Instructional Report

Decoding with Merriam-Webster Pronunciation Symbols: A Structured Approach for Dyslexia Instruction

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Abstract

This instructional analysis presents a structured decoding method using Merriam-Webster's pronunciation symbols to analyze 24 complex names from mythology, scripture, folklore, and literature. Selected from a larger dataset of 350 analyzed words, these names offer rich phonological variety and instructional value. Each name was broken down by syllable type, onset, vowel, and coda to identify consistent patterns aligned with structured literacy practices. This approach makes unfamiliar, multisyllabic words more accessible for students with dyslexia by promoting phonemic awareness, decoding accuracy, and engagement—particularly for older learners revisiting foundational skills. To support implementation, educators should receive training in pronunciation symbols and syllable structures. Integrating this framework into upper elementary and middle school instruction could strengthen decoding, track progress, and expand vocabulary access. Supplemental resources—such as word lists or instructional guides—can further support instruction. Overall, this method offers a practitioner-informed, research-aligned pathway to enhance decoding and literacy outcomes for all learners.

Dyslexia is a neurobiological condition that affects reading fluency, spelling, and word recognition, often due to deficits in phonological processing. For students like Jonah—a sixth grader who struggles with decoding—these challenges become more severe when they encounter unfamiliar names with irregular vowel patterns, unstressed syllables, or complex consonant clusters (Wolf, 2007). Noah Webster's lexicographic work aimed to simplify English spelling and pronunciation to make learning more accessible. In 1828, Webster's *American Dictionary of the English Language* introduced a system of diacritical marks to clarify pronunciation, expanding on his earlier *Compendious Dictionary* from 1806. Webster believed that orthography should support learning rather than preserve inconsistent conventions (Belok, 1967).

Merriam-Webster's Intermediate Dictionary continues this legacy by using consistent pronunciation symbols to represent English sounds. When paired with syllable structure analysis, these symbols provide a structured method for decoding complex or multisyllabic words. This approach is particularly helpful for students with dyslexia, as it reduces cognitive load and strengthens sound-symbol mapping (Brown, 2015). Resources like Merriam-Webster support phonemic awareness, decoding, and spelling pattern recognition. Neuroimaging research supports the effectiveness of structured phonics instruction that explicitly links phonemes and graphemes (Gabrieli, 2009).

This instructional report presents a structured approach rooted in Webster's principles. It applies those principles to names from mythology, scripture, folklore, and literature to demonstrate how dictionary-based decoding enhances phonological awareness and supports reading development. By engaging with these multisyllabic

names, students reinforce decoding skills, analyze sound-symbol relationships, and identify phonological patterns. This process supports critical thinking about language and reinforces literacy as a structured, meaning-making practice.

Lexicographic Theory and Instruction

Dictionaries are more than reference tools—they are structured classroom resources that support decoding, pronunciation, and word analysis. This instructional use aligns with research on the evolving role of dictionaries in active language learning (Abecassis, 2007). In literacy instruction, features like pronunciation symbols, syllable breaks, and part-of-speech labels help reduce cognitive load by breaking complex words into manageable units (Canney & Schreiner, 1976). When used purposefully, Merriam-Webster's *Intermediate Dictionary* can support decoding accuracy, vocabulary development, and learner confidence through structured analysis (Chen, 2011).

Dataset and Methodology

This analysis draws from a dataset of 405 names sourced from mythology, scripture, folklore, and literature. Selected for their phonetic complexity and instructional relevance, 350 names (approximately 84%) were fully analyzed and coded for phonological structure. From this group, 24 names were chosen for in-depth decoding analysis based on their educational value and linguistic variety. These multisyllabic names offer practical opportunities for helping students with dyslexia recognize and decode unfamiliar vocabulary patterns through consistent dictionary-based decoding and syllable analysis.

Word Selection Criteria

Names were chosen based on the following criteria:

- Literary and Historical Context: Names from mythology (Greek, Roman, Norse, Mesoamerican), scripture (Biblical and sacred texts), folklore (African and Asian), and classical literature.
- Phonetic Complexity: Incorporation of vowel teams, consonant clusters, schwa sounds, R-controlled syllables, and multisyllabic structures.
- Instructional Value: Words that pose unique challenges in decoding and pronunciation, especially for students with dyslexia who benefit from explicit phoneme-grapheme mapping.

