



DORDT COLLEGE

Digital Collections @ Dordt

Master of Education Program Theses

4-2014

Teaching Third-Grade Writing Using the Self-Regulated Strategy Development Model

Ellen Korver

Follow this and additional works at: http://digitalcollections.dordt.edu/med_theses

 Part of the [Curriculum and Instruction Commons](#)

Recommended Citation

Korver, Ellen, "Teaching Third-Grade Writing Using the Self-Regulated Strategy Development Model" (2014). *Master of Education Program Theses*. Paper 44.

This Thesis is brought to you for free and open access by Digital Collections @ Dordt. It has been accepted for inclusion in Master of Education Program Theses by an authorized administrator of Digital Collections @ Dordt. For more information, please contact ingrid.mulder@dordt.edu.

Teaching Third-Grade Writing Using the Self-Regulated Strategy Development Model

Abstract

Writing is a self-directed activity that involves the intelligent use of a variety of mental operations and skills. Christian teachers want their students to be able to write well because it enables them not only to examine God's world for themselves, but also to communicate with others. This communication is essential in many areas of modern life. However, research studies show that many students have only partially mastered writing skills. In this study, the effectiveness of an instructional mode, the Self-Regulated Strategy Development (SRSD) model, was examined in order to determine if its implementation would have a positive effect on the story writing skills of third graders. This study was conducted with a class of seventeen third graders from a largely homogenous population in terms of age, ethnicity, and background. The students were given a pre-test to determine their writing skills before any SRSD instructions. Students were then taught eight lessons using SRSD instruction focused primarily on learning writing strategies and knowledge for planning and composing stories. When the lessons were complete, the students took a post-test. The pre-test and post-test scores were then analyzed. A significant difference was found between the scores. Therefore, this study yielded statistical evidence of greater writing achievement for students after they were taught using the SRSD method.

Document Type

Thesis

Degree Name

Master of Education (MEd)

Department

Graduate Education

Keywords

Master of Education, thesis, Christian education, elementary education, third graders, writing, SRSD, Self-Regulated Strategy Development

Subject Categories

Curriculum and Instruction | Education

Comments

Action Research Report Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Education

Teaching Third-Grade Writing
Using the Self-Regulated Strategy Development Model

by

Ellen Korver

B. A. Dordt College, 1980

Action Research Proposal
Submitted in Partial Fulfillment
of the Requirements for the
Degree of Master of Education

Department of Education
Dordt College
Sioux Center, Iowa
April, 2014

Teaching Third-Grade Writing
Using the Self-Regulated Strategy Development Model

by Ellen Korver

Approved:

Faculty Advisor

Date

Director of Graduate Education

Date

Acknowledgements

The Lord has blessed me with many loving and supportive people as I worked on this project. I am deeply grateful to each one of them!

There are a few individuals I would specifically like to thank for their contributions to this work. First of all, I thank Dr. Pat Kornelis and Dr. Tim Van Soelen for being willing to walk with me down this road yet again. You have been an unfailing source of support as I explored different topics and suffered through several unfruitful attempts. Thanks, Dr. Kornelis, for reading those endless pages I sent and for the constructive feedback that helped me to become a better writer. Thanks, Dr. Van Soelen, for helping me to understand and appreciate things I never even knew I wanted to learn about! I also want to thank Curt Van Dam who has been a sounding board for my ideas and a friend by my side since the very beginning of this journey. Thanks to my excellent readers, Mr. Joshua Bowar and Mrs. Rebecca De Smith. Finally, I want to thank my third grade class (2013-2014) from Sioux Center Christian School! Thank you for being willing to help me with this project and for all the great stories you wrote!

I also want to thank everybody in my family for their help and support. Thanks, Dad, for raising me in a family that loves and supports each other. A special thank you to my mom, Hattie Van Der Plaats, for teaching me I can do hard things. Thanks, Lisa, for encouraging me to keep going! Thanks Richard, for helping me unravel the mysteries of APA 6th edition. I love the way you think! Thanks, Lora for all your help and lending me your hot spot! Thanks, Mom Korver, for loving and supporting me through this. Ben and Maria, thanks for being in the library to help me! Jon and Justin, my very favorite sons, thanks for always being a help and my inspiration. I will love you forever!

Table of Contents

Title Page	i
Approval	ii
Acknowledgements	iii
Table of Contents	iv
List of Tables	v
Abstract	vi
Introduction.....	1
Review of the Literature	4
Methodology	19
Results.....	22
Discussion.....	24
References.....	28
Appendixes	31
Appendix A.....	31
Appendix B.....	32
Appendix C.....	33
Vita.....	34

List of Tables

Table		Page
1.	Achievement-Level Results in Eighth-Grade NEAP Writing: 2011	8
2.	Achievement-Level Results in Twelfth-Grade NEAP Writing: 2011	8
3.	Differences in Pre-test and Post-test Scores on Writing Assessments	23
4.	Differences in Writing Assessment Scores.....	24

Abstract

Writing is a self-directed activity that involves the intelligent use of a variety of mental operations and skills. Christian teachers want their students to be able to write well because it enables them not only to examine God's world for themselves, but also to communicate with others. This communication is essential in many areas of modern life. However, research studies show that many students have only partially mastered writing skills. In this study, the effectiveness of an instructional mode, the Self-Regulated Strategy Development (SRSD) model, was examined in order to determine if its implementation would have a positive effect on the story writing skills of third graders. This study was conducted with a class of seventeen third graders from a largely homogenous population in terms of age, ethnicity, and background. The students were given a pre-test to determine their writing skills before any SRSD instructions. Students were then taught eight lessons using SRSD instruction focused primarily on learning writing strategies and knowledge for planning and composing stories. When the lessons were complete, the students took a post-test. The pre-test and post-test scores were then analyzed. A significant difference was found between the scores. Therefore, this study yielded statistical evidence of greater writing achievement for students after they were taught using the SRSD method.

Christian educators see the purpose of education, the students we teach, and the subjects we teach from a different perspective than educators whose teaching is not Christ-centered. Graham stated (2009), "The task of true education is to develop knowledge of God and his created reality and to use that knowledge in exercising a creative-redemptive dominion over the world in which we live" (p. 54-55). Christian educators see their students as being capable of being educated since they are created in the image of God and, therefore, possess some of the attributes of God. We know, for example, that humans are active, purposeful, rational, and creative (Graham, 2009). These attributes have enabled humans to develop their God-given gift of language.

