A study examined the effect of word study on second-grade students' application of spelling and phonics in their independent writing. Subjects were 19 second graders from a school in a north-central Indiana region marked by a broad range of social and economic levels. Data included a spelling inventory, independent writing samples, and student surveys. Subjects were divided into four groups based on ability and met two or three times a week for 45 minutes at the end of the school day. Activities for student discovery and application included word hunts, word sorts, games, making words, and reading books and poems at the appropriate developmental level. Results indicated that: all students progressed in their knowledge of words; the greatest gains were made by the English-as-a-second-language students; and students of all academic levels found word study to be meaningful and enjoyable. Findings suggest that word study was a valuable tool used as part of a larger literacy framework in this second-grade classroom. Appendixes contain evaluation measures; a spelling inventory; a list of characteristics of the developmental stages of learning to spell; 12 charts of data; and student dictation sentences. Contains 8 references. (RS)
Word Study

The Effects of Word Study on Students' Application of Spelling and Phonics in Their Independent Writing

Janet Elliott
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Chandler Elementary
April 22, 1999
Research Question

Teaching spelling to primary students can be challenging, particularly in a second-grade classroom full of students with diverse needs. Teachers are always searching for better ways to help children learn how to spell and how to apply that knowledge in independent writing. Traditionally, teachers have given most students the same list of words to memorize for the spelling test at the end of the week. The diversity of Kim Rietschel's second-grade class presented many challenges in September, so she looked for a spelling program that would meet the needs of the students who were performing at many different developmental levels. Kim was also dissatisfied with the spelling performance of some her students at the end of the previous year, so she was eager to try something other than a traditional spelling program. The question we chose to research is: What is the effect of word study on students' application of spelling and phonics in their independent writing?

Importance of Word Study

Much has been researched and published in recent years concerning word study (Bear, 1996; Fountas & Pinnell, 1998), which is an organized instructional program for phonics, vocabulary, and spelling at the developmental level. Students' developmental knowledge of English orthography refers to what they know about written words: What words look like, how they
sound, what they mean, and how they are used.

To determine what orthographic features and patterns to explore with each child, educators need to focus on what they “use but confuse” because this is where instruction will be of most benefit to the student. According to Russian psychologist, Lev Vygotsky (Bedrova & Leong, 1998), the level of awareness where students “use but confuse” is their “zone of proximal development” (ZPD). Vygotsky defines the ZPD as the space between a child’s independent performance and the child’s level of maximally assisted performance. Abilities that are fully developed exist at the level of independent performance. Those skills that are on the edge of emergence and that can be enhanced by varying degrees of assistance are located within the ZPD. Instruction is only useful when it moves ahead of development and is scaffolded by a more capable peer or adult. Gradually, the level of assistance decreases, as the learner becomes more independent. If instruction takes place outside of a learner’s ZPD, nothing will be gained as the child is beyond the scope of his understanding and development. For example, if a second grade student is using but confusing short vowel sounds in his writing, teaching that child to double consonants before adding endings to words is outside the child’s zone.

The School and Classroom Setting

Chandler Elementary School is located in a north-central
Indiana community of 24,000. The enrollment is five hundred twenty-six students, with three to four sections of each grade, K-5. Kindergarten is a half-day program, which provides two and one-half hours of instructional time per day.

Chandler is a neighborhood school located in the heart of the town. The neighborhood contains many older homes that have been converted into apartment houses. Many of these apartments are occupied by single-parent families of low socio-economic status and a high mobility rate. Some of the historic homes have been restored by families of higher socio-economic status, which gives the school a broad range of social and economic levels. Fifty-one percent of Chandler’s students receive free and reduced breakfast and lunch.

The strong economy in the area attracts many families from Mexico. The influx of Hispanics has increased steadily over the past seven years. In 1992, there were thirty-three Hispanic children at Chandler. Presently, there are one hundred fifty language minority children, which is twenty-nine percent of the total enrollment. Ninety-six of these children (eighteen percent of the total population) are receiving services for language.