Source of Pronunciation

All phonetic transcriptions were sourced from Merriam-Webster's *Intermediate Dictionary*, which uses a consistent, learner-friendly system of pronunciation symbols based on Noah Webster's original lexicographic framework. These symbols reflect general American English and support syllable segmentation and sound-symbol correspondence.

Analytical Procedure

Each word was analyzed using the following process:

1. **Syllable Segmentation:** Words were separated into their individual syllables according to dictionary hyphenation.
2. **Onset-Nucleus-Coda Breakdown**. Each syllable was analyzed by identifying its: (1) Onset: The initial consonant or consonant cluster, (2) Nucleus (Vowel): The central vowel sound, (3) Coda: The ending consonant(s).

3. **Syllable Type Classification:** Syllable types reflect the spoken structure of words, showing how vowel and consonant sounds function within each syllable to influence decoding and meaning (Kearns, 2020). The six syllable types include:
    - Open (ends in a vowel with a long sound),
    - Closed (ends in a consonant with a short vowel),
    - R-controlled (a vowel followed by ‘r’ that changes its sound),
    - Vowel team (two or more vowels working together to form one sound),
    - Silent E (a vowel-consonant-e pattern where the final silent ‘e’ makes the vowel long),
    - Consonant-le (ends in a consonant followed by ‘le,’ forming a final syllable).
4. **Instructional Notes:** The analysis noted less familiar phoneme-grapheme correspondences, phonemic units, and morphophonemic features that may influence decoding.

The decoding process revealed consistent phonological patterns across a wide range of names. This method reinforces structured phoneme-grapheme analysis by breaking complex words into manageable parts using Merriam-Webster’s pronunciation symbols. While not a formal intervention, it aligns with explicit decoding strategies and may improve accuracy and reading confidence for students who need targeted support.

Results

This section demonstrates how multisyllabic names from literature, mythology, and global traditions can be decoded using Merriam-Webster's pronunciation symbols to build phonological awareness, word recognition, and decoding accuracy. Often missing from early literacy instruction, these names are analyzed by syllable type, phoneme-grapheme mapping, and sound structure. This approach enriches vocabulary instruction and supports decoding across diverse language contexts. Each entry includes a syllable breakdown and sound representation based on Merriam-Webster's diacritical system.

Dialect and Pronunciation Considerations

This analysis uses pronunciation symbols from *Merriam-Webster's Intermediate Dictionary*, which reflect general American English. However, student pronunciations may vary due to regional dialects or language backgrounds. Common differences include: (1): stress patterns (ˈ for primary stress, ˌ for secondary stress) or (2): unstressed vowels, often shown as the schwa \ə\. These variations are natural and should not be seen as decoding errors. Instead, they offer opportunities to affirm students' linguistic identities and connect speech to phonics instruction.

Pronunciation is shown between reversed virgules (\ \) in roman type. Parentheses ( ) signal optional sounds, which may or may not be pronounced. Some consonants (e.g., m, n, l) represent their sounds directly, while others use phonetic symbols for clarity (e.g., c = k, g = j). Understanding these conventions supports accurate decoding and builds awareness of sound-symbol relationships. Teaching with dialect sensitivity helps students feel recognized while developing strong,

transferable reading strategies. The following section presents a breakdown of each name analyzed, organized by category.

Category: Word Analysis of Mythological Names

Word: Aesculapius

Pronunciation (Merriam-Webster): \es-k(y)ə-lā-pē-əs\

Phoneme-to-Grapheme Ratio: Balanced

Description: Demonstrates how multisyllabic names from mythology can be decoded through consistent phonics instruction. With a mix of open and closed syllables, the word provides structured opportunities to teach schwa sounds, long vowels, and consonant-vowel patterns.

