Spelling: A Differentiated Curriculum for Students in Fifth Grade

by

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PART I: INTRODUCTION

Introduction

Think back to your middle school years. You may remember a particular teacher and the methods by which he or she taught. Perhaps you recall a specific class, such as history or science. You remember activities, projects, or tests you completed to help you retain knowledge. Now, think specifically to the manner in which you learned your spelling words. Perhaps your spelling test consisted of a pre-test on Monday, a final test on Friday, and assignments to fill the time in between. Maybe it was endless worksheets wherein you used assigned spelling words, but never had allotted time for an actual class. Throughout the years, spelling has been a class for which teachers have had little support. However, recent educational research has shown the necessity for educators to conduct meaningful spelling classes that focus on basic words, word patterns, and alternative spellings. In this curriculum project, I will create a meaningful spelling curriculum for fifth grade students. The curriculum will be guided by differentiated instruction and Gardner's multiple intelligences to allow each student to reach his or her maximum potential.

Problem/Purpose Statement

Typically, spelling class has been taught using direct instruction. Students are given a pre-test at the beginning of the week, followed by a series of assignments to complete throughout the week, and concluding with a final test at the end of the week. This type of spelling instruction has frustrated many educators. According to Carpenter and Simmons (2010), teachers who teach this way are dissatisfied both by what they are doing (spelling instruction) and with their results (students continuing to spell poorly).

The problem is that traditional approaches to spelling are no longer effective yet, educators are unsure of what alternative instructional strategies to use (Carpenter & Simmons, 2010).

There are many reasons why direct instruction in spelling is no longer effective. First, children have varying learning styles. Auditory learners would prefer to learn by listening. Kinesthetic learners would prefer a more hands-on approach. Visual learners need to see what they are learning (Learningguide.org, 2012). An educator can't expect each student to learn in exactly the same way. That is, taking a pre-test, completing worksheets, and completing a final test is ineffective to a student who learns through lectures or a student who learns by touching sensory letters. In addition, direct instruction in spelling is no longer effective because it drives out intrinsic motivation. Students might be led to compare themselves to others because they are all doing the same thing. They received limited or no feedback from the teacher. There isn't time allotted for self-assessment. They also have no control over their learning, so they tend to not take ownership of their learning (Stiggens, Arter, J. Chappuis, & S. Chappuis, 2007). Finally, direct instruction is no longer effective because the activities and assignments aren't tailored for each individual student. Learning needs to be individualized according to each student's needs, abilities, and interests. Because direct instruction takes on a "one size fits all" approach, a child's potential is not met.

The purpose of this project is to create a spelling curriculum for fifth grade students that contains activities, assignments, and assessments driven by learning styles, student interests, and intrinsic motivation to help each individual student achieve maximum potential in the area of spelling.

Definition of Terms

Differentiated Instruction

Differentiated instruction is an approach to learning that places the student at the center. It includes a set of strategies that help teachers meet each child where they are (academically) when they enter the classroom. These strategies also help move the students far forward as possible on their educational path (Levi, 2008). Differentiated assignments and activities are driven by student readiness, interest, and individual learning profile (background knowledge, family status, culture, and gender)

(Foridahoteachers.org, 2011). Teachers also differentiate instruction by content, process, and product. They modify the facts and skills that children are expected to learn. They modify the activities the students are doing to use skills and gain information. Finally, they modify the methods by which the students demonstrate what they learn (Foridahoteachers.org, 2011).

Multiple Intelligences

"The theory of multiple intelligences was proposed by Howard Gardner in 1983 as a model of intelligence that differentiates intelligence into various specific modalities, rather than seeing it as dominated by a single general ability" (Wikipedia.org, 2012). Essentially, children learn in different ways according to the abilities they have been given. According to Gardner, there are eight different intelligences, and individuals can possess one or more of them. The eight intelligences are verbal-linguistic, logical-mathematical, visual-spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist (Campbell, 1992).

PART II: LITERATURE REVIEW

Introduction

Throughout the years, there have been many different philosophies of education. Well educated men and women have studied pupils and their teachers, watching carefully and documenting the ways they believe children best learn. Some believed that children learn best by observation. Some taught that by attaching consequences to learning, children would succeed in their education. Others saw children as individuals who learned at independent paces, but gained knowledge from those students who had already achieved learning goals in a particular area. Recent educational philosophies have shifted to place the focus entirely on the learner. These theorists believe that when a learner is placed in an environment that maximizes their intelligences, success for that learner is likely to follow. Learner-based education is the backbone of my teaching ideas, activities, and assessments, specifically in the subject area of spelling. By creating a spelling curriculum based on a learner-centered philosophy, students will improve their spelling skills and retain knowledge through everyday implementation.

Learner-Centered Education

Learner-Centered education is defined as "the perspective that focuses on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) and learning" (Henson, 2003, p.5). In other words, the individual learners and the way in which they best learn drive the type of education they receive. Learner-Centered education is based on the principles of an educational theory known as constructivism. "Constructivism emphasizes that individuals actively construct knowledge and understanding. Information isn't directly poured into children's minds.

Rather, children are encouraged to explore their world, discover knowledge, reflect, and think critically" (Santrock, 2001, p.10).

There have been many historical constructivists that have influenced Learner-Centered education. John Dewey's designs (1938) have taught educators that learning needs to be tied to life experiences. The more field trips, community activities, or role-play scenarios that children are involved in, the more meaningful their learning will be. Jean Piaget theorized that "the learners' interactions lead to structural changes in how they think about something as they assimilate incoming data" (Fogarty, 1999, p.76). This theory teaches educators to use manipulatives and hands-on activities in the classroom to make learning more meaningful. Lev Vygotsky believed that children first learn by interacting with others, and then process information on their own to create a better understanding (Fogarty, 1999). This means that students learn better in pairs or small groups, as opposed to one large class discussion. Finally, Howard Gardner's theory (1983) states that there are eight intelligences with which a child may be born. In classrooms, these multiple intelligences should be used to help children execute tasks (Fogarty, 1999).

Educators who use this type of model must always remember to keep the focus on the students. There are five driving principles which should be considered when implementing a Learner-Centered education model (Henson, 2003). First, learners have varying perspectives based on their backgrounds, beliefs, interests, and goals. If a teacher respects these perspectives, students are more likely to participate in the process of learning. Second, learners are individuals. This means that teachers must take into account that each child has different emotions, learning rates, learning styles, abilities,

talents, motivators, and feelings of success. Third, the learning process must be relevant and meaningful to the learner. When this occurs, learners can create their own knowledge and understanding by connecting the content to their prior knowledge and experience. Fourth, learning occurs when the environment is safe. Therefore, educators must strive to create a positive atmosphere between student and teacher, student and parent, and student and peers. Henson says, "The learner must feel appreciated, acknowledged, respected, and validated" (Henson, 2003, p.6). Finally, learning is a natural process. Teachers must embrace learning as a fun and meaningful experience, so as not to crush the curiosity and excitement in their students.

Philosophy of Differentiated Instruction

Within the past ten years, a variation of Learner-Centered education has emerged known as differentiated instruction. Differentiated instruction, or DI, is defined by Carol Ann Tomlinson as "adapting content, process, and product in response to student readiness, interest, and/or learning profile" (Bafile, 2010). Differentiation is based on three rationales. First, teachers meet their students where the students are at and move forward from that point. For example, suppose a teacher has Student A and Student B in her fifth grade spelling class. Each week she hands out the words and expects the students to complete the same assigned work, all leading up to the same test on Friday. However, Student A reads and spells at a fifth grade level and Student B struggles and can only spell at a second grade level. Differentiation allows the teacher to meet both students at their level by planning activities to help them improve, overcome the level they are currently at, and reach goals to move up to the next learning level.

The second rationale of differentiated instruction says that students are motivated by their interests. Children should be offered choices in various aspects of their learning. For example, a teacher can provide a menu or choice board of different activities for students to complete in spelling class. These activities can be anything from writing the word five times, creating a word collage, or using each word in a song. The goals of the activities are the same: the students learn their spelling words. However, the students were given an opportunity to take ownership of their learning by choosing the assignments they were going to complete. If children have a choice in their learning, activities, and assessment, they are more likely to be motivated to participate and put forth more effort.

The final rationale of differentiated instruction teaches that educators need to remember that each student is unique. They each have a different background, family status, culture, gender, and knowledge. Therefore, children will meet educational milestones, such as reading sight words, writing in cursive, and spelling patterns at different times. Differentiation helps teachers discover new ways to help each individual child achieve these milestones in a way that makes the student feel comfortable and confident.

There has been much research completed on the effects of differentiated instruction. In 2003, Baumgartner, Lipowski, and Rush used differentiated instruction to see if reading achievement could be increased in primary and middle school students.

This study took place at two schools in northern Illinois, both of which were in the same school district and contained the same demographics (Baumgartner, Lipowski, & Rush, 2003). The targeted groups were second, third, and seventh graders (the groups with the

lowest achievement and grades in reading at that time). At the beginning of the study, the students were tested and surveyed. The initial tests showed that most of the second and third grade students were reading either at or above instructional level, whereas the majority of the seventh graders were reading below their instructional level.

Furthermore, when asked whether or not they thought they were good at reading, 64% of the second graders agreed they were good at reading, 46% of the third graders agreed, but only 36% of the seventh graders believed they were good at reading (Baumgartner et al., 2003). Through differentiated instructional strategies such as flexible grouping (based on instructional level), student choice of learning, self-selected reading time, and access to a variety of texts (based on ability and interest), the outcome was quite successful. At the end of the study, the majority of students in each grade were reading at or above level.

The percentages of students who believed they were good in reading jumped from 64% to 72% in second grade, 46% to 56% in third grade, and 36% to 48% in seventh grade.

Based on their study, differentiated instruction improved achievement in reading.

Another study on the effects of differentiated instruction was conducted by Flaherty and Hackler in 2010. In this study, these two women wanted to see if differentiated instruction affected intrinsic motivational behaviors for elementary reading students. This study was completed in a Midwestern state with fourth and sixth graders that exhibited low intrinsic motivational behaviors that interfered with their learning. That is, they didn't participate in class, had incomplete or late assignments, and through surveys were found to have little motivation for learning. For fifteen weeks these children were taught using differentiated and cooperative learning techniques. Some of these techniques included "implementing individualized instruction within the lesson

plans, creating assignments and activities that offered choice based on students' interest and learning styles, utilizing cooperative learning groups 1-2 times per week for 25 minutes, creating a supportive teaching atmosphere with positive feedback that emphasized trust, fairness, structure, and routines, and setting high, yet realistic expectations for the students to attain' (Flaherty & Hackler, 2010). The results of the study showed that students become more responsible and proactive in daily routines. Frequency of late homework decreased. Students became enthusiastic and motivated by the idea of getting to choose the activity during differentiated lessons. Leadership and teambuilding emerged in the classroom during cooperative learning activities. Finally, academic achievement was realized on an individual basis (Flaherty & Hackler, 2010).

