### Some Sobering Statistics

National Center for Education Statistics (2003): *National Adult Literacy Survey*

<table>
<thead>
<tr>
<th>Literacy Activity/Question</th>
<th>% of Incorrect Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a check and an electric bill, write the dollar amount on the check in words.</td>
<td>19%</td>
</tr>
<tr>
<td>Using a check and an electric bill, fill in the “Pay to the Order of” line on a check.</td>
<td>26%</td>
</tr>
<tr>
<td>Refer to a newspaper article to answer this question:</td>
<td>30%</td>
</tr>
<tr>
<td>“According to Dewey, if automakers do not provide comfortable, safe, and efficient cars, what group must assume responsibility for mandating them?”</td>
<td></td>
</tr>
<tr>
<td>ARTICLE SAYS: “Americans want comfortable, safe and efficient cars. If automakers won’t provide them, Congress must mandate them…”</td>
<td></td>
</tr>
<tr>
<td>Refer to an article to answer the following question:</td>
<td>31%</td>
</tr>
<tr>
<td>“What was the projected cost of raising a child born in 1979 to the age of 18?”</td>
<td></td>
</tr>
<tr>
<td>ARTICLE SAYS: “That’s more than twice the $66,000 Urban Institute forecast for a baby born in 1979, says ZPG.”</td>
<td></td>
</tr>
<tr>
<td>Use the following information to fill in “TOTAL Postage and Fees” line on a receipt for certified mail.</td>
<td>35%</td>
</tr>
<tr>
<td>“You are sending a package to Doris Carter. Her address is 19 Main Street, Augusta, GA 30901. The postage for the package is $1.86. The fee for certified mail is $.075.”</td>
<td></td>
</tr>
<tr>
<td>Refer to an Alladryl label to underline three substances that may increase drowsiness associated with taking Alladryl.</td>
<td>36%</td>
</tr>
<tr>
<td>LABEL SAYS: “alcohol, sedatives, and tranquilizers may increase drowsiness”</td>
<td></td>
</tr>
<tr>
<td>Fill in the name and address for someone on a social security card application.</td>
<td>38%</td>
</tr>
<tr>
<td>Refer to the medicine label to answer this question:</td>
<td>40%</td>
</tr>
<tr>
<td>“The patient forgot to take his medicine before lunch at 12:00 noon. What is the earliest time he can take it in the afternoon?”</td>
<td></td>
</tr>
<tr>
<td>LABEL SAYS: “Take one tablet on an empty stomach one hour before a meal or two to three hours after a meal…”</td>
<td></td>
</tr>
<tr>
<td>Refer to the table to do the following:</td>
<td>44%</td>
</tr>
<tr>
<td>“Underline the statement for which the agreement is the same for the populations of parents and teachers.”</td>
<td></td>
</tr>
<tr>
<td>TABLE SAYS: “Our school does a good job of encouraging parental involvement in sports, arts, and other nonsubject areas”</td>
<td></td>
</tr>
<tr>
<td>AND SHOWS: Parents 77</td>
<td></td>
</tr>
<tr>
<td>Teachers 77</td>
<td></td>
</tr>
</tbody>
</table>
Spelling Grid

Spelling Grid

Video Script: Phoneme-Grapheme Mapping

One method for showing students the relationship between phonemes, sounds, and graphemes, letters or letter combinations, is phoneme-grapheme mapping. This is a technique for modeling how we effectively encode, or spell, words.

The only materials you will need for this activity are:

- a document camera,
- a spelling grid like this one for yourself and one for each of your students,
- a writing tool, and
- a list of words that have the spelling pattern you are teaching.

Each row of boxes on this grid goes with one word, so let’s number each row. We only need to do a few words at a time to have a powerful impact on students’ reading and spelling, so let’s do three words.

Let me demonstrate the steps of phoneme-grapheme mapping with our first word:

- “cage”

First, we show students how to say a word and break it into its individual sounds, by tapping out the sounds or counting the sounds on our fingers.

- “cage” Everyone say “cage” – /k/ /ā/ /j/

Then, we show them how each sound is represented by one of these boxes, and we can even mark a line after the last box to show where we should stop.

Now, we will go through sound by sound to match the sounds to their letters or letter combinations.

- /k/ What letter represents this sound when it comes before an “a”? – “c” – that’s right!
- /ā/ what letter? “a” – That’s right! And what does it need to make it say the long “a” sound? Yes, a silent-e. Because it’s silent and separate from the “a,” we will put the “e” in this box and draw a line through it. Then, we will draw an arrow over to the “a” to remind ourselves that it is reaching over to tickle the “a” to make it say the long “a” sound.
- /j/ what letter? Yes! It’s a “g.” That seems tricky. The “e” makes the “g” say the /j/ sound. The “e” is doing double duty – making the “a” say /ā/ and the “g” say /j/! In English we don’t end any words with “j,” so we have to end words with a “g” “e” if we want to have the /j/ sound at the end of a word.

Let’s do another word that continues with the “–ge” pattern:

- “judge”
- Everyone say, “judge” – /j/ /ü/ /j/
- Three boxes
Using Research to Inform Literacy Instruction: Do Children Learn to Read Naturally?