God created humans with the ability to speak and understand language. From these primary abilities, humans have developed the systems of encoding and decoding what we know as writing and reading. Speaking, listening, reading, and writing are the main components of language arts. Bruinsma (2003) stated that, "language learning at its best involves students honestly examining God's world, exploring real issues, recognizing the sinfulness of human life, and pointing toward the redemption promised in Christ" (p. 61).

Christian teachers want their students to be able to write because it enables them not only to honestly examine God's world for themselves, but also to share their thoughts, feelings, and opinions. This communication is important because God created us to be in relationships with one another, and relationships require communication. Writing is a powerful form of communication and essential in modern life. For example, writing is the primary way that teachers and students communicate with each other in most classrooms. It is also useful for communicating with the world outside of the classroom. In today's world students can text, tweet, email, and blog with people all over the world.

In addition to this, teaching Christianly involves, "equipping students for service (Ephesians 4), that is, for caregiving and stewardship characterized by acts of healing, reconciliation, and peacemaking" (Bruinsma, 2003, p. 36). Writing is essential in the work of healing, reconciliation, and peacemaking. For example, writing is essential for an administrator at a Christian agency who is putting together an overseas trip to bring wheelchairs to people who need them. It is also important for a third grader who is creating a Christmas card for a resident of the local nursing home or a prisoner.

However, many children struggle as they try to learn to write. "This is not surprising since writing is a conscious and self-directed activity, involving the intelligent use of a variety of mental operations and skills to satisfy the writer's goals and meet the needs of the reader" (Lienemann, Graham, Leader-Janssen, & Reid, 2006, p. 66). Christian teachers need to look for ways to help these struggling students since they believe that all students are recipients of God's gift of language and are called to use that gift in communication and service.

Research has shown that teaching writing strategies and self-regulation strategies can improve student writing (Cutler &, 2008; Graham, Harris & Mason, 2005). The Christian teacher must choose from among these strategies the ones that are most likely to be effective for his or her students. A search of current literature shows that one evidence-based model that is the subject of many studies is the Self-Regulated Strategy Development Model (Harris, Graham, Friedlander, & Land, 2013). This study examined the Self-Regulated Strategy Development Model in order to evaluate its effectiveness in a third-grade classroom.

Problem Statement

Christian teachers must look for ways to assist their struggling students because they believe that all students are called to use the gift of writing in communication and service. The

purpose of this study was to evaluate the Self-Regulated Strategy Development Model in order to determine if its implementation had a positive effect on the story writing skills of third graders.

Research Question

Does using the Self-Regulated Strategy Development Model (SRSD) result in a significant increase in the writing skills of third graders?

Definitions

For the purpose of this study, the following definitions will be used. Unless otherwise noted, the definitions are those of the author.

Advanced Writing Level: superior performance in writing knowledge and skills.

Basic Writing Level: partial mastery of the assessed writing knowledge and skills.

Below Basic Writing Level: no mastery of the assessed writing skills.

Minimal evidence: suggests that there is no body of research that demonstrates the practice's positive effect on student achievement (Graham, Bollinger, Booth Olson, D'Aoust, MacArthur, McCutchen, & Olinghouse, 2012).

Moderate evidence: evidence from studies that allows strong causal conclusions but cannot be generalized with assurance to the population on which a recommendation is focused (Graham et al., 2012).

Procedural knowledge: general guidelines or a step-by-step technique for accomplishing the objective or general guidelines.

Proficient Writing Level: a solid academic performance and competency when of assessed writing knowledge and skills.

Self-Regulated Strategy Development Model: an instructional program designed to improve the performance of struggling young writers. Its primary focus is on teaching writing strategies, but students are also taught knowledge and self-regulatory procedures for carrying out the task.

Strategy: A set of operations or actions that a person consciously undertakes in order to accomplish a desired goal.

Strong evidence: consistent evidence that the recommended strategies, programs, or practices which improve student outcomes for a wide population of students. There would be strong causal and generalizable evidence if this rating was given (Graham et al., 2012).

Literature Review

The development of effective writing skills is an important educational issue because writing plays a key role in learning. This review examines the literature related to: (a) the current status of writing skills of K-12 students in the United States, (b) the differences between skilled and unskilled writers, (c) writing strategies to help students become skilled writers, (d) the use of strategies in the Self-Regulated Strategy Development Model, and (e) empirical research.

Current Status Of Writing Skills Of K-12 Students In The United States

Learning how to write has always been considered an essential part of education, but today civic and community life increasingly requires the ability to write (Cutler, 2008).

However, not all students are becoming skilled writers. In the National Assessments of Educational Progress (2002) students' results on writing assessments were assigned the levels of Below Basic, Basic, Proficient, and Advanced. The results of the National Assessment of

Educational Progress (2002) showed that the majority of fourth graders performed at Below Basic or Basic levels in writing assessments. The same was true of eighth graders that were tested. This is a concern since it means that the majority of student had no or only partial mastery of assessed writing skills. When the results of the National Assessment of Educational Progress from 2002 were compared with the results of the National Assessment of Educational Progress in 1994, there was an increase in those reaching the Basic or Proficient levels. However, the number of 12th graders performing at or above Basic levels has declined since 1994 (Bui, 2006).

Concerns about students' writing development resulted in the National Commission on Writing in America's Schools and Colleges (2003) making four recommendations for school reform. The commission called for a writing agenda for the nation that stressed increased writing tasks for students, technology being used as a more integral part of writing instructions, students' writing progress being monitored, and teachers being better prepared to teach writing. The commission also conducted hearings throughout the country in 2004 in order to discover what local teachers, administrators, university faculty, and writing program directors had to say about the recommendations of the commission (College Entrance Examination Board, 2003) The messages that emerged from these hearings showed that there are many examples of effective practices in writing instruction and that these practices rest on a long and strong history of research (VanDeWeghe, 2007).

Other research studies have been conducted in which recommendations result in improvement of student writing. The Institute of Educational Sciences published a practice guide in order to offer educators specific, evidence-based recommendations to address the challenges of teaching writing in elementary school (Graham et al, 2012). The authors of the guide formed a

panel and began by evaluating the existing body of research. The recommendations which had been studied enough to evaluate were:

1. Provide daily time for students to write.
2. Teach the students to use the writing process for a variety of purposes.
3. Teach students to become fluent with handwriting, spelling, sentence construction, typing, and word processing.
4. Create an engaged community of writers (Graham et al., 2012).

