

Spelling Error Analysis for Planning Intervention

Phonological Errors (Phonetically Inaccurate)

Numerous errors in these categories indicate that the student's instruction should include explicit and direct teaching of the identity of consonant and vowel phonemes within the English speech sound system of 25 consonants sounds and 19 vowel sounds.

Vowels

Vowel substitution	(Note)	Vowel omission	(Note)
brash / brush		gaj/garage	
enything / anything			
sponk / spunk			
daning / dining			
aginda / agenda			

Consonants

Liquids /r / or /l/	Nasal consonant /n/, /m/, /ng/ substituted, misplaced, or deleted	Voicing confusion and de-aspiration of stops	Other Consonant
frist / first	haner / hanger		sopid / stupid
spilting / splitting	unbleded/unblended	crisbist / crispest	westerday/ yesterday
geomertey / geometry	trasplant/transplant	thrivt / thrift	chrik / trick
gaj/garage			

Orthographic Errors (Phonetically Plausible)

Numerous errors in these categories indicate that the student may be aware of phonemes, but may lack knowledge or understanding of the phoneme-grapheme correspondence system of English, and/or the written syllable patterns in English and their assembly in longer words. Instruction would systematically build understanding of correspondences and patterns within words and between syllables, while encouraging automatic recognition of whole words once they are accurately decoded.

Vowels

V-team, diphthongs	VCe, open, closed	Vowel-r spellings	Other
skreach / screech	hait / hate	dring / during	furnacher / furniture
throte / throat	rouls / rules	squrm / squirm	nachure / nature
siobeen / soybean	consontrat / concentrate		algabra/algebra
balones / balloons			presedent/president
fasset / faucet			coraspond/correspond
thot / thought			furnacher/furniture

Consonants

Complex Consonants		Syllable Juncture	
/k/ (c, k, ck, ch, x, qu), doubles, etc.	digraphs/trigraphs	Consonant doubling and -Cle syllables	Suffix addition rules
skool / school	spondge / sponge	sumer / summer	slaming / slamming
next / next	multching / mulching	balones / balloons	spilting / splitting
skreach / screech	begruge / begrudge		emptys / empties
scimping / skimping			strapt / strapped
vakashan / vacation			

Morphological Errors

A preponderance of errors in these categories indicates lack of awareness of morphemes and the representation of morphemes in English orthography. Instruction would focus on prefixes, roots, both kinds of suffixes (inflections and derivational suffixes), combining forms, word origin and the relationship between meaning and spelling.

Roots, Combining Forms	Prefix Identification, Assimilated Prefixes	Suffixes	
		Inflectional	Derivational
desision / decision	inprove / improve		
expretion / expression	coraspond / correspond	crisbist / crispest	equilise / equalize
equilise / equalize	colected / collected	classis / classes	shrinkedge / shrinkage
consontrat / concentrate		strapt / strapped	fames / famous
		balones / balloons	vakashan / vacation

Writing Sample Analysis, Classification of Spelling Errors

In the samples below, the spelling errors from a student’s writing are assembled into three broad categories: phonological (phonetically inaccurate), orthographic (phonetically plausible but inaccurate), and morphologic/syntactic.

#1 - Student 10 years, 6 months:

Hi I am an asstronot I love to Se the space ships and holes and unusul thing. That is why I go to space a lot. I allso love to see we all rede have made a lot of fondushon [foundations]. I am the one that is clos to you whipping [wiping] off apece of corvd [carved] stone.