Perhaps one of the most interesting studies on differentiated instruction was conducted by Mary F. Roe in 2009. Roe's research was primarily based on semi-structured and individually conducted interviews with the students (Roe, 2009). Roe's purpose was "to identify students' understanding of differentiation, to understand their responses to differentiated literacy instruction provided in their classrooms and schools, and to understand students' views of the challenges and successes of their teachers' differentiation attempts" (Roe, 2009). The research included students from nine different seventh grade classrooms in the Northwest. These classrooms were chosen specifically because of their teachers' implementation of differentiated instruction. The content being discussed in the interviews included how students defined themselves, factors that drove students' classroom success, thoughts about the variability of classroom activities, teacher consistency throughout the year, teachers' best practices to support student learning, and how the relationship between home and school affects learning (Roe, 2009).

The input given by the students was extremely insightful. First, students told Roe that they "appreciate the opportunity to take charge of their academic efforts" (Roe, 2009). These opportunities included learning how to stay focused and organized and learning to assess mistakes and learn from them. The study also showed that children liked that they were all learning the same thing, but the teacher made assignments more individualized for classmates who struggle. When the students were asked about their teachers' differentiation attempts, the views among the students all pointed to one conclusion. That is, they want to see things differently to keep learning fresh. In regards to his teacher, one student said, "[He] gives us lots of examples. He has us act things out. He tells us stories that involve different topics" (Roe, 2009). Another student, who had a different teacher, said, "I wish my teacher would be a little more exciting, more fun. I mean not all the time you want to be sitting there and they're explaining something else and go on to something else and it's all boring. Boring things don't always get kids motivated to learn more fully" (Roe, 2009). Finally, students appreciated that their teachers offered a variety of learning techniques to help them succeed. The teachers would be there to help answer questions, provide a variety of material as resources for learning, create rubrics and models for the students, and explain topics in a variety of ways to reach every style, ability, and talent. Ultimately, Roe's study "connected differentiation research and practice to the group for whom it all matters—students" (Roe, 2009).

Philosophy of Multiple Intelligences Based Instruction

One of the driving principles of differentiated instruction is that students learn best when they are motivated by their interests and abilities. This means that traditional

"cookie cutout" learning of lectures and worksheets has its time and place in the classroom, but isn't always the most effective way of teaching. Howard Gardner, developer of the multiple intelligence theory, believed this to also be the case. Gardener believes that there are eight types of intelligence that a person can possess. Those eight intelligences are as follows: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist (Armstrong, 2011).

The linguistic intelligence can best be described as "the ability to think in words and to use language to express meaning" (Santrock, 2001, p.130). Children who possess this intelligence love to tell stories, conduct interviews, and write in journals. Children who possess the logical-mathematical intelligence are highly successful in mathematics. They embrace problem-solving, hypothesizing, and designing. The spatial intelligence indicates that children like to express their thoughts with color, posters, drawing, and anything they can use to see the big picture. Children who possess the bodily-kinesthetic intelligence love assignments that ask them to perform, move around, or model. The musical intelligence is self-explanatory. It is centered on children who love music as part of their life. Interpersonal learners love to interact with others (such as in group work), while intrapersonal learners would prefer to work on their own. Finally, the naturalist intelligence "observes patterns in nature and understands natural and human-made systems" (Santrock, 2001, p.130). These learners are concerned with the environment and the outdoors.

There are four key points to consider when applying the multiple intelligence theory in classrooms. First, each person possesses all of the identified intelligences (Armstrong, 1994). That means that every person has the capabilities to perform

activities from each of these areas, but that some people will perform higher based on their intelligences. In classrooms, teachers need to be aware of these intelligences and offer activities that highlight each of them, so that each student has an opportunity to shine in their particular area.

Second, most people can develop each intelligence to an adequate level of competency (Armstrong, 1994). That means that if a teacher wants the students to gain knowledge using one particular intelligence, it can be done through encouragement, enrichment, and instruction. For example, if a student does not feel like he could roleplay a story in religion class, then it is the teacher's job to model how it should be done, encourage the student that everyone learns and that he will be in a safe, loving environment if it doesn't go well, and possibly pair him with a student who thrives in that intelligence.

The third key point to consider is that intelligences usually work together in complex ways (Armstrong, 1994). This means that no intelligence will work independently without another. In a classroom of twenty students, there are many intelligences present. It is the teacher's job to help the children learn how to use their intelligences to interact with one another and build each other up. It is also the teacher's job to create activities that use more than one intelligence at the same time, so as to bring out maximum learning potential for each student.

Finally, there are many ways to be intelligent within each category (Armstrong, 1994). This means that there are no standard qualities that a person must obtain in order to have a specific intelligence. There are many ways a person can show what he knows and still be within the guidelines of Gardner's intelligences.

Philosophy of Spelling Instruction

Being able to spell words correctly is an extremely important life skill for children. Correct spelling leads to effective communication in future educational pursuits, job applications, and interactions with adult peers. J. Richard Gentry even says in his article, *Spelling Counts*, "Spelling is the study of word-specific knowledge, and knowledge about words is important" (Gentry, 2007, p.39). The Common Core State Standards also lists spelling as part of its English Language Arts conventions of Standard English (Corestandards.org, 2012). Sadly, many students struggle with spelling words and remembering basic spelling patterns. Experts want to see teachers move away from traditional teaching and move towards new and innovative ways to teach spelling (Gentry, 2007).

There are five keys to a quality spelling curriculum. First, the teacher needs to encourage every student to become active in their learning. If the students are excited about what they are learning, their intrinsic motivation will be higher. Second, the teacher should help the children understand that correct spelling has a purpose, and that there is value to becoming a good speller. The third key to a quality spelling curriculum is that teachers should guide the students to apply their use of correctly spelled words and patterns. This can be shown through reading and writing. Fourth, teachers need to analyze student work and help students improve their common spelling errors. Finally, teachers should provide learners a variety of tools to help their students spell words and patterns correctly (Ediger, 2000).

Spelling is directly connected to reading and writing fluency. Students who are taught spelling patterns on a regular basis are more likely to attach meanings to words

when reading (Gentry, 2007). According to the Common Core State Standards, grade five students should be able to "use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of words" (Corestandards.org, 2012). This means that teachers must practice these word patterns with their students on a regular basis. Marlow Ediger's paper titled *Differentiated Instruction in Spelling* states that the most important way teachers can help students achieve this goal is by providing spelling words from research studies. By choosing effective research studies, teachers help students identify word and spelling patterns that are used in everyday reading and writing. A second source for choosing spelling words is from a carefully chosen basal spelling text.

Teachers may use the lists a basal provides, primarily because the words have already been sorted by pattern. However, Ediger instructs teachers to exercise this practice with caution. The word lists are appropriate, but the learning activities must be individualized to meet the needs of the children.

Once the word lists are created, the teacher must conduct a word sort to help the children understand the pattern being taught. According to Gentry (2007), first the teacher needs to introduce the spelling pattern being taught that week. Then, they need to understand the rules regarding the way in which the words are sorted. The teacher must provide various activities to help the children implement the words and patterns being learned. These words and patterns must be practiced daily and must use "fascinating learning opportunities which capture learner attention and purpose, individual and cooperative learning methods of study for study mastery, and Gardner's multiple intelligence to assist students in mastery of a given set of words" (Ediger, 2000).

Throughout the study of a particular word set or pattern, the teacher must make sure that application is involved in the process. In addition to activities, Ediger (2000) says, "Students need to use the spelling words in a variety of contextual situations." For example, students should use their words in poetry, expository writing, narrative writing, and pointing out words with similar patterns when reading different texts. This way, the spelling concepts being learned are more meaningful for the students.

Finally, Gentry reminds educators that in spelling, pre-tests and post-tests are quite useful. Pre-tests help teachers differentiate instruction for the concept being taught. By conducting pre-tests, educators can zero in on specific problem areas within a word list or pattern. In the same way, post-tests help educators see how the students have performed after a concept has been taught. If there are still concerns after a post-test has occurred, the teacher can re-teach whatever concepts are still a struggle for the students.

Differentiated Instruction in Spelling

Spelling is an important skill necessary for accomplishing tasks throughout a person's life. As explained in the previous section, one of the first things a teacher needs to do in order to implement a successful spelling program is to design a structured framework. Once that framework is properly secured, activities, lessons, and assessments can be designed. One of the most successful approaches to securing those items in spelling is to use a Learner-Center model. Differentiated Instruction, with the incorporation of Gardner's multiple intelligences, is a positive approach to implementing a spelling curriculum.

In *Differentiated Instruction in Spelling*, Marlow Ediger outlines a framework that teachers can follow in order to implement a successful spelling program. Recall that the

first step in Ediger's framework is to create word lists. However, it is vital that clear learning targets are established before word lists can be created. Students need to know the expectations for spelling. Rick Stiggins, author of *Classroom Assessment for Student Learning* says, "When [teachers] have a clear vision of where [they're] headed with students, [they] can communicate that vision to them." (Stiggens et al., 2006, p.57) If teachers want their students to be successful spellers, then it's very important to begin with goals for learning. The learning targets can be a blanketed list for the entire grade level. They should be based on the Common Core Standards (see Table 1). Once an educator has designed learned targets for the students, proper words lists based on those targets can be organized.

Table 1

Common Core State Standards for English Language Arts					
As they relate to spelling					
	(Grade 5 students)				
Standard Topic	Standard Subtopic	Standard Learning Target			
Reading: Foundational Skills	Phonics and Word Recognition	3.a: Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read accurately unfamiliar multisyllabic words in context and out of context.			
Language	Conventions of Standard English	2.e: Spell grade-appropriate words correctly, consulting references as needed.			
Language	Vocabulary Acquisition and Use	4.b: Use common, grade- appropriate Greek and Latin affixes and roots as clues to the meaning of a word.			

