A practicum was designed to motivate primary students to increase the quantity and improve the quality of their writing. Publication of student works was the prime motivating factor. Other objectives were to develop in students a more positive attitude toward writing and gain the agreement of teachers that the publishing of their students' written work would enhance their classroom writing programs. After 12 weeks of the implementation of the publishing center, the quantity and quality of writing increased. Also, student surveys indicated a more positive attitude toward writing, and teachers agreed that the publication of students' works enhanced their writing programs. The publishing center will continue to operate in future years and will be expanded to include kindergarten and grades four and five. (One table of data is included; 28 references, an attitude survey for teachers, a writing attitude scale for students, a sign-up sheet for the publishing center, and a writing process handbook for teachers are attached.) (Author/RS)
IMPLEMENTATION OF A PUBLISHING CENTER TO ENHANCE THE WRITING PROCESS FOR PRIMARY STUDENTS

by

Karen L. Wasson

A Practicum Report

Submitted to the Faculty of the Center for Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science.

The abstract of this report may be placed in a National Database System for reference.

May/1993

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ABSTRACT

Implementation of a Publishing Center to Enhance the Writing Process for Primary Students.
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Descriptors: Computer-Assisted Instruction; Elementary Education; Language Arts; Process Approach (Writing); Revision (Written Composition); Student Motivation; Thinking Skills; Writing (Composition); Writing Instruction; Writing Processes; Writing Research; Writing Skills

This report describes the writing process and how it relates to creative and critical thinking. It focuses on current research of how the writing process is best taught to primary students. The primary goal of the project was to motivate primary students to increase the quantity and improve the quality of their writing. Publication of student works was the prime motivating factor. Other objectives were to develop in students a more positive attitude toward writing and to gain the agreement of teachers that the publishing of their students' written works enhances their classroom writing programs. The pros and cons of using technology to teach the writing process to young children are presented. Publication, an often forgotten stage of the writing process, is considered by researchers to be crucial to the development of writing in young children. The implementation of a publishing center in an elementary school is described.

After 12 weeks of the implementation of the publishing center, the quantity and quality of writing increased. Also, student surveys indicated a more positive attitude toward writing, and teachers agreed that the publication of students' works enhanced their writing programs.

A writing process handbook for teachers was developed and shared with other educators. The publishing center will continue to operate in future years and will be expanded to include Kindergarten and
grades four and five. Appendices include teacher and student attitude scales and a student and editor sign-up schedule. Attachments include a writing process handbook for teachers.
Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in the hope that my work, presented here, will earn similar respect.

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CHAPTER I

Purpose

School and Community Setting

The setting for this practicum was an elementary school centrally located in a large, fast growing metropolitan city. In the past decade this city increased its population by over 300,000 people. There is an average of 5,000 people moving here each month.

Although gaming is the city's major industry, its lifestyle and demographic profile is similar to that of the rest of the nation. Seniors over 65 are the fastest growing age group. This age group is, however, proportional to the national average of 12.4 percent.

The city's "baby boom" population is larger than the national average due to the economic growth of the area, 45 percent compared to an average 32 percent nationally. This age group has increased 56.4 percent over the last decade. This gain has led to another population increase in the under five age group which has increased by 53.6 percent in the last decade.
The median age of this city's residents is 34.5. The median household income is $32,499 which is higher than the national average.

Although it is conceived to be a transient city, it should be noted that over 50 percent of the population has resided here for more than ten years and 61 percent are homeowners.

According to a 1990 census, 75 percent of the population is White, nine percent Black, 11 percent Mexican American and five percent were listed as "other".

Fifty-five percent of the residents are married. Thirteen percent have never been married. Nineteen percent are divorced, and 11 percent are separated or widowed.

There are no children in 67 percent of the households. Fifteen percent have one child in the household. Twelve percent have two, and six percent of households have three or more children.

The county based school district draws from a population of over 800,000 and an area of 7,910 square miles. It is the largest school district in the state educating approximately 60 percent of all students in
the state. According to 1991 statistics, this district ranks fourteenth in size by pupil enrollment in the United States. It serves over 129,000 students and employs over 14,000 people. Its minimum general operating budget for the 1991-92 school year was $497,965,281.