The panel judged the level of evidence for the recommendation of providing daily time for students to write to be minimal. They were unable to find studies that examined whether providing students with daily opportunities to write leads to better writing outcomes than providing less frequent opportunities. However, the panel still felt that time for writing was necessary and so they examined a study where additional writing instruction improved writing performance (Berninger, Abbott, Garcia, Anderson-Youngstrom, Brooks, Fulton, 2006) as well as two studies where additional instruction given to at-risk children resulted in improvement of their writing skills (Mason & Shiner, 2008; Saddler, Moran, Graham, & Harris, 2004). The panel's conclusion was that while more time is required if students are going to learn to write well, time alone will not result in improved student writing (Graham et al., 2012).

The panel next examined what research studies indicated about teaching students to use the writing process for a variety of purposes. They reviewed more than 40 studies, including those that examined teaching strategies, for the various components of the writing process and for guiding students to select and use appropriate writing strategies. The panel found strong evidence that teaching the writing process was effective in developing strong writers (Graham et al., 2012).

The panel then examined whether teaching students to become fluent with handwriting, spelling, sentence construction, typing, and word processing would result in improved writing. The authors listed eleven studies they reviewed to determine if this was an effective way to develop strong writers. The panel found that there was moderate evidence to support this recommendation (Graham et al., 2012).

The final recommendation suggested teachers create an engaged community of writers. The panel examined six studies that included components of the final recommendation. The studies included students from fourth to sixth grade. In three of the studies, the subjects were identified as being at-risk and one of the studies did not take place in the United States. The panel concluded that it was not possible to determine how much of the effect was due to the building of a community of engaged writers and how much of the effect was due to other factors. The members of the panel concluded that the final recommendation had minimal evidence to support it (Graham et al., 2012).

The National Assessment of Progress (2011) indicated that students are becoming fluent in typing and word processing. This was the first time the National Assessment of Educational Progress gave a computer based writing assessment where students were provided with the typical language resources such as a thesaurus and common computer tools such as spell-check, cut, copy, and paste. The assessment was given to 24,100 eighth graders and 28,100 twelfth graders. Students were asked to respond to tasks designed to measure one of three communicative purposes common to many typical writing situations:

1. To persuade, in order to change the reader's point of view or affect the reader's actions.
2. To explain, in order to expand the reader's understanding.

3. To convey experience (real or imagined), in order to communicate individual real and imagined experience to others (National Assessment of Educational Progress, 2011).

The results of this assessment are shown in Table 1 and Table 2. The results show that 24% of the eighth and twelfth graders performed at the Proficient level in writing in 2011 (Table 1, Table 2). This clearly demonstrated their ability to accomplish the communicative purpose of their writing. Fifty-four percent of the eighth graders and 52% of the twelfth graders performed at the Basic level in writing in 2011 (Table 1, Table 2). This indicates partial mastery of the prerequisite knowledge and skills that are fundamental for proficient work at each grade. Three percent of the eighth and twelfth graders in 2011 performed at the Advanced level (Table 1, Table 2). This level represents superior performance (National Assessment of Educational Progress, 2011).

Table 1

Achievement-Level Results in Eighth-Grade NAEP Writing: 2011

Level	Below Basic	Basic	Proficient	Advanced
Percent on Level	20	54	24	3

Table 2

Achievement-Level Results in Twelfth-Grade NAEP Writing: 2011

Level	Below Basic	Basic	Proficient	Advanced
Percent on Level	21	52	24	3

These results indicate that, at the present time, while writing knowledge and skills are seen as more important than ever for students' educational and occupational success, most

students have only partially mastered these skills. Writing at a Basic level demonstrates only a limited grasp of the importance of extended or complex thought. Students must be able to do more if they are going to be able to experience writing as both a way of demonstrating knowledge and as a complex form of learning and discovery (VanDeWeghe, 2007). Therefore, students who do not write well are at a disadvantage.

This disadvantage continues in the world of work. When 120 major U.S. corporations were surveyed about the importance of writing in the workplace, they reported that writing is important for getting a job as applicants with poorly written material are not considered for employment. Their employees are asked to use writing in emails, PowerPoint presentations, reports, and memos. An employee's skill in using these forms of writing is considered when making promotional decisions (VanDeWeghe, 2007).

Differences Between Skilled Writers and Struggling Writers

Students' struggles with writing begin early. The literature reports that by fourth grade, two out of every three children in the United States do not write well enough to meet classroom demands (Cutler, 2008). This places these children at risk because writing is essential to educational and occupational success. Writing is a skill that students will use in every subject they study. Writing is also the primary means by which students demonstrate their knowledge in today's classrooms (Harris, Graham, Friedlander, & Land, 2013). This makes it essential for a student to be able to communicate what he or she knows by writing.

Writing has become increasingly important on national and state assessments (Astro & Saddler, 2009). Essays have become part of many of these assessments and poor writers will not score well on these, even if they know the material. Poor writing skills place children academically at risk, not only during their early elementary years, but in secondary school as

well (Lane, Graham, & Weisenbach, 2006). Students with good writing skills are much more likely than those with poor writing skills to continue their education at the college level, since many colleges now include writing evaluations in their application processes (Tracy, Reid, & Graham 2009).

Teachers need to understand why some students are not able to write well enough to meet classroom demands if they are going to be able to help those students to become better writers. Research has shown that there are significant differences in the ways that skilled and struggling writers write. These differences can be divided into seven major categories. There are differences in students' (a) knowledge of writing, (b) approach to writing, (c) planning of writing, (d) ability to generate writing, (e) ability to revise writing, (f) transcription skills, (g) persistence, and (h) self-efficacy (Santangelo, Harris, & Graham, 2007).

Skilled writers know about writing genres, devices, and conventions. They are familiar with the elements and characteristics of good writing. Many students who struggle with writing lack contextual knowledge and believe that good writing is related to form and mechanics rather than substance or process. They tend to think that writing neatly and spelling correctly is all that is required for good writing (Santangelo, Harris, & Graham, 2007). Skilled writers include description and dialogue in their stories, while struggling writers tend to try to tell the story using just conversation.

