



The Development of Young Children's Spelling Ability

Dr. Ann C. Sharp

Educational Literacy Researcher and
Consultant



Studying Spelling Patterns

Orthography

- Orthography is the study of a writing system's spelling patterns
 - The English writing system is alphabetic
 - Chinese writing system is logographic
 - Japanese writing system is syllabic.



Historical Overview

Why Study Spelling? I mean really, why?

- In the 1960s researchers thought spelling was not very challenging (Jensen, 1962)
- Educators saw spelling as a mere convention (Thompkins, 2003).
- Common public attitude: “BORING!”



Historical Overview

Despite Misconceptions

- Durkin (1966) discovered that children who learned how to spell before they learned how to read, their writing lead to their ability to read.
- Researchers and educators alike became curious!



Historical Overview

The Development of Early Writing Behaviors (C. Chomsky, 1971)

- Children use their knowledge of letter names and sounds to write words.
- Children's spellings were attempts to use the phonemic (sound) structure of our English language.
- Not a mere memorization task!

Historical Overview

Inventive Spelling is Born

- Read was a student of C. Chomsky's.
 - In the 1980's he observed preschoolers' writings who had not yet learned to read.
 - Children's attempts demonstrated an understanding that letters symbolized sounds.
 - These attempts were nicknamed *inventive spelling*.

Historical Overview

Characteristics of Invented Misspellings

- Spell words using letter names
(EGL for *eagle*)
- Omit preconsonantal nasals
(BUPY for *bumpy*).
Preconsonantal nasals = bump, land, went
- Spelling is a deductive process of figuring out relationships between sounds and letters.



Historical Overview

Spelling Coming Up in the World!

- Spelling now a way to encode speech
- Spelling conventions are no longer seen as arbitrary
- Researchers postulated theories about spelling and even debated them
- Spelling research begins to provide insights into reading development
- Literacy scholars pursue the relationship of reading to writing



Developmental Characteristics

Spelling Develops in Stages

Henderson (1980) and Frith (1985) noticed when looking at the characteristics of children's misspelled words that they could categorize spelling attempts into stages of spelling growth.

Developmental Characteristics

Henderson's Spelling Theory

- Henderson examined the spelling of elementary school children
- Proposed that spelling developed from six distinct stages
 - Non phonetic
 - Semiphonetic
 - Phonetic
 - Within Word
 - Syllable Juncture
 - Derivational Constancy

Developmental Characteristics

Nonphonetic Stage

BQS2NF = a letter to a child's grandmother

- Pretend writing
- Random letterforms
- Not connected to speech
- Sometimes use numbers to spell

Non –phonetic = no evidence of phonological insights

Developmental Characteristics

Semiphonetic Stage

BD for *bed* or RUDF for *Are you deaf?*

- Omit vowels and the final sounds
- Discern the initial sounds first followed by the final sounds and then the medial sounds
- Begin to recognize that letters correspond with phonemes

Developmental Characteristics

Phonetic Stage

- Consonant blends in both the initial and final positions are often partially represented.
 - *clap* often spelled *cap*
 - *jump* often spelled *JUP*
- Schwa vowels often omitted
 - *tunnel* often spelled *TUNL*.
- Short consonant-vowel-consonant (CVC) words spelled correctly.
 - *cat hop nut lip red*
- Vowel sounds misrepresented
 - *BAD* for *bed*, or *SEK* for *sick*).

Developmental Characteristics

Phonetic Stage (continued)

- Long vowels are correct but without the orthographic features that sets them apart
 - *smile* often spelled SMIL
- Past tense *-ed* endings and the plural *s* are represented phonetically
 - *marched* often spelled MRCHT
 - *tens* often spelled TENZ.

Developmental Characteristics

Within Word Stage

- Start paying attention to English orthography (spelling patterns)
 - Recognize that *ck* never begins a word
 - Use silent vowel markers like the silent *e*
 - Confuse silent vowel markers
 - Spelling SNAIK for *snake* or FELE for *feel*
 - Overgeneralizations are common
 - Spelling NETE for *net*

Developmental Characteristics

Within Word Stage (continued)

- Children start to concentrate on patterns within words
- Begin to realize some words do not have sounds that map one-on-one with letters
 - the spelling of *sion* in mansion
 - *have* and *some* do not have a long vowel but are spelled as if they do.