Phonological Errors (Phonetically Inaccurate)

Vowels

Vowel substitution		Vowel Deletion	
fondushon / foundations			
corvd / carved			

Consonants

Liquids /r / or /l/	Nasal consonant /n/, /m/, /ng/ deleted or substituted	Voicing and de-aspirated stops	Other Consonant

Orthographic Errors (Phonetically Plausible)

Vowels

V-team, diphthongs	VCe, open, closed	Vowel-r spellings	Other
se / see			
rede / ready			
apece / a piece			

Consonants

Complex Consonants		Syllable Juncture	
/k/ (c, k, ck, ch, x, qu), doubles, etc.	digraphs/trigraphs	Consonant doubling and -Cle syllables	Suffix addition rule
allso / also	whipping / wiping		whipping / wiping

Morphological Errors

Roots, Combining Forms	Prefix Identification, Assimilated Prefixes	Suffixes	
		Inflectional	Derivational
asstronot / astro + naut			
		thing / things	unusul -al
		fondushon / foundations	fondushon / foundations
		corvd / carved	

Sample # 2: Student 13 years, 2 months

I an Dyslexic, non of my famly has Dyslexia althow my dad might hav it. My family notist that we had to start doing something about it in the 6th grade. Then began my great adventcher. We heded to Bostin. Its amazing loking out a window in the city, the cars speeding by in a calerfol [colorful] bler [blur] of head lights and street lights all arownd, th sownds of horns and sirens from all derectchins [directions]. aparenty [apparently] I had to go threw like 8 awers [hours] of testing, some of it was fun thow. After I finisd testing we needed to go to egecashinol [educational] consultants at the XXXXX senter.

Phonological Errors (Phonetically Inaccurate)

Vowels

Vowel identification		Vowel Deletion	
calerfol / colorful			

Consonants

Liquids /r / or /l/	Nasal consonant /n/, /m/, /ng/	Voicing and de- aspirated stops	Other Consonant
	an / am		finisd / finished

Orthographic Errors (Phonetically Plausible)

Vowels

V-team, diphthongs	VCe, open, closed	Vowel-r spellings	Other
althow / although		bler/blur	Bostin / Bosten
heded / headed		calerfol / colorful	non / none
loking / looking			hav / have
arownd / around			
sownds / sounds			
threw / through			
awers / hours			
thow / though			

Consonants

Complex Consonants		Syllable Juncture	
/k/ (c, k, ck, ch, x, qu), doubles, etc.	digraphs/trigraphs	Consonant doubling and -Cle syllables	Suffix addition rule
allso / also	whipping / wiping		whipping / wiping
	finisd / finished		

Morphological Errors

Roots, Combining Forms	Prefix Identification, Assimilated Prefixes	Suffixes	
		Inflectional	Derivational
senter / center	derectchins / directions		
	aparenty / apparently		dyslexya/ dyslexia
egecashinol/educational		notist / noticed	adventcher/ adventure
		aparenty / apparently	calerfol / colorful
		finisd / finished	derectchins / directions
			egecashinol/educational

Sample 2 Analysis: At a **phonological** level, this student made a few errors including one vowel identification error, a nasal substitution and a fricative substitution. This is typical of an adolescent dyslexic student who has received excellent instruction but who still exhibits residual phonological processing weaknesses. At the level of **orthography** this student struggles to correctly spell vowel teams, vowel-r combinations, and some common words with irregular vowel spelling such as *none*. At the level of **morphology** this student needs to review past tense and common Anglo-Saxon suffixes including -ily and -ly. This student chooses to use Latin-based words even though he struggles to spell them correctly – a sign of a strong vocabulary. He would benefit from beginning instruction in Latin-based word-building with common roots, assimilated prefixes and derivational suffixes, beginning with the most common patterns.

Sample Scope and Sequence of Basic Phonics and Word Reading Instruction
 Compiled by Louisa Moats, Ed.D.