	Aes-	**cu-**	**la-**	**pi-**	**us**
Onset	-	c	l	p	-
Vowel	ae	u	a	i	u
Coda	s	-	-	-	s
Syllable Type	Closed	Open	Open	Open	Closed
Sound Representation	"Ae" = short \ĕ\	"c" = \k\, "u" = \yə\	"a" = \ā\	"i" = \ē\	"u" = \ə\

As you continue analyzing the remaining words and their syllables, remember: the onset is the initial consonant or consonant cluster, the nucleus is the central vowel sound, and the coda is the final consonant(s). Syllables may follow patterns such as open (ending in a vowel with a long sound), closed (ending in a consonant with a short vowel), r-controlled (a vowel followed by r that alters its sound), vowel teams (two vowels forming one sound), silent e patterns, or consonant-le endings.

Word: Daedalus

Pronunciation (Merriam-Webster): \ˈde-də-ləs\

Phoneme-to-Grapheme Ratio: 7:8

Description: Follows regular phonetic patterns when decoded through vowel teams, open syllables, and closed syllables. This reinforces that even unfamiliar words can support core phonics instruction.

	Dae-	**da-**	**lus**
Onset	d	d	l
Vowel	ae	a	u
Coda	-	-	s
Syllable Type	Vowel-Team Syllable	Open Syllable	Closed Syllable
Sound Representation	"ae" = short \ĕ\	"a" = \ə\	"u" = \ə\

Word: Eurydice

Pronunciation (Merriam-Webster): \yu̯-ˈri-də-(ˌ)sē\

Phoneme-to-Grapheme Ratio: 7:8

Description: Includes vowel teams and open syllables that align with common decoding principles. Its structure also supports teaching less familiar vowel sounds and advanced syllable recognition.

	Eu-	**ry-**	**di-**	**ce**
Onset	-	r	d	c
Vowel	eu	y	i	e
Coda	-	-	-	-
Syllable Type	Vowel-Team	Open	Open	Open
Sound Representation	"eu" long \ū\	"y" = short \ĭ\	"i" = \ə\	"c" = \s\, "e" = \ē\

Word: Fafnir

Pronunciation (Merriam-Webster): \ˈfäv-nər\

Phoneme-to-Grapheme Ratio: 5:6

Description: Illustrates how surrounding letters influence vowel pronunciation, supporting focused instruction on mastering r-controlled syllables.

	faf-	**nir**
Onset	f	n
Vowel	a	i
Coda	f	r
Syllable Type	Closed	R-Controlled
Sound Representation	"a" = \ŏ\, "f" = \v\	"ir" = \er\

Word: Guinevere

Pronunciation (Merriam-Webster): \ˈgwi-nə-ˌvir\

Phoneme-to-Grapheme Ratio: 5:9

Description: Combines open and R-controlled syllables with consonant clusters that highlight glide and silent-e patterns. Its structure offers rich opportunities for decoding instruction within literary contexts.

	Gui-	**ne-**	**vere**
Onset	g	n	v
Vowel	ui	e	e
Coda	-	-	r (e)
Syllable Type	Open	Open	R-Controlled
Sound Representation	"qui" = \gwĭ\. This is a phonemic unit including a glide (gw+vowel), helpful in teaching complex sound patterns.	"e" = \ə\	"er" = \ear\, final "e" is silent.

Word: Hyperion

Pronunciation (Merriam-Webster): \hī-ˈpir-ē-ən\

Phoneme-to-Grapheme Ratio: 7:8

Description: Includes open, closed, and R-controlled syllables. Its structure highlights the value of teaching multisyllabic decoding while reinforcing vowel length and syllable pattern recognition.

	Hy-	**per-**	**i-**	**on**
Onset	h	p	-	-
Vowel	y	e	i	o
Coda	-	r	-	n
Syllable Type	Open	R-controlled	Open	Closed
Sound Representation	"y" = \ī\	"er" = \ear\	"i" = \ē\	"o" = \ē\

Word: Laocoon

Pronunciation (Merriam-Webster): \ lā-ˈä-kə-ˌwän\

Phoneme-to-Grapheme Ratio: Even

Description: With mostly open syllables and one closed syllable, Laocoon provides a clear model for vowel clarity and multisyllabic rhythm. Its structure shows how complex words can still follow foundational decoding principles.

