# So Many Rules, So Little Time: Unpacking Essential Foundational Skills of Reading

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## Abstract

Teacher content knowledge is a critical predictor for student reading achievement. This article unpacks the foundational knowledge teachers must know to teach the sounds and symbols necessary for their students to become proficient readers. In addition to content knowledge related to phonological and phonemic awareness, this article includes phonics generalizations/rules along with examples and the regularity of their application. Tasks such as jump rope rhymes and stories are included to illustrate ways to engage children in the identification and manipulation of the sounds and structure of language.

**Key Words:** phonological awareness; phonemic awareness; evidence based practices; phonics rules; National Reading Panel report; barriers to reading

## 1. Introduction

Most educators understand that reading is the foundation that supports learning in all content areas and at all grade levels, and most professors of pre-service teachers hold the same belief. However, together we question: Are preservice teachers being prepared with the foundational skills of reading that they require to meet the needs of their students? The National Council on Teacher Quality (NCTQ, 2013) found that fewer than half of the teacher education programs adequately prepare preservice teachers to teach phonemic awareness and phonics.

This finding may help to explain why one third of all students in grade four cannot demonstrate partial mastery of the reading skills necessary to read at grade level (Lee, Grigg, & Donahue, 2013). Rod Paige, former Secretary of Education, in a speech to the International Reading Association in 2001, stated that nearly 70% of all rural and inner-city fourth-grade students cannot read at even a basic level where students have partial mastery of grade level material.

With so much at stake, it is essential to examine the reading content knowledge every teacher of reading must possess to be experts in the science of reading assessment and instruction. Studies by Moats & Foorman (2003) show a strong correlation between teachers' prior knowledge of reading content and student learning or achievement. They found that teachers must have more than a superficial knowledge of isolated basic facts and processes to sequence the content and plan pedagogically sound lessons. In addition, teachers need content mastery to assess students and plan lessons that meet their needs (Holmes & Dougherty, 2006). Without content knowledge, teachers simply do not have the necessary information to plan sequenced lessons that build on each other. Without content knowledge, teachers will struggle to determine which reading skills to emphasize and how to begin

The purpose of this article is to unpack a body of knowledge in which teachers must be fluent to promote early reading success. We focus on the foundational reading skills of phonological awareness and phonics taught to young children in grades Pre-k through grade two. While this knowledge is essential for teachers in the early grades, it is also important for middle and upper elementary teachers to know these foundational reading skills so they can use them to identify and remediate the sources of reading failure for their struggling readers. To guide teachers on the teaching of phonics, we include Clymer's (1963) list of phonics rules, a dependable set of rules that may be applied to most reading situations, as well as a list of phonics rules to question based on their lack of dependability. In addition, we provide evidence-based examples to show how instruction of phonological awareness and phonics can be implemented in the classroom.

To emphasize the immense responsibility Pre-K through second grade teachers bear, we have provided riveting statements by six leading reading researchers which highlight the need for deep knowledge of phonological awareness and phonics. These statements are intended to motivate teachers to learn the essential prerequisite reading skills elementary students must master. However, the last statement is included to provide awareness regarding basic reading skill attainment!

- Callaghan and Madelaine (2012) stated that "poor phonological awareness skills in preschool are linked to early reading failure (p. 9)."
- Lundberg (2002, p. 7) states that the "...association between phonological awareness and reading acquisition is actually one of the most robust findings of development and cognitive psychology, repeated and replicated over and over again across languages..."
- Stanovich (2000, p. 397) has found that phonemic awareness is "the best predictor of the ease of early reading acquisition-better than anything else that we know of, including IQ."
- Byers (1998) and Snider (1997), reporting on longitudinal studies, found that children entering first grade phonemically unaware are likely to remain the poor readers at the end of fourth grade. This slow start is an unnecessary tragedy considering that readers of all ability levels are cognitively able to learn to read when they are taught the appropriate content.
- Moats & Tolman (2009, p. 6) "The devastating and social consequences of reading failure can often be prevented . . . all but 2-5 percent of children can learn basic reading skills in first grade..."

## 2. Content Teachers Must Know

More than a decade ago, The National Reading Panel (NRP, 2000) identified essential reading content and how it should be sequenced. The NRP findings were supported by the 2008 National Early Literacy Panel Report (NELP, 2008). Through their meta-analysis of early literacy skills, NELP found that phonological awareness continues to be a strong forecaster of success with decoding, comprehension, and spelling skills.

