Four (or five) Steps to Better Spelling Instruction

Bill Keeney, PhD
Bill.Keeney@dvfs.org
http://goo.gl/EuuKsf

©Bill Keeney please credit copies
How to Spell and Define a Word: Spelling Carries Meaning

What does it mean?

How is it built?

What are its relatives?

How is it pronounced?

Polonius: What do you read, My Lord?

Hamlet: Words, words, words.

--*Hamlet, Prince of Denmark* Act II, scene ii

“Spelling makes language visible.”

©Bill Keeney  please credit copies
English is a highly regular, orthographic system based in a morphophonemic spelling system that “takes precedence over letter-sound simplicity”
Principle 1: *Elements* (morphemes) are stable--they never cross morphemic boundaries (joints) and they never change their spelling, except under rule-driven conditions.

English spellings (*written* words) are built from *elements*.

English spellings have three types of elements:

<table>
<thead>
<tr>
<th>bases</th>
<th>affixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>free</td>
<td>bound</td>
</tr>
<tr>
<td></td>
<td>prefix ↓ suffix</td>
</tr>
<tr>
<td>twin</td>
<td>vowel consonant ↓ connective vowels</td>
</tr>
<tr>
<td></td>
<td>Latin Greek</td>
</tr>
<tr>
<td></td>
<td>-i- -e- -u- -o-</td>
</tr>
</tbody>
</table>

As in chemistry, *elements* are components of words that cannot be broken down any further.

That is, these are *spellings* that can combine with other *elements* to create new words, but these *spellings* do not change except in some very specific instances at the suffixing “joints” (see p. 8-9).

For Base, Stem, Root, see Appendix on Nomenclature (p 15)
The Word Sum: A graphic depiction of the morphemes used to build a word.

Example: in- + struct + -ion → instruction

“gets re-written as”

- When we announce a word sum, we name the letters of each element
- (We do NOT pronounce the syllables but rather name the letters of the element to show we know it is a spelling.)
  - Do not say /ɪnˈstrəkʃ(ə)n/
- We pause between word elements (at the joints between the morphemes) to show that we recognize them as separate elements (morphemes).
- An advanced technique is to announce digraphs and trigraphs as one unit, as well.
- The → (hyphen, hyphen, right angle bracket, space) sign is announced as “gets re-written as”

A Word MATRIX is a graphic depiction of a Word Family: Words that are formed from a common element, usually a morpheme or grapheme. The most common matrix uses a BASE as the common element.

For example, the base <ject> comes from Latin, meaning “to throw” It shows up in words like reject, object, project, eject, and so on. For a complete list, go to [http://www.neilramsden.co.uk/spelling/searcher/index.html](http://www.neilramsden.co.uk/spelling/searcher/index.html) and type “ject” into the search pattern box and hit go (see Appendix for instructions).

There are 74 members of the <ject> word family.

→ The Mini-Matrix maker is an online tool for creating a matrix [http://www.neilramsden.co.uk/spelling/matrix/temp/index.html](http://www.neilramsden.co.uk/spelling/matrix/temp/index.html)
Word Sum and Matrix Exercise for younger students:
Create word sums for the following words from the Old English free base
<lead> v. “to direct or show the way”
➔ (To create your own list, use the word searcher (see Appendix for
directions)
➔ Then, create word sums.

Example: mis- + lead + -ing → misleading  (Do NOT say /mɪs - ˈlɪd - ɪŋ/)

=> leads
=> leading
=> leader
=> leaders
=> cheerleader
=> bandleader
=> leadership
=> misleading
=> misleadingly

Then, create a matrix for the <lead> family

<table>
<thead>
<tr>
<th>prefix</th>
<th>base</th>
<th>suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Word Sum and Matrix Exercise for Older Students:
Create word sums for the following words from the Latin bound base <ject> v. “to throw”

➔ (To create your own list, use the word searcher (see Appendix for directions)

Example: <objection> is spelled ob- + ject + -ion ⇒ objection
(We do NOT pronounce the syllables /əb ˈdʒɛk fən/, but only name the letters of the morphemes to show we know it is a spelling.)