The language barrier, high mobility rate, and low socio-economic status of many families has challenged educators at Chandler to find better ways to meet the needs of their students. Many children come to school with few literacy experiences in the home and with minimal oral language proficiency. Teaching
children to become better readers and writers is at the forefront of Chandler's goals for the future.

The number of students in Kim's classroom has varied throughout this year, but the total number of second-graders researched for our word study totaled nineteen. Seven children are ESL (English Second Language), seven children are Strategies/LRE (Least Restrictive Environment) with two of these children also fitting in the ESL category, and seven children in the general population. Most of the seven ESL children were at English proficiency levels of P1 or P2 (P5 is fluent English) with one student speaking no English at the beginning of the school year. Five students are receiving speech services, with four of these students receiving language development instruction along with articulation instruction.

Method

Investigators

The two researchers involved in the word study action research are Kim Rietschel and Janet Elliott. Kim has taught second grade at Chandler Elementary for three years. Prior to teaching at Chandler, Kim taught in Mexico for one year. This experience enabled her to learn more about the Hispanic culture and language which has helped in her in communicating with and understanding her ESL students.

Janet Elliott is the literacy coordinator for Chandler
Elementary and also teaches Reading Recovery. She is involved in staff development and trains primary teachers how to implement a balanced literacy program in their classrooms. Word study is part of the framework in a balanced literacy classroom, so Kim requested Janet's assistance in implementing a word study program in her classroom.

**Procedures**

In this study we combined several methods of data collection, including Hearing and Recording Sounds in Words, the Elementary Qualitative Spelling Inventory, independent writing samples, and student surveys. All of this data was gathered in September of 1998 and again in the March of 1999 with the exception of the student surveys, which were administered in March.

Hearing and Recording Sounds in Words is an assessment task developed for first graders by Marie Clay (1993), founder of Reading Recovery. In this task, the teacher reads a couple sentences to the student and then reads them again word-by-word and the student writes them down (see Appendix A). The student is encouraged to say the words slowly in order to hear the sounds in the words. This task has been adapted for second-graders by Reading Recovery/Literacy Collaborative staff at the Ohio State University. They have increased the number of phonemic sounds possible from thirty-seven to sixty-four and
have formulated a correct word spelling assessment. The perfect score for number of words spelled correctly is eighteen.

The Qualitative Spelling Inventory is a spelling-by-stage assessment developed by Donald R. Bear (1996) which enables teachers to learn about their students' orthographic knowledge and the developmental level in which they are performing. This assessment is administered much like a traditional spelling test, with a dictation of five sets of words (with five words in each set) for a total of twenty-five words (see Appendix B). The assessment is then scored and analyzed by the teacher to find each students' developmental stage of spelling. This information is used to place students in groups according to development so instruction will be on their level.

Writing samples taken from writers' workshop and journals were analyzed in order to assess the application of children's learning to their independent writing. Samples from the beginning of the year were also compared to those written in the spring of the year in order to analyze the progress.

A survey was taken in the spring to allow students to reflect on what they had learned during the year in word study and also reveal their attitudes towards word study (see Appendix C).

Implementation

In order to work with groups of children at their developmental levels, we administered the Qualitative Spelling
Inventory to the entire class in the fall. The results of this assessment enabled us to divide the class into four different groups, according to the skills they had under control. The small groups met two to three times a week for a forty-five minute block of time at the end of the school day. Janet’s two groups started out in the Pre-literate and Early Letter Name stages. Kim’s groups were in the Letter Name and Within Word Pattern stages (see Appendix D). The small group instruction consisted of exploring patterns found in words and applying the patterns to new words. Activities for student discovery and application included word hunts, word sorts, games, making words, and reading books and poems at the appropriate developmental level.

**Results**

*Theme 1: All students progressed in their knowledge of words. The greatest gains were made by the ESL students.*

All the data collected on the students’ knowledge of words was divided into three categories: General Population, Strategies/LRE, and ESL. The general population group consisted of students that were slightly below grade level, on grade level, or above grade level. These were students that did not receive services for Special Education (LRE) and they were not brought to a strategies team for discussion of special needs.
and possible testing for Special Education services. The students in the Strategies/LRE group were students who either qualified for special education services, were tested for services but did not qualify, or were brought to strategies and they are being monitored for possible testing in the future. The ESL group consisted of students whose English proficiency ranged from P1 to P4.