To plan lessons that meet the early literacy needs of children, teachers must have a solid command of the alphabetic principle, the sounds, and symbols of their native language. Content knowledge related to the alphabetic principle includes knowing the differences between phonological awareness and its subset, phonemic awareness.

Phonological awareness is the ability to distinguish units of sounds in spoken words such as syllables, rhyme, rime, diphthongs, and phonemes. A phoneme is the smallest unit of meaningful sound in spoken words that includes beginning, middle, and ending sounds. In addition, teachers must teach students to listen for sounds in words with diphthongs (a gliding vowel sound that contains elements of two distinct vowel sounds (/oi/ $\ddot{o} \bar{e}$ ), and schwas (the replacement of two or more phonemes with a single unaccented phoneme, usually /uh/.

During the time students are learning to identify and manipulate the sounds of language, they must also be learning the names of the letters of the alphabet and the sounds they represent. This alphabetic content knowledge is necessary for assessing students' level of learning as they learn to read and write and to help them avoid pitfalls as they decode or encode words. For example, students without knowledge of digraphs will try to decode individual sounds from groups of letters such as /sh/, /th/, and /ch/ and meet with frustration. Explicitly teaching these digraphs is one way to minimize or eliminate this frustration. Schwas, so numerous in the English language, make it hard for students to distinguish many of the sounds in words. Students who spell *pencil* may spell it *pensul*. To the uniformed teacher, the student may appear woefully behind. On closer look, the student has demonstrated a good grasp of phonemic awareness and just needs to be taught the conventional spellings of these words. Instead of teaching all words as sight words, the teacher can teach some words, or even parts of words as sight words, a far less laborious task! It is important to note that we do not take the position that primary age children should be saddled with definitions of diphthongs, schwas, and the like. However, it is absolutely essential for the reading teacher to understand these technical aspects of language so they can assess and meet students' individual strengths and needs.

## 3. Evidence-Based Practices for Phonological and Phonemic Awareness

Like Julie Andrews in Rodgers and Hammerstein's *The Sound of Music*, teachers must "start at the very beginning" and focus on the early prereading knowledge and skills that support reading. The sounds of our language are, "a very good place to start."

However, how do teachers sequence the essential prereading content and skills? How do they plan lessons that are both developmentally appropriate and build on themselves? This is a Herculean task, yet one made easier due to the solid research-based sequenced activities available to teachers. It is a "very good start" when teachers plan lessons based on practices that have been proven to work. This section focuses on evidence-based classroom practices that are based on the sequence of phonological tasks listed earlier in this article.

It is important to begin with the essential building blocks for reading, phonological and phonemic awareness. These early skills must be an integral part of the curriculum for children who come to school lacking phonemic sensitivity (Gerber & Klein, 2004; Bursuck, Damer, Mehlig, Munk, Perry; & Smith, 2004; Berg & Stegelman, 2003; Yopp & Yopp, 2000, Byers, 1998). The NRP (2000) found that when teachers involve students with only one or two phonological or phonemic segmentation tasks at a time, the students learn at a faster rate, and their learning is sustained over time.

Current research advocates teaching phonemic awareness and letter naming close to or at the same time (Piasta & Wagner, 2010). Children must be able to identify and isolate the individual speech sounds and connect these sounds with the letters that represent them. Teaching phonemic awareness and letter naming together helps children make the connection between speech and writing. When tested, nonproficient readers lacked one or both of these essential skills, and instead, relied on the memorization of each individual word they encountered in print (NRP, 2000). The following statement by Reid Lyon, a former teacher and researcher with the National Institute of Health, describes the process children go through as they try to discern small units of sound in speech and match them to the letters that represent them.

"Although spoken language is seamless, the beginning reader must detect the seams in speech, unglue the sounds from one another, and learn which sounds go with which letters" (1998, p. 17).

The "very beginning" in reading instruction requires that teachers know the phoneme segmentation tasks and their order of difficulty. It is important to note that children are at varying stages of phonological and phonemic awareness. Each child will move through the stages at different rates and require different amounts of time devoted to a particular stage. Therefore, it is essential to differentiate instruction based on continued formative assessment.

Initially, children are able to discriminate the larger chunks of speech sounds and then first sounds of spoken words. For example, "mother" has two syllables, moth/er and begins with the sound "mmm," As children develop the ability to distinguish smaller units of sound within words, they develop the acuity to attend to the other phonemes in the word *daddy*: d/a/dd/y, d/a/dd/y, d/a/dd/y (Goswami, 2002).