Skilled writers also differ from unskilled writers in their approach to writing. Unskilled writers tend to focus on generating content (Santangelo, Harris, & Graham, 2007). In third grade, this could result in a seven page story in which nothing happens, for example. When asked to explain their work, these students are often puzzled because, to them, a long story is a good

story. Skilled writers, on the other hand, understand that writing involves planning, composing, evaluating and revising (Santangelo, Harris, & Graham, 2008). These students actually follow the plans or outlines that their teachers ask them to create. They ask questions about how to make their writing better.

Research shows that unskilled writers spend far less time planning than skilled writers do. (Santangelo, Harris, & Graham, 2008). If they are directed to spend time planning, they will usually not do so. For example, when given the direction to, “take your time to gather information and plan your report,” one unskilled student quickly glanced through one book on her topic and did not make any notes related to organization or content. Within a few minutes she created a draft that included two facts that she remembered (Santangelo, Harris, & Graham, 2007). Struggling writers’ plans are often a series of sentences which they simply rewrite in subsequent phases of the writing process. In contrast, skilled writers spend a significant amount of time planning and developing goals before they begin to write (Santangelo, Harris, & Graham, 2008).

Generating content refers to the ability to get your ideas and the information you need written down. This is very difficult for struggling writers who often write very short stories that contain little elaboration or detail. On the other hand, skilled writers often write more content than they need and get rid of unnecessary details and information during revision (Santangelo, Harris, & Graham, 2008).

Skilled writers make their text better when they make revisions. Struggling writers usually do not. Revisions made by struggling writers are word substitutions, correcting spelling and usage errors, and rewriting their papers to make them neater. When struggling writers do change their text, about two-thirds of their revisions have a neutral or negative effect

(Santangelo, Harris, & Graham, 2008). Struggling writers are often unable to get rid of seemingly obvious errors when making revisions (Santangelo, Harris, & Graham, 2007).

Transcription skills are the skills that enable writers to reproduce thoughts in written form. Struggling writers often have poor transcription skills. Struggling writers have fluency rates that are nearly half of their peers who are successful writers. This is sometimes difficult because they form letters very slowly. Struggling writers routinely misspell words, have difficulty with capitalization and punctuation, and produce letters very slowly. These difficulties take so much time that struggling writers pay little attention to the content of their writing. Transcription difficulties can also make it very challenging for any readers, including the original author, to read and comprehend the paper (Santangelo, Harris, & Graham, 2008).

A final difference between struggling writers and skilled writers has to do with self-efficacy and persistence. Many students who struggle actually overestimate their own writing abilities (Santangelo, Harris, & Graham, 2007). This may be because they have not yet developed the skills necessary to accurately assess their ability, but in any case it leads to putting minimal time and effort into the writing process (Santangelo, Harris, & Graham, 2008). Research has also shown that skilled writers are more likely to seek assistance when experiencing difficulties in writing (Saddler & Graham, 2007). Skilled writers seem to know more about writing, put more effort and time into writing assignments, and receive more help with their writing than less-skilled writers.

An analysis of the differences between skilled and unskilled writers helps imply that instruction in penmanship, sentence formation, spelling, punctuation, grammar, and capitalization is important because, without these skills, students will have a great deal of difficulty with transcription. However, working on these skills will not solve the difficulties in

their knowledge of writing, approach to writing, planning of writing, ability to generate writing, ability to revise writing, persistence, or self-efficacy. Struggling writers do not use the same type of writing strategies as youngsters who are good writers (Graham et al., 2008). Struggling writers must be taught the strategies that good writers use.

Writing Strategies to Help Students Become Skilled Writers

For the past 20 years, researchers have been developing strategies that are sets of operations that give procedural knowledge to accomplish writing tasks. Graham and Harris (2005) list 18 scientifically validated strategies for planning, composing, and revising. They recommend these strategies as being appropriate for elementary-age students. Some strategies are referred to as “universal” strategies because they can be used with different writing genres. Universal strategies are often combined with strategies for planning and composing. These kinds of strategies are important in helping students to understand the writing process.

Strategies have also been developed that help students to activate a strategy and to extend the required commitment and effort to be effective in completing the writing task. These strategies are often called self-regulation strategies. They include strategies for self-monitoring and goal-setting strategies.

The Use Of Strategies In The Self-Regulated Strategy Development Model.

Another approach to writing intervention is to teach students strategies for carrying out specific composing processes, but also to teach them how to apply the target strategies, to better understand the writing task, and to regulate their behavior during writing. In this approach, instruction was designed to enhance self-efficacy and effort. This approach developed in the 1980s by Graham and Harris, was originally called Self-Instructional Strategy Training. The name was changed to Self-Regulated Strategy Development Model because the approach had

begun to emphasize the development of self-regulatory skills (Lienemann, Graham, Leader-Jansen, & Reid, 2006).

The Self-Regulated Strategy Development Model (SRSD) was designed to teach students planning and revising strategies in combination with procedures for regulating the use of these strategies, the writing task, and undesirable behaviors that may make it more difficult for the student to accomplish the writing task. (Lienemann, Graham, Leader-Jansen, & Reid, 2006). This model uses six instructional stages. Each stage provides a set of general guidelines for instruction, but the stages can be reordered or modified to meet teacher and student needs. The stages can be briefly described as follows:

Stage one: Develop background knowledge. This is the introductory stage in which the teacher identifies what the students need to know and do in order to understand, learn, and apply the strategy and self-regulation techniques. For example, a teacher might read stories and identify the problems and solutions with his or her students until there is a clear understanding of what a problem and a solution looks like in a story. After students have clearly demonstrated their ability to identify the problems and solutions in the text, the teacher would begin to teach the strategy for writing narratives that include developing a problem and solution instructions (Harris, 2012, Mason, 2011, Santangelo, 2008).

Stage two: Discuss it. At the beginning of this stage, the teachers and students examine and discuss current writing performance, the strategies they are already using, and what the students think about the writing process. Next, a new strategy is introduced, then its purpose, benefit, and use are explored. Students are asked to make a commitment to learn the strategy and to act as collaborative partners as the class begins using the strategy to develop a piece of writing instructions (Harris, 2012, Mason, 2011, Santangelo, 2008).