The general population group made an average gain of four points in their phonemic analysis and five points in their words spelled accurately on the dictation task (see Appendices E and F). The children in this group were either in the Letter Name stage, in the Within Word Pattern stage, or for some later on, in the Syllable Juncture stage. We believe that the gains in this group on the phonemic analysis are lower than the other groups due in part to the higher level patterns studied by this group. These children were mostly beyond the confusion of consonant sounds and were refining their knowledge of vowel sounds. Therefore, there was less room for growth in the phonemic analysis due to their higher level of knowledge of letter sounds. Their higher rate of growth in the words spelled accurately corresponds with the stages in which they were working because their instruction focused on the spelling patterns and exceptions to the patterns, thus allowing them to use more conventional spellings (see Appendix G).

The children in the Strategies/LRE group made gains of
thirteen points in their phonemic analysis and four points in their words spelled accurately on the dictation task (see Appendices E and F). Four out of the five children in this group began working in the Early Letter Name stage focusing on the initial and ending consonant sounds in words. They moved into the Letter Name stage, studying the short vowel patterns of words. Toward the end of word study they compared short vowel and long vowel patterns of words. The children made greater gains in the phonemic analysis rather than the words spelled accurately due to the focus of instruction on their confusions of all letter sounds and not on conventional spelling patterns. Most of the gains in these scores were in the spelling of either high frequency words or words using the short vowel pattern of CVC (consonant, vowel, consonant).

Of these three groups, the ESL group made the greatest gains in both the phonemic analysis and words spelled accurately. This group gained twenty points in the phonemic analysis and seven points in the words spelled accurately (see Appendix E). Four of the children began word study in the Preliterate stage. One of the students began in the Early Letter Name stage and two others began in the Letter Name stage. The needs of the children to learn their letter sounds and use that knowledge to write were quite evident. For many of the students, the writing on their dictation task was only intelligible because we knew exactly what we had asked them to write. It was
dire that our ESL students be able to work on their confusions of letter sounds. These students were trying to separate the sounds of their first language from their second language while writing in their second language. Word study allowed these children to focus on individual letters and then progress to patterns in words. We allowed the students to work with words that they knew so that they were not using their cognitive energy to search for the meaning of words, only the letter sounds. We feel that had we put our ESL students into a traditional spelling approach, they would have been working with both words and spelling patterns that were outside their zone of proximal development (see Appendices H and I).

The Qualitative Spelling Inventory was used to place the students in their spelling stages in the fall. We used the same assessment in March to examine the progress of the students. We found their spelling confusions corresponded with the stages in which we were instructing them. The children that began in the Preliterate stage and Early Letter Name stage demonstrated that they were using beginning and ending consonant sounds yet, were still confusing their usage of short vowels. Both groups had progressed to the Letter Name stage. The children that began in the Letter Name stage demonstrated knowledge of the short vowel patterns they had studied and were showing some confusion in their usage of long vowels. These confusions are characteristic of the Within Word Pattern stage. The students
who began in the Within Word Pattern stage showed an improved usage of long vowel patterns and applications of knowledge gained from their subsequent study in the Syllable Juncture stage. The progression of the confusions that the students demonstrated corresponded with the course of word study as outlined in Bear’s *Words Their Way* (1996) (see Appendix J).

**Theme 2: Students of all academic levels found word study to be meaningful and enjoyable.**

In March we asked the children to evaluate word study. We chose to have the ESL and the LRE/Strategies children respond orally because we wanted them to express their thoughts on word study clearly without attaching, what for some continued to be, the difficult task of writing.

The children were able to articulate what they studied in word study and how they felt about it. Children from all levels commented that they learned about patterns of words. Children from higher academic levels commented that word study helped them to learn more about words. One student wrote, “What I liked was I always learned something new and I love to learn.” Children from varying academic levels enjoyed sorting the words and looking at them critically.

