Running Head: STUDY OF SORT STORIES

Study of Sort Stories: Leveled Reading Supplement to Words Their Way: Word Sorts for

Letter Name-Alphabet Spellers

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Abstract

Sort Stories: Leveled Reading Supplement to Words Their Way: Word Sorts for Letter Name-Alphabet Spellers effectiveness was tested using five English language learner (ELL) students in the fifth and sixth grade. *Sort Stories* uses the word lists and accompanying clip-art from *Words Their Way* in developmental, grade-level specific, short read stories. Strategies of *Sort Stories* include reading to the students, student read-aloud, choral reading, re-reads, and speed-reading. The program was taught for 10 to 15 minutes per day, four to five days a week, for a period of eight months, using one *Sort Story* and accompanying *Words Their Way* word sort per week. Results of the study showed the students had significant increase in their reading grade level, fluency, vocabulary, reading accuracy, comprehension, and reading speed as a result of the *Sort Stories* curriculum. Though *Sort Stories* can be used alone, used with the *Words Their Way* curriculum, *Sort Stories* provides teachers with an effective literacy curriculum that combines the strategies of word study with reading to build students' English language skills.

Introduction

My experience as a teacher includes a semester of a second-grade internship, 1-1/2 years teaching elementary ELL (English Language Learners), and earning a Master's degree in Elementary Education. I have used the *Words Their Way* word sorts for spelling lists and for building vocabulary with my ELL students. I have found the program to be very effective in teaching students how to spell while, at the same time, building vocabulary using picture/word association. I have found a need, as a result of the *stand-alone* characterization of *Words Their Way*, to further supplement the word sorts with additional self-made material to apply the vocabulary to contextual assignments to build understanding of the words and how to use them in language. These assignments include having the students use and write the words in a sentence or story, word finds, reading material that contains the words, journal writing using the words, and discussions about the words. I also have found a need to use a separate curriculum for reading development, which in itself contains issues of vocabulary, further explained in *Statement of the Problem*. I have developed a way of combining the successful literacy methods into a supplemental curriculum that includes the word study from *Words Their Way* with fluency, vocabulary, reading accuracy, comprehension, and reading speed called *Sort Stories: Leveled Reading Supplement to Words Their Way: Word Sorts for Letter Name-Alphabet Spellers*.

Statement of the Problem

The school in this study currently uses a curriculum for reading and literacy. The curriculum is based on leveled stories and books to build students' reading and language skills. The program does contain vocabulary pertinent to each story. However, as the program itself states, teachers may need to supplement with spelling. The curriculum vocabulary is theme

based, with words in each list that range greatly in difficulty with no pattern to the words. The

words are then learned individually, having the students learn *how* to spell the words, but not

why they are spelled that way. Appendix A shows a vocabulary list of words from the

curriculum that deal with the story "Dear Mr. Henshaw". The words *pen* and *typewriter,* for

example, using the *Words Their Way* stages, are not on the same developmental level for

spelling. From the *Words Their Way* curriculum, the word *pen* is within the Late-Emergent

(beginning and final consonants) to middle Letter Name-Alphabet (short vowels) spelling stage,

and the word *Typewriter* is in the Middle Within Word stage of spelling (vowel patterns). The

grade levels range from first to early second-grade for *pen* to third grade for *typewriter*.

The *Words Their Way* spelling sorts, a developmentally progressive curriculum based on

patterns of spelling, has been very effective as a supplement for both my class during my

internship as well as currently for my ELL students. Appendix B shows word sort 10 from the

Words Their Way program, combining words with pictures to build vocabulary and

comprehension along with spelling. However, the use of the *Words Their Way* list does not give

the students the advantage of reading the words in context, building understanding of *how* to use

the words in language. I have found the problem being finding a developmentally appropriate

spelling program that also provides material containing the spelling words in developmentally

appropriate reading level context. It is for these reasons that I developed *Sort Stories:*

Supplement to Words Their Way: Word Sorts for Letter Name-Alphabet Spellers, a leveled

reading program that uses the word lists from *Words Their Way: Word Sorts for Letter Name-*

Alphabet Spellers. Sort Stories takes all of the words from each word sort from *Words Their*

Way and uses them in sentences or stories, along with the pictures, if included with the sort. *Sort*

Stories focuses on fluency, repetition, progressive grade-levels, picture/word association, words-

per-minute, and grammar in a contextual story while combining the word sorts and picture/word

association from the corresponding *Words Their Way* word sort. Appendix C shows Sort Story

10 from *Sort Stories*, using the words and pictures from *Words Their Way* sort 10.

Purpose of the Study

The purpose of this study was to test the effectiveness of the *Sort Stories* program with

ELL students. The goal was to determine if there is a considerable improvement in words-per-

minute, reading accuracy, and comprehension along with the improvements in vocabulary and

spelling from the *Words Their Way* program. The goal was also to determine if any

improvement or lack of improvement correlates with any of the strategies used in the *Sort Stories*

program.

Research Hypotheses

This study tested the following Null hypotheses based on the *Sort Stories* curriculum and

strategies:

1. Repetition of reading a story does not improve words-per-minute.

2. A significant increase in wpm at a specific grade level does not improve the wpm for
   the next higher grade level material.

3. Repetition of reading a story does not improve reading accuracy.

4. Using developmentally leveled progressive reading material does not allow for a
   continual improvement in reading grade levels.

5. Using words in a contextual format does not increase comprehension.

6. A significant increase in reading accuracy at a specific grade level does not improve
   the reading accuracy for the next higher grade level material.

Theoretical Perspective

Upon observing the difficulty teachers were having in supplementing the adopted reading program with developmentally appropriate spelling lists, I realized how beneficial a program would be that combines spelling, picture/word recognition, vocabulary, and reading in a developmentally appropriate and progressive format. I also have realized how valuable time is for teachers, barely having enough time to keep up with the class curriculum, and undoubtedly not having time to develop a combined program. Therefore, the *Sort Stories* program, if proven effective, would benefit greatly teachers with students within the letter name-alphabet stage of spelling, typically elementary students ranging from first to sixth grade. The effectiveness of *Sort Stories* must be grounded in research in order for teachers to feel confident with the program.

Limitations of the Study

Sample size is one limitation of this study. The small sample size for this study is the result of studying only one school with a limited number of ELL students being used for the study. There was also limited grade level access to the ELL students, with the focus of the study being 5th and 6th graders.

