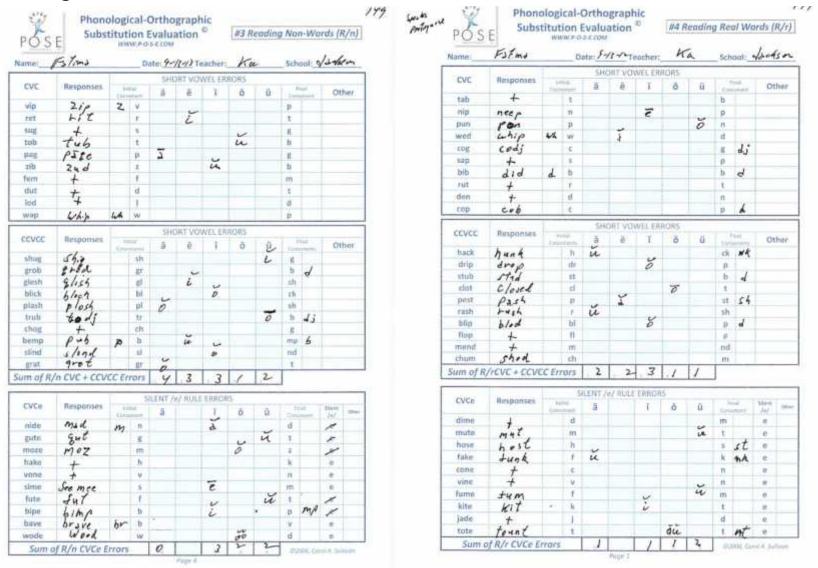


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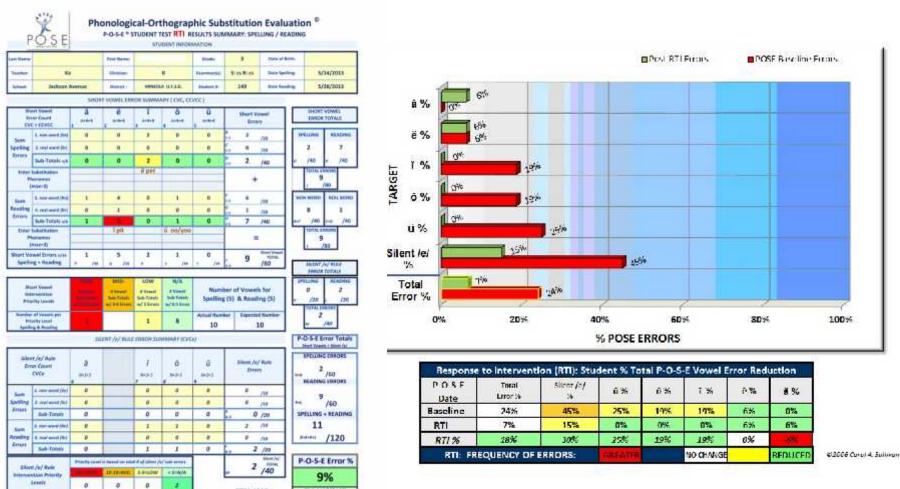
$\text{P-O-S-E}_{\tiny{\textcircled{\tiny \complement}}}$ Individual Grade 3 Student Reading Test



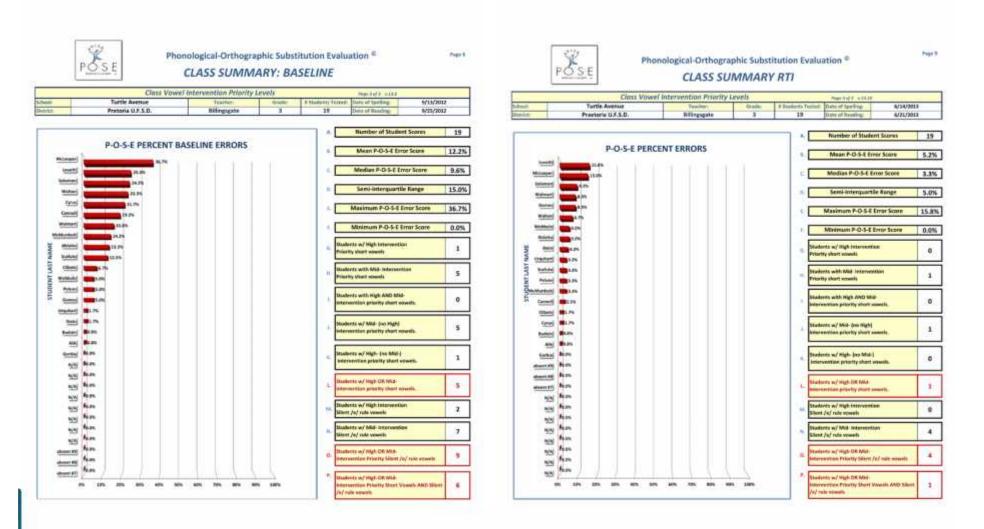
P-O-S-E_© Test Form Transcription of non-word / real word Reading Responses



