Word Class: Using Thinking Skills to Enhance Spelling Instruction

Andrew P. Johnson
Mankato State University
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ABSTRACT

Traditional spelling instruction has students studying words out of the context of authentic reading and writing. This type of instruction does little to move students to become mature writers. Spelling is a development process. The ability to spell is enhanced by wide reading and writing. Proficiency in spelling is related to one's visual memory more so than to instruction which examines words in isolation. Word class is an approach to spelling that combines a self-selected approach to spelling instruction and thinking skills. This approach to spelling instruction helps students become more sensitive to letter patterns and word parts, adds depth and dimension to their vocabulary, teaches thinking skills, creates more authentic thinking and writing experiences, and values students' ideas.

In many schools today, traditional basal spelling programs are used consisting of weekly spelling lists, a pretest, a series of fill-in-the-blank exercises, and a test on Friday. The same list, usually based on a spelling pattern or word part, is given to all students. Those students who have more difficulty are given fewer words and those who have less difficulty are given more words. At the end of the week, students' spelling performances are described in terms of a number of percentage.

But does this one-size-fits-all approach effectively differentiate spelling instruction for high or low ability learners? Is this the most effective way to develop mature spellers? Is this the best use of instructional time? Does this approach move students closer to becoming independent writers? Does this type of spelling instruction transfer to real life writing situations? According to Donald Graves, "no" (1983). Words studied out of context are of minimal effect in helping students develop spelling proficiency and worse, they keep them away from real writing experiences. Also, there is little research to support the use of traditional spelling instruction over other approaches.
This article describes a more authentic approach to spelling instruction based on the ideas put forth by Gentry and Gilbert (1993). Word Class uses thinking skills to study word meanings and spelling patterns.

BACKGROUND

Spelling as a Developmental Process

Like oral language, spelling is a developmental process that evolves in stages (Butler, 1996; Edwards, 1985; Gentry and Gilbert, 1993). An extensive program of meaningful reading and writing is essential in helping students move from one stage to the next (Bartch, 1992; Cunningham, Moore, Cunningham, and Moore, 1995, Graves, 1983; Gentry and Gilbert, 1993, Scott, 1994). Wide reading allows students to see a greater number of words with varying letter patterns used in meaningful contexts. Wide writing allows them to effectively use words to create meaning. Providing sufficient amount of time for students to engage in authentic reading and writing experiences is an important component in their development as mature readers and writers. Unfortunately, time spent studying words out of context in basal workbooks limits these types of experiences.

Spelling Proficiency and Visual Memory

What is the difference between a good speller and a poor speller? According to Gentry and Gilbert (1993), spelling proficiency might be attributed to one's visual memory capacity. That is, good spellers are better able to store and retrieve necessary letter patterns from long term memory. Building on this theory, the goal of spelling instruction should be to improve the efficiency of cognitive storage and retrieval by helping students become more aware of letter patterns and word parts. Only a small amount of direct instruction covering a few spelling rules and the most common prefixes, suffixes, and word families is needed (Topping, 1995). This suggests a need to examine approaches to spelling instruction which focus on letter patterns and using words in authentic contexts.

Two Alternative Approaches

Two alternative approaches to traditional spelling instruction are an embedded approach and a self-selected approach. An embedded approach uses spelling words that are taken from students' reading, science, social studies, or other subject areas (Bartch, 1992; Scott, 1994). It also allows for multiple exposures to words used in a meaningful context. The self-selected approach teaches students how to create their own spelling lists (Graves, 1983; Scott, 1994; Topping, 1995). This approach is described further below using word class.
Brainstorming
The student will be able to create a number of ideas without regard to evaluation.
Thinking Frame
1. Look at the idea.
2. add as many related ideas as quickly as you can.

Webbing and Brainstorming
Students will be able to create a structure relative to a given topic or concept, then brainstorm to fill in the structure.
Thinking Frame
1. Look at the main idea.
2. Find 2-3 related ideas (nodes).
3. Brainstorm on each node.
4. Describe or communicate.

Creating Groups
Students will impose order on a field by identifying and grouping common themes or patterns.
Thinking Frame
1. Look at the whole.
2. Identify patterns, or groups.
3. Arrange into groups.
4. Describe the whole in terms of groups (write or speak).

Comparing
Students will identify the similarities between two or more items. Students will use a Compare-O-Graph (see Figure 5) as a visual organizer to help with this skill.
Thinking Frame
1. Look at the items.
2. Brainstorm to find similarities.
3. Pick interesting ideas to describe.