A second limitation of this study is the fact that only ELL students were used. More so than just ELL students, the students were all non-English proficient (NEP), they could, at most, speak just a few words in English at the beginning of the school year. Also, none of the students in the study were literate in their first language, having much difficulty reading and spelling in their primary language. The students' skills in their primary language, as observed in school, was interpersonal oral language, being able to communicate with little to no difficulty with students and teachers who spoke the same primary language.

A third limitation of the study is that the students were either in 5th or 6th grade and reading English at a Kindergarten level at the beginning of the semester. This level was determined through spelling and reading assessment. The students used in this study are, therefore, not representative of the normal school population consisting of NEP as well as native English speakers, students at, above, and below reading grade level, and ELL students who are literate in their first language. Other than sample size, the limitations listed may also be considered positive for showing the effectiveness of *Sort Stories* in that if this program shows effectiveness with students considered very "difficult" as far as teaching reading, writing, spelling, and speaking English, the effectiveness with a general population of students may be greater. In order for the results of this study to be generalized across a large population, the sample size would have to be much larger, consisting of students from various schools with various English development levels. The results of this study are also based on assessments done within the *Sort Stories* program. Another measure of effectiveness would be having the students assessed using the standardized tests as required under No Child Left Behind (NCLB).

Significance of the Study

Results from this study showing the effectiveness of the *Sort Stories* program may be valuable to both teachers and students. Effectiveness in this study would allow teachers confidence to broaden the population for which the program could be used, adding a valuable and simple tool to their curriculum. The students, by adding additional developmentally appropriate reading material to their current curriculum, could only benefit from the program. Teachers themselves would then be able to decide, from seeing results specific to their own students, the pace of which to follow the curriculum. In order to teach students developmentally, classes are divided into reading *groups*. Each group, through assessment, would have the

starting point for *Sort Stories*. With *Sort Stories* having specific grade levels, teachers would be

able to pace the groups looking ahead to reach specific grade level goals. Students below grade

level would be able to "close the gap," and students above grade level would be able to further

expand their literacy skills. Pacing for *Sort Stories* could allow for students to achieve faster

results, allowing for students to be able to achieve at or above grade level standing as determined

through assessment. Because *Sort Stories* is grade level based, teachers would always know

exactly at which grade level each student is reading and at what level of accuracy through the use

of running records assessment. With the combined literacy skills of *Sort Stories*, teachers would

be able to teach more literacy skills in less time, adding valuable time to their day. Effectively

combining curriculum gives teachers the freedom to add lessons to their day that may otherwise

not be included. With the majority of focus, as a result of NCLB (No Child Left Behind) being

Math and Literacy, subjects that are often either cut back or not taught at all are Science, Social

Studies, Art, Music, and P.E. By effectively and efficiently teaching the literacy skills

incorporated in the *Sort Stories* curriculum, teachers will be able to allow more time for these

subjects into their everyday lessons.

Review of the Literature

Knowing how to read, write, speak, and listen in English is a powerful tool and focus of

current curriculum as well as requirements set forth in NCLB. Communication is essential for

opportunity and success, and in the United States where English is the dominant language,

English literacy is currently looked at as being an essential component of equal opportunity for

students. For teachers, proven effective material, methods, and curriculum is crucial in

providing the most effective learning environment for the students. Because of this focus, there

are seemingly endless resources available for teaching English literacy. Along with these

resources comes the scientific data supporting or rejecting the effectiveness of the resources.

The following is a short review of literature that has given further insight into the strategies

incorporated in the design and implementation of *Sort Stories* for this study.

Cook and Weinstein (1992) conducted a study involving four male beginning readers

with learning disabilities. They studied the effects on gains in fluency of two types of mastery

criteria using the technique of rereads. One criterion required the students to reread a passage

until they could demonstrate three successive improvements. The other criteria required students

to reread a passage until 90 correct words-per-minute were reached. As stated in the study, "both

were successful," and the improvements increased the reading efficiency of the students. The

importance of this study shows the effectiveness of rereads in improving reading fluency, a main

strategy in the *Sort Stories* program.

Another reference to using rereads for increasing fluency in order to increase reading rate

and comprehension was an action research project done by Eber and Miller (2003). In this

project, consisting of a study of second and third graders in a middle class community, the

problems of low fluency scores had been documented through standardized testing and teacher

observation. A review of the in-class curriculum revealed a "questionable" amount of time spent

reading and repeating vocabulary. A review of strategies led to the use of repeated readings as

the chosen intervention. The results of the intervention were "favorable," suggesting, "Repeated

readings may have influenced the improved comprehension and fluency scores."

Armstrong, Campos, and Johnson (2001) studied a program that used leveled books for

increasing reading fluency. The students used in the research were from three elementary

classrooms. The students exhibited low fluency rates, which in turn, was impeding them from

becoming independent readers at their grade level. The evidence for the low fluency rates was

based on wpm on a grade level reading passage. The result of reading at the frustration level for their grade level was low fluency scores for the students. The solution strategy studies involved creating a leveled classroom library along with instructing students and parents how to select a book at each student's independent reading level. The results of the study indicate an increase in student reading fluency scores and student understanding of how to choose an appropriate book to read independently. Another main focus of the *Sort Stories* program is leveled, grade-level appropriate, progressive stories with support goal of reaching the independent reading level for each story.

A study done by Woodcock (1968) looked at the potential value of using rebus stories in the early stages of reading instruction. A rebus story uses symbols to represent entire words, in contrast to letters that represent sounds. *Sort Stories,* using the definition as stated in the Woodcock study, are rebus stories, using clipart pictures to represent entire words. The hypothesis of the study was that pupils learning to read with rebuses would do significantly better than pupils presented the same instructional material in traditional orthography (T.O.). Two samples of preschoolers were used in a learning-to-read setting. One sample learned using T.O., while the other used rebuses. Results of the study demonstrated that "learning to read rebuses was markedly easier than learning to read T.O." Also, as stated by Woodcock, "The differences became even more disparate as the complexity of the vocabulary and sentences increased."

Lehr, Osborn, and Hiebert (2004) released a publication on vocabulary as it relates to reading comprehension. They state that of the "many compelling reasons for providing students with instruction to build vocabulary, none is more important than the contribution of vocabulary knowledge to reading comprehension." They state that in reading research, one of the most

enduring findings is the extent to which increased vocabulary relates to comprehension. Because

of these research findings, the Lehr, Osborn, and Hiebert publication focuses on using

vocabulary instruction as a component of reading instruction. This combination of vocabulary

and reading instruction is another main focus of *Sort Stories*.