Since both the general population and the student population have increased at a much higher rate than projected by any of the County's major public entities, an expansive building program has been incorporated supported by local bonds. The construction of 77 new schools was scheduled beginning in 1988 continuing through to 1998.

Currently, of the district's 164 schools, 116 are elementary schools.

The particular site for this practicum was a 30-year-old centrally located elementary school which operates on a nine-month schedule. It serves 769 students, Kindergarten through grade five. There are four Kindergarten classes with a student teacher ratio of 27:1, seven first grade classes with a ratio of 15:1, six second grade classes with a ratio of 18:1, four third grade classes with a 27:1 ratio, three
fourth grade classes with a ratio of 23:1, and five fifth grade classes with a 25:1 ratio. In addition to these regular classes, there are five self-contained special education classes, two preschool development classes, and three ESL classes. Of the school's enrollment, 54.8 percent are White, 12 percent are Black, 24.8 percent are Mexican American and 8.6 are listed as "other".

The faculty and staff of the school include a principal, a part-time assistant principal, a special education facilitator, a part-time counselor, an office manager, a clerk, 17 classified employees, 33 regular classroom teachers, one reading specialist, and five specialists teaching art, library, music, and physical education.

The physical facility of the school consists of eight permanent buildings which house the majority of the Kindergarten through fifth grade classes, as well as the special education classes, library, art and music rooms, a computer lab containing 15 computers and three printers, a physical education room and a multi-purpose room which includes a stage. In addition
there are three portables which house a special education class and an ESL class.

The total enrollment of the school is 769 students. The majority of the students live in the community proximate to the school which consists of older single-family homes, large single-family dwellings, and middle income apartment complexes. Eighty students are bussed from a similar area.

Approximately 50 percent of the parents are enrolled in the PTA. Thirty are active members that participate regularly in school events.

The author received a bachelors degree from a large university in the southwest. The author has had additional training in computer applications as well as professional development courses in bookbinding and reading.

Problem Statement

For years teachers have struggled with the problem of what steps to take in order to encourage their students to produce more and higher quality writing.
In a pamphlet "Help Your Child Learn to Write Well", published by the Office of Educational Research in Washington D.C. it is noted that:

Study after study shows that students' writing lacks clarity, coherence, and organization. As many as one out of four have serious writing difficulties. And students say they like writing less and less as they go through school.

Traditionally, teachers have taught writing by assigning a particular topic and required length: "Write two to three pages about what you did on summer vacation." When the final paper was submitted the teacher would use a red pen to mark errors and make corrections. It is not surprising that this method did not motivate students to write, nor did it add to their confidence in their ability to write.

Another area that has posed a challenge for teachers is how to best teach students problem-solving skills and the skills of creative and critical thinking.

In the resource book, Developing Minds, published by the Association for Supervision and Curriculum Development, Carol Booth Olson stated that "... depth and clarity of thinking enhance the quality of writing, while at the same time, writing is a learning tool for
heightening and refining thinking." (Olson, 1985:102)

Olson goes on to say:

This renewed emphasis on writing as a reflection of thinking comes at a time when the reasoning skills of American school children appear to be on the decline. For example, Reading, Thinking and Writing, (Applebee, Brown, Cooper and others) a recent report of a national reading and literature assessment of over 100,000 nine-, thirteen-, and seventeen-year-olds cites as its "major and overriding" finding that although students at each age level had little difficulty making judgements about what they read, most lacked the problem solving and critical thinking skills to explain and defend their judgments in writing. (Olson, 1985:102)

An Attitude Survey for Teachers (Appendix A:56) responded to by approximately two-thirds of the primary teachers at the target school indicated that 70 percent of the teachers believe that children are not adequately motivated to write. This author has spoken with the primary teachers at the target school and they clearly supported the idea that creative writing needed to be developed. One teacher commented: "Students who have a goal work harder than if they are writing for a grade." Another teacher said it would be beneficial to have students work towards a finished product such as a published book, but with the number of students in the classroom and only one adult it is difficult to invest
Another teacher stated that students' motivation to write would increase if they could use their finished writing projects in meaningful ways. This could include publishing their books, reading their works to another person, and placing their published books in the school library for other students to read.