Developmental Characteristics

Syllable Juncture Stage

- Looking at spelling patterns across syllables
- Polysyllabic words with inflected endings often require manipulation of the root word
 - hop/ hopping versus hope/hoping
- Prefixes absorbed in the spelling of a root are the most complex
 - addition and community).

Developmental Characteristics

Derivational Constancy Stage

- Learning about the derivational principles of some polysyllabic words
- Learning about Latin or Greek roots and their word meanings
- Find out that meaning and pronunciation can change but spelling remains constant
 - *nation* and *national*

Developmental Characteristics

Derivational Constancy Stage (continued)

- Many confusions are common, normal and eventually give way to correct spelling
 - Confusions about schwa sound spellings
 - BENAFIT for *benefit*
 - Confusions about silent consonants
 - CONDEM for *condemn*
 - Vowel alternations in derivationally related pairs
 - COMPOSITION for *composition*
 - Confusion about silent letters
 - INDITEMENT for *indictment*
 - Uncommon roots
 - EXHILERATE for *exhilarate*

Developmental Characteristics

Derivational Constancy Stage (continued)

- Derivational constancy implies
 - When competent spellers make an error their spelling errors are likely the derivational type
 - National Spelling Bee contestants formally study languages to understand derivations

- Phonics instruction, phonemic awareness, and more and more reading cause spelling to become more complete



Spelling and Phonemic Awareness

Linguistics, Closely Tied to Spelling

- Spelling is mapping symbols to language
- English writing system symbols are the alphabet
- Beginning stages of spelling requires mapping the smallest sound units to letters
- Smallest unit of sound = phoneme
- Phonemic awareness = being aware of phonemes

Phonological Structures

EASIEST

Largest sound unit

No letter knowledge needed

RHYMING

(big, pig, wig)

SYLLABLES

(sci /en/ ti/ fic)

INTERMEDIATE

Sound units are getting smaller

Some letter knowledge needed.

ONSET/RIME

b-ack st-ick

HARDEST

Smallest sound unit

Child gets better with reading and writing.

PHONEMEIC

AWARENESS

b-a-t sh-i-p



Spelling and Phonemic Awareness

Phonemic Awareness is Important!

- Phonemic awareness allows children to segment spoken words into individual sounds and then relate them to letters
- Phonemic awareness is a prerequisite skill to learning how to spell and learning how to read



Spelling and Phonemic Awareness

Phonemic Awareness can be difficult!

- Two reasons why:
 - More attention given to meaning than sound
 - Speech is one steady stream of sound
- Lack of phonemic awareness is the number one predictor for spelling and reading failure



Spelling and Phonemic Awareness

Good News!

- Phonemic awareness can be taught!
- Spelling helps!
- Phonemic awareness is a reciprocal process to spelling
- Phonemic awareness and spelling develop in synchrony



Spelling and Phonics

Spelling and Phonics are Reciprocal

- Phonics is knowing the **symbol/sound** complexities of our writing system.
- Phonics helps us **decode** the **letters** of the alphabet into meaningful words.



Spelling and Phonics

Try To Decode

gress

shinique

litperide

orthophodia



Spelling and Phonics

Spelling and Phonics are Reciprocal

- Spelling is knowing the **sound/symbol** complexities of our writing system
- Spelling helps us **encode** the **sounds** of the alphabet into meaningful words



Spelling and Phonics

How Did You Do?

tay

sess

depine

darlanker



Spelling and Phonics

Mirror Processes

We use the
encoding
process to
spell.

We use the
decoding
process to
read.



Spelling and Phonics Similarities

READING

- Connections between written and spoken words
- Segmenting spoken words into phonemes
- Recognize how letters correspond to sound

SPELLING

- Connections between spoken and written words
- Segmenting spoken words into phonemes
- Recognize how sounds correspond to letters

Spelling and Phonics

Reading Stages vs Spelling Stages

Ehri (1991)	Henderson (1980)
Pre-Alphabetic Pretend reading	Non-Phonetic Pretend writing
Semi Phonetic Maps letters to sounds	Semi Phonetic Maps sounds to letters
Phonetic Reads CVC words Reads long vowel words	Phonetic Spells CVC words