P-O-S-E_© Individual Grade 3 Student RTI Report



P-O-S-E_© Grade 3 Entire Class RTI Report : Bar Chart Format



$P-O-S-E_{\odot}$ Grade 3 Entire Class RTI Report : Table Format



Phonological-Orthographic Substitution Evaluation [®]

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Phonological-Orthographic Substitution Evaluation ®

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Data Analysis of P-O-S-E responses

- An individual student reports and detailed classroom summary reports are produced targeting error patterns for intervention.
- P-O-S-E_© data becomes a prescriptive remediation template for classroom teachers, speech-language pathologists, reading teachers and ESL teachers
- Targeted interventions

Integrating P-O-S-E results into remediation processes

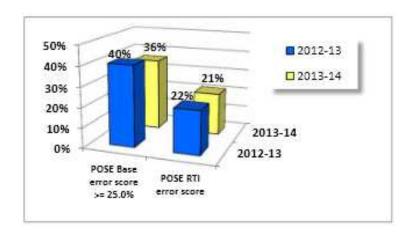
- Data on errors provides prescriptive information for instruction in the classroom, reading and special education.
- Students with high levels of errors receive <u>auditory training</u> with a team approach, in areas of phonological knowledge to develop competencies foundational to accessing core curriculum.
- Focus on phonological/orthographic mapping using auditory and articulatory skills.

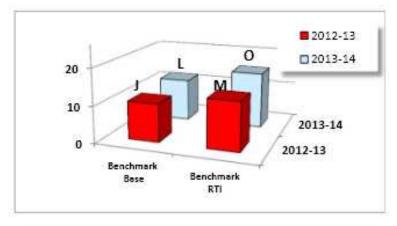
Understanding underlying concepts of vowel training

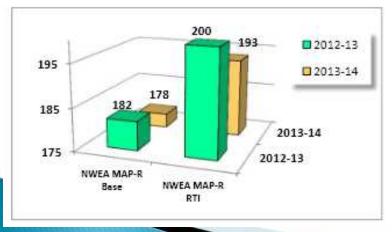
- Goal is to change auditory storage of error vowel to the intended correct vowel
- Vowels are produced within the mouth- no visual cues however they have close phonological relationships
- Important to complete the auditory-articulatory loop
- Classroom conditions with noise can create difficult listening to discern differences

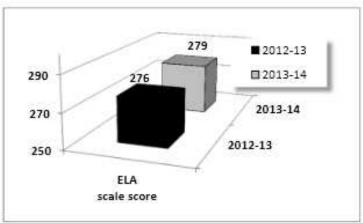
Mineola U.F.S.D. Grade 3 Literacy Baseline v. RTI Scores 2012-13 v. 2013-14 P-O-S-E©; F & P Benchmarks; NWEA MAP; NYS ELA Matched student sets (Baseline P-O-S-E©error score >=25.0%)

Year	n	POSE Base error score	POSE RTI error score	Benchi Bas		Benchm RTI		NWEA MAP-R Base	NWEA MAP-R RTI	ELA scale score
2012-13	38	40.4%	21.7%	10.4	J	13.2	M	181.8	199.7	275.6
2013-14	39	36.1%	21.2%	11.6	L	15,3	0	178.3	193.2	279.1