Word class combines thinking skills instruction with a self-select approach to spelling instruction and can be adapted for use in grades 2 through 12. A thinking skill is any cognitive process broken down into explicit steps (Johnson, 1996; Perkins, 1986). If students are to
learn to use higher level thinking skills, they must be explicitly taught (Gallagher and Gallagher, 1994; Johnson, 1996; Perkins, 1987). Word class does this by identifying four different thinking skills and the specific steps used (see Figure 1).

Word class teaches students how to generate and choose the words they will study each week. This choice might happen in one of three ways: First, given a topic, students create their own spelling lists. Second, given a spelling pattern, students create their own lists. Here, the teacher begins with a short mini-lesson covering a particular spelling pattern or skill. Students then work with a partner or small group to create a list of words using that particular letter pattern or skill. Or third, students use their interests, current reading, or their experiences to create their own spelling lists. This approach is usually the most interesting, as children search their lives for interesting and meaningful words.

A word wall (Cunningham and Allington, 1994), can be used to help call attention to interesting or important words within the given topic or spelling pattern. To insure that students are exposed to words of varying difficulty levels, a teacher might choose to include two to five mandatory words for all students to study each week. However, Topping (1995) found that the words students choose are usually longer and more complex than those chosen by teachers.

There are four advantages of using the self-selected approach: students' ideas and experiences become the focus; more time can be spent doing authentic writing; money spent on consumable spelling books can be used to buy trade books; and students are able to add depth and dimension to their word knowledge.

**WORD CLASS WEEKLY SCHEDULE**

Spelling instruction should be limited to approximately 20 minutes a day (Gentry and Gilbert, 1993). The following weekly schedule uses four general thinking skills (Johnson, 1996) along with thinking frames to provide eight different activities (see Figure 1). These skills add depth and dimension to word knowledge, highlight letter patterns, enhance writing skills, teach general thinking skills, value students' ideas and experiences, and gets them to use their words in meaningful contexts.

**Monday**

**Brainstorming.** Working with a partner, students use brainstorming to generate 8-15 words to use for their spelling lists. After they have selected words for their lists, they check the correct spelling in a dictionary or on a computer spell-check and record them in a word journal or learning log. For example Joey, a 6th grade student who was very much interested in space, came up with the following
spelling list: space, rocket, planet, oxygen, gravity, life, universe, moon, atmosphere, launch.

**Tuesday-Thursday**

Working individually or with a partner, students use thinking skills for the following activities.

**Brainstorm and describe.** Here, students brainstorm to create a group of descriptive words or association to go with one or more of words on their list. Students then use these associating words to write a descriptive paragraph. For example, one of the spelling list words is "launch." Words, thoughts, or images associated with this word are: take-off, smoke, noise, rumble, power, liftoff, launch pad, fire, or push. Many of these words can then be used to describe a rocket launch. Below is a sample of such a paragraph written by Joey, a sixth grade student.

*A launch is when a rocket takes off into space. The rocket is fired into space from a launch pad. It is powered by powerful rocket engines. Thick smoke and loud noise sound as the rocket pushes away from earth (Joey, age 12).*

Allow time for students to share their creations in large or small group settings. At the end of the lesson, students record their best or most interesting paragraphs in their word journal.

**Web and brainstorm to write.** Here, students use webbing and brainstorming to create a piece of writing based on one or more of their spelling words. The web provides structure for a piece of writing when generating ideas or information about a topic (see Figure 2). Each node becomes a paragraph. At the end of the lesson, students record their best or most interesting piece of writing in their word journal.

**Webbing to speak.** Students pick a word from their spelling list to use in creating a short one-minute oral presentation. Working with a partner they web and brainstorm to provide information and ideas related to the list word for their oral presentation. A web, with two or three nodes, provides the structure to help them communicate effectively. The goal here is to add depth and breadth to word knowledge and to get students to use their words and related ideas in a meaningful context.

**Web to find related parts.** Here, students use webbing and brainstorming to examine phonetic elements of a word. The goal is to analyze words and letter patterns. Students choose a word from their spelling list and break it into beginning, middle, and ending segments (see Figure 3). They decide which parts of the words go into each of the three segments. This leads naturally to talk about prefixes, suffixes, roots, onsets, and word families. Also, it allows them to see patterns emerging. Each segment then becomes a node on the web.
Students work with a partner to generate words with similar sounds or letter patterns as those in each node. Each web is recorded in the students' word journal.

Creating groups. The thinking skill, creating groups is used by students to organize their spelling words into groups. A group is two or more things that are the same or alike. Groups are creating according to spelling patterns or ideas (see Figure 4). The teacher should model this in a large group setting several times before students do this in pairs or small groups. At the end of the lesson, students describe and record their lists using their new groups in their word journals.