(Corestandards.org, 2012)

At the beginning of the school year, educators can assess what level each child ranks in spelling. There are many differentiated tasks to help teachers learn more about their spellers. First, teachers can create an interest survey that helps them understand the

students' attitudes toward spelling. In 2008, Alison Hall conducted a study that compared a learner-centered approach to spelling to a traditional approach. In this study, she gave the children an attitude survey in regards to spelling (see Artifact B). This survey asked children to rate their interests in spelling on a scale of 1 to 4. She wanted to understand students' prior attitudes in regard to spelling class. She found that at the beginning of the study, most students had the attitude that they needed to spell the words correctly in order to pass the weekly tests, but didn't think that spelling correctly was important in real-life applications. The students also didn't like the activities conducted in their traditional setting (Hall, 2008). By using this differentiated approach, Hall was able to tailor her activities based on the students' attitudes. At the conclusion of her study, Hall noted that the students' attitude towards spelling drastically changed. They took the same survey, and this time most of them still agreed that spelling the words correctly for the tests was key. However, the majority of them loved the activities planned and now felt that applications of spelling was important (Hall, 2008).

Another type of differentiated assessment educators can use is an intelligence assessment. By conducting this type of assessment, educators can see in which of the multiple intelligences each student excels. One example of this type of assessment was created by Literacyworks.org. Educators can have their students take the online survey, which instantly calculates the students' strongest intelligences, as well as their weakest. Another example of an intelligence survey was created by Walter McKenzie in 1999. This survey, completed in the classroom, asks the children to define themselves by placing a "1" next to each statement that describes them (see Artifact C). Conducting

assessments like these helps educators gain insight to their students' interests and talents, thus opening the door to a variety of assignments and activities.

After interest and attitude surveys are complete, weekly assessment of spelling can occur. Recall that one of the components to differentiated instruction is readiness. As Karen Burggraf states, "Pre-assessment of readiness...is a necessary component of differentiation. Without it there is a good chance that instruction will continue to be delivered as a 'one size fits all' approach" (Burggraf, 2005). One example of a spelling pre-assessment is the traditional pretest. This type of assessment is already implemented in many of today's classrooms. By giving each student a pretest at the beginning of each unit, teachers are able to gauge how well the students know the spelling of the words and patterns. Another differentiated assessment teachers can conduct is a simple checklist. Checklists can help a teacher see which students need more help defining the spelling words, another key component when learning to spell.

Once the pre-assessments are complete, teachers can use differentiated instruction to help meet the needs of each student. This type of differentiated instruction is known as flexible grouping (Foridahoteachers.org, 2012). Using the pre-assessments that have been conducted, the teacher can tailor the lesson to the needs of the students. For example, if the majority of the class passed the pretest, then the mini lesson can be filled with student led activities and independent practice. On the contrary, if the pretest showed that many students struggled, the teacher can model how to sort the words and be the leader of the lesson. Another example of tiered lessons would have the teacher divide the students in groups according to the pretest results. The children in need of a challenge can be given certain activities to complete, and the children who need more

time to learn the word pattern can have a small-group lesson with the teacher. This type of differentiated instruction was shown to have a positive impact by Dube, Bessette, and Dorval. This team of researchers conducted a study that questioned which "innovating services favored the mainstreaming and development of writing competencies of elementary school children with difficulties." (Dube, Bessette, & Dorval, 2011, p.168). Their study compared flexible learning to direct instruction. The results of this study showed positive effects on competency when flexible grouping is implemented. It also showed a decrease in the average error rate in writing, as well as an increase in the number of words written by a student (Dube et al., 2011).

Throughout the spelling unit, teachers need to help the children practice both the words being taught and the word pattern being learned. This should happen daily through differentiated activities. The teacher can choose to use flexible grouping, teacher led games, or learning centers to help the students. Regardless of the approach to these activities, "teachers need to have students experience a variety of learning opportunities in order that meaningful learning occurs" (Ediger, 2000). Recalling Mary F. Roe's study in which the students gave their opinion of learning, one student reminds all teachers that "[they] should make the class fun" (Roe, 2009). Another student remarked that learning was fun because "they [the teachers] make it interesting and that makes you want to do it more" (Roe, 2009). These activities should also be carefully planned according to the learning styles of the students and the intelligences that they possess (see Table 2 for examples). Recall that Ediger also stated that spelling needed to be contextual. The teacher can also implement activities throughout the week that invite children to find

their spelling words in texts they are reading. They can also earn a reward for every spelling word they use correctly in classes or in writing.

Table 2

Spelling Activities for the Multiple Intelligences			
Linguistic	Using a white board and markers to write practice writing the words. Using a dictionary to find definitions.		
	Dividing the words by syllable.		
Logical Mathematical	Assigning a number code for each letter and spelling the words according		
	to number.		
Visual/Spatial	Creating a poster with the spelling words using watercolor paints.		
Music	Pat-clap-stomp rhythm for each letter of the spelling word.		
Bodily Kinesthetic	Jumping rope while spelling each word.		
Interpersonal	Play interactive games such as Sparkle or Hangman		
Intrapersonal	Use each spelling word in a story.		
Naturalist	Draw pictures of outdoor scenes and hide the words within the picture		
Naturalist	for others to find.		

Spelling words and patterns should not only be practiced daily in the classroom, but also independently as assignments. There are many ways that daily assignments can be differentiated. One way that works very well for spelling is known as a Think Tac Toe choice board. In this technique, the students are given a worksheet that looks like a tic tac toe board (see Artifact E). Within each space of the board are nine activities for the children to choose from. Each of the activities are tiered according to degree of difficulty, as well as the eight intelligences. Recall that students are motivated by their interests, which is a driving component of differentiated instruction. By giving the students a choice board, they are given the task of taking ownership of their learning. They can choose three activities to do to help them retain knowledge throughout the unit. The catch is that the three activities must form a "tic tac toe" (three in a row). This

method keeps learning fun for the students and gives them something to look forward to each week.

Finally, at the end of the unit, there must be an assessment to see what has been learned. The most basic assessment would be a test of all the spelling words. This type of assessment can be tiered according to ability. For example, if a student struggles with retention, the teacher can limit the amount of words that he is tested on. Another way to assess the students is to have them use each spelling word in a sentence. This type of assessment would be especially beneficial to those in need of a challenge. If teachers wanted to assess application of a specific word pattern, they could give the children a list of words (assigned or not) and have the children complete activities based on the pattern.

One final way that teachers can assess student learning is simply by asking them.

There are several ways this type of assessment can be carried out. First, the teacher can produce exit cards for the students to fill out (see Artifact I). Exit cards give teachers a good idea of how much the students understand what was taught. Another way to assess through personal communication is by having the students complete response journals.

Through this method, students can express how they feel about their spelling, what activities they appreciate, and which assignments are beneficial for them. The response logs can also be a safe place for the children to ask clarifying questions regarding spelling. One final way to assess the children is through conferencing. In this situation, the teachers can ask the students specific questions about the word patterns, activities, and assessments. In any of these types of personal communication assessments, the students remain at the center, and the teacher is given the best insight on how to improve student learning.

Summary

In conclusion, using a learner-centered approach to teaching spelling is very beneficial. When educators use a differentiated model to teaching spelling, they are able to meet the needs of the students, motivate them through different activities and assignments, and assess the students according to ability. Differentiated instruction is a positive approach to teaching spelling because not only does it teach the children the life skill to spell correctly, it teaches them to spell correctly in a fun, meaningful, and memorable way.

PART III: IMPLEMENTATION

Introduction

The first year that I taught spelling at St. John's I used a very traditional approach. I taught from the same curriculum as teachers in the past, which proved to be very redundant and boring. The students weren't motivated, and their test scores lacked consistency on a weekly basis because they didn't study. I wanted to make a change that was beneficial for them. I believe that differentiated instruction is very positive and beneficial for students. Therefore, I wanted to create a curriculum that offered the children more choices, and put them at the center of their learning.

I began by choosing word lists from *Houghton Mifflin: Spelling and Vocabulary*, *Level 5 (1986)*, the current spelling curriculum that is used at St. John's. I used these word lists because I felt they helped the children learn age appropriate word patterns, which aligns with the Common Core standards for fifth grade spelling. Then, I created choice boards for the students to complete for each spelling unit. These choice boards were created based on ability, multiple intelligences, and surveys given to the students. In addition to the choice boards, I created daily activities which allowed the class to practice these words as a group. Finally, I ended each unit with a post-assessment to evaluate whether the students could apply the word pattern learned throughout the week.

Procedures

Before an educator can begin implementing any curriculum, it is vitally important that the state standards are reviewed and understood within the grade level of the subject area being taught. The Common Core State Standards for fifth grade English Language Arts (as they relate to spelling) are listed in Table 1.

Table 1

Common Core State Standards for English Language Arts				
As they relate to spelling				
(Grade 5 students) Standard Topic Standard Subtopic Standard Learning Target				
Reading: Foundational Skills	Phonics and Word Recognition	3.a: Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (roots, affixes) to read accurately unfamiliar multisyllabic words in context and out of context.		
Language	Conventions of Standard English	2.e: Spell grade-appropriate words correctly, consulting references as needed.		
Language	Vocabulary Acquisition and Use	4.b: Use common, grade- appropriate Greek and Latin affixes and roots as clues to the meaning of a word.		

(Corestandards.org, 2012)

Once the state standards are reviewed and understood, the educator must use them to create learning targets that can be understood by the students. This can be done effectively by creating "I can" statements, which are "statements of the intended learning" (Stiggens et al., 2006, p.58). Table 2 lists suggested learning targets for grade five spelling. These learning targets were determined by the Common Core Standards in Table 1, applicative spelling goals for writing by the educator, and differentiated learning goals as taught by the educator.

Table 2

	Learning Targets: Grade Five Differentiated Spelling		
1.	I can recognize all letter and word patterns when reading. This means when I see any word, I can read it by chunking the sounds according to word patterns I have learned in spelling.		
2.	I can spell grade-appropriate words correctly. This means I can recall what I've learned in spelling and apply it to my writing without looking in a dictionary for help.		
3.	I can understand the definitions of words based on their spelling. That means I can evaluate different parts to a word and use them as clues to find out what it means.		
4.	I can identify spelling errors in my writing. This means that when I review other work I create I can recognize when I have made a spelling error and make appropriate corrections.		
5.	I can evaluate which activities best help me recall and apply spelling patterns, and use those activities to practice my spelling.		

As educators, it is very important that the goals are understood. However, it is even more important that the students also know and understand those learning goals. Therefore, once the learning targets have been established, the educator must create a poster that boldly lists the intended learning targets (see Artifact A). This poster should be visible in the classroom throughout the school year. The learning targets should be reviewed with the students weekly to remind them of their goals for spelling. Shirley Clarke, a British teacher, created a poster of learning targets with her students in 2001. Upon evaluation of this method, her students commented, "It helped [us] focus on the aspect at hand and not get distracted by other things. [Other] children said it was a good reminder of what [we] were supposed to be doing!" (Stiggens et al., 2006, p.59).