We asked children if word study helped them to read. The children that were already on grade level in reading did not feel
that it improved their ability to read. However, children that were below grade level commented that they learned to say sounds, use words they knew to read new words, and read longer words.

As we looked at the children’s progress in reading we discovered what Bear (1996) describes as “synchrony”. This means that “development in one area is observed along with advances in other areas. [Reading, writing, and spelling] advance in stage like progressions which share important conceptual dimensions.” (Bear, 1996 p. 14) To analyze students’ reading progress we grouped the students as we grouped their data for word study: General Population, Strategies/LRE, and ESL. The data shows that the greatest gains in reading were made by the children who were below grade level in September. Their belief that word study helped them read words corresponds with the progress that they made in reading. We believe that word study allowed them to deepen their understanding of words within their zone of proximal development while participating in a reading program that also provided instruction within their “zone” (see Appendices K and L).

The children’s evaluations of word study confirmed that children from all academic levels felt that they were learning. Not only did they say they learned, they were able to tell explicitly what it was they learned. The children’s progress throughout word study and their understanding of what they learned supports the theory that children need to be taught within their
Discussion

Word study was a valuable tool used as a part of a larger literacy framework in Kim’s second grade classroom. Thus far, this article has focused on the impact of word study on spelling, reading, and the attitudes of the children in Kim’s classroom. Bear’s theory of synchrony (1996) connects the spelling, reading, and writing development of students. The knowledge gained in word study would not have impacted the students without sufficient opportunities to apply that knowledge in their own written works. Writers’ workshop was a vital part of the literacy program. Word study complemented writers’ workshop because it promoted writing fluency which in turn allowed them to express themselves with greater ease.

In order to not be misleading, we must state that at the end of word study, writing was not a miraculously easy task for all students. In a perfect world we would have taught the children a pattern and without fail they would have been able to use that knowledge in writers’ workshop without ever asking, “How do I spell ...?” We teach in real classrooms, with real students, whose minds develop at a pace we cannot control. We can merely aid in that development and celebrate the knowledge gained.

Looking at writing samples from September and March might cause some to say, “This is still difficult to read. They are
not spelling well. What progress has been made?” Due to the knowledge we have gained from word study, as educators we are able to look at writing and celebrate when a child who did not know consonant sounds can now write the beginning and ending sounds of words with some vowels correct. We can also celebrate the child who was too afraid to write a word in September, but now writes entire stories with confidence. Celebrations also occur when a child who came into second grade knowing short vowel sounds, looks at a word with a long vowel in it and says, “That doesn’t look right,” and she searches for the correct pattern. Not only did the students learn from word study, so did we. These celebrations might have been missed without the knowledge and understanding we gained from this project!

Recommendation

Both investigators found it very enlightening to read and learn about spelling developmental levels. Both teachers had participated in a word study group during the previous summer with three additional Chandler teachers. Two out of these three teachers were unable to implement the word study in their classrooms due to the demands of organization and management.

It was only by working together that we were able to successfully implement word study in Kim’s classroom. It is
difficult for one teacher to instruct and manage four different learning groups. Ways for one teacher to manage word study more successfully would be:

- divide the class into fewer learning groups
- conduct guided reading four days a week and do word study on the fifth day while other children are at independent learning centers
- assign word study activities in independent learning groups
- utilize paraprofessional/parental assistance

It is recommended that teachers read to inform themselves about the developmental stages of spelling. When an educator understands the stages of development, she will not push those in the beginning stages beyond their “zone” and will not neglect to scaffold those students who are already performing at high levels. Each fall teachers receive a new classroom of children with unique strengths and needs. By understanding the developmental stages of spelling, teachers will be able to adapt to the needs of their students and continue instruction at their developmental level.

**Conclusions**

In summary, the findings of this study suggest that organized word study has positive effects on spelling performance, particularly the ESL population. Miss Rietschel’s
students moved through stages just as the literature described. Children became more aware of how word patterns work and were able to apply their new understanding to unknown words. Students also found word study to be a positive and enjoyable experience.