Phoneme-Grapheme Correspondences, Syllable Patterns, and Morphemes in English Orthography	Typical Grade Level Taught	
	Reading	Spelling
Consonant phonemes represented with single letters: m, s, t, l; p, f, c (/k/), n; b, r, j, k; v, g (/g/), w, d; h, y, z, x	K	K
Short vowels /ă/ /ĩ/ /õ/ /ũ/ /ē/ spelled with a, i, o, u, e	K	K
Encode and decode simple syllables with short vowels (VC, CVC)	K	K
Long vowel sounds associated with single letters a, e, i, o u; open syllables in one-syllable words <i>me, he, be; so, no; hi, by</i>	K	K
A few transparent consonant blends: qu, st, sm, sn, -st, -ft, lp	K	1
Consonant digraphs sh, ch, wh, th, ng	1	1
Consonant trigraphs, with and without digraphs (splint; square)	2	2
Concept of closed syllable needing consonant guards to keep the vowel short	1-3	1-3
Concept of open syllable with no guards, allowing vowel to be long	1-3	1-3
Two or more spellings for certain sounds: /s/ = c, s /z/ = s, z /k/ = k, c, -ck after a short vowel /g/ = j, g	1	1
Principle of hard and soft c and g (carry, cent; girl, gentle)	1-2	2-3

Identify base word and inflectional suffix on single-syllable base words with no spelling change (help, <u>helps</u> , <u>helped</u> , <u>helping</u>)	1	1
VCe long vowel pattern in single syllable words (wage, theme, fine, doze, cute/rude)	1	2
Concept of VCe syllable type in multi-syllable words	1-3	1-3
Most common vowel teams for long vowel sounds (ee/ea; ai/ay; oa/ow/oe; igh)	1	1-2
Diphthongs /oi/ (oi, oy), /ou/ (ou, ow); odd vowels /aw/ (au, aw), /oŏ/ (oo, u) (boil, boy, shout, now, cause, saw, book, put)	1	2
Concept of vowel team syllable type in multi-syllable words	2-3	2-3
Generalization of position-based vowel spelling patterns such as ai, ay in one-syllable words	--	2
Vowel + r patterns, /er/ = ir, ur, er /ar/ = ar /or/ = or and Vowel + r syllable type	1	2-3
All jobs of y (y as consonant /y/; as /ī/ on ends of one-syllable words like cry; as /ē/ on ends of multi-syllable words like baby; as / ĭ/ in a few words like gym, myth)	1	2
“Floss” or f, l, s, z doubling rule (stuff, well, miss, jazz)	1	1
Encode and decode single syllable words with blends, digraphs, short vowels, long vowel, and vowel+r patterns that have been taught	1-2	1-2
Application of spelling principle of more consonants after short vowels (-dge, -tch, -ck, etc.)	--	2-3
Additional consonant digraphs ph, gh (phone, cough)	2	2-3
The -ild, -ost, -old, -olt, -ind pattern (wild, most, cold, dolt, hind)	2	2
Lesson common vowel teams: ei, eigh (vein, eight); ie (thief), ie, igh (pie, fight);	2	2
The sounds /ū/ and /yū/ have overlapping but different spelling patterns (music/stupid; cute/rude; few/chew; cue/clue; suit, soup, moon)	2	2-3
Less common vowel + r spellings with vowel teams and VCe: are, air, aire, eir; ore, our, oor; ear, eer, ier; ire; ure	2	2-3
Contractions with am, is, has, not (I’m, he’s, she’s, isn’t, don’t)	1	2
Contractions with have, would, will (I’ve, he’d, they’ll)	2	3
Common silent letter patterns from Anglo-Saxon (kn, mb, -lk, gn, wr, gh) (know, comb, talk, gnat, write, ghost)	2	3+
Division of multi-syllable words with two closed syllables and VCCV letter sequence (napkin, rabbit, helping)	1	2
Two and three-syllable words with regular syllable types (closed, VCe, open, vowel team, vowel + r)	2	2-3
Consonant-le syllable type (stable final syllable) on multisyllabic words (bugle, snuggle)	2	3+
Multi-syllable word construction and division principles, VC/CV, V/CV, VC/V, CV/VC	2-3	3+
Pattern for plural -s, pronounced /s/ and /z/, and -es after /s/, /z/, /ch/, /j/, /z/, /zh/)	1	2
Possessive singular (house’s)	1	2