Stage three: Model it. This stage focuses on demonstrating how to effectively use the strategy and the accompanying self-regulation procedures. Think-alouds and visuals can be used to enhance the modeling process. It is critical that the teacher demonstrates the use of self-instructions (e.g., “Okay, I now need to ask myself...”) and self-talk (“I’m doing a great job with listing my reasons...”). This is followed by a discussion of how the strategy might be modified to make it more appropriate, effective, or efficient. The students write personal self-statements to regulate strategy use and the writing task (e.g., “I can do this.”). They also develop goals for their writing (e.g., “I will include all of the story parts.”) instructions (Harris, 2012, Mason, 2011, Santangelo, 2008).

Stage four: Memorize it. Students are provided with time to practice and memorize the strategy from the beginning of the SRSD instruction through daily individual, pair, or group practice. Memorization includes mnemonics and explanations of the meaning and importance of each strategy step, as well as selected self-instructions (Harris, 2012, Mason, 2011, Santangelo, 2008).

Step five: Support it. Students practice the strategy and self-regulatory techniques during this step. Scaffolded teacher support and guided practice are provided. Students are encouraged to work cooperatively during this stage because peer support is helpful in learning and applying a strategy. The goal of this stage is to develop the student’s skill in applying the strategy until they no longer need support in doing so instructions (Harris, 2012, Mason, 2011, Santangelo, 2008).

Stage six: Independent performance. Students demonstrate independent performance when they can use writing and self-regulation strategies effectively without teacher or material support instructions (Harris, 2012, Mason, 2011, Santangelo, 2008).

Empirical Research

Students learn to read and write during their primary years in school. A traditional-skills approach suggests that children will become good writers if they are taught to become fluent with handwriting, spelling, and sentence construction. Tracy, Reid, & Graham (2009) conducted a study to determine whether SRSD is a more effective way to teach young children than a traditional-skills approach. In their study, students who were taught (a) a general strategy and a genre-specific strategy for writing stories; (b) procedures for regulating the use of these strategies, the writing process, and their writing behaviors; (c) and knowledge about the basic purpose and characteristics of good stories were compared with students who received traditional-skills writing instruction. One hundred and twenty-seven third-grade students participated in this study. Sixty-four of the students were part of the group who were taught using the SRSD method. Sixty-three were taught using traditional-skills writing instruction.

After controlling for initial pre-test performance, the stories written by SRSD-instructed students were evaluated and found to be longer and schematically stronger than those that were written by children in the control group. They also maintained, over a short period of time, the gains that they made from pre-test to post-test (Tracy, Reid & Graham, 2009). This suggests that SRSD may be more effective than traditional-skills writing instruction.

Most of the first studies of SRSD were done with children in upper elementary and middle school as subjects. However, a study by Graham, Harris, and Mason (2005) examined the effectiveness of SRSD on younger students. The study also examined if social support through

peer assistance would enhance SRSD students performance at a young age (Graham, Harris, & Mason, 2005).

In this study, 73 third-grade struggling writers were taught two genre-specific strategies that were embedded in a more general strategy for writing a paper. The genre-specific strategies related to generating ideas for a story and a persuasive essay. The comprehensive strategy reminded students to carry out three basic processes: to pick a topic to write about, to organize possible ideas into a writing plan, and to use and upgrade this plan while writing (Graham, Harris, & Mason, 2005).

Graham, Harris, and Mason(2005) concluded that the writing performance and knowledge of struggling young writers can be improved substantially by teaching them strategies for planning and writing in conjunction with the knowledge and self-regulatory procedures needed to use the strategies effectively. After instruction, children were able to write stories that were longer, more complete, and qualitatively better than the ones produced by their peers in the comparison condition. Similar effects were obtained when the students in the SRSD-only condition were taught to apply these strategies and knowledge to persuasive essays. The effect sizes ranged from 1.79 to 3.23 for length, elements, and quality measures across both stories and persuasive essays (Mason, Harris, & Graham, 2002). This study provides evidence that SRSD can be effective with young students.

Children with learning disabilities often have an especially difficult time learning to write. Lienemann, Grahm, Leader-Janssen & Reid (2006) conducted a study using the SRSD model that included children with disabilities. This study examined whether or not explicitly teaching six at-risk second-grade writers, including children with disabilities, how to plan and

draft stories would improve their story writing, as well as their recall of narrative reading material. Six children were involved in the study.

The SRSD model was used to teach the strategies and the impact of the instruction was evaluated via a multiple-baseline design. The study showed that instruction had a positive impact on the students' writing, as their stories were longer, more complete, and qualitatively better. All of the children wrote more complete stories following the instruction, and with the exception of one child, produced stories that were much longer. For five out of the six students, quality scores for story writing increased by 137% to 277%. The smallest average change in quality scores was 113% and this occurred for the student who evidenced no increase in story length as a result of instruction. An important extension in this study was that SRSD instruction in writing resulted in an improvement on a reading task for four of the six students (Lienemann, Graham, Leader-Jansen, & Reid, 2006). Evidence from this study supports the idea that SRSD is useful for children with and without learning disabilities.

The SRSD model and strategies have been shown to consistently and significantly improve students' writing performance, knowledge, strategic behavior, motivation, and perceptions (Santangelo, Harris, & Graham, 2008). More than 80 studies have been conducted across grades 1-12. These studies provide convincing evidence that SRSD is an effective method for teaching writing strategies to students who represent the full range of writing ability in a typical class and students with writing disabilities (Harris, Graham, Friedlander, & Land, 2013)

Conclusion

Writing skills are important to our students now and in their future. There is evidence that students need writing for school success and that writing helps students in their learning.

The writing skills of students are declining. Many of our students are not writing well enough to be considered proficient in their skills.

Research shows us that students who are successful writers are successful because they have knowledge of what good writing is, they use effective strategies, and demonstrate persistence and self-efficacy as they write. Scientifically validated strategies have been developed and can be taught to primary age children. Therefore, teaching these strategies to students in third grade should result in improvements in their writing.

Methodology

Participants

The participants in this study were third-grade students in a small private school in the Midwest. The participants were from a largely homogenous population in terms of age, ethnicity, and background. The students were generally middle-class and lived in a rural setting. This study was conducted in the 2013-2014 school year. Seventeen students participated in the study.

Research Design

The research design was a pre- and post-test writing sample. The writing samples from both the pre- and post-test were evaluated by two readers for reliability. The scores given by the readers were averaged and that score was used to determine progress or lack of progress.

The independent variable was the teaching of the SRSD strategy. The dependent variable was the achievement level in writing based on the scores of the post-test.