The beginning of the school year is a time for educators to get to know their students. They need to take time to evaluate how each student learns, what their interests are, and how a student can best show that learning has taken place. In the realm of differentiated spelling, this process is no different. Recall that differentiated instruction, or DI, is defined by Carol Ann Tomlinson as "adapting content, process, and product in response to student readiness, interest, and/or learning profile" (Bafile, 2010). Therefore, prior to the first spelling unit, educators must conduct a Spelling Research Survey (see Artifact B). This survey will give the educator insight on the learners' attitudes towards spelling by asking the students to evaluate statements like, "I enjoy spelling activities," and "I don't think spelling is important" (Hall, 2008). This survey will also give the educators a sense of how each student has approached the idea of practicing spelling in previous grades. The students will evaluate statements such as, "My parents help me learn my words," and "When I practice my spelling words I write the words over and over" (Hall,

2008). The educator should use the results of this survey to create engaging activities that will motivate students to take ownership of their spelling capabilities.

After the Spelling Research Survey is evaluated, educators should conduct a survey to gain insight on how each student learns and what their interests are. These two items can be evaluated through the Multiple Intelligences Inventory (see Artifact C). This inventory will give the educator insight into their students' interests and talents, thus opening the door to a variety of assignments and activities. For example, an educator might recognize that many of the students are visual learners. To maximize the success in learning, the educator will incorporate many assignments that include posters, markers, paint, and color. In contrast, if students are kinesthetic learners, the educator should plan for activities that require movement and rhythm.

Once the learning targets have been established and communicated, and the educator has gained insight as to how each student learns, word lists must be established. Many educators struggle with choosing successful word lists. Marlow Ediger states that the most important way teachers can help students succeed is by providing spelling words from research studies (Ediger, 2000). By choosing effective research studies, teachers help students identify word and spelling patterns that are used in everyday reading and writing. A second source for choosing spelling words is from a carefully chosen basal spelling text. Teachers may use the lists a basal provides, primarily because the words have already been sorted by pattern. Recall that Ediger also reminds educators that while the word lists chosen should be appropriate for average students, the learning activities must be individualized to meet the needs of the each child (Ediger, 2000). Table 3

provides a list of appropriate word patterns that average students should know by the end of their fifth grade year.

Table 3

		Table 3		
Suggested Age Appropriate Word Patterns for Fifth Grade				
Short Vowels (ă, ĕ, ĭ, ŏ, ŭ)	Long Vowels $(\bar{a},\bar{e},\bar{\imath},\bar{o},\bar{u})$	/ōō/ (clue)	/ou/ (tower)	/ô/ (pause)
/oi/ (moist)	/ôr/ (torch)	/âr/ (flair)	/är/ (scar)	/ûr/ (germ)
/îr/ (smear)	Compound Words (basketball)	Homophones (piece, peace)	Final /ər/ (actor)	Final /l/ (jewel)
Vowel (V) and Consonant (C) Patterns VCCV (permit)	Vowel (V) and Consonant (C) Patterns VCCCV (complain)	Vowel (V) and Consonant (C) Patterns VV (poem)	Vowel (V) and Consonant (C) Patterns VCV (closet)	Suffixes (-ly, -ful, -ness, - less, -ment)
Final Ending -ed (collapsed, whipped)	Final Ending -ing (amusing, hitting)	Final /n/ (captain)	Final /chər/ (culture)	Final /zhər/ (treasure)
Final /ĭj/ (voyage)	Final /ĭv/ (native)	Final /ĭs/ (notice)	Unstressed Syllables (repair)	Prefixes (un-, dis-, in-, re-, com-, con-, en-, ex- , pre-, pro-)
Changing Final y to i (liberty = liberties)	-ion (elect = election)	/ənt/ (student)	/ə bəl/ (suitable)	Multi-syllabic (wilderness)

(Henderson & Templeton, 1986 & Rpdp.net, 2012)

Using the age appropriate word lists for grade five, pre-tests should be conducted at the beginning of each week (see Artifact D). These pre-tests should be administered by the educator in the following manner: speak the word clearly, give a sample sentence so that the children can apply their contextual knowledge, and finally speak the word once more. After the pre-test has been administered, it must be corrected immediately. This process can be done in two ways. One way is to have the children correct their own tests or the tests of others. By correcting the test this way, the children receive immediate feedback, and the educator has an immediate opportunity to assess how much the

children know about the word pattern for the week. The second way the pre-test can be corrected is to have the educator correct each test, making notes about the students as the scores are calculated. Correcting the pre-test in this manner still allows the teacher to receive immediate assessment opportunities. However, the students might not receive immediate feedback, so the teacher would have to ensure that the students received their pre-tests immediately after they have been corrected. Once the pre-tests are corrected, the educator is able to evaluate how each student attacked the spelling of the intended word pattern. This will be useful when teaching how to apply the word pattern in reading and writing. The educator can also note specific words that were difficult for the students, and practice those words during weekly activities.

After the pre-test has been administered and corrected, the educator should begin the unit by teaching the intended word pattern. First, read each word so the students can hear the correct pronunciation. Next, have the students read each word so they master the correct pronunciation. At this point, the educator should conduct an informal assessment by asking the students to define some of the words. The educator can follow up by asking if there are any words that are not understood. Continue the informal assessment by asking the students to use several of the words in a sentence. The children must know what each spelling word means and how to properly apply them in context, so the educator must carry out this informal assessment daily.

Following the informal assessment, explain the intended word pattern for the unit. For example, if the intended word pattern for the week is short vowel sounds, the educator should explain each of the five sounds (ă, ĕ, ĭ, ŏ, ŭ). At this point, the educator can informally assess how well the word pattern is known by asking students for some

examples of each. Another activity the educator can use to informally assess is to place several words with short vowels in a hat. The students can pull out a word and match the word to the short vowel sounds they hear.

After an informal assessment activity is complete, the educator should lead the class in a word sort. First, sort each assigned spelling word according to the word patterns being taught. Then, ask the students to use their background knowledge to think of other words that would fit under each section. This word sort will remain visible to the students throughout the unit (see Table 4 for an example). In addition, invite the students to add words to the chart throughout the unit. Encourage them to look for those words in other texts they are reading, as well as when they write. Provide an incentive for correctly locating and using words that can be applied to the unit's word pattern. Some examples of incentives include (but are not limited to): a piece of candy per word (or per five words), a sticker per word used or read, or a larger gift such as a pencil, pen, or notepad if the child used or read each of the twenty assigned words for the week.

Table 4

Unit 1: Short Vowels				
ă	ĕ	ĭ	ŏ	ŭ
staff	slept	mist	dock	bunk
grasp	breath	swift	fond	bunch
	dwell	ditch		stuck
	swept	split		tough
	deaf			crush
				fund
				rough

(Henderson & Templeton, 1986)

For the remainder of the week, the students will review the word pattern using the word lists provided in two ways: daily assignments and daily activities. First, they will complete daily assignments. After the students have exhausted the possibilities for the classroom word sort, distribute the Differentiated Spelling choice board for the unit (see

Artifact E for template). This choice board includes the word pattern being discussed, spelling words for the week, and nine assignments from which the students can practice the spelling the words.

The assignments that are chosen by the educator must be learner based. Recall the second principle of learner-based education, which states that learners are individuals. This means that when choosing assignments, educators must take into account that each child has different emotions, learning rates, learning styles, abilities, talents, motivators, and feelings of success. The assignments should also align with the philosophy for differentiated instruction, which is that children learn best when activities enhance their abilities, keep their interests in mind, and utilize the approaches necessary to maximize their learning. Therefore, the assignments should be a combination of activities that apply to different tiers of learners (low, average, and high), should apply the multiple intelligences that were strongest from the survey that was conducted, should apply to everyday writing as it relates to the attitude survey implemented, and should apply to specific word pattern practice (see Artifact I for a complete list of assignments that can be implemented throughout the course). These assignments should change weekly, either by rearranging the choice board or by substituting different activities to offer the children more opportunities to apply their interests to what they learn. Each student will complete three assignments throughout the week. Students will choose individually which assignments to complete, as long as the assignments form a "Tic Tac Toe" (three in a row) by the end of the week.

There are several ways that educators can use the choice boards. Recall Ediger's warning to teachers: use whichever word list necessary to teach the patterns, as long as

the activities meet the needs of the learner (Ediger, 2000). With that in mind, one of the choice boards can be dedicated solely to a learner who struggles in the area of spelling or performs poorly on the pre-test (see Artifact F). These assignments will apply the multiple intelligences as well as incorporate activities that help apply the word patterns in a more direct way. For example, a student who struggles in spelling will need to practice the word pattern by creating his or her own word sort. That way, the word pattern will become more visible to them. The student who struggles might also benefit from creating his or her own Memory game. This way he or she can practice the words independently throughout the unit.

Just like the assignments mentioned above will benefit the learner who struggles, educators can also create choice boards for learners who need a challenge in the area of spelling or performed highly on the pre-test (see Artifact G). This choice board should apply the multiple intelligences and real-world applications in a way that requires higher level thinking. For example, if a student was using this choice board, he or she might have the option to use each word in a story that makes sense. Another challenging assignment would be to locate other words and create an entirely new word sort that applies the word pattern being learned.

The final choice board can be a combination of activities that meets the needs of all learners (see Artifact H). This choice board is the least time consuming in the realm of preparation, because the activities need only be rotated or substituted. However, it is vitally important that the teacher be in full communication with each of the students when using this type of choice board to ensure that the students are choosing activities that best meet their needs. The educator must explain the process thoroughly at the beginning of

each week to the class as a whole. Then, the educator must conference with each of the students to ensure they are choosing assignments that improve their knowledge in spelling. This will have to be done weekly, as the outcomes of the pre-tests will be different each week.

The second way the students will review the word pattern using the word lists provided is through daily activities. In addition to the daily informal tasks that assess word pattern application and word meanings, educators should devote fifteen minutes per day to practice the spelling words and patterns. During this time, educators should implement activities that apply to the students according to their multiple intelligence inventories. These activities can be implemented as a class or in small groups according to tiered learning. Just like the choice boards, the in-class activities should be rotated weekly, allowing the learning to remain not only fun and exciting, but also ensuring that each learner and intelligence is highlighted. Daily activities will help the children practice the word pattern, thus applying it to their reading and writing in future settings (see Artifact J for a list of activities).

Both the daily assignments and the in-class activities require specific materials be available to the students at all times. In order to carry out these activities, the educator must make sure that all of the materials and pieces of technology be accessible prior to the school year's start. For a complete listing of the materials you will need for the assignments and activities mentioned above, see Artifact K.