Schatschneider, Francis, Foorman, Fletcher, & Mehta (1999) list six phonological tasks for teachers to follow that require students to identify and manipulate the sounds of their language. The easiest tasks are listed first; the level of auditory and oral complexity increases as the children progress through the tasks.

- First sound comparison- identifying the names of pictures beginning with the same sound.
- Blending onset-rime units into real words.
- Blending phonemes into real words.
- Deleting a phoneme and saying the word that remains.
- Segmenting words into phonemes.
- Blending phonemes into non-words.

The above list does not include the specific recognition of syllables. However, syllables, as larger chunks of language, would be close to the same ranking as the blending of onset-rime units into real world. The "very beginning" in reading instruction requires that teachers know the phoneme segmentation tasks and their order of difficulty.

To teach the recognition of syllables, teachers should have children listen for breaks in words. Have them tap or clap the syllables in their names, family and friends' names and familiar objects. Another tactile/kinesthetic way to teach children to "feel" syllables in words is to have them feel their jaw drop as they say the word. Have children place one hand under their chin as they say a word. Demonstrate and then guide them as they say a word and count the number of times their jaw drops. Through these simple activities children can learn to discern individual or groups of sounds from a succession of speech sounds.

Another helpful technique for teachers is to use rhyming words to teach children to identify and count syllables in words. Examples include (yellow-fellow-bellow and witch-stitch-hitch). These rhyming words were taken from jump rope rhymes, another way for students to also mark syllables through tactile/kinesthetic activities and hear more sophisticated vocabulary at the same time.

Blends, two letters each with a distinct sound, can be spoken together in a rapid fashion that may aid students when decoding or encoding words. It is best to first teach children the individual phonemes and then teach them together in their blended state. This process helps to eliminate a step when sounding out a word. Treiman (1991), an early childhood reading researcher, found that young children who experienced difficulty identifying separate sounds in words with consonant clusters (e.g. <u>pl</u>-an and <u>str-ing</u> could decode words more easily when the separate letters were taught as a single sound unit.

Onsets and rimes, known as word families, combine two of the easiest phonological segmenting tasks, identifying initial sounds and sound chunks Treiman (1991) suggests that children begin with simple sound combinations and move to more complex ones as they become proficient. The following is her recommended progression for teaching onsets and rimes:

- Choose a word that has a short vowel for the onset followed by a single consonant for its rime <u>*a*-t.</u>
- Choose a word with a single consonant for the onset followed by a two letter rime, one vowel and one consonant <u>s-at.</u>
- Add different consonants, one at a time, for the onset and keep the rime the same <u>r</u>-at, <u>m</u>-at, <u>h</u>-at, <u>f</u>-at.
- After students have had plenty of practice with consonant-vowel-consonant onsets and rimes, add two letter onsets <u>*fl*</u>-at, <u>*sl*</u>-at.
- Continue adding layers of complexity by using consonant clusters for both onsets and rimes.

Provide children with planned opportunities to play orally with words, syllables, onsets and rimes, and phonemes. Drill can be incorporated into developmentally appropriate and interesting scenarios. Here are two examples that show how teachers can make up simple stories and scenarios that help children identify and use the sounds of their language:

- The mean old troll who gets so angry he can't talk straight, "Sip, sap, sip, sap, who's sipping on my bridge?" Or, "I mean, "Brip, brap, brip, brap, who's that bripping on my bridge?" Or, "Oh! Oh! I mean, "Trip, trap, trip trap, who's that tripping on my bridge?" Have children use sounds to trick the troll.
- A story such as Harry the Cat who is looking for the lost sound /s/. As the teacher reads or tells a story, the children try to help Harry by pointing out pictures of objects that begin with "s."

Ways to engage students with language are legion and require few props and just a little imagination. Songs, poems, stories, games, and riddles are the vehicles for systematically planned, explicitly delivered, and developmentally appropriate reading lessons. Classrooms should ring with the sounds of language.

We know that children develop a better awareness of the sounds of their language if they are taught in small groups. Though it is not clear why small group instruction is better than individual instruction, researchers have hypothesized that the social interaction and motivation may be a factor (National Reading Panel, NRP, 2000). However, teachers, who know their students well, may choose to teach those who need one-on-one instruction individually.