	La-	**o-**	**co-**	**on**
Onset	l	-	c	-
Vowel	a	o	o	o
Coda	-	-	-	n
Syllable Type	Open	Open	Open	Closed
Sound Representation	"a" = \ā\	"o" = \ŏ\	"c" = \k\, "o" = \ə\	"o" = \wŏ\,

Word: Minotaur

Pronunciation (Merriam-Webster): \ˈmi-nə-ˌtȯr\

Phoneme-to-Grapheme Ratio: 7:8

Description: Illustrates how decoding supports vocabulary development by blending open and R-controlled syllables. Its structure is well-suited for reinforcing vowel patterns in mythological terms.

	Mi-	**no-**	**taur**
Onset	m	n	t
Vowel	i	o	au
Coda	-	-	r
Syllable Type	Open	Open	R-Controlled
Sound Representation	"i" = \ĭ\	"o" = \ə\	"aur" = \or\

Word: Narcissus

Pronunciation (Merriam-Webster): \när-ˈsi-səs\

Phoneme-to-Grapheme Ratio: 7:9

Description: Pairs R-controlled and closed syllables, showing how decoding applies to names from literature and psychology. It reinforces consistent sound-symbol mapping.

	Nar-	**cis-**	**sus**
Onset	n	c	s
Vowel	a	i	u
Coda	r	s	s
Syllable Type	R-Controlled	Closed	Closed
Sound Representation	ar = \ar\	"c" = \s\ "i" = \ĭ\, "s" = not pronounced	"u" = \ə\

Word: Pollux

Pronunciation (Merriam-Webster): \ˈpä-ləks\

Phoneme-to-Grapheme Ratio: 5:6

Description: Consists of two closed syllables, reinforcing CVC decoding and less common final blends. It's useful for practicing short vowels and consonant clusters.

	Pol-	**lux**
Onset	p	l
Vowel	o	u
Coda	l	x
Syllable Type	Closed	Closed
Sound Representation	"o" = \ŏ\, "l" = not pronounced	"u" = \ə\, "x" = \ks\

Word: Quetzalcoatl

Pronunciation (Merriam-Webster): \ˌkwet-səl-kə-ˈwä-tᵊl\

Phoneme-to-Grapheme Ratio: 11:12

Description: Despite its visual complexity, this word follows predictable syllable and vowel patterns. It offers a useful model for decoding instruction that incorporates global names.

	Quet-	**zal-**	**co-**	**a**[1]	**tl**
Onset	q	z	k	-	t
Vowel	ue	a	o	a	-
Coda	t	l	-	-	l
Syllable Type	Closed	Closed	Open	Open	Open
Sound Representation	"que" = \kwĕ\	"z" = \s\, "a" = \ə\	"c" = \k\, "o" = \ə\	"a" = \wŏ\	

[1] The letter "a" in Quetzalco**a**tl makes the \wŏ\ sound, an irregular pattern due to its Nahuatl origin, rarely seen outside of loanwords or names

Word: Romulus

Pronunciation (Merriam-Webster): \ˈräm-yə-ləs\

Phoneme-to-Grapheme Ratio: Consistent

Description: Combines closed and open syllables with standard vowel representations. It shows how historically important names can still follow regular phonics principles.

	Rom-	**u-**	**lus**
Onset	r	-	l
Vowel	o	u	u
Coda	m	-	s
Syllable Type	Closed	Open	Closed
Sound Representation	"o" = \ŏ\	"u" = \yə\	"u" = \ə\

Word: Siegfried

Pronunciation (Merriam-Webster): \ˈsig-ˌfrēd\

Phoneme-to-Grapheme Ratio: 7:9

Description: Demonstrates how vowel team syllables appear in legendary names. Despite its length, the word follows consistent decoding patterns and supports instruction on distinguishing vowel teams.