Many teachers agreed that making books for individual students is too time consuming but most indicated that they do create class big books. Many also indicated a lack of familiarity with the techniques of layout and bookbinding.

A few teachers indicated that they tried to set aside time daily for students to write. This writing usually took the form of a daily journal. Many teachers agreed that it was difficult for them to come up with interesting and varied creative writing topics.

All teachers, as well as the principal, agreed that there was a need to motivate students to do more and better writing. Seventy percent of the teachers indicated in the survey that they believed that children were not adequately motivated to write. Ninety percent of the teachers indicated they believed
the establishment of a publishing center would motivate students to write more and would improve the quality of the students' writing. One hundred percent believed that students would enjoy writing and publishing their own books. One hundred percent believed that a publishing center would enhance their writing program.

Objective Outcomes

The following objectives were identified to measure the outcomes of the implementation of a publishing center at an elementary school.

By the end of 12 weeks, 75 percent of the students in the primary grades utilizing the publishing center at the target school will demonstrate an increased quantity of writing as a result of using publishing center activities as measured by a numerical count of the number of thought-units in written products. A thought-unit is defined as a segment of meaningful expression which contains an identifiable verb and subject (Amodeo, 1987).

By the end of 12 weeks, 75 percent of the students utilizing the publishing center will demonstrate an improvement in the quality of their writing as a result
of using publishing center activities as measured by a numerical count of the number of correct sentences divided by the total number of thought-units. A correct sentence is a thought-unit with initial capital and end punctuation.

By the end of 12 weeks, 75 percent of the students will demonstrate a more positive attitude toward writing as a result of using the publishing center as evidenced by a writing attitude survey.

By the end of 12 weeks, 90 percent of the primary teachers will agree that the publishing center does enhance their writing program as measured by a survey of teachers.
CHAPTER II
Research and Solution Strategy

Writing and Thinking

A primary goal of education is to help students learn to think (Hughes, 1985). Effective thinking will be imperative for success in the technological society of the next century (McTighe and Schollenberger, 1985).

The University of California Thinking/Writing Project directed by Carol Booth Olson (1985) is based on the premise that writing is a form of problem solving and can be used to develop critical thinking. In each step of the writing process writers use creative and critical thinking (French and Rhoder, 1992).

In order to produce a composition, writers must tap their memory to establish what they know, review the information they have generated and translate it into inner speech or print, organize main ideas, re-see the whole to find a focus, construct a structural framework for communicating an intended message, transform this network of thought into a written paper, and evaluate the project. (Olson, 1985:102)
Development of Writing in Children

When is a child ready to write? Graves and Stuart (1985) contend that all children in our schools are ready to write. This does not mean that they have perfected their writing. However, they arrive on that first day of school with a knowledge of the basics of writing. Many have experienced with writing themselves and most have had some sort of indirect experience with writing. They are, however, still beginners and they need opportunities to practice their developing skills (Gundlach, 1982).

Most all physiologically normal children learn to talk without much effort on the part of their parents. Babies practice sounds by babbling and later practice words by imitating adults and older siblings. Parents usually view these attempts as a normal progression of sequences in learning to speak. Mistakes or approximations are usually considered humorous and cute. Indeed, parents seem to have an innate understanding that children will progress naturally through the stages of speech, and most do not make active or conscious efforts to teach their children to talk.
According to writing researchers, children's development of writing and reading language would, if allowed and encouraged by parents and teachers, virtually mirror the sequence of stages of speech.

They begin by pretending, imitating adults. If encouraged, children continue to imitate adults in a series of efforts that soon approximate actual reading and writing. Many adults who know they learned to read before ever going to school, but can't remember how, followed this natural process. (Graves and Stuart, 1985:9)

Children's first attempts at writing usually take the form of what adults would refer to as scribbling. Children will also view drawing as story writing and most, if not invalidated, will attempt to write words.