Possessive plural (houses')	2	3
Three sounds for the past tense –ed (walked /t/, hummed /d/, wanted /ed/)	1	2-3
Identification of syllable stress and schwa (wagon, ticket, music, along)	2	2-3
Irregular plurals and irregular past tense verb forms (wolf, wolves; deer, deer; ran, run; leave, left; sell, sold)	1-2	2-3+
Consonant doubling rule for one-syllable words (sit, sitting)	2-3	3+
Drop silent e spelling rule for one-syllable words (hope, hoping)	2-3	3+
Change y to I spelling rule for one-syllable words (cry, cries)	2-3	3+
Final syllables beginning with ti, ci, si (nation, special, vision)	3-4	4+
Spellings dependent on language of origin of a word (etymology), such as Greek ph /f/, ch /k/, y /i/; French ch for /sh/, g for /zh/ (machine, garage or rouge)	2-3	3
Morphology (Meaningful Word Parts)		
Anglo-Saxon compounds with closed, open, and VCe syllables (starlight, daytime)	1-2	2-3
Common inflectional suffixes on base words (-s, -ed, -ing, -er, -est)	1	2-3
Most common prefixes closed and vowel- <i>r</i> syllables: <i>non, ex, con, per, mal</i> open syllables: <i>bi, co, di, o, pro, tri, twi, pre</i> two syllables: <i>super, circum, intra, contra, counter, extra, intro, multi, ultra</i>	2	3
Common suffixes beginning with a consonant (-ly, -ful, -ment, -hood, -less, -ness)	2	3
Common suffixes beginning with a vowel (-y, -er, -or, -en, -able/ible)		
More prefixes (fore, inter, trans, over, sub, semi, anti, mid, ex, post)	3	3-4
Suffixes with ti, ci, si (tion, sion, tious, sious, cial, tial), suffix -ture	3	4
Common Latin roots: port, form, rupt, script, tract, cept spect, ject, struct, dict, mit, flex, fer cred, duc, pend, pel, fac, vert, tend curs, ped, vid, aud, vit/viv leg, greg, cap/cieve/cep, grad/gress voc/voke, leg/lect, lit/litera cede/cess, tain/ten/tin, fid/fide/feal sis/sta/stat, cad/cas/cid, pon/pose cern/cert, mob/mot/mov, gen/genus cid, cis	[4+]	[4+]

<p>Assimilated prefixes</p> <p><i>in</i> (immigrate, illegal, irregular) <i>ad</i> (address, approach, aggressive) <i>ob</i> (obstruct, opportunity) <i>sub</i> (subtract, suppose, surround) <i>com</i> (commit, collide, corrode) <i>dis</i> (dissuade, difference)</p>	4+	4+
<p>More Derivational suffixes</p> <p><i>most, ous, or, ess, ure/ture, dom, ent/ence, an, ant/ance, ist, ic, ty</i> <i>ar, ability, ible/ibility, ize, ary, ate, ward, age, al, ify, ity, ee, fy</i> <i>ism, ious, ory, ial, ian, cious, ation, ial, tious, ile, ade, ium</i></p>	5+	5+
<p>Connectives that join the root and suffix</p> <p><i>i</i> (menial, lenient, anxious) and <i>u</i> (superfluous, disingenuous, factual)</p>	5+	5+
<p>Greek morphemes and combining forms</p> <p>Graphemes unique to Greek-based words</p> <p><i>ch</i> = /k/ (chorus, monochrome) <i>y</i> = [I] or [#j] (dyslexia, cytoplasm) <i>ph</i> = /f/ (phonology, grapheme) <i>x</i> = /z/ (xylophone)</p> <p>Silent letter spellings</p> <p><i>rh</i> (rheumatoid) <i>ps</i> (psychology) <i>pn</i> (pneumonia) <i>mn</i> (mnemonic) <i>pt</i> (pterodactyl)</p> <p>Combining forms</p> <p><i>micro, scope, photo, graph</i> <i>tele, phon, geo, therm, bio</i></p>	6+	6+

<i>meter, logy</i>		
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Sources: Henry (2010), Moats & Rosow (2010), White et al., (1989)