## 4. Barriers to Teaching Phonological and Phonemic Awareness

Evidence that phonological awareness is critical for reading success has been known for at least twenty years, yet there is a growing body of evidence that a research-to-practice gap is substantial in the area of phonological and phonemic awareness (Moats, & Foorman, 2003; McCutchen, D., Abbott, Greenwood, Beretvas, S. N., Cox, S., Potter, N. S., Quiroga, T., Gray, A. L. 2002, Bickart, 1998). In a three-year study of teacher implementation of phonemic awareness, McCutchen et al (2002) found three barriers to learning content related to phonological awareness and phonics:

- 1. The overburdened teacher. Teachers juggle a myriad of tasks daily concerning students academic, social, and cultural needs.
- 2. The language of research does not match the language teachers hear daily and use with their general population of students and parents. Therefore, researchers must take care to define technical terms so they are readily understood by busy teachers. Teachers are more likely to teach what they know and understand rather than something wrapped in technical terms.
- 3. A demanding school day leaves teachers with little time to practice skills before teaching. In one school, the speech teacher instructed teachers on the proper way to pronounce the phonemes. Though not difficult, this practice went a long way to demystify the content for the teachers.

In addition to the barriers found by Abbott, Walton, & Greenwood (2002), Holmes and Moore (unpublished) found that it was difficult for their graduate students, teachers and proficient readers, to focus solely on the spoken sounds exclusive of the orthography. The spelling of the words interfered with their ability to hear the complexity of some of the spoken sounds. Kamil & Walhberg (2005) noted that a danger exists when teachers try to teach a skill that comes effortlessly to them. When Holmes asked graduate students, enrolled in literacy classes, how they learned to read, most could not remember; their earliest memories were of a parent reading to them. No one mentioned specific skill instruction, leading them to believe that learning to read is a natural process, something that "just happens." The "just happens" mindset has been legitimized by some reading experts Goodman (1993) and Smith (2003) who argue that learning to read is as natural as learning to talk. Many teachers were led to believe that reading would, "just happen" if children were surrounded by print-rich environments and given access to books. Though print-rich environments and access to good books are an essential part of a total reading program, they must accompany the explicit instruction of individual reading skills, rather than replace it (Moats & Tolman, 2009; Adams, 2001; Stanovich, 2000).

In addition, Holmes and Moore (unpublished) found that elementary teachers enrolled in their graduate classes frequently had a fuzzy notion of critical reading content. They confused phonemic awareness and phonics and, when pressed, thought phonics and phonemic awareness were synonymous. Most worrisome, they thought reading instruction began with the decoding of words.

They bypassed phonological and phonemic awareness, the important prerequisites to written language, and proceeded to ask children to connect sounds, which they had not yet mastered, to newly learned letters. Furthermore, when teaching phonics, sound/symbol correspondence, the authors found that teachers had considerable confusion over the correspondence between orthography (written text) and the corresponding phoneme. For example, multiple letters that represent one sound (ship, eight), a single letter / $\underline{x}$ / that represents two phonemes /ks/ or /gz/, added a baffling level of complexity to the content knowledge teachers are expected to know. An even greater level of insecurity came with diphthongs with their glided vowel sound, /oi/ in oil and /ou/ in out, along with vowels that produce the "uh" sound of schwa vowels. The authors' observations parallel findings from Rowan, Schilling, Ball, and Miller (2001) who found that subjects were unable to isolate phonemes from written words with a high level of confidence. Moats and Foorman (2003) reporting on a 2001 study by Bos, Mather, Dickson, Podhajski, & Chard, found that, "All teachers showed a very weak grasp of phonological concepts and phonics" (p.26).

Many teachers have told us that since they learned to read through whole language and sight words, the concepts and terms of phonemic awareness and phonics were alien to them. Though they had a general idea about what was meant by phonics, they easily confused it with phonemic awareness. One first grade teacher said, "I have learned that I had been missing a critical foundation piece, phonological and phonemic awareness that would set the stage for the later phonics tasks I had been trying to teach my students. I had rushed into teaching phonics before my children had the foundational phonological skills. I lacked the content knowledge to know where to start."

#### 5. So Many Rules! Which Ones to Teach and Which Ones to Ignore?

As children develop the ability to hear and manipulate the sounds of their native language they must be able to connect the sounds to the symbols that represent them. Some phonemes have a direct one-to-one correspondence with the symbols that represent them. For example, the sound *buh* consistently is represented by the letter /b/. However, others are not as consistent and cannot be counted on to work 100% of the time. Because our language is somewhat phonetically irregular, controversy surrounds generalizations related to phonics usage. Teachers may avoid teaching generalizations because they believe that the rules have too many exceptions to be useful. Without knowledge of the number of times the words conform to the rule, teachers may teach phonics generalizations that readers can count on at least 78% of the time and apply to 30-334 words. This list is followed by a list of phonics generalizations (Table 2) that worked, at best, only 32% of the time (Clymer 1963).