At the end of the week, educators will conduct a post-test (refer back to Artifact D). This test will show the teachers how well the students have mastered the word pattern applied throughout the week. Educators can compare and contrast the pre-test

with the post-test to evaluate how much more time should be devoted to practicing the word pattern. In addition to the post-test, educators can also provide opportunities to informally assess how the children felt about the unit they just completed. Teachers can have the children fill out exit cards (see Artifact L), write private messages using their response journals, or have an informal conference with the students to see how they feel towards the unit completed. Finally, at the conclusion of the school year, educators may conduct the Spelling Research Survey to see how the attitudes of the students have changed in regards to spelling (see Artifact B).

Artifacts

Artifact A

Learning Targets: Grade Five Differentiated Spelling

- 1. I can recognize all letter and word patterns when reading. This means when I see any word, I can read it by chunking the sounds according to word patterns I have learned in spelling.
- 2. I can spell grade-appropriate words correctly. This means I can recall what I've learned in spelling and apply it to my writing without looking in a dictionary for help.
- 3. I can understand the definitions of words based on their spelling. That means I can evaluate different parts to a word and use them as clues to find out what it means.
- 4. I can identify spelling errors in my writing. This means that when I review other work I create I can recognize when I have made a spelling error and make appropriate corrections.
- 5. I can evaluate which activities best help me recall and apply spelling patterns, and use those activities to practice my spelling.

Artifact B

Name :	Date:						
		search Surve		(2002)			
-	Adapted from a Survey Used in Shah, T. & Thomas, A. (2002). Strongly Disagree Don't Agree S						
	~ •	Disagree	Don't Know	Agree	Strongly		
Di	sagree	2		4	Agree		
	1	2	3	4	5		
1. I try to spell words correctly.	1	2	3	4	5		
2. I only need to spell words correctly on a test.	1	2	3	4	5		
3. I need to spell words correctly every time I write.	1	2	3	4	5		
4. My parents help me learn my words.	1	2	3	4	5		
5. My teacher helps me learn my words.	1	2	3	4	5		
6. I enjoy spelling activities.	1	2	3	4	5		
7. I am responsible for learning my words.	1	2	3	4	5		
8. I think the best way to spell words is to memorize then	n. 1	2	3	4	5		
9. I don't think spelling is important.	1	2	3	4	5		
10. When I practice my spelling we and over again.	ords I wri	ite the words o	over	Yes	No		
11. When I practice my spelling wo loud.	ords I say	the words ou	t	Yes	No		
12. When I practice my spelling wo	ords I pla	y spelling gar	nes.	Yes (No Hall, 2008)		

Artifact C

Multiple Intelligences Inventory

Adapted from a survey created by McKenzie, W. (1999)

Part 1

Complete each section by placing a "1" next to each statement you feel accurately describes you. If the statement doesn't describe you, leave the space blank. Then, add up the total in each section.

	enjoy categorizing things by common traits
L	Cological issues are important to me
	Classification helps me make sense of new data
I	enjoy working in a garden
I	believe preserving our National Parks is important
	orting things in order makes more sense to me
	Animals are important in my life
	My home has a recycling system in place
	enjoy studying biology, botany and/or zoology
I	pick up on subtle differences in meaning
T	OTAL for Section 1
Section .	2
I	easily pick up on patterns
	focus in on noise and sounds
_	Moving to a beat is easy for me
N	
I	enjoy making music
I	respond to the cadence of poetry
I I	respond to the cadence of poetry remember things by putting them in a rhyme
I I C	respond to the cadence of poetry remember things by putting them in a rhyme Concentration is difficult for me if there is background noise
I I C L	respond to the cadence of poetry remember things by putting them in a rhyme Concentration is difficult for me if there is background noise istening to sounds in nature can be very relaxing
I I I C C L N	respond to the cadence of poetry remember things by putting them in a rhyme Concentration is difficult for me if there is background noise istening to sounds in nature can be very relaxing Musicals are more engaging to me than dramatic plays
I I C L	respond to the cadence of poetry remember things by putting them in a rhyme Concentration is difficult for me if there is background noise istening to sounds in nature can be very relaxing

Section 3 _____ I am known for being neat and orderly _____ Step-by-step directions are a big help _____ Problem solving comes easily to me _____ I get easily frustrated with disorganized people ____ I can complete calculations quickly in my head _____Logic puzzles are fun _____ I can't begin an assignment until I have all my "ducks in a row" _____ Structure is a good thing _____ I enjoy fixing something that isn't working properly Things have to make sense to me or I am dissatisfied TOTAL for Section 3 Section 4 ____ I learn best interacting with others _____ I enjoy informal chat and serious discussion _____ I love having lots of people around me I often serve as a leader among peers and colleagues _____ I value relationships more than ideas or accomplishments _____ Study groups are very productive for me ____ I am a "team player" _____ Friends are important to me _____ I belong to more than three clubs or organizations ____ I dislike working alone TOTAL for Section 4 Section 5 _____ I learn by doing _____ I enjoy making things with my hands _____ Sports are a part of my life I use gestures and non-verbal cues when I communicate _____ Demonstrating is better than explaining _____ I love to dance _____ I like working with tools _____ Inactivity can make me more tired than being very busy _____ Hands-on activities are fun _____ I live an active lifestyle TOTAL for Section 5

(continued on page 40)

Section 6

Foreign languages interest me I enjoy reading books, magazines and web sites I keep a journal Word puzzles like crosswords or jumbles are enjoyable Taking notes helps me remember and understand I faithfully contact friends through letters and/or e-mail It is easy for me to explain my ideas to others I write for pleasure Puns and anagrams are fun I enjoy public speaking and participating in debates
TOTAL for Section 6
Section 7
My attitude effects how I learnI like to be involved in causes that help othersI am keenly aware of my moral beliefsI learn best when I have an emotional attachment to the subjectFairness is important to meI want to help others in the world so that all people are treated equallyWorking alone can be just as productive as working in a groupI need to know why I should do something before I agree to do itWhen I believe in something I give more effort towards itI am willing to protest or sign a petition to right a wrongTOTAL for Section 7
Section 8
Rearranging a room and redecorating are fun for me I enjoy creating my own works of art I remember better using graphic organizers I enjoy all kinds of entertainment media Charts, graphs and tables help me interpret data A music video can make me more interested in a song I can recall things as mental pictures I am good at reading maps and blueprints Three dimensional puzzles are fun I can visualize ideas in my mind
TOTAL for Section 8 (continued on page 41)

Part 2
Now carry forward your total from each section and multiply by 10 in the table below.

Section	Total Forward	Multiply	Score
1		X10	
2		X10	
3		X10	
4		X10	
5		X10	
6		X10	
7		X10	
8		X10	

Part 3
Now plot your scores on the bar graph provided. Use a different color crayon for each section.

100								
90								
80								
70								
60								
50								
40								
30								
20								
10								
0								
	Sec 1	Sec 2	Sec 3	Sec 4	Sec 5	Sec 6	Sec 7	Sec 8

(continued on page 42)

Part 4

Use the key below to find out how strong you are in each area.

- Section 1 This reflects your Naturalist strength
- Section 2 This suggests your Musical strength
- Section 3 This indicates your Logical strength
- Section 4 This shows your Interpersonal strength
- Section 5 This tells your Kinesthetic strength
- Section 6 This indicates your Verbal strength
- Section 7 This reflects your Intrapersonal strength
- Section 8 This suggests your Visual strength

Artifact D

Spelling Word Lists and Sample Test Sentences

Adapted from weekly spelling units in *Spelling and Vocabulary* (1986).

Unit: Short Vowels

- 1. Bunk—I will sleep on the top bunk.
- 2. Staff—The camp staff welcomed the new campers.
- 3. Dock—The boat was left at the dock.
- 4. Slept—Have you ever slept in a tent?
- 5. Mist—The mist changed to heavy rain.
- 6. Bunch—Ann picked a bunch of flowers.
- 7. Swift—The swift runner will win the race.
- 8. Stuck—A cat is stuck in the tree.
- 9. Breath—I took a breath of cold air.
- 10. Tough—The teams played a tough game.
- 11. Fond—Maria is fond of her dog.
- 12. Crush—A machine will crush the cans.
- 13. Grasp—Please grasp the door handle.
- 14. Dwell—Do bears dwell in the woods?
- 15. Fund—My family has a birthday fund.
- 16. Ditch—The car went into the ditch.
- 17. Split—The logger split the wood.
- 18. Swept—Amanda swept the floor.
- 19. Deaf—Owens old cat is almost deaf.
- 20. Rough—Today the sea is rough.

Unit: Spelling / ā/ and /ē/

- 1. Speech—The teacher gave a speech.
- 2. Greet—I greet my guests at the door
- 3. Claim—Will someone claim this scarf?
- 4. Stray-Do not stray from the path.
- 5. Brain—How does the brain work?
- 6. Deal—Sam got a deal on a used bike.
- 7. Male—Tom has a male cat.
- 8. Raise—Please raise the window.
- 9. Leaf—I will save this yellow leaf.
- 10. Thief—The police caught the thief.
- 11. Lease—Martha received the lease today.
- 12. Laid—He laid the paper on the desk.
- 13. Waist—These pants are too big in the waist.
- 14. Praise—A puppy needs lots of praise.
- 15. Beast—The show was about a huge beast.
- 16. Stain—The stain would not come out.
- 17. Seal—Eva saw a seal at the zoo.
- 18. Sway—the trees sway in the wind.
- 19. Fleet—The fleet of ships sailed into the harbor.
- 20. Niece—My niece will visit soon.

Unit: Spelling /oo/ and /yoo/

- 1. Clue—We need a clue for the secret word.
- 2. Proof—Do you have proof that this dog belongs to you?
- 3. Cruise—Anna went on a cruise.
- 4. Choose—I will choose a book to read.
- 5. Rule—This class has a rule against shouting.
- 6. Troop—Who will lead your troop?
- 7. Dew—The morning dew is gone.
- 8. Route—What route do you take to school?
- 9. View—I like the view from here.
- 10. Lose—Do not lose this pencil.
- 11. Duke—The king spoke to the duke.
- 12. Mood—I am in a good mood today.
- 13. Scoop—The children scoop the sand into their buckets.
- 14. Mule—A mule pulled the wagon.
- 15. Youth—My mother moved many times in her youth.
- 16. Bruise—I got this bruise when I bumped into the table.
- 17. Loose—The top of this jar is loose.
- 18. Rude—Do rude people bother you?
- 19. Loop—Tie a loop in this string.
- 20. Flute—Jane plays the flute.