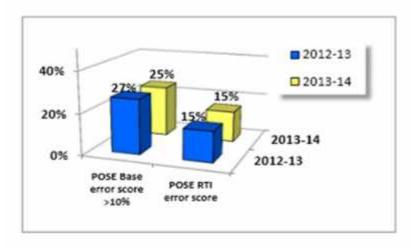


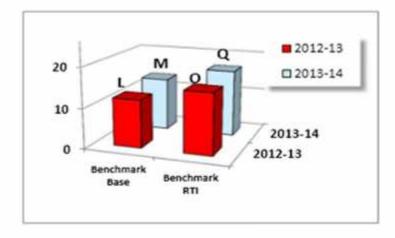


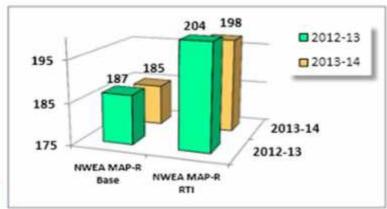


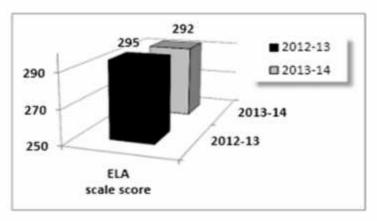


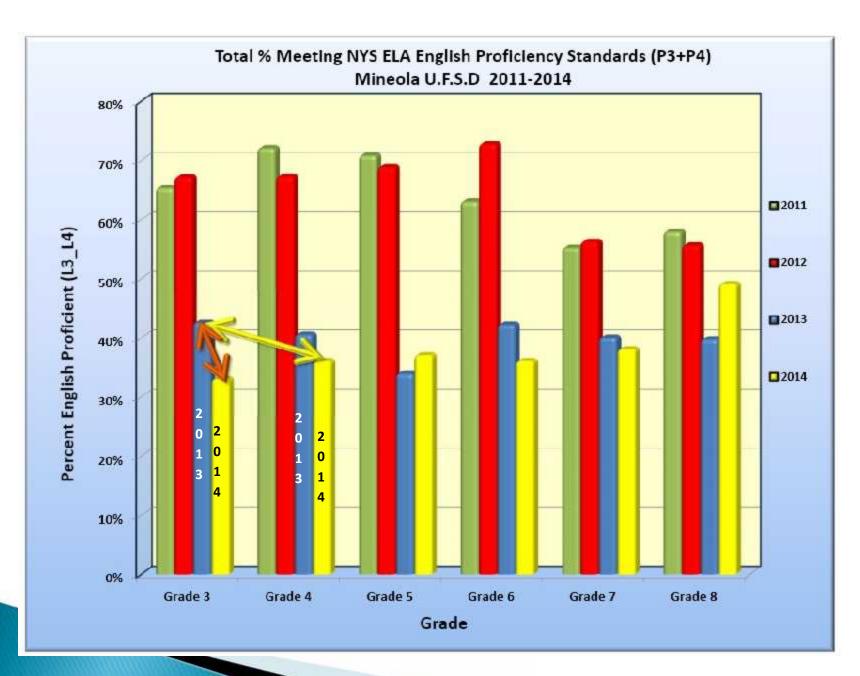
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Grade levels for intervention

- Designed for the 3rd grade
- Significant benefit when used in the 2nd grade
- Application of test and intervention to grades above 3rd grade for students making poor progress

CASE STUDIES

- John S.
 - 11 years of age
 - 6th grade
 - Referred for an auditory processing evaluation due to poor reading scores and written language scores
 - An analysis of overall pattern of results indicate normal auditory processing skills except in the area of phonemic synthesis (17/25 correct- norm 21 correct on the Phonemic Synthesis tests)
 - IQ- 117 overall

John S

- Reading scores
 - Woodcock Test of Reading Mastery- 2.3 grade
 - WIAT 12th percentile
 - Spelling 12th percentile
 - Pseudo word decoding 12th percentile
 - Listening comprehension 99th percentile
- Classification- learning disabled
- Placed in self contained class in 7th grade

2015

John S.

- 14 months of phoneme remediation
- Results
 - Reading
 - Woodcock Reading Mastery-
 - Pre treatment grade 2.3
 - Post treatment grade 6.5
- Placed in collaborative class
- Following year, placed in regular class without support
- Declassified

Outcome of the P-O-S-E_© Project in Mineola U.F.S.D. 2012-13, 2013-14

- ▶ P-O-S-E© Grade 3 error scores were reduced to grade-appropriate values.
- F & P Benchmarks across Grade 3 rose a full letter at the beginning and end of the school year.
- NWEA MAP-Reading scores achieved grade-appropriate levels.
- Intervention Teams were established including the classroom teacher, special education teacher, speech, reading and aids.
- Targeted Specific areas of academic need were targeted of individual students with a focus for the entire team
- Students were identified for Response-to-Intervention training as individuals and in categorical groups.

Thank you!

- Plainview-Old Page Central School District Ellie Becker, PPS Director
- Mineola Free Union School District Catherine Maiman Fishman, PPS Director
- To the staff members of both districts who have worked tirelessly to teach students.
- ▶ To the students who have taught us through development.
- Patricia Schwetz, CCC-SLP Nassau BOCES

For additional information about the P-O-S-E_©

Visit the website: www.P-o-s-e.net

Email: c@p-o-s-e.net

Telephone: 516-248-POSE (7673)