Handout 3

• /j/ what letter? That’s right – “j!”
• /j/ what three letters represent this sound after a SHORT vowel? “-dge” Yes. After a short vowel, we use “-dge.” We need the “-ge” to make the /j/ sound as we just learned because we don’t end words with “j.” And, we need the silent “d” to keep the silent-e away from the “u” because we want the “u” to be short, not long. If the silent-e gets too close to the “u,” it will reach over and tickle it and make it say the /ũ/ sound. We don’t want it to say /jũj/. We want it to say “judge.”

Let’s try one more to increase the complexity from an advanced first grade lesson to a second or third grade lesson:

• “gadget”
  Everyone say, “gadget” – /g/ /ā/ /j/ /ē/ /t/
  Five boxes
  /g/ what letter? Yes. “g”
  /ā/ what letter? Yes. “a”
  /j/ what letters? Yes. It’s a short vowel, so it should be “-dge.” Let’s go ahead and write those in the box. What’s about to happen, though, is we’re going to add a suffix that starts with an “e.” That means we won’t leave this “e” here, so let’s erase it.
  /ē/ what letter? Yes. “e”
  /t/ what letter? Yes. “t”
  Go ahead and circle the “-et” because it’s a meaningful part. I like for students to circle morphemes, or meaningful parts in words, like root words, prefixes, and suffixes. When I looked up the word “gadget” and the suffix “-et” in the dictionary, I found that it’s a noun suffix that often means “small.” A “gadget” is a small, useful tool, like a can-opener or corkscrew.

A side note: You would want to teach adding a suffix as a separate lesson. I just wanted you to see how to use phoneme-grapheme mapping to scaffold the same pattern across increasingly complex words.

A few practical ideas when using phoneme-grapheme mapping:

• Don’t do a lot of words at one time. 3 to 5 words in 5 to 8 minutes is sufficient. Do this 2 or 3 times across a day.
• Teach phoneme-grapheme mapping in whole group, but also model it in small groups for students who need additional practice.
• Put phoneme-grapheme mapping at a center for students to practice with partners.
• To save paper, laminate the grid and let students use vis-à-vis markers.
• For older students, use grid paper with smaller boxes so you can do longer words with four and five syllables.
• When doing spelling assessments, let students use the grid to spell words. That way, you can give them credit for boxes with correct graphemes rather than just entire words spelled correctly.
3rd Grade Student:  
Beginning-of-Year Spelling Sample

1. bed  
2. ship  
3. when  
4. lump  
5. up  
6. float  
7. train  
8. place  
9. drive  
10. bright  
11. shopping  
12. spoil  
13. serving  
14. chewed  
15. carries  
16. marched  
17. shower  
18. bottle  
19. favor  
20. ripen  
21. cellar  
22. pleasure  
23. fortunate  
24. civilize  
25. opposition

Script: Spelling Inventory Analysis

A spelling inventory is one type of screening assessment and curriculum-based measure. This assessment provides information about a student's understanding of phonology, orthography, morphology, and relationships among these linguistic components.

We can analyze students' spelling errors to plan instruction across these different components. The data informs grouping decisions for whole group instruction, teacher-led small groups, and centers, and differentiating within grouping formats.

Let’s examine this third grade student’s beginning-of-year spelling inventory to model data analysis for instructional planning.

The first misspelled word is “ship.” The student spelled the /i/ with an /ã/. This means that the student has some difficulty with short vowels, a first-grade-level skill. As a third grade teacher, I will not be spending much time in whole group instruction on short vowels. But I know that if I don’t work with this student on short vowels, he will have a learning gap. So I’ll work with this student on short-vowel words in a teacher-led small group. I also will give him some short-vowel decodable texts and games in center practice.

The next misspelled word is “lump.” The student seems to have lost the /m/ sound. This is a common problem in students with phonology issues. It’s called nasalization. The /m/, which is a nasal sound, meaning it resonates in your nose, gets lost in the vowel sound /ũ/. For this problem, I will work with the student to:

- Tap out sounds in words /i/ /ũ/ /m/ /p/
- Sound out and blend words using Elkonin boxes
- Use phoneme-grapheme mapping

If many students demonstrate this problem, I will model this in whole group. I’ll also do it in small group so I can hear the student making the sounds and see him matching the sounds to the letters. I’ll use different kinds of words, including ones with the other nasal sounds – /n/ and /ng/.

The next set of misspelled words includes “float,” “train,” and “bright.” These misspellings are all orthographic, meaning the student represented the sounds with legitimate spellings, just not the conventional ones. These are second-grade-level problems. I probably have several students who have difficulty with these vowel teams, so I’ll probably focus on these long-vowel spellings in whole-group instruction. I also will

- Display long-vowel sound-spelling cards
- Have a center with long-vowel words for students to spell, sort, and read in isolation and in connected text
- Practice phoneme-grapheme mapping with these patterns daily
I could continue analyzing the rest of the words on this inventory, but the first ten words give me plenty of data. If you look at the last 5 or 6 words, you can see that the student is unable to spell longer, multisyllabic words. Since we are at the beginning of third grade, we will make a lot of progress. When I give this inventory at the end of the year, the student should be able to spell almost all of these words, even the longer words at the end, correctly!
Using research to inform literacy instruction:
Do children learn to read naturally?

References


Additional Resources

Florida Center for Reading Research: Student Center Activities
http://www.fcrr.org/curriculum/SCAindex.shtm

Additional Readings