Unit: Spelling /ou/, /ô/, and /oi/

- 1. Hawk—The hawk flew over the tree.
- 2. Claw—The bird wrapped its claw around the stick.
- 3. Bald—The bald eagle landed in the field.
- 4. Tower—Alex watched the birds from the tower.
- 5. Stalk—Tigers stalk other animals for food.
- 6. Prowl—Cats prowl at night.
- 7. Loyal—Kate is loyal to her friends.
- 8. Pause—I had to pause for a while.
- 9. Moist—Plant the flowers in moist dirt.
- 10. Ounce—The letter weighs an ounce.
- 11. Launch—When will you launch the ship?
- 12. Royal—The royal family waved to the crowd.
- 13. Scowl—Tim had a scowl on his face.
- 14. Haunt—This movie will haunt us for days.
- 15. Joint—The girls are joint owners of the new bike.
- 16. Coward—Only a coward would run away.
- 17. Fawn—A fawn follows its mother.
- 18. Thousand—A thousand birds flew by.
- 19. Drown—What can we do to drown out the noise?
- 20. Fault—This broken glass is not my fault.

Artifact E

Differentiated Spelling Choice Board *Template*

Spelling Words Unit: Click here to enter spelling word pattern.				
Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word	
Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	
Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	
Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	
Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	Click here to enter spelling word.	

Click here to enter differentiated spelling assignment.	Click here to enter differentiated spelling assignment.	Click here to enter spelling assignment.
Click here to enter differentiated spelling assignment.	Click here to enter differentiated spelling assignment.	Click here to enter differentiated spelling assignment.
Click here to enter differentiated spelling assignment.	Click here to enter differentiated spelling assignment.	Click here to enter differentiated spelling assignment.

Artifact F

Sample Differentiated Spelling Choice Board

Intended Participants: Struggling students

Spelling Words Unit: Spelling / ā/ and /ē/				
Speech	Greet	Claim	Stray	
Brain	Deal	Male	Raise	
Leaf	Thief	Lease	Laid	
Waist	Praise	Beast	Stain	
Seal	Sway	Fleet	Niece	

Using markers and white construction paper, sort each spelling word according to the long vowel sound you hear. Use one color for each group. Label each group appropriately. Write neatly and clearly so your list can be seen from at least 3 feet away.	Pretend you are at your favorite outside place. Draw a picture of what you see. "Hide" your words in the picture.	Make a set of flashcards to study your words. Be sure to use markers and index cards. Use the flash cards to study.
Using index cards, create a memory game using each of the spelling words.	Write each spelling word 5 times using your best cursive handwriting.	Create a word puzzle using http://www.armoredpenguin .com/ Click on "Wordsearch" Make 2 copies. Make one into an answer key and leave the other blank.
Draw a picture of each spelling word and write the word next to the picture.	Write the spelling words on graph paper. Put one letter in each box. Tall letters (h,k,f,t,d,l,b) go up 2 boxes and low letters (y,g,q,p,j) go down 2 boxes. Trace around the words with straight lines using a marker to see the shape of each word.	Use each of the spelling words in a sentence. Avoid sentences that begin with words like I, he, she, they, or it. Be specific!

Artifact G

Sample Differentiated Spelling Choice Board

Intended Participants: High performing students

Spelling Words Unit 4: Spelling /ōō/ and /yōō/				
Clue	Proof	Cruise	Choose	
Rule	Troop	Dew	Route	
View	Lose	Duke	Mood	
Scoop	Mule	Youth	Bruise	
Loose	Rude	Loop	Flute	

Write a story using each of the spelling words. Your story must make sense, so use the words appropriately.	Write a song to a familiar tune using at least 10 of your spelling words. Be sure to write out the entire song, along with the tune. Performing in front of class is optional.	Using poster board or construction paper, create a board game. The game should involve practice of each spelling word.
Write a spelling word. Then look for a new word to create using only the letters in the spelling word you wrote down. Do this for each spelling word. Example: looppool chooseshoe	Create a word puzzle using http://www.armoredpenguin.com/ Click on "Crossword" Make 2 copies. Make one into an answer key and leave the other blank.	Using the numbers on a telephone keypad, translate your spelling words into "phone numbers". Make sure to provide and answer key.
Using each of the spelling words, create 60 second commercial to put on for the class. Choose a product you are going to sell and use the spelling words to help you sell it. This can be done with a group of 2 or 3 only.	For each word, draw a flower. The entire word will be written on the stem of the flower. Then, write one syllable on each pedal of the flower. Use construction paper and markers/crayons for your flowers.	Use each of the spelling words in a sentence. Avoid sentences that begin with words like I, he, she, they, or it. Be specific!

Artifact H

Sample Differentiated Spelling Choice Board

Intended Participants: Every current student

Spelling Words Unit: Spelling /ou/ /aw/ and /oi/				
Hawk	Claw	Bald	Tower	
Stalk	Prowl	Loyal	Pause	
Moist	Ounce	Launch	Royal	
Scowl	Haunt	Joint	Coward	
Fawn	Thousand	Drown	Fault	

Using markers and white construction paper, create a bubble map. Each sound above (3) will be its own bubble and color. Draw a line from the middle bubble to a connecting bubble with the spelling word that contains that vowel sound. Write neatly and clearly so your list can be seen from at least 3 ft. away.	Using index cards, create a memory game using each of the spelling words.	Write all of your spelling words using your non-dominant hand. That is, if you are right-handed, write them with your left hand.
Create a word puzzle using http://www.armoredpenguin.com/ Click on "Crossword" Make 2 copies. Make one into an answer key and leave the other blank.	Use each of the spelling words in a sentence. Avoid sentences with words like I, he, she, they, or it. Be specific!	Write your spelling words on graph paper. Put one letter in each box. Tall letters (h,k,f,t,d,l,b) go up 2 boxes and low letters (y,g,q,p,j) go down 2 boxes. Trace around the words with straight lines using a crayon or marker to see the shape of each word.
Draw a picture of each spelling word and write the word next to the picture.	Using watercolor paints and construction paper, paint each of the spelling words.	Number the alphabet from 1 to 26, then convert your spelling words to a number code.

Artifact I

List of Suggested Differentiated Spelling Assignments for Choice Boards

- Make a set of flashcards to study your words. Be sure to use markers and index cards. Use the flash cards to study.
- Number the alphabet from 1 to 26, and then convert your spelling words to a number code.
- Use the computer to type the spelling words. Each word should be a different font, different color, and different size.
- Write each spelling word 5 times using your best cursive handwriting.
- Use each of the spelling words in a sentence. Avoid sentences with words like I, he, she, they, or it. Be specific!
- Using index cards, create a memory game using each of the spelling words.
- Draw a picture of each spelling word and write the word next to the picture.
- Create a word puzzle using http://www.armoredpenguin.com/ Click on "Word Search", "Crossword", "Word Scramble", or "Word Match". Make 2 copies. Make one into an answer key and leave the other blank.
- Write your spelling words on graph paper. Put one letter in each box. Tall letters (h,k,f,t,d,l,b) go up 2 boxes and low letters (y,g,q,p,j) go down 2 boxes. Trace around the words with straight lines using a crayon or marker to see the shape of each word.
- Using markers and white construction paper, sort each spelling word according to the long vowel sound you hear. Use one color for group. Label each group appropriately. Write neatly and clearly so your list can be seen from at least 3 feet away.
- Using markers and white construction paper, create a bubble map. Each sound will be its own bubble and color. Draw a line from the middle bubble to a connecting bubble with the spelling word that contains that vowel sound. Write neatly and clearly so your list can be seen from at least 3 ft. away.
- Write a story using each of the spelling words. Your story must make sense, so use the words appropriately.

• Using markers and white construction paper, write out each spelling word as an addition problem. Be neat and use one color per line. Be sure that it's readable from at least three ft. away.

Examples:

Compound words: cup + cake = cupcake Prefixes: dis + aster = disaster Suffixes: watch + ful = watchful $Word \ Endings, drop \ final \ letter: \ squeeze - e + ing = squeezing$

- Invent a board game that allows the players to practice each of the spelling words.
- Using watercolors, paint each of the spelling words on a piece of poster board.
- Write each word in ABC order. Then, write the definition of each word using a dictionary or www.dictionary.com
- Using Microsoft Word or www.google.com (images), find a piece of clip art that you associate with each spelling word. Then label each picture by typing the spelling word using any font, color, or size.
- Create a spelling dictionary using the paper provided. Using one word per page, put the words in ABC order, along with part of speech (noun, verb, etc...) and the definition.
- For vowel or consonant letter patterns: Find [amount] different colored markers (one must be black). Write each word neatly on white construction paper. Find the [letter] pattern within the word. Use the [colors] to write the letters in the **PATTERN ONLY**. All other letters must be written in black.

Examples:
VCCV: traffic
VCCCV: district
VV: poem
VCV: rapid
Word endings: fashionable

- Write a song to a familiar tune using at least 10 of your spelling words. Be sure to write out the entire song, along with the tune. Performing in front of class is optional.
- Create a spelling quiz on Microsoft Word. Each problem should have three different ways to spell each word. Circle the correct answer.
- Create a riddle for at least 10 spelling words. Make sure you give at least three clues for each word and include the answer with the riddle.

- Using markers and construction paper, write each spelling word. Using a black marker, draw a clear line between the syllable (don't let the black line touch the other letters!)
- Using stencils and crayons or markers, draw 10 of your spelling words on a piece of white construction paper
- Create 5 <u>acrostic poems</u> using the 5 most difficult spelling words for you. Be creative with the words that you choose! Remember: The words/phrases you choose must describe the spelling words you have chosen.
- Find three different colored markers. Write each word neatly on white construction paper. Clap out each syllable. Use one color to spell out each different syllable. Use a dictionary to help you.

Example: wilderness

- Using the graph paper provided, create a "word" graph. Each bar in the graph will be one of the vowel sounds. Say each word and write it in the appropriate area on the graph. Use one color for each vowel sound.
- Using the numbers on a telephone keypad, translate your spelling words into "phone numbers." Make sure to provide an answer key.
- Pretend you are at your favorite outside place. Draw a picture of what you see. "Hide" your words in the picture.

Additional scenes to draw: vacation spots, movie scenes, jungle, ocean, rainforest

- Write all of your spelling words using your non-dominant hand. That is, if you are right-handed, write them with your left hand.
- Using graph paper, write all of the spelling words so that they connect, like the game Scrabble.
- Using each of the spelling words, create a play to put on for the class. This can be done with a group of 2 or 3 only. Hand in a copy of the script to the teacher.
- Using the stickers provided, spell out each spelling word on construction paper.
- Using each of the spelling words, create 60 second commercial to put on for the class. Choose a product you are going to sell and use the spelling words to help you sell it. This can be done with a group of 2 or 3 only. Hand in a copy of the script to the teacher.