   Susan M. Miller (1995) studied the effectiveness of reading words in context for building

comprehension. The study hypothesized that "students who only used a dictionary to

understand words, not exploring context or prior knowledge, will not possess a true

understanding of the word meaning." In the study, 22 heterogeneously grouped third-grade

students were divided into control and experimental groups. The control group defined words

using a dictionary and used the words in sentences. The experimental group identified each

words in context, using context clues to determine the meaning of the words. The results of the

study indicated that, "When students used a dictionary alone, they did not use the word in other

reading and writing tasks more accurately than students who learned the meaning of words via

context and relating sub-meaning to prior knowledge." Though formal assessment of

comprehension was not used during the *Sort Stories* study, this study by Miller contains valuable

information as to the importance of learning words in context.

Methods

Research Design

   This study was designed to test the effectiveness of the *Sort Stories* program. The study

was therefore structured so as to provide a relative score for words-per-minute (wpm) and

reading accuracy as both a pre and post-test. Running records were used to determine these

scores. Each *Sort Story* and associated word sort were taught for about 15 minutes per day,

about 5 minutes for word study and 10 minutes for *Sort Stories*, over a one-week period. The

pre-test was given on the first day, usually Monday, and the post-test was given at the end of the

week, usually Friday. The students were aware they were being assessed. The testing strategies,

along with the goals of the lessons, were explained to the students. The lessons followed the

Sort Stories Suggested five-day Program (Appendix I), with minor adjustments made based on

the individual needs of the students. The data was collected for twenty *Sort Story* lessons over

an eight-month period from October of 2005 through May of 2006. The students had not seen

the stories or the word sorts prior to each lesson.

Subjects

This study used five subjects from an elementary school in North East Sparks, NV. The

school, during the 2004-2005 school year, had 444 students (2004-2005 School Accountability

Report). The school had 51.1% of the students eligible for the Free/Reduced Lunch program, a

socioeconomic indicator of the school population. The school, according to the accountability

report, made Adequate Yearly Progress (AYP) and was designated as *High Achieving – Growth.*

The school population consisted of 46.2% White and 43.2% Hispanic students, with the

percentage of students with Limited English Proficiency (LEP) being 21.6%. The study used

five ELL, NEP students. The students were pre-selected in that they are the only ELL students I

tutor one-on-one or small group for ½ hour each school day. All five students are Mexican

immigrants, new to the United States. All speak conversational Spanish, but none are literate in

Spanish. Because of the high Hispanic population at the school, all of the students have made

friends in their classes that speak both Spanish and English, allowing much interpretation

throughout the day of English, as well as valuable friendships. None of the five students are

required to do most of the assignments in class, due to the fact they have difficulty understanding

them. They get most of their English instruction through the ELL program consisting of myself

teaching small group or one-on-one in the classroom, and another ELL teacher doing roughly 1

to 1-1/2 hours of *pullout* every day as well. *Pullout* is when the students meet outside their

regular classroom for small group instruction. Students1, 2, and 4 are in the sixth grade, and

students 3and 5 are in the fifth grade. Students 1 through 4, being very similar in background

and ability, followed the same lessons each week. Student 5 entered school late in the year and

did not begin *Sort Stories* until late March of 2006. Student 5 was on a different *Sort Story* than

the other four students, but followed the same pace of one *Sort Story* lesson per week.

Instrumentation and Materials

The instrument used in this study was the *Sort Stories* curriculum. Each story, as noted

on the upper right-hand corner, contains data showing the total number of words (tw) and the

grade level (gl) as determined using the Flesch-Kincaid Grade Level Score formula ("Readability

Formulas," 2005): $[(.39 \times ASL) + (11.8 \times ASW) - 15.59]$, with ASL being *average sentence*

length and ASW being *average number of syllables per word*. The beginning story to be used

was determined by the students' spelling level, as determined using the *Words Their Way*

Primary Spelling Inventory spelling assessment (Appendix H). All five of the students were in

the letter-name alphabet stage of spelling. The *Sort Stories* were used as instructional reading

material for the students, as well as for running records used as the assessments. Each lesson

included the *Sort Story* and the corresponding *Words Their Way* word study.

Variables in the Study

There are several variables that may have affected the data collected in this study. One

variable is the amount of background knowledge the students bring to the study. Background

knowledge that could affect the data would be vocabulary, spelling, and reading level. Because

the five subjects were all NEP (non-English proficient) students, their literacy background knowledge in English was very little. The students knew very few of the words from the word study when introduced to them on the first day of each lesson. The students did, however, recognize most of the pictures and were easily able to associate the new words with the pictures. In order to reduce the effect of the variables, the *Words Their Way Primary Spelling Inventory* spelling assessment was used to determine the spelling level of each student. The spelling inventory gave an accurate assessment of each student's spelling level. Because the starting point of the stories was determined using spelling, the variable mentioned concerning reading skills may need to be considered, but should not change the starting point for *Sort Stories*. Instead, the number of times each student needs to read the story in order to achieve the goals should be adjusted.

Another variable is the number of times each student either read or heard the story. The more a student reads a story, the higher the accuracy becomes, as shown by the data. However, a teacher is limited to the amount of time that can be spent on a lesson, so I simply limited the number of times a student read or heard the story to about 10 minutes per day, four days a week, with the fifth day being assessment. This kept the number of times the story was read or heard to between 12 and 20. This was enough times in order to determine the minimum number of times a student should read or hear a story and achieve the highest results. Having the students read the stories more or less would have affected the results of this study. In order to address this variable, data is given showing results in relation to the number of times a story is read or heard instead of simply results after a *Sort Story* lesson is completed. There is also data presented showing the average number of times each story used in this study was read.

Data Analysis

Running records were given to the students as a pre and post-test, shown in Appendix E (pre-test) and F (post-test), measuring WPM (words-per-minute) and reading accuracy. WPM and accuracy were both assessed during the running records, with the students knowing that they were to read the stories as accurately as possible and as quick as possible as well. The pre-tests were given at the introduction of the story as the student read the story for the first time, typically on Monday. The post-test was given at the end of the lesson, usually on Friday. For data collection purposes, running records were also given throughout the lesson in order to determine wpm and accuracy progress relative to the number of times the student had either read or heard the story. The data was then collected and compared to see the progress. Wpm was given a percentage score for change.