Spelling and Phonics

Reading Stages vs Spelling Stages

Ehri (1991)	Henderson (1980)
<p data-bbox="131 531 521 585">Consolidation</p> <p data-bbox="227 616 927 731">Reading words on higher and higher levels of difficulty</p>	<p data-bbox="1000 531 1574 585">Within Word Pattern</p> <p data-bbox="1097 616 1767 806">Spells long vowel patterns Over generalizes long vowel patterns</p> <p data-bbox="1000 835 1593 892">Syllables and Affixes</p> <p data-bbox="1097 921 1825 1021">Learning about multisyllabic words and how affixes are spelled</p> <p data-bbox="1000 1049 1622 1106">Derivational Relations</p> <p data-bbox="1097 1135 1816 1235">Looking at Greek and Latin Roots and how they affect spelling</p>



Implications for Instructions

Spelling and Reading

- The development of spelling ability provides insights into how to better teach spelling.
- Studying spelling provides insights into how to better teach reading



Implications for Instructions

Inventive Spelling

- We are no longer alarmed with children's inventive misspellings
- Inventive spelling is a window into the progress the child is making to acquire literacy
- Developmental spelling lists are one indicator to determine overall literacy development.



Implications for Instructions

Instruction matters!

- Spelling and reading are not natural. They are conventions invented by man.
- Instruction drives the development of critical understandings
- Instruction makes the difference between a child progressing quickly or moving more slowly



Implications for Instructions

Components of Effective Instruction

- Combine with phonemic awareness and phonics instruction
- Strategic
- Systematic
- Driven by Development
- Explicit
- Taught in a Literacy Rich Environment



Implications for Instructions Combined with Phonics

Students who struggle learn to read and spell with intensive strategic training in:

■ Phonemic awareness

breaking down words into their sound units (specifically the smallest sound units, like cat = /k/ + /a/ + /t/ called phonemes)

■ Phonics

(understanding the relationship between letters and their sounds to make words)



Implications for Instructions

Benefits of Combined Instruction

1. Increase **phonemic awareness**
2. Improve **writing and reading**
3. Encode and decode **strategically**
4. Process **accurately**
5. Develop **automaticity**



Implications for Instructions

Spelling strategies

- Spelling strategies used:
 - Guessing
 - Sounding Out
 - Rule Use
 - Analogy (if I know dog then I can spell hog)
 - Visual Checking
 - Complete Retrieval