	Sieg-	**fried**
Onset	s	fr
Vowel	ie	ie
Coda	g	d
Syllable Type	Vowel-Team	Vowel-Team
Sound Representation	"ie" = short \\ĭ\	"ie" = long \ē\

Word: Terpsichore

Pronunciation (Merriam-Webster): \ˌtərp-ˈsi-kə-(ˌ)rē\

Phoneme-to-Grapheme Ratio: 9:11

Description: Combines one R-controlled syllable with several open syllables, making it useful for teaching vowel variation and stress in classical terms.

	Terp-	**si-**	**cho-**	**re**
Onset	t	s	ch	r
Vowel	e	i	o	e
Coda	rp	-	-	-
Syllable Type	R-Controlled	Open	Open	Open
Sound Representation	"er" = \er\	"i" = \ĭ\	"ch"= \k\, "o" = \ə\	"e" = \ē\

Word: Koschei

Pronunciation (Merriam-Webster): \ kəsh-chā

Phoneme-to-Grapheme Ratio: 5:9

Description: Combines closed and vowel team syllables with a final consonant cluster, such as “sch.” Its predictable structure supports phonics instruction with less familiar words.

	Kosch-	**chei**
Onset	k	ch
Vowel	o	ei
Coda	sch	-
Syllable Type	Closed	Vowel-Team
Sound Representation	"o" = \ə\, "sch" = \sh\	"ei" = \ā\

Category: Word Analysis of Biblical Names

Word: Isaiah

Pronunciation (Merriam-Webster): \ī-ˈzā-ə\

Phoneme-to-Grapheme Ratio: 4:6

Description: Provides a clear example of open, vowel team, and closed syllables. Its structure supports decoding instruction using scriptural and high-frequency names.

	I-	**sai**	**ah**
Onset	-	s	-
Vowel	i	ai	a
Coda	-	-	h
Syllable Type	Open	Vowel-Team	Closed
Sound Representation	"i" = \ī\	"s" = \z\ "ai" = \ā\	"ah" = \ə\

Word: Joshua

Pronunciation (Merriam-Webster): \ˈjä-sh(ə-)wə\

Phoneme-to-Grapheme Ratio: 5:6

Description: Uses only open syllables, making it effective for modeling multisyllabic segmentation and schwa pronunciation in commonly known names.

	Jo-	**shu**	**a**
Onset	j	sh	-
Vowel	o	u	a
Coda	-	-	-
Syllable Type	Open	Open	Open
Sound Representation	"o" = \ŏ\	"u" = \ə\	"a" = \wə\

Word: Zechariah

Pronunciation (Merriam-Webster): \ˌze-kə-ˈrī-ə\

Phoneme-to-Grapheme Ratio: 7:9

Description: Combines open and closed syllables with long vowels and schwa sounds, illustrating how decoding supports the reading of sacred and historical names.

	Ze-	**Cha-**	**Ri-**	**ah**
Onset	z	ch	r	-
Vowel	e	a	i	a
Coda	-	-	-	h
Syllable Type	Open	Open	Open	Closed
Sound Representation	"e" = \ĕ\	"ch" = \k\, "a" \ə\	"i" = \ī\	"ah" = \ə\

Category: Word Analysis of African & Global Folklore

Word: Chiwara

Pronunciation (Merriam-Webster): \chē-wär-ə\

Phoneme-to-Grapheme Ratio: 4:7

Description: Blends phonetic transparency with cultural relevance. Its syllable structure models decoding of names with phonemic shifts and morphophonemic patterns.

	Chi-	**war-**	**a**
Onset	ch	w	-
Vowel	i	a	a
Coda	-	r	-
Syllable Type	Open	R-Controlled	Open
Sound Representation	"i" = \ē\	The /w/ before "ar" alters the vowel sound, showing a morphophonemic shift \war\.	"a" = \ə\

Word: Urashimataro

Pronunciation (Merriam-Webster): \ü-rä-shē-mä-tä-rō\

Phoneme-to-Grapheme Ratio: 11:12

Description: Composed entirely of open syllables, the word reinforces vowel clarity and rhythm. It's well-suited for applying decoding principles to longer names from non-Western traditions.