Reading accuracy was determined by marking errors when the student read each story, as shown in Appendix E and F as circled words. Errors effecting accuracy are *word insertions*, *substitutions*, *teacher-supplied words*, *omissions*, and simply not being able to read a word. The number of errors was then divided by the total number of words, giving an accuracy percentage. Though the difference in accuracy percentage is given in the results, it was determined that since there is a limit of 100% accuracy, considered *full proficiency*, the percentage of increase *towards* full proficiency was calculated. With re-reading being a strategy and focus for the study, the number of times each story was read is also included in the data. Each time a student heard the story read or read the story him/herself, an "X" was put in one of the boxes at the bottom of the story (Appendix D). The goal speed for the student, as determined by the teacher reading the story at a student-achievable pace, is written in the box on the lower-right corner of the story, also shown in Appendix D. The student strives to reach this goal during the lessons. The student

continues to read and practice the story in his/her personal reader until the goal time is met. Student errors were corrected when the student read the story. Student errors were not corrected when the student was reading solely for speed. The student was simply instructed that he/she must read every word.

Comprehension was not measured using the story, but instead was taught in the form of vocabulary and discussion using the word study and discussion of the story. The word study allowed, through picture/word association, the building of understanding of the definition of each word. Words that did not include pictures involved more discussion of the definitions. The *Sort Stories* allowed for further understanding of how to use the word in language by allowing the students to read the words in context. Comprehension assessment in the form of formal assessments, such as questions about details in a text, I felt were important when teaching other subjects, such as Science and Social Studies. Though formal assessment of comprehension was not used during this study, formal observation during the study showed an increase in comprehension for *Sort Stories*, further discussed in *Discussion and Final Remarks.* The study "Vocabulary Development and Context Usage" (Miller, 1995) did conclude that when students read words in context they are more able to correctly use the words in other reading and writing more accurately.

The following chart is one column from the data collection sheet for *Sort Stories*, followed by an explanation of each entry.

Story: 9
gl: 2.2

	wpm
pre-test	57
post-test	77
% change	35.1

	accuracy
pre-test	79.5
post-test	97.4
% change	22.5
% change towards full proficiency (100%)	87.3
Times read	14

Story: The *Sort Story* number for the column.

gl: The grade level of the *Sort Story*.

wpm: The words-per-minute assessment results for the story:

> **pre-test**: The wpm as determined using a running record the first time the student
>
> read the story, typically on a Monday
>
> **post-test**: The wpm as determined using a running record the last time the
>
> student was required to read the story, typically on Friday.
>
> **% change**: The percentage change in wpm from pre-test to post-test, with
>
> negative change being shown using ().

accuracy: The accuracy assessment results for the story:

> **pre-test**: The accuracy determined using a running record the first time the
>
> student read the story.

post-test: The accuracy determined using a running record after the pre-test. **%**

change: The percentage change in accuracy from pre-test to post-test,

with negative change being shown using ().

% change towards full proficiency (100%): The percentage change in accuracy

from the difference between pre/post-test increase and 100%. A student

with a pre-test accuracy score of 98% and a post-test accuracy score of

99% would have achieved 50% of the difference between 98% and 100%.

Times read: The number of times the student has either read or heard the story at

the time the assessment was taken.

Results

The results are shown in the following tables:

Table 1

Showing the average number of times each Sort Story was read for the study.

Number of times *Sort Story* is read
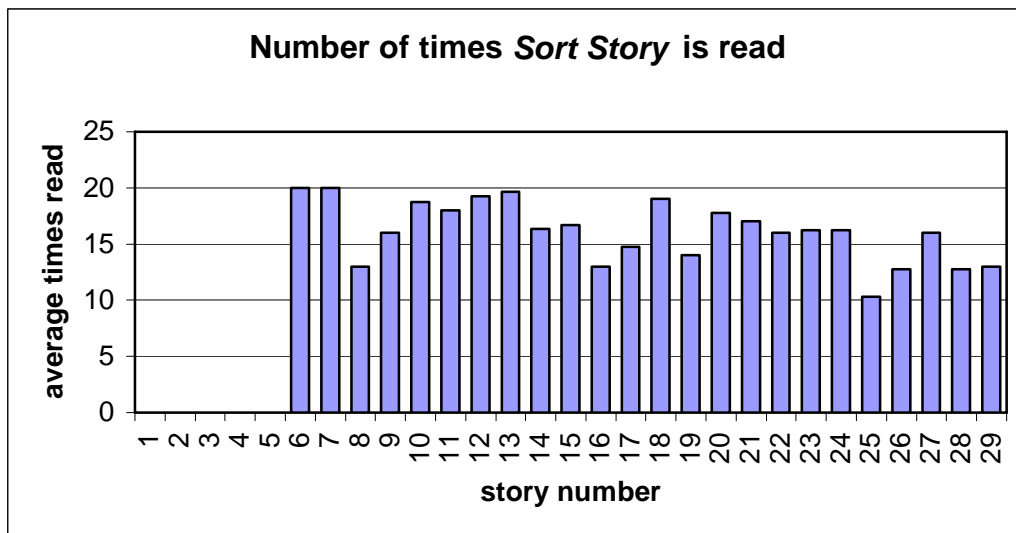
Table 2

Showing the percentage change towards 100% accuracy in relation to the average number of times the stories were read.

% change towards 100% accuracy

Y-axis: percentage (40, 50, 60, 70, 80, 90, 100)

X-axis: Times the story is read (1–21)
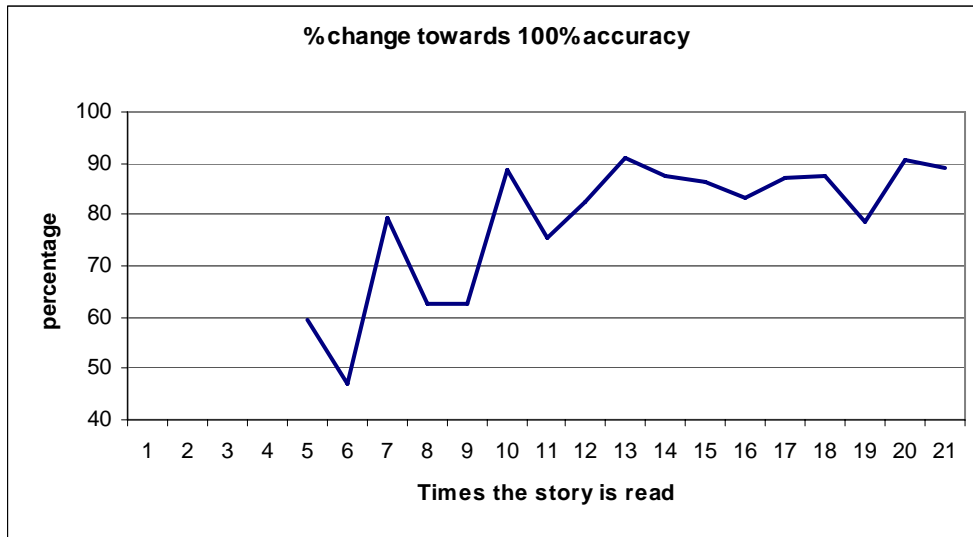
Table 3

Showing the change in words-per-minute (WPM) in relation to the number of times the stories were read.