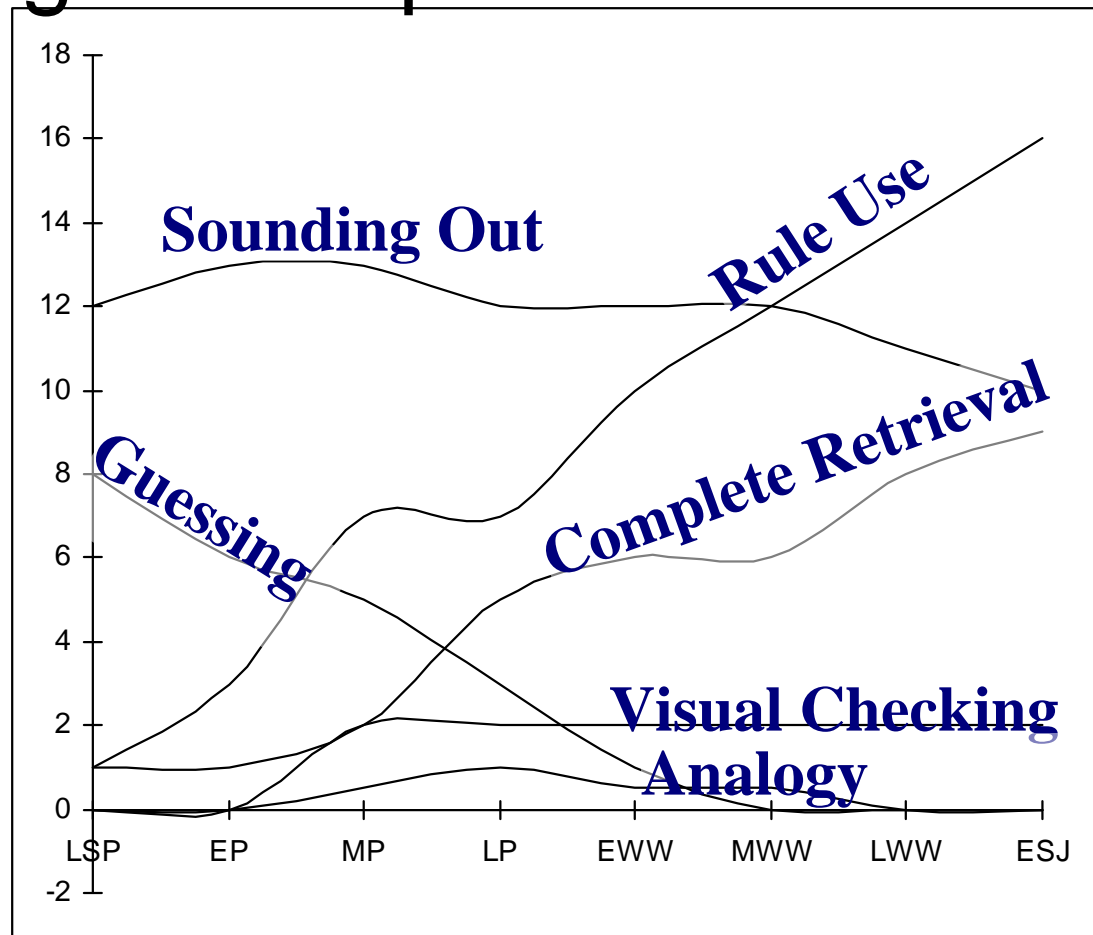
Implications for Instructions

Spelling strategies improve as development increases

- Sounding out is the most simple and most common strategy
- All words carry heavy phonological clues
- Using rules is a more sophisticated strategy
- Verbalizing a spelling rule leads to increase rate of development and accuracy

Implications for Instructions

Mapping Strategy Development to Spelling Development





Implications for Instructions

Strong Support for Strategy Training

- The fundamental principles for word study
 - Follows the developmental phases of orthographic understanding
 - Focuses on spelling patterns
 - Focuses on effective spelling strategies



Implications for Instructions

Benefits of Becoming Strategic

- Strategies help readers decipher unknown words
- Helps writers spell more difficult words
- Without a teacher or parent or tutor
- They become self-regulated!



Implications for Instructions

Systematic

- Spelling and reading taught systematically
 - Follows a prescribed sequence
 - Developmentally appropriate
 - Skill building

Implications for Instructions

Developmentally Driven

- 1st letter sound matching
 - M = mmmm
- 2nd blending and segmenting CVC words
 - /p/ /a/ /t/ = pat
- 3rd rules that help determine vowel patterns
 - Silent e = tide
 - Adjacent vowel = boat
 - *r*-controlled = art
- 4th rules for syllabication
 - 1 consonant following the first vowel must run = mo/tel
 - 2 consonants following the first vowel will split = cam/pus
- 5th learning derivational roots



Implications for Instructions

Explicitly Taught

1. Pre-assess student's ability
2. Clearly explain what students will learn
3. Tell students the benefits of using skill/strategy
4. Model how skill/strategy is used
5. Provide guided practice with feedback
6. Provide independent practice with feedback
7. Provide review

Implications for Instructions

Literacy-Rich Environment

Lots of real reading and writing!





Implications for Instructions

Automaticity

A good spelling and phonics program will provide a systematic approach that is both developmentally driven and strategic. This approach allows the quality of words to become engrained in memory so readers can become **fast, accurate, and effortless decoders and spellers.**



Caveat:

Spelling Harder than Reading

- Spelling requires our memories to reproduce words
- Reading requires our memory to recognize words
- Greek and Latin roots must be carefully learned to spell but not necessary for reading
- Often a good reader will also be a good speller but it is not always the case



Conclusion

Combine Spelling and Phonics Instruction

- Studying the correspondences between sounds and letters is the same for both spelling and reading.
 - As children study phonics rules they are also studying spelling rules.
 - Therefore, word study approach can incorporate both phonics and spelling.
 - There is no need to have separate class times for these.



Conclusion

Word Study

- Follow the developmental sequence
- Draw attention to letter/sound relationships
- Help see prevalent spelling patterns
- Provide simple phonics rules that generalize thru out multisyllabic words
- Follow-up with interesting reading and writing



Conclusion

We Have a Come A Long Way!

- Use to think of spelling as a memorization task
- Now we know that spelling ability follows a developmental path which gives insights on
 - what words to teach
 - what spelling patterns to teach
 - when to teach them
- The process is intricately related to reading
- Instruction is linked with phonemic awareness and phonics



Please e-mail all questions to
mail@readinghorizons.com Thanks