Comparing. Here, students begin to look for similarities between words related to ideas or letter patterns (see Figure 1). Students use the Compare-O-Graph (see Figure 5) to compare five words at a time. Their Compare-O-Graphs are recorded in their word journals.

Figure 2
A web with three nodes used to provide structure for writing

Poetry. Word Class is also a perfect place to use poetry as the process of using words to paint a picture. Poetry is an effective tool for advancing children's language skills and high level thinking as it
calls for careful observation and a precise use of words. Writers of poetry must also be attuned to patterns, sounds, and the subtle effect of words. Students can use the thinking skills of comparing to generate similes and metaphors and webbing and brainstorming to generate ideas around a specific spelling word.

Figure 3
A web with three nodes used to examine word parts

Friday
On Friday, students work with a partner to take their weekly spelling test. Each partner gives the test to the other. The teacher or student records the results after the test is complete along with reflections or observations.

ASSESSMENT

The results of weekly spelling tests are recorded in students' word journals. These journals might be included as part of a writing portfolio to show growth over time. Students might also chart their progress by graphing the results of each week's test. I recommend, however, a more authentic and accurate form of spelling assessment called WPH (words-per-hundred) scores. Here, the teacher examines a
students' writing, designates a 100-word segment, and counts the number of words spelled correctly in that 100-word segment to arrive at a WPH score. This is a more accurate reflection of spelling ability under authentic writing conditions rather than scores taken from isolated word lists. With younger students, a WPF (word-per-fifty) score can be used.

Figure 4
Examples of groups based on spelling patterns and ideas

Creating Groups

**Spelling Pattern Groups**

<table>
<thead>
<tr>
<th>Spelling Pattern Group</th>
<th>List: space, rocket, planet, oxygen, gravity, life, universe, moon, atmosphere, launch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending e-consonant group:</td>
<td>rocket, planet, oxygen, atmosphere</td>
</tr>
<tr>
<td>Final e group:</td>
<td>space, life, universe, atmosphere</td>
</tr>
<tr>
<td>Double consonant group:</td>
<td>space, rocket, planet, atmosphere, launch</td>
</tr>
<tr>
<td>Consonant blend group:</td>
<td>space, planet, gravity, atmosphere, launch</td>
</tr>
<tr>
<td>Three-syllable group:</td>
<td>oxygen, gravity, universe, atmosphere</td>
</tr>
</tbody>
</table>

**Idea Groups**

<table>
<thead>
<tr>
<th>Idea Group</th>
<th>List: space, rocket, planet, oxygen, gravity, life, universe, moon, atmosphere, launch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaceship group:</td>
<td>rocket, launch</td>
</tr>
<tr>
<td>Planet group:</td>
<td>moon, atmosphere, gravity, planet</td>
</tr>
<tr>
<td>Huge group:</td>
<td>space, universe</td>
</tr>
<tr>
<td>Earth group:</td>
<td>planet, oxygen, gravity, life, moon, atmosphere</td>
</tr>
<tr>
<td>Invisible group:</td>
<td>space, oxygen, gravity</td>
</tr>
</tbody>
</table>

Figure 5
A compare-o-graph used to find similar spelling patterns or ideas related to spelling words.

Compare-O-Graph

Spelling list: space, rocket, planet, oxygen, life, universe, moon, atmosphere, launch

<table>
<thead>
<tr>
<th>rocket</th>
<th>planet</th>
<th>oxygen</th>
<th>gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>space</td>
<td>- e</td>
<td>- e</td>
<td>- a</td>
</tr>
<tr>
<td></td>
<td>- double</td>
<td>- a</td>
<td>- no oxygen</td>
</tr>
<tr>
<td></td>
<td>consonant</td>
<td>- consonant</td>
<td>in space</td>
</tr>
<tr>
<td></td>
<td>- 2 vowels</td>
<td>blend</td>
<td>- 2 vowels</td>
</tr>
<tr>
<td></td>
<td>- 3 consonants</td>
<td>- a planet is</td>
<td>- no gravity</td>
</tr>
<tr>
<td></td>
<td>- a rocket</td>
<td>in space</td>
<td>in space</td>
</tr>
<tr>
<td></td>
<td>travels in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>space</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Students will pick out 2 or 3 interesting ideas to describe in paragraph form.
FINAL THOUGHTS

Spelling does not have to be a meaningless subject emphasizing rote memorization while learning new words out of context. Word Class, as described here, can be used with all students to help them become more sensitive to letter patterns and word parts, add depth and dimension to their vocabulary, promote students' ideas and creativity, teach thinking skills, create more authentic thinking and writing experiences, and thus, enhance language learning overall.

REFERENCES


Andrew P. Johnson is a faculty member in the Department of Curriculum and Instruction at Mankato State University, in Mankato Minnesota.