Change in WPM

Y-axis: Percentage (0, 10, 20, 30, 40, 50, 60)

X-axis: Number of times the *Sort Story* is read (1–21)
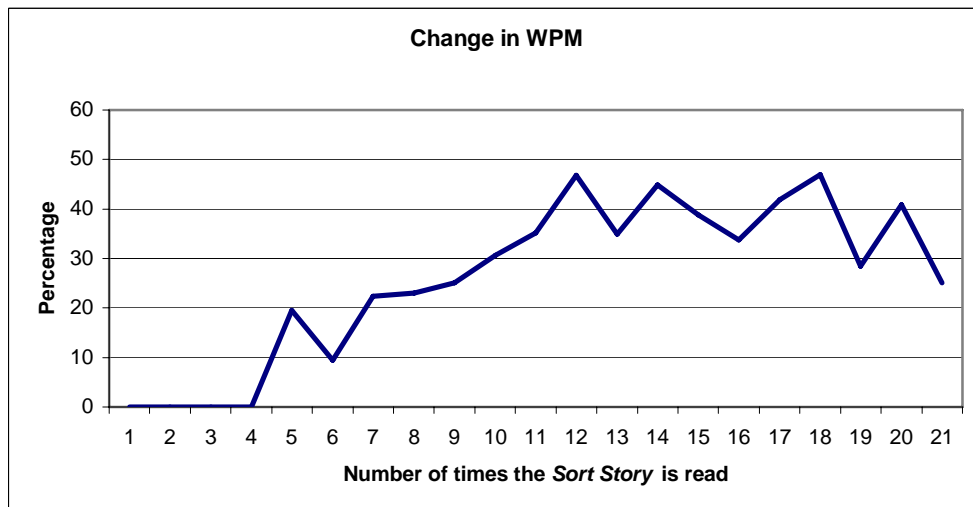
Table 4

Showing the change in words-per-minute (WPM) between pre-tests and post-tests for each of the

stories, along with the wpm guidelines shown as shaded boxes.
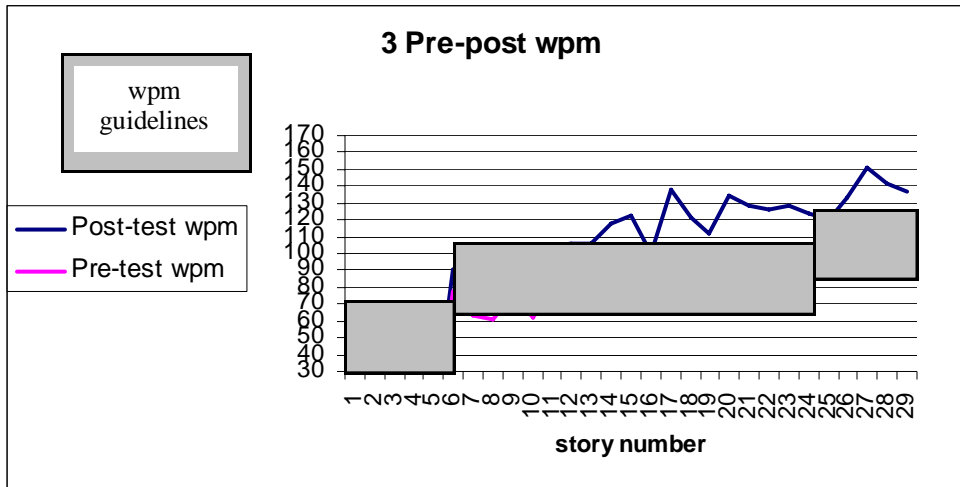
Table 5

Showing the change in reading accuracy between pre-tests and post-tests for each of the stories.
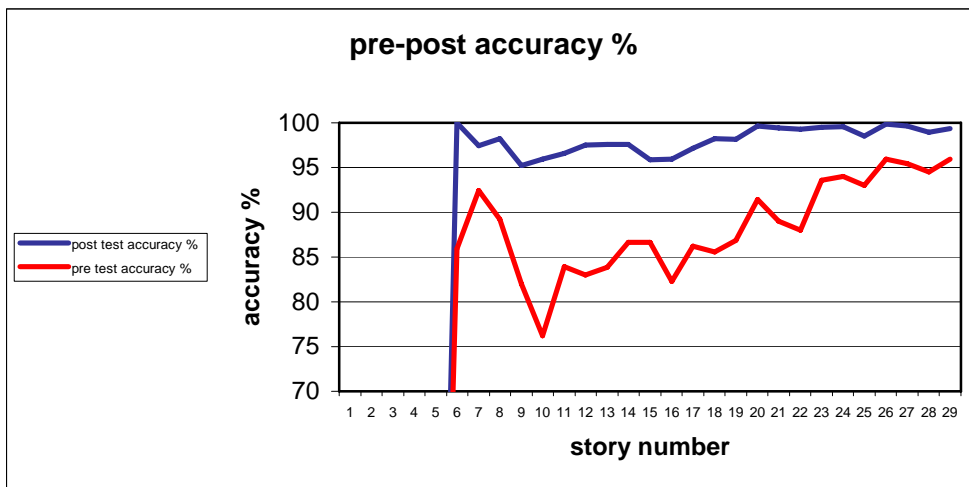
Discussion and Final Remarks

The results of this study show effectiveness of the *Sort Stories* program based on reading accuracy and words-per-minute (WPM). Table 1, showing the average times each story was read, should be referenced along with the rest of the data tables. The data shows a clear correlation between the effectiveness of the program and the number of times the stories were read. A story with fewer average times read, stories 19 and 25, for example, also show less of an increase in accuracy (Table 2) and wpm (Table 3).

Table 2 shows the percentage change towards 100% accuracy in relation to the number of times the stories were read. The table identifies the minimum number of times a story should be read for maximum results to be between 10 and 13 times. The reason the table shows a consistent average change above this number of times read is because the more advanced students were required to read the story fewer times than the struggling students. The students had an accuracy goal of 97% for each story, so to achieve this goal took more reading. To explain how to use the data in this table, consider a student who initially reads a *Sort Story* with 85% accuracy. An 80% increase towards 100% accuracy would put the student at 97% accuracy. Table 2 shows significant increase in reading accuracy with an over 80 increase in accuracy towards 100% proficiency when the story is read enough times for each student. The table shows that with enough times read, relative to the level of each student, the student will be able to achieve a significant increase in accuracy towards the independent reading goal. Table 2 shows that repetition of reading a story *does* improve reading accuracy, proving false Null hypothesis 3.