Adults tend to believe that children must learn to read before they can learn to write. But by observing and mimicking adults and older siblings children can progress through a series of approximations and through the beginning stages of composition. As an added benefit, reading will come more easily to children who write first (Graves and Stuart, 1985).

The Process Approach to Writing

In studying how writing is taught in American schools, researchers discovered that most teachers
focus on the final product of writing - the essay, the report, the story. They do not have experience in and do not understand the specific process of how successful writers attain their final product. Teachers have expected their students to produce quality products on demand without having learned the steps that such writing requires (Schaeffer, 1987).

Many teachers avoid having their students do actual reading and writing and instead focus their programs around isolated components of reading and writing. This usually takes the form of fill in the blank or circle the answer worksheets. This method denies children valuable experience in reading and writing and in effect teaches them to dislike these activities. It "... prevents children from using important thinking skills, such as organizing, analyzing, interpreting, and evaluating information." (Graves and Stuart, 1985:14)

Donald Graves directed a research project on children's writing at a public elementary school in Atkinson, New Jersey from 1978 to 1980. Graves and fellow researchers Susan Sowers and Lucy Calkins with the help of the teachers at Atkinson developed an
unconventional method of teaching writing. Instead of following a traditional curriculum wherein skills are taught in isolation and in a prescribed sequence, Graves' project encouraged natural interaction between students and between students and teachers (Graves and Stuart, 1985).

Children were encouraged to choose their own topics and to use invented spellings, the sounding out of words. Following certain guidelines, each child was free to consult with other children or the teacher. Students would read their works in progress to other students and obtain feedback about the clarity and interest of their stories. The decision to revise or not was left to the author.

After a child had written several stories the teacher would discuss the works with the child and select the best one for publication. Publication consisted of typing the book using standard spelling and punctuation and then binding it in cardboard sewn with dental floss and covered with wallpaper.
A biographical note, "About the Author", was added, and the finished book might be read aloud to the whole class before it was placed in the class library. Then other children could take it home to read and share with their families. A library card inside the cover provided a record of the names of children who had borrowed the book throughout the year. (Graves and Stuart, 1985:46)

From this and other studies researchers have been able to analyze how children and adults compose. This has led to the development of an effective method of teaching writing (Collins and Sommers, 1985). This method consists of prewriting, writing, revising, editing, and publication. "Proponents of this method regard writing as an ongoing, multi-stage process, with equal emphasis given to each of the stages." (Schaeffer, 1987:7) The U.S. Department of Education has endorsed this method as the most effective way to teach writing skills (Amodeo, 1987).

Prewriting and Motivation

Writing begins with motivation. It is very difficult to produce under pressures of time, conventions and grades. It is even more difficult to be creative under such duress. Yet many teachers expect students to write under these conditions.
Even before the prewriting stage parents and teachers need to expose children to various forms of literature and language by reading to them, talking with them, listening to them. They need role models to show them what successful readers and writers do. Children want to be successful in these areas too. They need to see parents and teachers reading and writing (Robinson and Hulett, 1984).

Researchers Graves (1985) and Calkins (1986) stress that a sense of authorship and pride is essential to the development of young writers. Children lose their sense of ownership and authorship when they write on assigned topics. They write best about subjects they care about. "An excited writer is not only motivated, but also receptive to new ideas and techniques." (Graves and Stuart, 1985:90) Having children write about what is meaningful to them "...serves a larger purpose than just tricking children into writing without complaining." (Gundlach, 1982:80)

Prewriting includes activities such as brainstorming, class discussion, free writing, drawing or doodling, visualizing, or just plain thinking. Its purpose is to stimulate the flow of ideas. Some
children, like adults, may find pacing back and forth, moving around, creating outlines, story webs or diagrams helpful. Amodeo (1987) suggests encouraging children to create a model using Legos, clay, paper-mache, popsicle sticks, toothpicks, marshmallows or other manipulatives to stimulate children's creativity and to give them something concrete to draw from.