Materials

The materials used for this study consisted of copies of Macmillan/McGraw-Hill writing assessments rubrics. The researcher used sample stories that contained the seven story parts and powerful language. Posters illustrating the strategies that were taught, picture prompts to help

students select ideas to develop, graphic organizers for planning, and graphs for graphing story parts were used.

Procedure

In order to identify the writing level of each of the participants, the researcher gave them a story prompt. The researcher followed the procedure given in the Stanford Writing Assessment Program (Third Edition, 1995), which included the following: a narrative prompt, 5 minutes of planning time, 20 minutes of writing time, and a 5-minute warning before the close of the testing session. The researcher then collected the students' writing. Two readers scored the test using the rubric provided by Macmillan/McGraw-Hill in their assessment materials. The researcher used the scores to rank participants.

Next the researcher taught lessons to the selected third-grade participants, using the six stages of the SRSD in the following manner:

The first stage of SRSD consists of developing and activating knowledge needed for writing and self-regulation. During this stage the researcher introduced, described, and discussed the two strategies she was studying using the acronyms of POW and W-W-W, What=2, How=2. Participants engaged in a practice session in which they were asked to identify powerful word choices and the seven story parts. Students orally reviewed the acronyms for the two strategies.

The second stage of SRSD is discussing purpose and benefits. During this stage the researcher discussed the purpose and benefits of each part of the POW and W-W-W, What=2, How=2 strategies with the participants. Participants memorized the acronyms for the two strategies with the support of posters illustrating the strategy. Participants demonstrated knowledge of the parts of the strategy in oral discussion. Participants who struggled were given time for additional practice as they worked with peers. The researcher then gave the students

stories that they had written previously. The participants used these stories to identify the story parts and graphed the number of story parts. The participants were asked to commit to writing stories in which all seven parts were included.

The researcher began the modeling stage by testing the students' memory of the strategies acronyms and the strategy parts. Next, she modeled the complete planning and writing process with participant assistance. Modeling began with the "P"—Pick an Idea—in POW. The researcher used a selected picture prompt to show participants how to pick an idea. Self-instructions were modeled out loud by the researcher as she went through the process of picking an idea. The researcher then continued the process by modeling the "O"—Organize my Notes—in the POW by using the W-W-W, What=2, How=2 strategy. The researcher continued talking aloud through this part, making sure that she was modeling self-instructions as she wrote. When the story was complete, the researcher modeled graphing the story parts and applying self-reinforcement through positive self-instructions. After this modeling, the researcher helped the participants to develop appropriate personal self-instructions. The researcher wrote one story with the participants during this stage.

While working with "memorize it" stage of SRSD the researcher required the participants to quickly write out the two strategy acronyms. Then she collaboratively planned and wrote a story with the participants to encourage them to memorize the way that the strategy was applied. The participants wrote two stories collaboratively with the researcher during this stage.

The fifth stage of SRSD is "support it." As participants moved into this stage the researcher worked with them as they made notes of their ideas on a graphic organizer and wrote a story. Participants were encouraged to use their self-instructions as they worked. Progress in

including the seven story parts was monitored by both the participants and the researcher. The students planned and wrote two stories during this stage.

The final stage of SRSD is independent performance. During the final stage, students were encouraged to write the notes for their stories without the use of the graphic organizer since they had memorized the acronyms. The students planned and wrote their stories independently. Progress in writing the seven story parts was monitored by the participants by graphing of the story parts. The researcher assessed participants' stories and shared feedback when the participants said their story was complete. Students wrote one story during this stage.

The researcher taught eight lessons using between 30-60 minutes for each lesson. After the children had written six stories, (three collaboratively, two with support, and one independently), they were retested using a different story prompt than that used in the pre-test. The same procedure that was used in the pre-test was followed in the post-test. The post-test was evaluated by two readers using the Macmillan/McGraw-Hill rubric.

The design of the research is a pre- and post-test design. The independent variable was the teaching of the SRSD strategy. The dependent variable was the achievement level in writing based on the scores of the post-test.

Results

Difference scores were used to analyze the results of the two writing assessments. The pre-test score was subtracted from the post-test score for each unit to reveal a difference score.

Table 3

Differences in Pre-Test and Post-Test Scores on Writing Assessment

Student #	Assessment 1	Assessment 2	Diff (T2-T1)
1	13.5	15	1.5
2	14.5	16.5	2.0
3	13.5	14.5	1.0
4	17	14.5	-2.5
5	13.5	18.5	5.0
6	17.5	19	1.5
7	16	13.5	-2.5
8	14.5	16.5	2.0
9	13	14	1
10	12	12.5	0.5
11	19.5	22.5	3.0
12	13.5	17	3.5
13	13.5	20.5	7.0
14	18	21	2.0
15	16.5	18.5	2.0
16	16	23	7
17	18	20.5	2.5

An independent, one-tailed t-test was then conducted using the mean of average gain scores between the two groups and the test for significance was run. An alpha level of $p < .05$ was used to show significance. Any probability less than .05 suggests that the likelihood of that outcome randomly happening would occur less than 5% of the time. Thus, for results less than .05 the null is rejected. For this study, the null hypothesis was that there would be no difference between the treatment group and the control group.

A significant difference was found between writing scores in the pre-test and post-test, ($t=3.500224$, $p=.001481$). The result is significant at $p \leq .05$. The results of this analysis are displayed in Table 4.

Table 4

Differences in Writing Assessment Scores

	n	m	t	p
Pre-Test	22	46		
Post-Test	25	39	3.50	.001

Discussion

Summary

To summarize this research, there was statistically significant evidence that showed greater achievement for students after they had been taught using the SRSD method for teaching writing strategies. Fifteen of the seventeen participants had improved scores on the post-treatment assessment. Therefore, using the Self-Regulated Strategy Development Model did result in an increase in the writing skills of the third grade participants.

Many of the participants expressed their enjoyment of writing when they felt confident of what was needed to include in their writing to make their stories high quality. The strategies also seemed useful in helping the participants focus on the task of writing for quite long periods of time. During the pre-test, the researcher observed that several children finished their stories in less than the 30 minutes that was allowed in the pre-test, but all of them wrote for the entire time during the post-test. The researcher also observed that, during the lessons she taught, students were more focused and wrote for a longer time as SRSD instruction progressed.