	U-	**ra-**	**shi-**	**ma-**	**ta-**	**ro**
Onset	-	r	sh	m	t	r
Vowel	u	a	i	a	a	o
Coda	-	-	-	-	-	-
Syllable Type	Open	Open	Open	Open	Open	Open
Sound Representation	"u" = \ü\ as in ruby	"a" = \ŏ\	"i" = \ē\	"a" = \ŏ\	"a" = \ŏ\	"o" = \ō\

Word: Walumbe

Pronunciation (Merriam-Webster): \wä-lüm-bā\

Phoneme-to-Grapheme Ratio: 6:7

Description: Presents a mix of open and closed syllables, reinforcing vowel-consonant blending in names rooted in African mythology.

	Wa-	**lum-**	**be**
Onset	w	l	b
Vowel	a	u	e
Coda	-	m	-
Syllable Type	Open	Closed	Open
Sound Representation	"wa" = \wŏ\	"u" = \ü\	"e" = long \ā\

Word: Yudi

Pronunciation (Merriam-Webster): \yü-dē\

Phoneme-to-Grapheme Ratio: 3:4

Description: Models early multisyllabic decoding with two simple open syllables and supports vowel clarity in diverse names.

	Yu-	**di**
Onset	y	d
Vowel	u	i
Coda	-	-
Syllable Type	Open	Open
Sound Representation	"yu" = long \ū\	"i" = long \ē\

Category: Word Analysis of Classical / Literary Figures

Word: Beowulf

Pronunciation (Merriam-Webster): \ˈbā-ə-ˌwu̇lf\

Phoneme-to-Grapheme Ratio: 6:7

Description: Shows how decoding can support access to names from Old English literature. It blends open and closed syllables, phonemic approximants, and familiar vowel patterns.

	Be-	**o-**	**wulf**
Onset	B	-	w
Vowel	e	o	u
Coda	-	-	lf
Syllable Type	Open	Open	Closed
Sound Representation	"e" = long \ā\	"o" = \ə\	"wu" = \wu̇\[2]

[2] Wu forms an approximant unit \wu̇\, where the glide /w/ alters the vowel sound. Teaching it as a unit supports decoding and builds fluency with similar patterns.

Word: Vivian

Pronunciation (Merriam-Webster): \ˈviv-ē-ən

Phoneme-to-Grapheme Ratio: Even

Description: Offers a straightforward mix of open and closed syllables. Its predictable structure supports foundational decoding instruction using real names.

	Viv-	**i**	**an**
Onset	v	-	-
Vowel	i	i	a
Coda	v	-	n
Syllable Type	Closed	Open	Closed
Sound Representation	"i̲" = \ĭ\	"i̲" = \ē\	"a̲" = \ə\

The phonological analysis of names from mythology, scripture, folklore, and literature revealed consistent decoding patterns using Merriam-Webster's pronunciation symbols. Despite their visual and structural complexity, many of these words adhered to predictable syllable types such as open, closed, vowel team, and R-controlled, which support instruction in phonics and pronunciation. Names like *Aesculapius*, *Eurydice*, and *Guinevere* illustrated teachable features, including schwa sounds, long vowels, and consonant clusters. This structure reinforces the value of dictionary-based decoding for improving word recognition and reducing processing demands, especially for students with dyslexia encountering multisyllabic or unfamiliar names.

Discussion

This analysis demonstrates how dictionary-based pronunciation symbols and syllable decoding can enhance instruction for students with dyslexia. By breaking down complex names into phonological components, educators can reinforce phonemic awareness, syllable type recognition, and grapheme-phoneme correspondence—core

elements within the Science of Reading, a multidisciplinary body of research grounded in cognitive psychology, linguistics, neuroscience, and lexicography (see Appendix A).

Instructional Implications

Middle school teachers can incorporate this decoding framework into phonics and word study lessons. It draws on multisyllabic names from mythology, scripture, folklore, and literature. These multisyllabic words provide meaningful opportunities to reinforce explicit instruction in syllable types, strengthen sound-symbol mapping, and support the decoding of less familiar but instructionally valuable vocabulary (Bowers & Bowers, 2017). Rather than relying solely on simplified readers, this approach deepens engagement while advancing foundational skills. This approach aligns with Cognitive Load Theory (Sweller, 1988), which emphasizes reducing unnecessary processing demands so students can focus on learning. By using consistent pronunciation symbols, educators can help students with dyslexia more easily recognize patterns, build decoding skills, and gain confidence.