Teachers must recognize that such prewriting activities are a valid and necessary stage in the process of composing and, hence, we must allow children this time before writing begins to experience their ideas. Teachers must learn to fight their impulse to tell children to stop daydreaming, stay on task, or to get busy.

Our students can also be motivated by each other. This not only means permitting them to interact. It also means that teachers should focus on the very best writers in the class. Teachers tend to spend more time with the children at the lower levels, the ones who say they cannot, or will not, or do not know what to say. Teachers should focus their efforts on the ones who can, and want to write. Their success will motivate
others and raise the ability level of the entire class (Calkins, 1986).

Writing

The second stage of the writing process is the writing or composing stage. This is the stage in which the ideas generated in the prewriting stage are transferred to words on paper. In this stage the children should be encouraged to write without regard to spelling or punctuation. "When students worry about spelling and neatness while composing a draft, their writing becomes so slow it is hard of them to maintain logic and coherence." (Calkins, 1986:199)

The major role of the teacher during this stage is to provide plenty of opportunities to write. To get the practice required to become successful writers children would benefit most from writing on a daily basis. As with talking and walking children need to internalize the processes involved.

The single most important thing we can do for students' syntax, spelling, penmanship, and use of mechanics is to have them write often and with confidence. Furthermore, students must be encouraged to write without worrying whether they are making errors. (Calkins, 1986:198)
"The goal of the first draft should be fluency rather than refinement of ideas or expression." (Olson, 1985:106) At this stage it is best to tell children over their laments of not being able to spell a particular word or not knowing where to put the comma, "Sound it out." And, "We will worry about the comma later." Encourage them to get their ideas down while their creative juices are flowing. If teachers are very clear and consistent about this, the children will come to trust the teacher and themselves, and the mechanics of writing will eventually improve (Calkins, 1985:199).

Probably at this stage, the most difficult part of the teacher's job is to provide an atmosphere conducive to writing. In a classroom patterned after the model as proposed by Calkins (1986) and Graves (1985) students will be working at different stages of the writing process. There may be conferences going on between students and between students and teacher.

During all this activity the biggest problem can be how to keep the noise level down. Teachers may find it helpful to create and enforce firm guidelines for procedures students are to follow during the different
stages of the writing process. "These procedures allow students to guide themselves, in effect through much of the job of writing." (Gundlach, 1982:84) It may be best to have children who are conferencing with other students do so in a corner of the room specially set up for that purpose. Students who are in the editing stages should have a checklist of editing guidelines. Procedures such as these allow the teacher the freedom to focus on conferences with individual children.

Revising

Children learn the basic principle of revision when they choose their own topics. As children sort through their list of topics contemplating some and excluding others they are learning to revise (Graves, 1985).

Children tend to view revising as an attempt by the teacher to get them to write more or as proofreading. Some view it as punishment (Smith and Good-Zavagno, 1991).

At Middlefork School in Northfield, Illinois, children are given plenty of time to write their first drafts. Then they are taught to revise and elaborate on
their original drafts (Smith and Good-Zavagno, 1991). At this stage the teacher's main role is to get the child to elaborate and clarify by adding details, explanations, and new anecdotes to their stories (Gundlach, 1982). "In the first response to a draft, therefore, a teacher draws out what the writer knows, often orally, so the writer can fill in any missing information on the page." (Graves and Stuart, 1985:92)

Children need lots of experience revising their writing. Professional authors regularly make several revisions, even dozens, before they consider their work complete. Many children have been trained in some classrooms to turn in a neatly written, erasure-free paper. Therefore, it becomes necessary for the effective teacher of writing to encourage students to rewrite and revise. They should be encouraged to make deletions by scratching out, to use carets and arrows to add words, and to move whole sections by cutting and taping (Fennell and Ammon, 1985).

At this stage, children will need feedback on their writing from others. However, it is important that writers maintain a sense of responsibility and ownership over their writing. Rules must be
established for those students acting as listeners. The final decision to change something or not lies with the writer.

An added benefit to having students listen to each other's works is that by the time the teacher reads the piece it has already gone through some revision thus lessening the load of the teacher and making the teacher more accessible to students who are in later stages of the revision process.