Implications

This researcher sees the value and worth of teaching third graders writing strategies using the SRSD writing method. The SRSD instruction boosted the participants' knowledge about writing as instruction began by looking at examples of good writing. Once students understood

that it was important to include all seven parts of a good story in their writing they began to do so.

There were additional benefits to this research project that were realized by the researcher during the study. For example, the lessons provided time for children to share their work with their classmates. The students received feedback from classmates as well as their teachers. The researcher modeled writing for the participants and reminded them that good stories are fun to write and fun to read. The classroom was often filled with laughter as children worked on writing together.

The current research focused on teaching students writing strategies that could be used in writing narratives. In the future, this researcher would like to implement the SRSD methods for other genres as well. Persuasive essays and information writing are areas of difficulty for many third graders, and the SRSD method would be helpful for teaching students writing strategies.

This research adds to a body of knowledge supporting the teaching of writing strategies, knowledge of writing, and self-regulatory procedures for carrying out writing tasks. It took a good deal of class time to teach writing this way, but the procedure resulted in improvement in most of the participants' writing. Therefore, since writing skills are so important in educational, vocational, and social settings today, using the Self-Regulated Strategy Development Model may be a useful educational tool.

Limitations

Some of the confounding variables in this study were the researcher, the homogenous group, and the relatively small sample size. The researcher was the teacher in this study and it was the first time that she used the SRSD method. This lack of experience made selecting material more difficult since she was uncertain of what would work best. Some prompts seemed

more effective than others. Lack of experience also affected the pace of the lessons. More experience for the teacher would likely result in her being able to teach the material more effectively and in less time.

The participants in the subject were from a largely homogenous population in terms of age, ethnicity, and background. The participants were generally middle-class and lived in a rural setting. The SRSD method worked well for them, but the positive effect may not transfer to students in a broader sample population. There were only seventeen participants in the study and that number is too small a sample size to generalize the results.

Another limitation is that the positive gains might have come from the extra practice that participants received during the study rather than the SRSD method being used. It would be difficult to conclude that the SRSD was causal in the mean score difference.

Further Study

The researcher taught eight lessons over the period of about a month. The post-test was given immediately after the lessons were complete. The researcher did not do a recheck to see if gains were maintained. It would be interesting to see if these gains were maintained. The researcher found that students were able to write more independently than they had in previous years, but it would be beneficial to see long-term effects on the students' writing skills.

The researcher observed that most students did very little planning when the pre-test was given. During the treatment, participants observed the researcher modeling planning, had opportunities to plan collaboratively and were instructed to use their strategy to plan before beginning to write. It would be interesting to study how many students would continue to use the strategies they were taught to plan their writing if they were no longer instructed to do so.

Another area of further study would be to see if the positive effect that was observed in story writing would also happen if SRSD were applied to other writing genres. The participants were involved in report writing as part of a Bible unit during the time that the study was being conducted and the researcher found herself reminding them of the POW strategy as they worked through the process of report writing. She observed that the students reacted to this reminder by writing confidently. They seemed able to complete the process more independently than her students had in previous years.

References

- Astro, K. & Saddler, B. (2009). Effects of planning instruction on a young writer with Asperger syndrome. *Intervention in School and Clinic*, 44 (5), 268-275.
doi:10.1177/1053451208330895
- Berninger, V. W., Abbott, R. D., Garcia, N., Anderson-Youngstrom, M., Brooks, A., & Fulton, C., (2006). Tier 1 and tier 2 early intervention for handwriting and composing. *Journal of School of Psychology*. doi 0.1016/j.jsp.2005.12.003
- Bruinsma, R. (2003). *The joy of language*. Colorado Springs, CO: Purposeful Design Publications
- Buffum, A. M. (2010). The why behind RTI. *Educational Leadership*, 68 (2), 10-16.
<http://www.ascd.org/publications/educational-leadership/oct10/vol68/num02/The-Why-Behind-RTI.aspx>
- Bui, Y. N. (2006). The effects of a strategic writing program for students with and without learning disabilities in inclusive fifth-grade classes. *Learning Disabilities Research and Practice*, 21 (4). 244-251. doi:10.1111/j.1540-5,826.2006.00221.x
- College Entrance Examination Board, N. Y. (2003). The neglected "R": The need for a writing revolution. *Report of the National Commission on Writing in America's Schools and Colleges*.
<http://www.californiawritingproject.org/uploads/1/3/6/0/13607033/neglectedr.pdf>
- Cutler, L., & Graham, S. (2008). Primary grade writing instruction: A national survey. *Journal of Educational Psychology*, 100 (4), 907-919. doi:10.1037/a0012656

Graham, D. L. (2009). *Teaching redemptively: Bringing grace and truth into your classroom*.

Colorado Springs, CO: Purposeful Design Publications.

<http://www.californiawritingproject.org/uploads/1/3/6/0/13607033/neglectedr.pdf>

Graham, S., & Harris, K. R., Mason, L. L. (April, 2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: The effects of self-regulated strategy development. *Contemporary Educational Psychology* [serial online]. *30*(2) 207-241. Available from: ERIC, Ipswich, MA>

Graham, S., Bollinger, A., Booth Olson, C., D'Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide* (NCEE 2012- 4058). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. http://ies.ed.gov/ncee/wwc/publications_reviews.aspx#pubsearch.

Harris, K. R., Graham, S., Friedlander, B., & Land, L. (2013). Bring powerful writing strategies into your classroom! Why and how. *The Reading Teacher*, *66* (7), 538-542.

Lane, K. L., Graham, S. H., & Weisenbach, J. L. (2006). Teaching writing strategies to young students struggling with writing self-regulated strategy development. *TEACHING Exceptional Children*, 60-64.