In future research, it would be helpful for investigators to study available resources at length, develop activities and materials, and collaborate with peers who can support and encourage the implementation of such a program.
References


Appendices
Hearing Sounds In Words Task C: Grade Two

TEST SCORE: _______/64 Phonemic Analysis
______/18 Words Spelled Accurately

Student: ___________________________ I.D. # ___________________________
Tester: ____________________________ School: ___________________________

Say: "I AM GOING TO READ YOU A STORY. WHEN I HAVE READ IT THROUGH ONCE I WILL READ IT AGAIN VERY SLOWLY SO THAT YOU CAN WRITE THE WORDS OF THE STORY."

Read through the Hearing Sounds in Words sentences (below) at normal speed.

Say: "SOME OF THE WORDS ARE HARD. SAY THEM SLOWLY AND THINK HOW YOU WOULD WRITE THEM."

Then read each work of the Hearing Sounds in Words sentences one at a time. Be sure to say each word normally; do not articulate the word slowly for the child. Copy exactly what the child writes onto this form.

If the child has difficulty, say: "YOU CAN SAY IT SLOWLY. HOW WOULD YOU START TO WRITE IT? WHAT CAN YOU HEAR? WHAT ELSE DO YOU HEAR?"

If a child cannot complete a word, say: WE'LL LEAVE THAT WORD. THE NEXT WORD IS ...."

(3) (3) (5) (3) (1) (4)
Three boys jumped over a little le
Three boys jumped off a little
booz gumpt ov'r

(5) (2) (4) (3) (4) (4)
stream. The water was very cold
stream
water waz vary kold
stream
water wuz vere

(3) (3) (4) (3) (7) (3)
and their legs got dripping wet
they r legz gawt d ri p ping w et
there

Scoring:
Determine if the student has rendered an appropriate sound analysis, a plausible grouping of letters to represent a particular sound (see Sentence C for an example). Extra letters and reversals of a given letter do not count as wrong, and one point is taken off the word total for letters that may be out of order.

Measure conventional spellings by a count of each target word spelled right (only use the words that were part of the phonemic analysis).

Totals for each Sentence: Total Phonemic Analysis = 64 Total words accurately spelled = 18

Elementary Qualitative Spelling Inventory
Spelling-By-Stage Assessment

This is a short spelling inventory to help you learn about your students’ orthographic knowledge. The results of the spelling inventories will have implications for reading, writing, vocabulary and spelling instruction.

Instructions: Let the students know that you are administering this inventory to learn about how they spell. Let them know that this is not a test, but that they will be helping you be a better teacher by doing their best:

Possible script: “I am going to ask you to spell some words. Try to spell them the best you can. Some of the words will be easy to spell; some will be more difficult. When you do not know how to spell a word, spell it the best you can; write down all the sounds you feel and hear.”

Say the word once, read the sentence and then say the word again. Work with groups of 5 words. You may want to stop testing when students miss 3 out of 5 words. See the text for further instructions on administration and interpretation.

Have students check their papers for their names and the date.

Set One
1. bed  I hopped out of bed this morning.  bed
2. ship  The ship sailed around the island.  ship
3. drive  I learned to drive a car.  drive
4. bump  That is quite a bump you have on your head.  bump
5. when  When will you come back?  when

Set Two
6. train  I rode the train to the next town.  train
7. closet  I put the clothes in the closet.  closet
8. chase  We can play run and chase with the cats.  chase
9. float  I can float on the water with my new raft.  float
10. beaches  The sandy beaches are crowded in the summer.  beaches

Set Three
11. preparing  I am preparing for the big game.  preparing
12. popping  We are popping popcorn to eat at the movies.  popping
13. cattle  The cowboy rounded up the cattle.  cattle
14. caught  I caught the ball.  caught
15. inspection  The soldiers polished their shoes for inspection.  inspection

Set Four
16. puncture  I had a puncture in my bicycle tire.  puncture
17. cellar  I went down to the cellar for the can of paint.  cellar
18. pleasure  It was a pleasure to listen to the choir sing.  pleasure
19. squirrel  We found the tree where the squirrel lives.  squirrel
20. fortunate  It was fortunate that the driver had snow tires during the snowstorm.  fortunate

Set Five
21. confident  I am confident that we can win the game.  confident
22. civilize  They had the idea that they could civilize the forest people.  civilize
23. flexible  She was so flexible that she could cross her legs behind her head.  flexible
24. opposition  The coach said the opposition would give us a tough game.  opposition
25. emphasize  In conclusion, I want to emphasize the most important points.  emphasize
This year you spent a lot of time working in word study. Please describe what you did during word study.