#### 6. Discussion of Phonics Rules

Please note that the above lists of rules to teach and rules to question are to serve as a guide. We culled our list from over 45 phonics generalizations and listed the generalizations that were the most and the least consistent with the phonics rules. It is interesting to note that we omitted four phonics generalizations that conformed to the rules 90%-100% of the time because they applied to fewer than 10 words. Unless there is a special need, these generalizations may not be worth the time to teach or should be sequenced later in the school year after students have learned rules that apply to the vast number of the words they are expected to learn.

It must be noted that the generalizations presented in figures 1 and 2 are not without controversy. Two noted researchers, Johnston (2001) and Duke (2014) found discrepancies in his work based on subsequent research and his word selections. Because sounding out vowel patterns is a difficult task for students, they advocated teaching high utility vowel pairings through direct instruction and word analysis where the students seek and identify patterns of vowel pairings in words. Therefore, teachers must consider carefully the generalizations and identify vowel patterns they know will fit with the books and other written text their students will encounter.

Teaching phonics generalization rules, like the teaching of phonological awareness, must be planned and systematic. This does not imply that all instruction requires rote memorization, though it is helpful if children interact with each rule enough times to have a ready familiarity with it. As children work with the phonics rules, they should be able to explain the spelling and pronunciation of the words they use. Furthermore, they must be able to identify words that conform or are exceptions to the rule. Word walls and personalized word books with phonics rules generalizations as the headings are two ways children can move from decoding words by their first letter to more sophisticated ways of interacting with and analyzing words.

Choosing the phonics generalizations and determining how many to teach at one time depends upon the grade level and the needs of the students. The Common Core State Standards (NGA & CCSSO, 2010) and most individual state frameworks provide a continuum of phonological awareness and phonics skills. The CCSS includes the teaching of phonological awareness skills for grades K-one and phonics skills to be taught in grades K-five. Teachers, when determining the scope and sequence of their phonics lessons, must take their cues from a number of sources including the CCSS, state frameworks, district guidelines, their reading series and mesh the sequencing and teaching of individual goals with the level of their students. For example, students who do not struggle with the pronunciation of "ck" as "k" are better served by focusing on a different rule, one that helps them target specific errors that crop up in their reading and writing.

## 7. Summary

While educators are aware of the importance of foundational literacy skills, often there are sequencing gaps that prevent the positive outcomes they seek. Some of these gaps may be partially explained by the multiple responsibilities facing teachers. In addition to having a firm grasp of reading and academic content and the developmental levels of their students, teachers must know the research that informs their practice and how to break it down into manageable chunks to teach to their students. Extensive research has been conducted to determine the best way to teach phonological and phonemic awareness. Phonemic awareness can be taught to young children, and though they do not acquire it naturally, most learn it quite easily through planned, systematic instruction where children progresses from simple to complex speech sounds.

Effective phonics instruction should be systematic and explicit. Moats & Hall (2010) state that "a systematic approach ensures that (a) concepts are explained, practiced, and generalized; and (b) learning is continually evaluated." (p. 35). The list of phonics generalizations provides teachers with a sequence to follow in this process. The approach should be comprehensive where phonics is taught in isolation and applied within reading and writing.

When teachers do not fully understand the progression of the essential skills of learning to read, they tend to skip over, or teach the sounds and symbols that comprise words in fragmented fashion. Teachers who believe that focusing on phonemic awareness is not developmentally appropriate because, "Children get bored sitting and working on worksheets" demonstrate a lack of reading content knowledge because phonemic awareness instruction, by its very nature, *is oral, not written*.

Teachers can learn the fundamentals of phonological awareness and in turn teach them to their students (McCardle & Chhabra 2004; Stanovich, 2000). Increasing the teachers' knowledge of phonological and phonemic awareness and the pedagogy to teach it will ultimately lead to improved educational experiences (Abbott, Walton, & Greenwood, 2002; Berg & Stegelman, 2003; Hall & Moats, 1999).

It is important to note that a reading program that includes the teaching of isolated basic skills does not preclude more holistic activities including exposure to print, especially good literature. An effective reading program is comprehensive in scope, enabling emergent and beginning readers to master the subskills of reading in an environment that also promotes the richness of the total literacy experience and socially interactive language activities. Effective skills-based activities should stimulate a great amount of curiosity and experimentation with language (National Reading Panel, 2000; Yopp & Yopp; 2000; Wasik, 2001).