Table 3 shows the change in wpm in relation to the number of times the stories were read. Similar to Table 2, Table 3 identifies the minimum number of times a story should be read for

the maximum increase in wpm to be between 11 and 13 times. Tables 3 also shows the benefit

of having the student read the story more times, if necessary, to achieve significant increases in

wpm for each story, with above a 20% increase in wpm when the story is read minimum of 11 to

13 times. Table 3 shows that repetition of reading a story *does* improve words-per-minute,

proving false Null hypothesis 1.

Table 4 shows the difference between pre and post-test wpm, along with shaded boxes

showing the wpm guidelines (Appendix G). Significant to table 4 is the pre-test scores. As

Table 3 shows, with enough times read a student will be able to achieve a significant increase in

wpm. Important is the ability of the students to use the skills to improve their overall reading

wpm, shown by the pre-test scores of the next *Sort Story* at a higher grade level. The steady

increase in pre-test wpm scores shows that a significant increase in wpm at a specific grade level

does improve the wpm for the next higher grade level material, proving false Null hypothesis 2.

Table 5 shows the difference between pre and post-test accuracy scores. The significance

of the results shown in Table 5 is also the steady increase in pre-test scores. This increase shows

that students are able to use the reading accuracy skills learned at a specific grade level at the

next higher grade level, with pre-test scores improving from as low as 77% to above 95%. This

also shows the importance of a student achieving independent reading skill at a specific grade

level before moving onto the next higher level. A student achieving 90% at grade level 3.2

(third-grade, second month), for example, would be able to achieve, at most, 90% accuracy at

level 3.3. Having the student achieve a higher reading accuracy goal, using the grade-level

specific stories in *Sort Stories*, allows the student both a higher achievement at the grade level

and the ability to achieve a higher initial accuracy score at the next higher reading level. Table 5

shows that a significant increase in reading accuracy at a specific grade level *does* improve the

reading accuracy for the next higher grade level material, proving false Null hypothesis 6. Table 5 also shows that using the developmentally leveled progressive reading material of *Sort Stories does* allow for a continual improvement in reading grade levels, both wpm and reading accuracy, proving false Null hypothesis 4.

Though not tested in this study, the results of word study using *Words Their Way* was observed to be very effective in building vocabulary comprehension. Increased comprehension of the vocabulary of reading material results in an increase in the comprehension of the reading itself. Further increasing the comprehension was students being able to read the words from *Words Their Way* word study in the contextual format of *Sort Stories*. The study, "Vocabulary Development and Context Usage" (Miller, 1995) did conclude that when students read words in context they are more able to correctly use the words in other reading and writing more accurately. Formal observation made during the *Sort Stories* study did conclude that the students had a definite increase in the understanding of the words from the word study as a result of reading them in a story. This formal observation proves false Null hypothesis 5.

All of the data provided in this study provides valuable information for not only the student and teacher, but for the parents of the students. Written records of student improvement is a must when conferencing with parents, and running records for reading defined by a grade level is an easy-to-discuss and understand assessment. With running records and the students having the completed *Sort Stories*, teachers are able to provide valuable artifacts to parents and faculty showing steady improvement. The artifacts also allow teachers to be able to assign grades for students based on achievement and not solely on grade-level assessment.

When a student is below grade level, it is necessary to excel the student at a faster pace in order to "close the gap" and allow the student to achieve *at grade-level* status, as determined

through standardized assessment. The positive results of this study show that using *Sort Stories* as a supplement to *Words Their Way* allows teachers to pace students who are below grade level to achieve at or above grade level literacy skills. During this study, all of the students were able to progress through one *Sort Story* per week. The students who started at *Sort Story 9*, grade level 2.2, finished *Sort Story 29*, grade level 3.3, in 20 weeks time, an increase in grade level reading skills of 1.1 years. A teacher who plans for 38 weeks of *Sort Story* instruction, with one story per week, will improve the reading skills of the students about 2 years, depending on the starting points of the students. The results of this study were based on the number of times a story was read, and not on the amount of school days spent on each story. Therefore, a teacher would be able to adjust the pace necessary for individual students in order to achieve the literacy skills goals as set forth by the teacher. With the average time spent daily on *Sort Stories* along with the corresponding *Words Their Way* word study being around 15 minutes, teachers would not have difficulty in increasing the pace through the *Sort Story* curriculum.

An observation made during this study was the ease of teaching *Sort Stories* because of the enjoyment the students had in doing the strategies involved in the curriculum, mostly timing themselves to see how fast they could read. The students knew that when they were reading for speed only, no assessment was being done and no errors were corrected. When a student came close to achieving his/her speed reading goal, some students would want to read the story as much as five or six times in a row. When a student did achieve their goal speed-reading time, they were always filled with excitement and were very proud of their accomplishment. In the same way, I always showed the students their final running record assessments and compared them to their pre-test running record. They always felt very proud of their accomplishment when seeing their improvement in both their wpm and accuracy. It seemed that the students were not

aware of the progress they had made until they were shown. Because of their sense of

accomplishment and improvement, the students were very motivated to start a new story and

improve as much as they could.

Though not tested during this study, another observation made was that there was clearly

an improvement in the accuracy of the stories when the students were reading for speed only,

with no error corrections being made. The students were able to correct their reading errors

themselves while reading at a fast pace. Also observed was the effectiveness of the *Sort Stories*

program with non-ELL students. On several occasions, non-ELL students were used for a short

time, usually just one story, for observation of effectiveness of the program. It was observed that

non-ELL students had the similar results as the ELL students, increasing wpm and reading

accuracy.

The results of this study show a clear effectiveness of the *Sort Stories* curriculum. The

overall positive results of this study of *Sort Stories*, combined with the ease of implementation,

the minimal amount of time required by *Sort* Stories, the integration of the word study skills of

Words Their Way and the literacy skills of *Sort Stories*, and the improvement of all of the

students in this study has given me the motivation to continue *Sort Stories* as a supplement to

Words Their Way through the entire *Words Their Way* curriculum. This also includes *Words*

Their Way: Word Sorts for Within Word Pattern Spellers, *Words Their Way: Word Sorts for*

Syllables and Affixes Spellers, and *Words Their Way: Words Sorts for Derivational Relations*

Spellers.