Benefits of Dictionary-Based Pronunciation

Merriam-Webster's pronunciation system aligns well with the Science of Reading (SoR)—including frameworks like Language Essentials for Teachers of Reading and Spelling (LETRS)—and with cognitive load theory by offering consistent symbols that clearly correspond to specific sounds. This clarity supports orthographic mapping and memory, making the system highly transferable. Once familiar, students can apply it independently. The method is especially effective for older students revisiting decoding in age-appropriate and cognitively engaging contexts.

Limitations and Training Needs

A primary challenge is the general unfamiliarity with dictionary-based pronunciation symbols among educators. To address this challenge, basic professional development should introduce common pronunciation symbols, provide guided practice with multisyllabic words, and demonstrate how to integrate the method into tiered supports or enrichment activities. With appropriate scaffolding, the framework can enhance decoding instruction while promoting linguistic precision.

Conclusion

This instructional analysis examined 24 complex names from mythology, scripture, folklore, and literature, using pronunciation symbols from *Merriam-Webster's Intermediate Dictionary*. Each name was deconstructed by syllable type, onset, vowel, and coda to reveal phonological patterns aligned with current instructional practices. This structured decoding approach helps make multisyllabic, unfamiliar words more accessible for students with dyslexia, offering a practical model for integrating linguistically rich vocabulary into phonics and word study. Rather than avoiding complex names, this method embraces them as opportunities to strengthen phonemic awareness, decoding accuracy, and student engagement—particularly for older learners revisiting foundational skills. By combining consistent pronunciation symbols with explicit instruction in syllable structure, students build independent decoding skills, confidence, and vocabulary awareness.

To support effective implementation, educators should receive foundational training in pronunciation symbols and syllable types. Embedding this framework into upper elementary and middle school instruction can improve decoding fluency and

enable progress monitoring. Supplemental resources—such as word lists, instructional templates, or digital tools—can further reinforce learning and promote independent practice. Overall, this framework offers a research-informed, classroom-ready strategy to enhance decoding instruction and expand literacy access for all learners.

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Appendix A: Alignment Across LETRS, Merriam-Webster Dictionary Approach, and Cognitive Load Theory

Focus Area	LETRS Framework (Moats, 2023)	Merriam-Webster Dictionary Approach	Cognitive Load Theory (Sweller, 1988)
Purpose of Instruction	Focuses on decoding, phonology, morphology, and orthography.	Supports decoding and vocabulary using pronunciation symbols and syllabication.	Reduces cognitive overload by segmenting decoding, learning, and vocabulary tasks.
Focus on the Learner	Builds comprehension and word recognition for both teachers and students.	Helps students analyze word structure and sound-symbol relationships.	Scaffolds engagement with pronunciation, spelling, and meaning in real time.
Treatment of Words	Emphasizes explicit mapping of sounds to letters.	Uses dictionary entries to explore pronunciation, syllable types, and structure.	Organizes words into manageable learning units for efficient processing.
Approach to Decoding	Applies systematic instruction and language analysis.	Applies pronunciation symbols to map sounds without relying on general rules.	Minimizes extraneous load through consistent phonetic symbols and rule-based patterns.
Application in Literacy	Advances reading through a science-based approach to word learning.	Promotes vocabulary growth and decoding through structured, real-world word use.	Enhances independent learning through guided practice and structured supports.
This table highlights how LETRS provides a research-based foundation for teaching word structure, while dictionary-based strategies offer a practical, self-directed approach to decoding. Cognitive Load Theory supports both frameworks by emphasizing clarity and minimizing extraneous processing, allowing students to focus on core elements such as pronunciation, decoding, and vocabulary. Together, these approaches promote independence and deeper word understanding through structured, manageable tasks.			