Editing

Professional authors edit their work before it is published. Novice writers should edit their work too (Mehan and Souviney, 1984:9). Some people might argue that correcting a student's work diminishes the child's ownership of the writing. Researcher Lucy Calkins (1986) disagrees. "There is a time when published writing leaves the writer's hands and becomes a public document" (Calkins, 1986:209). As such the conventions of spelling, punctuation, and grammar should be observed.

At this stage the child may once again work with a partner. The partner or the student re-reads the work
checking for capitalization, punctuation, spelling, and usage (North Carolina Dept. of Public Instruction, 1987).

The professional literature on writing offers many excellent ideas on guiding children through the editing process. Teachers will find it helpful to institute some sort of procedure for editing. This could be a simple checklist on the back of the child's writing folder or a checklist that students go over themselves or with a partner (Calkins, 1986) (Jackson, 1985).

As in the revising stage children who help other children edit their writing must have firm guidelines. Children love to play teacher and if left unchecked will mark all over another child's writing. "...They must understand that the writer makes the final decision. One way to emphasize this is to say that peer editors can advise but cannot write on a draft." (Calkins, 1986:207)

Teachers must also be careful that the editing system in their classrooms does not put too much stress on young children. If children are pressured to look up every misspelled word in a dictionary they will learn not to take risks in their writing. "They will
write with safe words, choosing big when they wanted to say enormous" (Calkins, 1986:207).

After a child has finished editing a piece, the teacher needs to look at it. Have the child place the work in a box so that the teacher can look at it later. This prevents the teacher from getting involved in a long conference with one child. Having finished one story the child now begins another (Calkins, 1986).

Publication

Children have an innate desire to communicate. They want to be successful as readers and writers. Our responsibility as educators is to provide them with opportunities to achieve the successes they desire (Robinson and Hulett, 1984).

Publication is often the forgotten stage of the writing process. However, it is an integral part of writing and has great motivational merit. "The idea of writing a real book creates enthusiasm." (Brady, 1987) Also, children's writing activities should be functional. Children should feel they are writing for real purposes rather than for artificial purposes such as a teacher-given assignment (Olson, 1985). Children
should expect that their writing will be read by someone other than the teacher. The someone other could be classmates, parents, other students at the school or even the community at large.

Publication could take the form of class stories, individual books, posters, school newspapers, or works published in student sections of community newspapers.

Piirto (1988) writes about a Colorado elementary school where sixth graders write books for first graders. Here the writers discover what it is like to write for a specific audience. In so doing they must consider plot development, story line, and vocabulary.

Fennell and Ammon (1985) suggest having students write their own math problems. Doing this involves the students in reading, writing, critical and creative thinking, and collection and organization of data. These word problems can be published in a class anthology, on posters, index cards, overhead transparencies, or individual collections of math problems.
Those pupils frustrated and bored with textbook word problems will begin tackling their friends' problems with new enthusiasm and understanding. And with such insight, children will be more likely to apply these problem-solving skills to real life. (Fennel and Ammon, 1985)

Calkins (1986) suggests scheduling frequent Authors' Days. This is a time to celebrate and applaud the efforts that students have made in their writings. It provides a natural deadline and motivates students to complete unfinished pieces. It also gives them a chance to look back over and give closure to what they have accomplished.

Using Technology With Children

With the introduction of more computers into schools and homes, educators and administrators are becoming more interested in and more familiar with the potential application of technology to the teaching and learning of the writing process.

Children are naturally attracted to computers perhaps because of their game-like format. Generally, children find it enjoyable writing on a computer using a word processing program. Smith (1985) reports that children approach writing with a more positive attitude
when working on a computer rather than with pencil and paper.

Educators should not, however, assume that they can simply sit a child in front of a computer and magic will take place. Computers cannot replace good writing instruction. "Computers are not very good at judging the quality of writing nor do they adequately interpret the human emotions evident in an author's work." (Miller-Souviney and Souviney, 1987:4)

Using computers with children actually adds to rather than diminishes the responsibility of the teacher. In addition to teaching children the writing process, teachers must also teach keyboarding and the necessary word processing skills (MacArthur and Graham, 1987) (Rodrigues, 1986) (Smith, 1985).