<div align="center">Implications for Further Research</div>

The effectiveness of *Sort Stories*, as shown by the research data, suggests further research

into the overall effectiveness should be considered. Another factor to consider that was not

presented in the data was the incredibly positive response from the students' teachers about the effectiveness of the *Sort Stories* program in regards to the student's reading abilities, spelling, and English language acquisition. There was also a very positive response to the ease of implementation and comprehensive quality that the *Sort Story* program contains, being able to stand-alone as a reading, vocabulary, fluency, comprehension, and spelling program. Data from this study should be compared to data of other reading and comprehension programs to compare effectiveness to existing models of teaching. In order to compare data on an equal basis, data for individual students across the general student demographic using standardized test scores should be used. Also, further research should be considered for the relationship between vocabulary and comprehension. With the combination of fluency, repetition, progressive grade-levels, picture/word association, words-per-minute, grammar, vocabulary, comprehension, and spelling being used all within the *Sort Stories* and *Words Their Way* program, further research in the correlation between and among the various strategies could be used to further strengthen the program as it applies to literacy.

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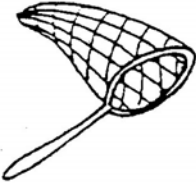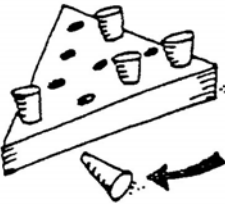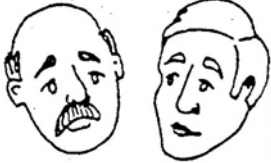
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Appendix A

pen	computer	pencil
eraser	chalk	typewriter
printer	keyboard	sharpener

Appendix B

SORT 10   ET, EG, and EN Word Families

net	peg	jet	hen
pen	pet	beg	wet
leg	ten	men	

Holly the **hen** could not lay an egg. If Holly could use a

pen, she would write down at least **ten** reasons why.

There was too much noise on the farm. The **jet** flying above

made a rumbling sound. Holly could hear barking when the dog Rover

would **beg**. Puff the cat would meow when she got **pet**.

Two **men** would yell as they tried to catch bugs with their

net. The dripping sound from the **wet** socks would drive

Holly crazy. The farmer was trying to hammer in a **peg**. If

Holly had a **leg**, she would stomp on the ground to make everyone

be quiet. Then Holly noticed the **jet** was gone. The dog

stopped barking and the cat stopped meowing. The two **men**

stopped yelling, the socks were dry, and the farmer had gone fishing.

Holly laid an egg.

Appendix D

Holly The Hen
By Kevin Zugel
Sort 10

Student 2

tw: 142
gl: 2.3

Holly the [hen image] **hen** could not lay an egg. If Holly could use a

[pen image] **pen**, she would write down at least [10 image] **ten** reasons why.

There was too much noise on the farm. The [jet image] **jet** flying above

made a rumbling sound. Holly could hear barking when the dog Rover

would [dog image] **beg**. Puff the cat would meow when she got [pet image] **pet**.

Two [men image] **men** would yell as they tried to catch bugs with their

[net image] **net**. The dripping sound from the [socks image] **wet** socks would drive

Holly crazy. The farmer was trying to hammer in a [peg image] **peg**. If

Holly had a [leg image] **leg**, she would stomp on the ground to make everyone

be quiet. Then Holly noticed the [jet image] **jet** was gone. The dog stopped

barking and the cat stopped meowing. The two [men image] **men** stopped

yelling, the socks were dry, and the farmer had gone fishing. Holly laid

an egg.

WPM: 96
accuracy: 88.7

Appendix E
Student 2   10/10/05   Pre-test

Holly The Hen
By Kevin Zugel
Sort 10

errors: 16   1:26   tw: 142
gl: 2.3

Holly the 🐔 hen could not lay an egg. If Holly could use a

🖊 pen, she would write down at least **10** ten reasons why.

There was too much noise on the farm. The ✈ jet flying above

made a rumbling sound. Holly could hear barking when the dog Rover

would 🐕 beg. Puff the cat would meow when she got 🐈 pet.

Two 👥 men would yell as they tried to catch bugs with their

🕸 net. The dripping sound from the 🧦 wet socks would drive

Holly crazy. The farmer was trying to hammer in a 🪵 peg. If

Holly had a 🦵 leg, she would stomp on the ground to make everyone

be quiet. Then Holly noticed the ✈ jet was gone The dog stopped

barking and the cat stopped meowing. The two 👥 men stopped

yelling, the socks were dry, and the farmer had gone fishing. Holly laid

an egg.

WPM: 111
Accuracy: 99.3%

Appendix F

Student 2   10/17/05

(Post Test)

Holly The Hen
By Kevin Zugel
Sort 10

ERR: 1
Time: 1:17

tw: 142
gl: 2.3

Holly the 🐔 hen could not lay an egg. If Holly could use a

🖊 pen, she would write down at least 🔟 ten reasons why.

There was too much noise on the farm. The ✈ jet flying above

made a rumbling sound. Holly could hear barking when the dog Rover

would 🐕 beg. Puff the cat would meow when she got 🐈 pet.

Two 👥 men would yell as they tried to catch bugs with their

🕸 net. The dripping sound from the 🧦 wet socks would drive

Holly crazy. The farmer was trying to hammer in a 🪵 peg. If

Holly had a 🦵 leg, she would stomp on the ground to make everyone

be quiet. Then Holly noticed the ✈ jet was gone. The dog stopped

barking and the cat stopped meowing. The two 👥 men stopped

yelling, the socks were dry, and the farmer had gone fishing. Holly laid

an egg.