What did you like about word study?

What did you dislike about word study?

How did word study help you to write?

How did word study help you to read?

Write any other comments that you have about word study.
Table 1
Characteristics of the developmental stages of learning to spell

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Preliterate/Prephonetic</th>
<th>Preliterate/Phonetic</th>
<th>Letter Name</th>
<th>Within Word</th>
<th>Syllable Juncture</th>
<th>Derivational Constancy</th>
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<tbody>
<tr>
<td></td>
<td>• Scribbles</td>
<td>• Learns alphabet (reading and writing)</td>
<td>• Uses logic to predict spelling (names of letters, own name as basis, environmental print as aid)</td>
<td>• Develops growing sight vocabulary (reading and writing)</td>
<td>• Begins to correctly double consonant before adding ending (stepping, shopping)</td>
<td>• Reads efficiently and fluently</td>
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<td></td>
<td>• Imitates reading and writing</td>
<td>• Strings letters to spell words</td>
<td>• Begins development of sight vocabulary (reading and writing)</td>
<td>• Correctly uses short vowels</td>
<td>• May incorrectly spell vowel in schwa position (illistrate for illustrate)</td>
<td>• Develops greater understanding of relationships of words, derivations, and multiple meanings to help with spelling</td>
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<td>• Is aware of print</td>
<td>• Often exchanges short vowel sound for closest long vowel sound when predicting spelling (that is, a for short e, e for short i, etc.)</td>
<td>• Uses -d for past tense (skipped or skipped instead of skipt)</td>
<td>• Marks long vowel sound (sometimes incorrectly—caek for cake, flote for float)</td>
<td>• Through spellings shows phonetic awareness available for word attack during reading</td>
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<td>• Makes common spelling errors—affrications (jirv for drive), nasal (bop for bump), exaggerated sounding (palana for plane)</td>
<td>• Understands words have two elements—beginning consonant pattern and a vowel plus ending—to inform predicted spellings</td>
<td>• Uses -d for past tense (skipped or skipped instead of skipt)</td>
<td>• May overgeneralize rules (doubles when not needed—sufferring for suffering, drops e before adding any ending—carful for careful)</td>
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<td>• Begins to internalize rules (doubling, e marker, etc.)</td>
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Appendix E

Phonemic Analysis

General Population

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<th>Series 1</th>
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<td>Sept. 58</td>
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<td>March 62</td>
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Strategies/LRE

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<td>Sept. 37</td>
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<tr>
<td>March 50</td>
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</table>

ESL

<table>
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<th>Series 1</th>
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<tbody>
<tr>
<td>Sept. 33</td>
</tr>
<tr>
<td>March 53</td>
</tr>
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</table>
Appendix F

Words Spelled Accurately

Diagram showing the number of words spelled accurately by different groups over time (Sept. to March):
- ESL
- Strategies/LRE
- General Population
Appendix G

September Dictation Sentence: Pat pulled on her mittens and picked up her present. She carried it to Mike's house and sang happy birthday.

Above: This student began the school year in the within word pattern stage. He did not have confusions with short vowel sounds, therefore he was ready to work with long vowel patterns.

Below: The same student ended word study in the syllable juncture stage. His only error was his spelling of the word "their." This error corresponds to his developmental stage of spelling as assessed in March.

March Dictation Sentence: Three boys jumped over a little stream. The water was very cold and their legs got dripping wet.
Appendix H

September Dictation Sentence: Pat pulled on her mittens and picked up her present. She carried it to Mike's house and sang happy birthday.