Today's entering teachers must have a command of the content of reading so they can pass it on to their students. Without content knowledge about the subjects they teach, they run the risk of using outdated and ineffective curricula and pedagogical practices. With up to 70 % of our most vulnerable student population struggling with reading, teachers must become experts in the underlying skills and processes their students need to become proficient readers.

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#### Table 1

#### **Vowel Rules to Teach**

1. R-controlled vowels- /ar/, /er/, /ir/, /or/, /ur/- The vowel sound is distorted or omitted when followed by an /r/. Examples: *care*, *stern*, *air*, *motor*, *turn* (78%)

2. The digraph /oa/- Combined, these letters represent the long /o/ sound. Examples: *boat, coast, road* (97%)

3. /Y/ as a vowel sound (continuous flow of air) - Sounds for long /e/ and /i/, and short /i/ are made when /y/ is the final letter in a word. Examples: *carry*, *bury* (84%)

4. Short /e/- When /e/ is in a word that ends with a consonant Examples: <u>end</u>, <u>lemon</u> (76%)
5. Words with /ee/- Words with /ee/ have the long /e/ sound. Examples: <u>need</u>, <u>creed</u>, <u>proceed</u> (98%)

6. Words with /ay/- Words with /ay/ have the long /a/ sound. Examples: *day*, *play*, *display* (78%) Consonant Rules to Teach

1. Two consonants together- When two of the same consonants are side by side, only one is heard. Examples: *common, runner, happy* (99%)

2. The sound for /c/- The consonant /c/ is pronounced with the hard /k/ sound when followed by /o/ /u/, or /a/. Examples: *coat, cut, raccoon, cat* (100%)

3. The sound for the digraph /ch/- The letters /ch/ are pronounced like the "choo choo" train sound. /Ch/ always makes one sound and cannot be separated into two separate sounds. Examples: <u>chess, each, mischief</u> (95%)

### 4. /C/ followed by /e/ or /i/ – *center*, *circle* is pronounced as /s/. (96%)

5. /Ck/ at the end of words- The sound for /ck/ at the end of words is /k/. Examples: *sti<u>ck</u>, back, cluck*\_(100%)

6. The pronunciation of /ght/ in a word- The letters /gh/ are silent; only the /t/ is pronounced. Examples: *highlight, freight, eight, thought, caught* (100%).

#### Syllable Rules to Teach

1. Words that end in /le/. The consonant preceding /le/ begins the last syllable. Examples: *simple*, *am-ple*, *crum-ble* (97%)

2. Vowels followed by digraphs /ch/, /sh/, /th/ – Do not split the digraph when segmenting words into syllables. Examples: kit-<u>ch</u>en, moth-er, bish-op (100%)

3. When r/ is unaccented.- R/ as the final letter in the last syllable, is unaccented. Examples: *motor*, *letter*, *hammer* (95%)

4. The accented syllable in two syllable words- In two syllable words that end with a consonant followed by /y/, the first syllable is accented. Examples: <u>*pup-py*</u>, <u>*bo-dy*</u>, <u>*ha-zy*</u> (96%).

#### Phonics Generalizations to Teach (78% regularity)

#### Table 2

### **Vowel Rules to Question**

1. Vowel digraph /ui/- /u/ is usually long and the second vowel is silent. Examples: <u>juice</u>, <u>fuel</u> (6%)

2. The use of /y/as a vowel- /y/sometimes has the sound of long i. Examples:*fly, cry, rhyme*(15%)

3. The letter /a/ following /w/- Words with /wa/ usually have the sound of /ä/. Examples: water, watfle, wash (32%)

4. The diphthong /ie/- In words, the /i/ is silent and the /e/ has a long sound. Examples: yield, chief, believe. The only exceptions to this are when /i/ and /e/ are not part of the same syllable. Examples: *ex-pe-di-ent*, *con-ve-ni-ent* (17%)

### **Consonant Rules to Question**

When /g/ precedes /i/ or /e/- In words with /g/ followed by /i/ or /e/ the /g/ is pronounced /j/. Examples: *gelatin*, *general*, *giraffe*, *giant* (64%)

## **Syllable Rules to Question**

When the first vowel sound is followed by a single consonant sound the word is divided after the vowel sound. Examples: *a*-<u>ny</u>, *e*-<u>cho</u>, *le*-<u>gal</u> 44%

Phonics Generalizations to Question (32% regularity)