<http://www.californiawritingproject.org/uploads/1/3/6/0/13607033/neglectedr.pdf>

Lienemann, T. O., Graham, S., Leader-Janssen, B., & Reid, R. (2006). Improving the writing performance of struggling writers in second grade. *The Journal of Special Education*, *40* (2). 66-78. <http://files.eric.ed.gov/fulltext/EJ758169.pdf>

- Mason, L. H., & Shiner, J. G. (2008). Self-regulated strategy development instruction for writing an opinion essay: Effects for six students with emotional/behavior disorders. *Reading and Writing*, 21(1-2), 71-93. doi 10.1007/s11145-007-9065-y
- Saddler, B., & Graham, S. (2007). The relationship between writing knowledge and writing performance among more and less skilled writers. *Reading & Writing Quarterly*, 23(3), 231-247. doi 10.1080/10573560701277575
- Saddler, B., Moran, S., Graham, S., & Harris, K. R. (2004). Preventing writing difficulties: The effects of planning strategy instruction on the writing performance of struggling writers. *Exceptionality*, 12(1), 3-17. doi10.1207/s15327035ex1201_2
- Santangelo, T., Harris, K. R., & Graham, S. (2007). Self-regulated strategy development: A validated model to support students who struggle with writing. *Learning Disabilities: A Contemporary Journal*, 5 (1), 1-20.
- Santangelo, T., Harris, K. R., & Graham, S. (2008). Using self-regulated strategy development to support students who have "Trouble giting thangs into werds". *Remedial and Special Education*, 29 (2), 78-89. doi:10.1177/0741932507311636
- Tracy, B., Reid, R., & Graham, S. (2009). Teaching young students strategies for planning and drafting stories: The impact of self-regulated development. *Journal of Educational Research*, 102 (5), 323-331. doi: 10.3200/JOER.102.5.323-332
- VanDeWeghe, R. (2007). Research matters: Writing policy and school reform. *The English Journal*, 96(4), 94-98. <http://www.jstor.org/stable/30047172>

Appendix A

Parental Consent Form for Writing Strategies Research

January 5, 2014

Dear Parents,

I am currently working on a master's degree at Dordt College and will be conducting research on writing strategies during January, February, and March of 2014. I would appreciate your help by allowing your child to participate in my study.

The purpose of this study is to evaluate whether teaching third graders strategies for story writing will have a positive effect on the story writing of third graders. During this study, your child will work with me and his or her classmates and learn to identify the parts that good stories have. Next we will learn some strategies that will help the third graders to include the important story parts in their stories. Then they will practice writing some stories. The lessons I am using for my research will be taught during our regular writing time. Mr. De Vries has approved this study.

It is completely up to you and your child whether or not he or she can participate in this study. There will be no harm or risks for your child. I am hopeful that the strategies will be useful for your child. I am asking permission to publish data taken from your child's work in my master's thesis. Your child's name will not be used.

If you have any questions about my study, please contact me at 712-541-7606. I will be happy to share the results of my study with you when it is completed. If you and your child have decided to let him or her participate in this study, please read the statement below with your child and both sign your names.

Thank you very much for your help!

Ellen Korver

I understand the information on this page and am willing to allow my child to participate in this study.

Please have your child return this form to me by January 10.

Signature of child

Printed name of parent/guardian

Date

Appendix B

Writing Prompt Used for Pre-Test and Post-Test

Pre-test

Imagine that one day your favorite stuffed animal started to talk to you. Write a story about what happened next.

Post-test

Think of a time you really enjoyed spending with a good friend. What was it about the time that has created a good memory for you? Start at the beginning of the special time you spent with your friend and write a story about what happened.

Appendix C

Scoring Rubric for Fictional Narrative

4 Excellent	3 Good	2 Fair	1 Unsatisfactory
<p>Ideas and Content</p> <p>Presents an entertaining story with well-developed characters, clearly described setting, and an intriguing problem and solution</p>	<p>Ideas and Content</p> <p>Presents an interesting story with engaging characters, setting, and plot</p>	<p>Ideas and Content</p> <p>Writes a story that includes characters, a setting, and a basic plot line</p>	<p>Ideas and Content</p> <p>Shows little or no understanding of story elements</p>
<p>Organization</p> <p>Maintains a tightly focused progression of story events with an engaging beginning, middle, and ending</p>	<p>Organization</p> <p>Maintains a clear progression of story events with a strong beginning, middle, and happy ending</p>	<p>Organization</p> <p>Does not consistently display a logical progression of events; digressions and lack of focus may be distracting</p>	<p>Organization</p> <p>Illogical sequence of events makes the story hard to follow.</p>
<p>Voice</p> <p>Demonstrates an exceptionally strong narrative voice and sense of audience; uses dialogue effectively</p>	<p>Voice</p> <p>Demonstrates a solid awareness of audience and purpose; dialogue is appropriate for characters</p>	<p>Voice</p> <p>Shows occasional awareness of audience but weak narrative voice and dialogue</p>	<p>Voice</p> <p>Does not achieve a consistent narrative voice; shows little sense of audience</p>
<p>Word Choice</p> <p>Creates vivid, detailed descriptions that add clarity and authenticity to the story</p>	<p>Word Choice</p> <p>Uses precise words to craft interesting details throughout the story</p>	<p>Word Choice</p> <p>Does not consistently use words to develop well-detailed descriptions</p>	<p>Word Choice</p> <p>Uses little or no descriptive language</p>
<p>Sentence Fluency</p> <p>Skillfully constructs complete, fluid, and easy-to-follow sentences that vary in structure</p>	<p>Sentence Fluency</p> <p>Writes complete sentences that have a variety of structures</p>	<p>Sentence Fluency</p> <p>Can write simple sentences but attempts at complex sentences are less successful</p>	<p>Sentence Fluency</p> <p>Fragmented or run-on sentences make reading difficult</p>
<p>Conventions</p> <p>Writing has few or no mechanical, grammatical, or spelling errors</p>	<p>Conventions</p> <p>Spelling, capitalization, punctuation, and usage are mostly correct</p>	<p>Conventions</p> <p>Makes frequent errors that interfere with meaning</p>	<p>Conventions</p> <p>Repeats significant errors in spelling, punctuation, and usage</p>
<p>Presentation</p> <p>Handwriting, font, spacing, and margins make work ready for public viewing</p>	<p>Presentation</p> <p>Handwriting is readable; font, size, and styling are mostly appropriate and consistent</p>	<p>Presentation</p> <p>Story looks like a draft copy; inappropriate use of fonts or type sizes; variations in handwriting</p>	<p>Presentation</p> <p>Does not resemble a finished piece; includes uneven margins, and hard to read text</p>

ELLEN R. KORVER
23 8th St. SW
Sioux Center, IA 51250
(712) 541-7606

Education

M.A. Curriculum and Instruction, Dordt College (2014)

B.A. Elementary Education, Dordt College (1980)

Academic Employment

Teacher (3), Sioux Center Christian School, Sioux Center, IA (1984-present)

Teacher (4-5), Ireton Christian School, Ireton, IA (1980-1984)

Academic Awards

Academic Scholarship, Dordt College (1977-1980)