→ adjective
→ ejected
→ projectile
→ rejects
→ rejecting
→ subjectively

Advanced Challenge word:
→ objectivity

Even more advanced challenge:
→ objectification

Then, create a matrix for the <ject> family

prefix  | base  | suffix
### <lead> Matrix

<table>
<thead>
<tr>
<th>PREFIX</th>
<th>BASE</th>
<th>SUFFIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>cheer</td>
<td></td>
<td>-s</td>
</tr>
<tr>
<td>band</td>
<td></td>
<td>-ing</td>
</tr>
<tr>
<td>mis-</td>
<td></td>
<td>-er</td>
</tr>
<tr>
<td></td>
<td><strong>lead</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>O.E. “to direct, or show the way”</td>
<td></td>
</tr>
</tbody>
</table>

### <ject> Matrix

<table>
<thead>
<tr>
<th>PREFIX</th>
<th>BASE</th>
<th>SUFFIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-</td>
<td></td>
<td>-s</td>
</tr>
<tr>
<td>ad-</td>
<td></td>
<td>-ed</td>
</tr>
<tr>
<td>re-</td>
<td></td>
<td>-ion</td>
</tr>
<tr>
<td>ob-</td>
<td></td>
<td>-ive</td>
</tr>
<tr>
<td>in-</td>
<td></td>
<td>-ile</td>
</tr>
<tr>
<td>pro-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sub-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Principle 2: Elements *never* change, except under certain, very predictable, rule-bound circumstances at the suffix joints.

Practice 2: Teach the changes at the joints with flow charts.
Why I change <y> to <i>  
<y> or <y> not?

1. happy + -er  => _______________________________
2. happy + -ness => _______________________________
3. happy + -ly  => _______________________________
4. boy + -s    => _______________________________
5. monkey + ing => _______________________________
6. fly + -es   => _______________________________
7. fly + -ing  => _______________________________
8. fly + swatter => _______________________________
9. shine + -y   => _______________________________
10. shine + -y + -er => _______________________________
11. friend + -ly + -ness => _______________________________

Explain in a word sum:

12. ______________________________ => fried
13. ______________________________ => frying
   (trick question)
14. ______________________________ => fired
15. ______________________________ => styled
16. ______________________________ => playing
17. ______________________________ => friendliness
18. ______________________________ => application
Doubling Rule vs Silent-e Rule

Part 1 Directions: All of these words are spelled similarly and have a vowel suffix. Read the pair of words and put the base word for each in the blank beside it.

- Put D for doubling rule
- Put S for silent-e rule before each word, then write the word sum.

Ex. cutter S  cute + -er
    cutter D  cut(t) + -er

1. __biting __________________
   __bitter __________________

2. ___hoped _____________________
   ___hopped _____________________

3. ___hidden _________________
   ___hiding _________________

4. ___ripping _____________________
   ___riper _____________________

5. ___sloppy __________________
   ___sloping _________________

6. ___caper ______________________
   ___capped ______________________

7. ___starring ________________
   ___staring ________________

8. ___filing _______________________
   ___filling _______________________

9. ___mopped _________________
   ___moped _________________

10. ___copper _____________________
    ___coping _____________________

©Bill Keeney  please credit copies
Principle 4: Spelling patterns repeat graphemes in predictable patterns

Practice 4: Teach graphemes, not letters (alone)

English has more digraphs and trigraphs than letters.

We are familiar with the “h” digraphs:
<ch>  <ph>  <sh>  <th>  <wh>  (also <gh>, and rare <rh>, <dh>, <kh>)

We are also familiar with the “vowel teams” or digraphs:
<ai>  <au>  <aw>  <ay>
<ea>  <ee>  <ei>  <eu>  <ew>  <ey>
<ie>
<oa>  <oe>  <oi>  <oo>  <ou>  <ow>  <oy>
<ue>  <ui>  <uy>

We know some common consonant digraphs:
<qu>  <ck>  <ng> as well as <ce> and <ge>
    (I haven’t yet figured out what to call: <ci>  <cy>,  <gi>  <gy>)

We know some rare consonant digraphs:
Old English  <wr>  <kn>  <gh>  and Greek  <ps>  <pn>  <pt>