Generally, the literature reviewed indicates that the use of word processing during the initial prewriting stage may actually be detrimental to good writing (Daiute, 1985) (Rodrigues, 1986). Prewriting is an explorative and creative stage. During this stage ideas often come in creative and divergent bursts. The computer lends itself to a more linear and sequential approach. Daiute (1985) suggests that young
writers between the ages of four and eight who are just learning to make the connection between sounds and symbols will feel more comfortable with traditional tools such as paper, pencils and crayons.

Whether or not the computer is a help or a hindrance in the composing stage depends a lot on the individual writer. Some writers find it helpful because it allows them to concentrate more on their flow of ideas. They know for now they can disregard spelling, punctuation and usage and make those corrections easily at another time (Daiute, 1983).

Other writers find that the ease in which such corrections can be made distracts them from their writing. When seeing mistakes in print, these writers seem compelled to stop and correct them immediately (Bridwell et al., 1984) (Daiute, 1985) (MacArthur and Graham, 1987).

The main difficulty for children composing on the computer lies with their lack of typing skill. Children tend to be hunt and peck typists, and this interrupts the flow of ideas and composition itself.

The word processor may be helpful to young children during the revising and editing stage,
however, researchers report mixed findings. Jones, Meis, and Bolchazy as cited by Rodrigues (1985) found that students who have had limited experience with word processing make more revisions with paper and pencil than with the computer. Schwartz (1982) writes that young children are so enchanted with the clean and polished appearance of hard copies that they tend to believe a piece is finished prematurely.

Hult, Kurth and Stromberg, as cited by Schaeffer (1987), found that students make the same amount of mechanical errors and revisions on a computer as when using paper and pencil.

Daiute (1985) suggests, however, that the motivational aspect of using a computer may, for some students, outweigh the drawbacks.

Many theorists believe that if children enjoy writing, their skills will eventually improve. Therefore, even if it takes time to learn to write with the computer, this may not be as important as the fact that children feel that the task is easier. (Daiute, 1985:170)

With young children, most of the benefits of using a computer are motivational. Children are thrilled to see their stories in print. The polished copy on clean white paper gives them the sense of authorship and
pride that Graves (1985) and Calkins (1986) said is so important in the development of young writers.

Solution Strategy

After reviewing the literature and research findings on critical and creative thinking and the writing process, this author chose to use publication as motivation for primary children to think and write. The writing process was taught in a workshop format. Students were encouraged to choose their own topics and to use drawings to stimulate ideas during the prewriting stage. They were encouraged to use invented spellings during the composing and revising stages. Children were taught to edit according to their ability level.

After several stories had been written, the child chose to publish. Invented spellings were corrected by the student and by parent volunteers or the teacher. The story was typed on a word processor by a volunteer and published in book form. This eliminated the tedious re-copying stage of writing that children find so distasteful.
The author, with the help of the principal, set up a publishing center which contained a computer for word processing. Parent volunteers were recruited to make book covers, bind the books, and type the completed stories on a computer. The decision to have students compose on a computer or by longhand was left to individual teachers. They, in turn, may have chosen to leave this decision to the student.
CHAPTER III

Method

To motivate students to write was a key component of this project. Therefore, this author chose to utilize the highly motivational aspect of computers. The child was involved with the word processing, publishing, and collating of the book.

The author met with the principal, and together they discussed and chose a location at the target school for the publishing center.

They also discussed and gathered materials that were needed for implementation of the publishing center. This list included: a computer and printer and tables for them; bookmaking supplies including paper, colored pencils for students' illustrations of books, posterboard for making bookcovers, one quarter inch plastic spiral bindings and a spiral bookbinding machine. There were two chairs and shelves for storing supplies. The selection of an appropriate computer program was accomplished by speaking to several teachers who had experience with children's word
processing programs. The program chosen and most recommended was "The Children's Writing and Publishing Center" published by the Learning Company.