(2)

Appendix G

Sort story/ *Words Their Way* #	Sort Story title	*Words Their Way* sort title	Sort Story total words (tw)	Sort Story grade level (gl)	WPM guideline
1	Sort Sentences	Beginning Consonants B, M, R, S	116	1.0	30 - 70 wpm
2	Sort Sentences	Beginning Consonants T, G, N, P	121	1.2	
3	Sort Sentences	Beginning Consonants C, H, F, D	134	1.6	
4	Sort Sentences	Beginning Consonants L, K, J, W	121	1.8	
5	Sort Sentences	Beginning Consonants Y, Z, V	130	1.9	
6	Favorite Hat	AT Word Families	64	2.1	66 - 104 wpm
7	Can of Beans	AD and AN Word Families	118	2.1	
8	Rover	AP and AG Word Families	166	2.2	
9	Bill the Frog	OP, OT, and OG Word Families	151	2.2	
10	Holly the Hen	ET, EG, and EN Word Families	142	2.3	
11	Beach Hut	UG, UT, and UN Word Families	117	2.3	
12	Pat the Pig	IG, IP, and ILL Word Families	158	2.4	
13	A Thrilling Day for the Zoo	S, H, and SH Digraphs	138	2.4	
14	Winter Break	C, H, and CH Digraphs	165	2.5	
15	The Big Storm	H, SH, and CH Digraphs	160	2.5	
16	Lost in the Cold	TH and WH Digraphs	162	2.6	
17	Pirate Pete	SH, CH, TH, and WH Digraphs	156	2.6	
18	Sue's House	S, T, and ST Blends	157	2.7	
19	The Fire	SP, SK, and SM Blends	164	2.7	
20	Summer Break	SC, SN, and SW Blends	134	2.8	
21	Plum Leaf Pie	P, L, and PL Blends	180	2.8	
22	Treasure Hunt	PL, SL, and BL Blends	171	2.9	
23	Go To Sleep	CR, CL, FL, and FR Blends	151	2.9	
24	A Walk in the Woods	BL, BR, GR, and GL Blends	174	3.0	86 - 124 wpm
25	First Prize	PR, TR, and DR Blends	158	3.1	
26	King John	K, WH, QU, and TW	136	3.1	
27	Green Cheese	AT, OT, and IT Word Families	186	3.2	
28	Thin Man	AN, UN, and IN Word Families	140	3.2	
29	Red Sled	AD, ED, AB, and OB Word Families	186	3.3	
30	Scooby	AG, EG, IG, OG, and UG Word Families	187	3.4	
31	Paul at the Mall	ILL, ELL, and ALL Word Families	192	3.4	
32	Soccer Ball	ICK, ACK, and UCK Word Families	201	3.5	
33	Sarah's Race	ISH, ASH, and USH Word Families	183	3.5	
34	Recess	Short A and O Vowel Pictures	164	3.6	
35	Sea Monster	Short I and U Vowel Pictures	173	3.7	
36	Fridays at the Park	Short E, I, O, and U Vowel Pictures	177	3.7	
37	Working at the Zoo	Initial Short Vowel Pictures	158	3.8	
38	Late for School	Short A and O Vowels	152	3.8	
39	Jesse's Cousins	Short I and U Vowels	189	3.9	
40	Summer Camp	Short E, I, O, and U Vowels	158	3.9	
41	Family Cruise	Short A, I, and E Vowels	186	4.0	95 - 130 wpm
42	Shortcut	Short A and I Vowels	196	4.0	
43	Field Trip	Short E, O, and U Vowels	196	4.1	
44	Birthday Gift	Short Vowels	172	4.1	
45	Wish List	Short Vowels	195	4.2	
46	Camp Week	Short Vowels	198	4.3	
47	Trip to the Beach	Short Vowels	195	4.3	
48	Baseball	Short O and OR	198	4.4	
49	Coming Home	Short A and AR	153	4.5	
50	Sort Sentences	Contractions	186	4.5	

Appendix H

Feature Guide for Primary Spelling Inventory

Directions: Check the features that are present in each student's spelling. In the bottom row, total features used correctly. Check the spelling stage that summarizes the student's development. Begin instruction at that stage with a focus on the types of features where the student missed two or more features in a column.

Student's Name _____ Teacher _____ Grade _____ Date _____

SPELLING STAGES→ / Features→	EMERGENT LATE — Beginning Consonants	EARLY — Final Consonants	LETTER NAME–ALPHABETIC MIDDLE — Short Vowels	LATE — Consonant Digraphs	EARLY — Consonant Blends	WITHIN WORD PATTERN EARLY — Long Vowel Patterns	MIDDLE — Other Vowel Patterns	LATE — Inflected Endings	SYLLABLES & AFFIXES EARLY — Feature Points	MIDDLE — Words Spelled Correctly
1. fan	f	n	a							
2. pet	p	t	e							
3. dig	d	g	i							
4. rob	r	b	o							
5. hope	h	p				o-e				
6. wait	w	t				ai				
7. gum	g	m	u							
8. sled			e		sl					
9. stick			i		st					
10. shine				sh		i-e				
11. dream					dr	ea				
12. blade					bl	a-e				
13. coach				ch		oa				
14. fright					fr	igh				
15. chewing				ch			ew	ing		
16. crawl					cr		aw			
17. wishes				sh				es		
18. thorn				th			or			
19. shouted				sh			ou	ed		
20. spoil					sp		oi			
21. growl							ow			
22. third				th			ir			
23. camped								ed		
24. tries								ies		
25. clapping								pping		
26. riding								ding		
Cells with 2 or more errors	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(56)	(26)

SPELLING STAGES:

☐ EARLY ☐ MIDDLE ☐ LATE
☐ LETTER NAME–ALPHABETIC
☐ WITHIN WORD PATTERN
☐ SYLLABLES & AFFIXES
☐ DERIVATIONAL RELATIONS

Words Spelled Correctly: /26
Feature Points: /56
Total: /82

302

Appendix I

Sort Stories Suggested five-day program

- Modify lessons for individual or small-group instruction
- Begin each lesson with the corresponding word study from *Words their Way: Word Sorts for Letter Name-Alphabet Spellers*.
- Record an "X" or the *reading time* in a box at the bottom of the page each time the student listens to or reads the story.
- Use a running record to assess accuracy, words-per-minute, fluency, and progress on days 1 and 5.
- Student keeps all stories in a *personal reader* and continues to practice, if necessary, until the *goal* time is reached.
- If not specified all readings are from side #1 of the *Sort Story*.

<u>Day 1</u>
1. Read to student
2. Student read aloud (running record)
3. Student read aloud for time (no error corrections)

<u>Day 2</u>
1. Read with student
2. Student read aloud (with error corrections)
3. Student read aloud for time (no error corrections)
4. Read to student
   - Read at a student-achievable pace
   - Record the student's reading time in the box at the bottom right of the story as the student's "goal" time

<u>Day 3</u>
1. Read with student
2. Student read aloud side #2 (with error corrections)
3. Student read aloud for time (no error corrections)

<u>Day 4</u>
1. Student read aloud (with error corrections)
2. Student read aloud side #2 (with error corrections)
2. Student read aloud for time (no error corrections)

<u>Day 5</u>
1. Read with student
2. Student read aloud (running record)
3. Student read aloud for time (no error corrections)