We also know some common trigraphs:
<tch>  <dge>  <que>
and maybe even <ugh> /f/ as in <laugh> and <rough>,  or /ə/ as in <dough> and <thought>

However, the following are also “split digraphs”
<a C e>  <e C e>  <i C e>  <o C e>  <u C e>

The final “doubled” letters:
<ff>  <ll>  <ss>  <zz> (Floss rule)
but also medial <bb> <dd> <gg> <mm> <nn> <pp> <rr> <tt> <zz>

Then, there are a bunch of rarer ones:
<mb>  <lm>  <sc>

Letters, phonemes and graphemes
Say each word. Count the letters. Count the phonemes. Count and underline the graphemes.
Match the phonemes to the graphemes with arrows.

<table>
<thead>
<tr>
<th>Word</th>
<th>Letters</th>
<th>Phonemes</th>
<th>Graphemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>cat</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>cat</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>scratch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>might</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>flew</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>manner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hatcheck</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>buckling</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Challenge: Now count MORPHEMES
Appendix: A brief word on nomenclature

A BASE is a spelling (morpheme).
A ROOT is a meaning.
A STEM is a word with affixes already attached to which other affixes can be appended. For example: <leader> is the stem word for <leadership> and <happy> is the stem for many words, such as <unhappy, happiness, and happily>.

It is hard to change your usage of these terms, and even harder to push back the tide of usage unless your whole school system is on board. It is not vital that you adopt these usages with your students, but it IS vital that YOU know the difference.

A BASE is a word element (etymon) that comes from some language group (in English usually from Old English, Latin, or Greek). That same spelling appears in several words without change in the spelling and often carries with it a MEANING.

The ROOT meaning of the base is the meaning it had in the language of origin. That meaning is often modified by prefixes.

Sometimes, in some of the words in the word family, the root meaning will be lost, changed, or only a vague echo, and sometimes, the root meaning is even reversed.

The base <villa> shows up in <villa>, <village>, and <villain>, but the root meaning of “country house” has been lost in the last.

The words <salute>, <salutary> and <silly> share a common root <salus>.

Look up the root of “silly” and the many meanings of the word over time as an example.
http://www.etymonline.com/
Appendix:
How to Create a Morpheme or Grapheme Word List Using Word Searcher

1. Search base or grapheme at Word Searcher
   http://www.neilramsden.co.uk/spelling/searcher/

2. Note: You can search for beginnings of words using ^,
   “contains”, ends with $, etc.

3. Highlight the list from bottom to top.

4. Copy

5. Paste into a spreadsheet

6. Sort alphabetically

7. Copy, paste into a word document. Select “text only”

8. Arrange into columns

9. Put the base <base> and root language, definition “ “

10. Eliminate false letter strings (misshapen for <hap>)

11. Sort by stem words

12. Search/replace base or grapheme with a different color

13. Create a matrix

©Bill Keeney  please credit copies
<ject>
L. “to throw”

<table>
<thead>
<tr>
<th>abject</th>
<th>inject</th>
<th>project</th>
</tr>
</thead>
<tbody>
<tr>
<td>abjectly</td>
<td>injected</td>
<td>projected</td>
</tr>
<tr>
<td>adjective</td>
<td>injecting</td>
<td>projectile</td>
</tr>
<tr>
<td>adjectival</td>
<td>injection</td>
<td>projectiles</td>
</tr>
<tr>
<td>adjectivally</td>
<td>injections</td>
<td>projecting</td>
</tr>
<tr>
<td>adjectives</td>
<td>injects</td>
<td>projection</td>
</tr>
<tr>
<td>conjecture</td>
<td>interject</td>
<td>projectionist</td>
</tr>
<tr>
<td>conjectural</td>
<td>interjected</td>
<td>projectionists</td>
</tr>
<tr>
<td>conjectured</td>
<td>interjecting</td>
<td>projections</td>
</tr>
<tr>
<td>conjectures</td>
<td>interjection</td>
<td>projector</td>
</tr>
<tr>
<td>conjecturing</td>
<td>interjections</td>
<td>projectors</td>
</tr>
<tr>
<td>interject</td>
<td>interjects</td>
<td>projects</td>
</tr>
</tbody>
</table>