- Using paper provided, create a word book. On each sheet of paper, draw 10 of your spelling words artistically. Then put each page in alphabetical order and staple together.
- Write a spelling word. Then, look for a new word to create using only the letters in the spelling word you wrote down. Do this for each spelling word.
- Using lined paper, write each spelling word forward. Then, on the same line, write the corresponding spelling word backwards.
- Using the Bull's Eye template modeled in class, write the spelling words according to how difficult they are for you. Fill in easy words in the easy target, not easy words in the middle target, and very difficult words in the outer target.
- Using WordArt, create each spelling word using different types of WordArt colors and patterns.
- Write your spelling words in reverse alphabetical order (start with Z instead of A) using your best cursive handwriting.
- Create a PowerPoint slide show. Each spelling word will be a different slide. Put the spelling words in ABC order. Each spelling word will be the heading of the slide show. Then, name its part of speech (noun, verb, etc...) and definition using bullet points. Clip art is optional.
- Using the sentence strips provided and your markers, write each spelling word in ABC order. As you fill the sentence strips, connect the new one using tape so that you have one long train of words.
- Using Microsoft Word, sort the words according to how many LETTERS are in each. Make a column for each number, then type the word under the correct column in any font, size, or color.
- Using the foam letters and glue provided, spell out 10 of the most difficult spelling words on a poster board.
- Choose two markers. Write each spelling word in the following way: use one marker for consonants and the other marker for vowels. Write as neatly as you can and write one word per line.
- Using a piece of lined paper, create a little picture symbol for each letter. Then, use your new "code" to write each of the spelling words. One word per line, and please skip a line to make it easy to follow.

Example:
Little sun = A
Happy face = B

- Write a story using each of the spelling words once. Then, go back and take out 10-15 nouns, verbs, adjectives, or adverbs to create a Mad Libs for others.
- For a Homophone unit: Create 10 sentences using the pair of homophones in the same sentence.
- Write 10 of your spelling words by cutting out letters in a newspaper or magazine and glue them on a paper.
- Draw a fictional map. Be sure to label each street and building using spelling words.
- Create a word collage on white paper. Write each word using a different color and anywhere on the paper. Then, fill in the gaps making designs with your markers. NO SCRIBBLING!!!!!
- Write all of your words on lined paper. As you write, replace all of the **VOWELS** or **CONSONANTS** with a line. Use your best printing handwriting!
- Using lined paper, find each word in a dictionary. Write the word, its dictionary page number, and the guide words on the page (the words in the top corners). Then record the number or definitions listed for that word.
- Using the construction paper strips provided, write each spelling word on a strip.
 Then connect the construction strips by making them into chains (like Christmas rings)
- Using your markers, write each spelling word in your best handwriting. Each letter in the word **MUST** be a different color!
- For each word, draw a flower. The entire word will be written on the stem of the flower. Then, write one syllable on each pedal of the flower. Use construction paper and markers/crayons for your flowers.
- Take the word list and a spelling test form home. Have one of your parents give you a practice spelling test. Make sure your parents sign and date the paper to verify they conducted the test.
- Neatly fold a sheet of construction paper in half twice. Then open the paper and label each section:

One Vowel Two Vowels
Three Vowels Four or More Vowels
Sort your spelling words into each of the sections using different colored markers.

Artifact J

List of Suggested Daily Teacher-Led Activities for Spelling Word Practice

- Writing Practice: Give each student a hand held white board, dry erase marker, and paper towel. Have them spell each of the spelling words. For extra practice, have the students create a sentence using the spelling words.
- **Partner Testing:** Have each of the students pair up with a classmate. Then, have the pairs of students quiz each other using the assigned spelling words.
- Sparkle: Have the students form a large circle. The teacher stands in the middle of the circle, and says a spelling word. The first student will say the first letter of the word. Then, in a clockwise fashion, each student after the first will say the next letter of the spelling word. Once the word is spelled, the next student in line speaks the word once more. The student after that says, "Sparkle," and the next student sits down. If a student misspells a letter, he or she must immediately sit down. The last person standing is the winner.
- Back to Back: In pairs, the students "write" the spelling words on each other's backs. The person being spelled on tries to guess which word is being spelled on his or her back.
- Spelling Basketball: Divide the class into two teams. Ask the students to spell each spelling word. If a student spells a word correctly, he or she earns an opportunity to score a basket for the team. Using a large basket and a small ball (or a wastebasket and crumpled paper), the student tries to make a basket. Making the basket earns 2 points, hitting the rim earns 1 point, and missing the basket earns zero points. The team with the most points at the end wins.
- Paper Airplane Spelling: Similar to spelling basketball, the object of this game is to earn the most points for the team. Divide the students and have them make their own paper airplanes. For every correctly spelled word, the students have an opportunity to fly their airplanes into a basket or hoop in the center of the classroom. Hitting the target earns 2 points, landing on the border earns 1 point, and missing the target earns zero points.
- **Missing Letters:** Create a power point document that contains one spelling word per slide. Instead of spelling the words in their entirety, leave some underline blanks. Have the children guess the spelling word, then spell each word correctly.
- Word Scramble: Create a power point document that contains one spelling word per slide. Scramble each spelling word. Then, have the children guess the spelling word, then spell each word correctly.

- **Boom!:** Write each spelling word on a popsicle stick. For every four spelling words, create a new popsicle stick with the word "BOOM!" on it. Place the popsicle sticks all together in a solid colored container. Divide the students into teams. Have each student choose a popsicle stick. The children should spell the word on the stick. If a student chooses a "BOOM!" stick, all of the popsicle sticks for the entire team must be collected. The team with the most sticks when the last one is chosen is the winner.
- **Spelling Aerobics:** Assign a different exercise, rhythm, or dance move for vowels and consonants. Then, as the students spell the words, they should move to the exercise they agreed upon.
- Pictionary Spelling: Write each spelling word on a note card. Divide the students into two teams. Have one student approach the white board in the front of the classroom. That student should draw a card from a hat, and attempt to draw a description of the word for the team. If the team fails to guess after 30 seconds, the other team has a chance to steal. The team with the most points at the end wins.
- **Rhythmic Spelling:** Practice spelling each word using any of the following rhythms or movements:
 - o Popcorn—jumping out of the chair (like a kernel popping) for each letter
 - Volcano—spell each word using arms to mirror lava erupting and flowing down a volcano
 - Basketball—pretend to dribble a ball for each letter, taking a fake shot at the end of the word
 - o Drum—beat student desks like a drum for each letter
 - Clap-pat—clap or pat a rhythm for each letter
- **Ticket out the Door:** Before the students leave the building for the day, ask them to spell one of the words for the week. Another activity would be to give a word that fits the word pattern being learned. Spelling or naming the word will be the students' "Ticket out the door."

Artifact K

Complete List of Materials Needed

As they apply to the activities noted in Artifacts F and J

- Markers (at least 10 different colors)
- Crayons
- Colored Pencils
- #2 Pencils
- Pens (multi-colored)
- Watercolor paints
- Foam letters
- Alphabet stickers
- Alphabet stencils
- Popsicle sticks
- Magazines
- Newspaper

- Index cards
- Hand-held white boards
- Dry erase markers
- Wide ruled lined paper (white and colored)
- White printer paper (8.5 x 11)
- White drawing paper (11 x 17)
- Graph paper
- Colored construction paper (9 x 12 and 11 x 18)
- Large basket with ball (Nerf ball or tennis ball)
- Student computers with Microsoft Office and internet access

Artifact L

Exit Card used for Post-Assessments Adapted by Rebecca Lindenberg

What three thing	gs did I learn	from this w	eek's unit?				
What items fr	om this unit o	did I alread	y know?				
What further questions do I have about this unit?							
What further q	uestions do I	have about	this unit?				
What further q	uestions do I	have about	this unit?				
What further q	uestions do I	have about	this unit?				
What further q	uestions do I	have about	this unit?				
	uestions do I						
Overall, ł	now do I feel a	about this u	nit?				
	now do I feel a	about this u					

Results

The effectiveness of the differentiated spelling curriculum was measured in a several ways. First, I used the cumulative spelling grades for a group of students that had me as an educator for spelling in both a traditional and a differentiated setting. During the 2010-2011 school year, these children were fifth grade students at St. John's Lutheran School. They were described as an above average group in the realm of academics. None of the students in this group had any diagnosed learning disabilities. They worked very well independently, as well as in groups. They always scored very high across the subject areas.

In 2010-2011, this group of students was taught spelling using a traditional approach. The children were given a list of words and a brief explanation of the word pattern on Mondays. Their only assignment throughout the week was to write the words in alphabetical order and create a sentence using each of the words correctly. This was to be completed independently, and there were no other accompanying activities to practice the words. The assignments were the same for each of the children. Finally, on Fridays the children were tested on the word list.

Because of the departmentalized nature of St. John's, I also taught spelling to these students the following year as sixth graders. However, during the 2011-2012 school year, the students learned through the differentiated curriculum explained earlier. Each of the students' quarterly grades (0-100%) over the course of both school years was averaged, as shown in the following example:

Student A (2010-2011): 94 97 94 92 = 94.25%

Student A (2011-2012): 97 94 97 96 = 96%

The results of this comparison can be found in Figure 1. Out of thirteen students, ten of them earned improved grades during the year the differentiated curriculum was used. Two of the thirteen children had grades that remained stable, and only one student received grades that decreased using the differentiated approach. Overall, the class average was 1% higher when they were taught the differentiated spelling curriculum compared to their year of traditional learning.

Spelling Grades: Traditional Learning
Versus Differentiated Learning

100
95
95
4 B C D E F G H I J K L M Class Average

Students

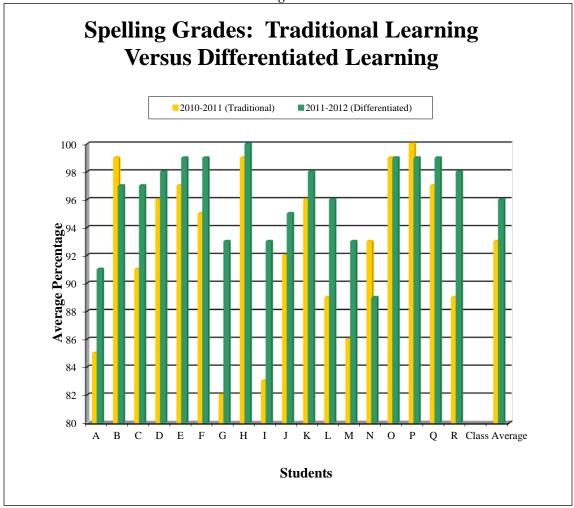
The second way the effectiveness was evaluated was through the 2011-2012 fifth grade students. This group of students differed from the previous one because their academic capabilities were spread across a broader spectrum. This group included one student who was diagnosed with Dyslexia. This particular student had a tutor specifically trained to help children with Dyslexia. Upon the advice of the tutor, it was agreed that

this student only learn 10 of the 20 spelling words each week. There were also students in this group who struggled academically, but were not tested for any specific disability. This was the first group of children to be taught spelling using the differentiated curriculum as fifth graders. Because of the wide spectrum of intelligences that this group entered fifth grade with, I was excited to see how the differentiated curriculum would help them.