Above: This student was an ESL student in his second year of English instruction. He began the school year in the preliterate stage. On the September dictation task he copied words from the directions instead of writing the sentence read to him.

Below: The March dictation shows the progress that this student made. Not only was he attempting to write the words read to him, he was using most of his beginning and ending consonant sounds correctly. At this point, he had moved into the letter name stage, with instruction focusing on his confusion of vowel sounds.

March Dictation Sentence: Three boys jumped over a little stream. The water was very cold and their legs got dripping wet.
Appendix I

September Dictation Sentence: Pat pulled on her mittens and picked up her present. She carried it to Mike's house and sang happy birthday.

```
P e a + p o u + a n J o r m e t e n s
e n - p ic - a p J u r P r u e s e n t c h
q u e r r = e + t u g m x j a o s e n d s e d
J a p: bu rei
```

Above: This student was also an ESL student, however, unlike the other ESL students in our class, he was able to read and write in his first language, Spanish. He came to Chandler at the beginning of the year speaking no English. In the above dictation this student uses his knowledge of Spanish phonemes to write the English sentence.

Below: The progress that this student made is evident. In this sentence the only consonant confusion he had was the “b” for the “v.” This is quite common with our Spanish speaking students. This student began the year learning the sounds of the alphabet and he ended the year studying long and short vowel patterns.

```
Three boys jumpt oober a litle strem
and the water was bery cold wet
```

March Dictation Sentence: Three boys jumped over a little stream. The water was very cold and their legs got dripping wet.
### Appendix J

#### Qualitative Spelling Inventory

<table>
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<th>1-10</th>
<th>September</th>
<th>March</th>
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<tr>
<td>1. bed</td>
<td><em><strong>bed</strong></em></td>
<td><em><strong>bed</strong></em></td>
</tr>
<tr>
<td>2. ship</td>
<td><em><strong>ship</strong></em></td>
<td><em><strong>ship</strong></em></td>
</tr>
<tr>
<td>3. drive</td>
<td><em><strong>drive</strong></em></td>
<td><em><strong>drive</strong></em></td>
</tr>
<tr>
<td>4. bump</td>
<td><em><strong>bump</strong></em></td>
<td><em><strong>bump</strong></em></td>
</tr>
<tr>
<td>5. when</td>
<td><em><strong>wen</strong></em></td>
<td><em><strong>bump</strong></em></td>
</tr>
<tr>
<td>6. train</td>
<td><em><strong>train</strong></em></td>
<td><em><strong>when</strong></em></td>
</tr>
<tr>
<td>7. closet</td>
<td><em><strong>closet</strong></em></td>
<td><em><strong>train</strong></em></td>
</tr>
<tr>
<td>8. chase</td>
<td><em><strong>chase</strong></em></td>
<td><em><strong>closet</strong></em></td>
</tr>
<tr>
<td>9. float</td>
<td><em><strong>float</strong></em></td>
<td><em><strong>chase</strong></em></td>
</tr>
<tr>
<td>10. beaches</td>
<td><em><strong>beaches</strong></em></td>
<td><em><strong>float</strong></em></td>
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</tbody>
</table>

This ESL student began the year in the letter name stage. Her September Qualitative Spelling Inventory shows that she had confusion with blends, digraphs, and short vowel sounds. These confusions are characteristic of students in the letter name stage. When the March Qualitative Spelling Inventory was taken she had progressed to the within word pattern stage. She had cleared up her confusions of short vowels, blends, and digraphs. Her March inventory shows confusions with long vowel patterns. The within word pattern stage's course of study begins with long vowel patterns.
Appendix K

Reading Levels

Note: The above reading levels were converted from the ELLI levels A - R to numbers 1 - 18 for graphing purposes. The same numerical levels apply in Appendix L.
Title: The Effects of Word Study on Students' Application of Spelling and Phonics in Their Independent Writing

Author(s): Janet Elliott and Kim Rietschel

Corporation Source: Goshen Community Schools

Publication Date: 4/22/99

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Date: 4/22/99