| dejected | object | reject |
| dejectedly | objected | rejected |
| dejection | objectification | rejecting |
| eject | objecting | rejection |
| ejected | objection | rejection |
| ejecting | objectionable | rejections |
| ejection | objections | rejects |
| ejections | objective | subject |
| ejects | objectively | subjected |
| object | objectives | subjecting |
| objective | objectionable | subjective |
| objectively | objections | subjectively |
| objectives | objectionable | subjectivity |
| objectivity | objections | subjects |
| objector | objections | trajectories |
| objectors | objectionable | trajectory |
| objects | objections |
**HAPPINESS IS a Well-Spelled Word: If you’re happy, and you know it....PROVE IT!**

Directions: As a word scientist (a linguist), you should be able to account for every letter in a spelling, based on your understanding of morphemes (affixes, bases, and connectives) and the three basic rules about how morphemes makes minor changes at the joints.

Write a word sum AND an explanation of any changes you make at the joints for each of the following spellings.

Example: `<happy>`

Word Sum: `hap(p) + y => happy`

(aicht, A, double-p / Y gets rewritten as aicht, A, double-p / Y)

Explanation: the base `<hap>` has a single vowel letter, followed by a single consonant letter, and we are adding the vowel suffix `<y>`, so according to “the doubling rule” (a.k.a., the “1-1-1 rule”), we have to double the final consonant letter, `<p>`.

1. `<happiness>`
   
   word sum: ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
   Challenge question: Why are there two `<s>`es at the end of this spelling?
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________

2. `<unhappiness>`

   word sum: ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________

3. `<happened>`

   word sum
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
   Challenge question: Why might we consider doubling the `<n>`? Why DON’T we double the `<n>`?
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
   ______________________________________________________________
4. (big clue) <perhaps>
   word sum:
   Explanation:
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

5. (another big clue) <mishap>
   word sum:
   Explanation:
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Challenge question: What does <mishap> mean? How does it relate in meaning to the other words on this list?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

6. <happenstance>
   word sum:
   Explanation:
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Challenge question: What does <happenstance> mean?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Challenge question #2: Think of (or find, using word searcher) another word that has the same suffix. http://www.neilramsden.co.uk/spelling/searcher/index.html
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

   Final challenge word:
7. <misshapen>
   word sum:
   Explanation:
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

8. On a separate piece of paper, create a matrix for all of the words in the same word family in this exercise.
Does punctuation and spelling still matter?

Punctuation marks are symbols that indicate structure and organization. Spelling is the action of writing symbols so that these constitute meaningful structure (words) that in turn create longer structures (sentences, paragraphs, etc.) that convey meaning. But in the current world where technology is used more and more for communication purposes, what is the importance of correct spelling and punctuation? Isn't spelling reform a good idea? Do we still need punctuation?

Candidate for a Pullet Surprise by Mark Eckman and Jerrold H. Zar

I have a spelling checker,
It came with my PC.
It plane lee marks four my revue
Miss steaks aye can knot sea.
Eye ran this poem threw it,
Your sure reel glad two no.
Its vary polished in it's weigh.
My checker trolled me sew.
A checker is a bless sing,
It freeze yew lodes of thyme.
It helps me right awl stiles two reed,
And aides me when eye rime.
Each frays come posed up on my screen
Eye trussed too bee a joule.
The checker pours o'er every word
To cheque sum spelling rule.
Bee fore a veiling checker's
Hour spelling mite decline,
And if we're lacks oar have a laps,
We wood bee maid too wine.
Butt now bee cause my spelling
Is checked with such grate flare,
Their are know fault's with in my cite,
Of nun eye am a wear.
Now spelling does knot phase me,
It does knot bring a tier.
My pay purrs awl due glad den
With wrapped word's fare as hear.
To rite with care is quite a feet
Of witch won should bee proud,
And wee mussed dew the best wee can,
Sew flaw's are knot aloud.
Sow ewe can sea why aye dew prays
Such soft wear four pea seas,
And why eye brake in two averse
Buy righting want too pleas.