The previous school year (2010-2011), this group of children had a different teacher who used a traditional approach. This approach was through a basal curriculum. The word lists were provided to the children. They also were to complete assignments and worksheets throughout the week, with a test on Friday to see what they had learned. Using the same methods as explained with the last class, I compared their cumulative fourth grade spelling scores (traditional) to their fifth grade scores (differentiated). The results of those scores can be found in Figure 2.

As with the previous set of students, the majority of this group also had grades that increased when taught using the differentiated curriculum. Out of the eighteen students in this class, fourteen of them had cumulative scores that increased the second year. One student's grades remained the same, while three of the eighteen students had grades that went down when the differentiated curriculum was used. Overall the class average jumped 3% when they were taught using the differentiated curriculum explained above.

Figure 2



The final way the effectiveness of the differentiated curriculum was measured was through the Spelling Research Survey (as noted in Artifact B). This survey was given to the 2012-2013 fifth grade students. Academically, this group of students average middle to low in grades. There is one student who has been diagnosed with Attention Deficit Disorder and two others who have been involved in speech therapy during this school year. This class is very active and talented in gross motor skills, but they lack high achievement scores.

The research survey was administered at two different points during the school year. The first time the survey was filled out was the first day of school, August 28, 2012

(pre-semester). This was done to see how the children approached spelling words and practiced them in a traditional setting (which they had just graduated from the previous school year). The second time the survey was given was December 17, 2012 (post-semester). This time, the survey was given to see how the children approached spelling words and practiced them after four month of differentiated curriculum. The results of the survey are noted in Figure 3.

As seen in Figure 3, the attitudes and approaches to spelling changed over the course of the semester. At the beginning of the year, 62.5% of the students strongly agreed that they try to spell words correctly. This percentage increased to 81.25% after a semester of differentiated curriculum. Another aspect of the differentiated instruction was highlighted with the statement, "My teacher helps me learn my words." On the first day of school only 31% of the students strongly agreed with that statement, but after a semester of daily activities through differentiation, that percentage increased to 50%. When asked to evaluate the statement, "I am responsible for learning my words," 62.5% either agreed or strongly agreed coming out of a traditional approach to spelling. However, after a month of doing choice board assignments through differentiated spelling, that percentage jumped to 100%.

Figure 3

Student Spelling Research Study										
	Strongly Disagree (1)		Disagree (2)		Don't Know (3)		Agree (4)		Strongly Agree (5)	
	Pre- Semester	Post- Semester	Pre- Semester	Pre- Semester	Pre- Semester	Post- Semester	Pre- Semester	Post- Semester	Pre- Semester	Post- Semester
1. I try to spell words correctly.	0	0	0	0	0	1	6	2	10	13
2. I only need to spell words correctly on a test.	9	6	4	5	1	3	1	1	1	1
3. I need to spell words correctly every time I write.	0	1	1	0	0	3	6	3	9	9
4. My parents help me learn my words.	3	2	1	4	1	3	6	5	5	2
5. My teacher helps me learn my words.	2	0	2	3	3	1	4	4	5	8
6. I enjoy spelling activities.	2	0	1	1	3	2	4	7	6	6
7. I am responsible for learning my words.	2	0	0	0	4	0	5	10	5	6
8. I think the best way to spell words is to memorize them.	2	3	2	3	2	3	4	4	6	3
9. I don't think spelling is important.	15	12	1	4	0	0	0	0	0	0
	Yes				No					
		re- ester	Post- Semester				Pre- Semester		Post- Semester	
10. When I practice my spelling words I write the words over and over again.	12 3		3			4		13		
11. When I practice my spelling words I say the words out loud.	8	8	6				8		10	
12. When I practice my spelling words I play spelling games.		4	6				11*		10	
*One student skipped question 12 on the Pre-Semester Attitude Survey.										

PART IV: REFLECTIVE ESSAY

Introduction

When I began teaching spelling at St. John's Lutheran in 2010, I was immediately taken back to my personal experiences with spelling in middle school. Spelling words were always assigned on Mondays, tested on Fridays, and practiced independently Tuesday through Thursday. I recalled not having much guidance in studying word patterns. On the contrary, the word patterns were expected to be memorized. This traditional way of teaching spelling was mirrored at St. John's.

As an educator, I knew I wanted to change the way my students learned spelling. I wanted them to enjoy spelling and apply what they learn in class to their everyday lives. I wished they would see spelling the way I saw it- that is, a necessary life skill that needs constant practice and attention. There was one philosophy of education that encompassed all of these ideas: learner-centered differentiated instruction.

Conclusions

Since incorporating this new differentiated curriculum, I have seen many changes in my students. The amount of late work each week has almost diminished, mainly because the attitudes of the students have changed. The students are given choices in their work now, which leads them to taking ownership of their learning. We practice the words and patterns every day with games, which always leads to shouts of, "Yes! Alright! I love that game!" This tells me that the students look forward to practicing the word patterns, and that I am able to provide activities that excite them about spelling. The students are eager to see what the choices will be for the upcoming week's words. My classroom is filled with silent smiles as they eagerly read through and sort out the

possibilities for assignments that week. I love that the artistic students are able to use their abilities to show what they've learned. I love that my technological students get excited about spelling. I look forward to seeing what number codes the mathematicians will use for their spelling words for the week. I get excited to see a group of students not only working together, but successfully writing an entire play script using each spelling word. What I love most of all is that because I have offered choices that reflect their abilities, interests, and intelligences, I have helped mold a classroom of students who approach spelling in a positive way. I have taught them that spelling is a life skill necessary for their world beyond our classroom.

Recommendations

This curriculum can easily be implemented in every fifth grade classroom. However, there are several recommendations to keep in mind. The first recommendation is to get to know each student before designing the choice boards. The choices should be different for each classroom of students. Use the Multiple Intelligence Inventory and the Spelling Research Survey (Artifacts B and C) to drive your choice board selections at the beginning of the school year. As the teacher gets to know the students on a more personal level, his or her choices will change to better meet the students' needs and interests. After a substantial length of time, the teacher should ask the students which choices are their favorites and use their answers to help determine which choices are chosen for the week. By selecting choices for the boards that meet the students' needs, interests, and intelligences, the teacher will increase opportunities for success in spelling.

The second recommendation is to use daily activities and assignments to informally assess as often as possible. Understanding and applying the word pattern

correctly is vital for the children. Therefore, the teacher must constantly use the choice board assignments and the daily class activities to gauge which words patterns are easy or difficult for the students. When a word or word pattern is particularly difficult for a child, or group of children, the teacher should focus on that area until the student(s) feel comfortable moving on. By following through with informal assessments, the teacher will discover ways to improve everyday spelling for the students.

A third recommendation is to schedule a specific block of time for spelling practice. The "ideal" time necessary for most class activities listed in Artifact J is about fifteen minutes. The teacher will also have to ensure that study time is set aside for the completion of some activities. Again, if the students are allotted about 15 minutes during the school day, they will have plenty of time to complete assignments. By scheduling time for the students to practice and complete their spelling assignments, the teacher is stressing the importance of spelling. The block of time assigned to spelling shows that the life skill is just as necessary as other classes throughout the day like math, science, and reading.

A fourth recommendation is that educators must constantly informally assess the choices that students make. In addition to spelling correctly, time management is a life skill learned in this curriculum. At times, teachers must monitor how long it takes certain students to complete their assignments. Recall that differentiated instruction involves choosing assignments that meet the students' interests. That being said, sometimes the students create a large, time-consuming project due to their love of the activity. Creating a board game, drawing the words artistically, creating codes for each letter, and drawing a hidden picture are all examples of choices that have taken some of the students more

time than necessary in the past. Also recall that choice boards are created to meet the needs of all of the students. However, the students might not always realize which choices best meet their needs. There have been times during this curriculum implementation where students choose assignments simply because their friends choose them. For example, a student who is likely to take longer completing assignments might choose an assignment that takes longer just because his or her friends chose it. The telephone number codes, power point presentations, and sticker spelling activities are all examples of assignments that have varied completion times. If this occurs, the teacher must encourage students to choose activities better suited for their abilities and interests. The teacher should also take that opportunity to explain how to approach the choices so that the students have a smaller chance of making the mistake again.

The fifth recommendation for this curriculum is to analyze its cost effectiveness. While there are no textbooks or workbooks to purchase yearly, there are materials that must be available to the children in order for their assignments to be complete. Such materials include (but are not limited to): construction paper, sentence strips, markers, stencils, stickers, magazines, index cards, and crayons (The complete list of materials can be found in Artifact K). Many of these materials can be bought in bulk, and used over a period of two school years, depending on which activities on the choice board are popular each year. Teachers can also include some of the materials on the students' school supply lists. Items like lined paper, pencils, markers, and index cards can certainly be supplied by the students themselves. In addition, several of the activities require a computer with internet access and Microsoft Office. If a teacher wishes to utilize these activities, each student must have access to a computer with internet at any given time. If

the school doesn't have a computer lab or a few computers in the classroom, or the student doesn't have access to a computer with internet in their home, the teacher will have to make appropriate accommodations to the choice boards by offering other options for the students (see Artifact I).

The final recommendation for this curriculum is to constantly communicate each student's progress with his or her guardians. Because the activities are mainly independent, the students are taught to work independently. Therefore, there isn't a constant reminder to teachers to make parent-teacher connection. Extra strides will have to be made for those students who study with their parents on a regular basis. In addition, students will have to be taught organization and planning skills in order to think ahead when taking the spelling choice boards home as homework. They will have to think about what materials they need and plan accordingly to ensure all directions are followed.

This curriculum has shown to be beneficial to fifth grade students. It has not only improved their daily spelling, but it has improved their attitudes towards spelling. As an educator, has been very rewarding to see the students so excited about their learning.

Being able to watch the children take ownership of their spelling has made the creation of this differentiated curriculum worthwhile.

PART IV: REFERENCES

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