Each teacher decided individually whether to have their students write their stories in longhand or use a word processing program for composing. Some teachers had computers in their classrooms which they may have chosen for this purpose. There were also fifteen computers available to teachers and students in a computer lab.

When a student author visited the publishing center, choices regarding publication were presented to the child. The student chose how many sentences to put on each page and the location of those sentences on the page. For example, the sentences may have been placed in the middle of the page or at the top or bottom. The student author was also presented a choice of fonts. The child chose whether to illustrate all the pages in the book using colored pencils, or whether to use the graphics offered by the software program, or a combination of both. The student, with the help of a volunteer editor, also composed a dedication and an author statement. The child was given the choice of
sitting at the computer and having the volunteer assist with the word processing or watching as the volunteer sat at the computer and the child told the volunteer what choices were desired.

When the word processing was completed and the book was ready for binding, the child was able to watch, if desired, as this was being done by the volunteer.

Recruiting volunteers was the most difficult part of this project. This author had originally planned to place an announcement for volunteers in the school's monthly newsletter. However, the principal suggested that the author ask each teacher for a list of potential volunteers. This was the primary method of recruiting volunteers. Out of 17 classrooms, eight telephone numbers were obtained. The author called each potential volunteer and explained the project. Out of these eight, six volunteers were recruited. Two volunteers dropped out the first week. The publishing center operated with four parent volunteers. This author also approached the P.T.A. president for a list of volunteers, but none were obtained. The reason given by most parents was lack of time. With so few
volunteers, an average of three students were served each day. Many teachers expressed disappointment that there were not enough openings to send as many students as they would have liked. This author had to ask two teachers not to send students for a week so that other children would have the opportunity to get books published. A "Student and Editor Sign-Up" schedule was devised (Appendix C:60). Teachers were instructed to sign students' names on the "Student and Editor Sign-Up" schedule which was be located in the school office across from the teachers' mailboxes.

Volunteers were trained to use the computer and the selected word processing program, which was "The Children's Writing and Publishing Program," published by The Learning Company. Instead of binding the books in book covers made with tagboard, covered with wallpaper and sewn with dental floss as Graves (1985) suggested, this author used posterboard covers cut to 9 inches by 11 1/2 inches. The pages were standard 8 1/2 by 11 inches. The cover was one quarter inch larger than the pages on all sides. The book was bound on a spiral bookbinding machine. This was a much simpler method to teach to volunteers, and much less time
consuming for them. Since publication is not a distinct activity in and of itself but is a part of the writing process, the author created a manual, "The Writing Process Handbook for Teachers" (Attachment), about the writing process. The purpose of this manual was to provide teachers with an easy-to-use, hands-on guide to the writing process.

A system of operation of the publishing center was developed and established. This included a schedule for students to meet with volunteers (Student and Editor Sign-Up) and procedures for volunteers to follow when working with student authors.

To introduce and demonstrate the writing process to students the author-teacher modeled the writing process with this author's students. To introduce the lesson, the students were shown samples of bound books to motivate them and to create interest.

The story took the form of a class language experience story. Prewriting took the form of a class discussion with student ideas written on the board by the teacher. Class brainstorming led to a topic and title.
During the writing stage, the teacher wrote the children's sentences on chart paper. For some words, the teacher asked the students for invented spellings so these could be used as examples in the editing stage. The teacher also deliberately made a few errors in punctuation and capitalization. If a student commented on this, the teacher explained that those errors are to be disregarded during the writing stage and would be corrected during the editing stage. The teacher read through the story with the students several times discussing elements such as story sense, descriptions, clarity, sequence of events, etc.

Revisions were made by using arrows and carets for insertions. Deletions were made by crossing out words. Some paragraphs needed to be moved, and the teacher demonstrated this by cutting and taping.

When the students agreed that the story was finished, the teacher modeled the editing process by having students look in their student dictionaries for words that they believed were misspelled. These words were crossed out, and the standard spellings were written above the misspelled words. Errors in
punctuation and capitalization were corrected in the same manner.

When the students believed that all errors had been corrected, the teacher explained that professional editors edit the work of professional authors, and the teacher, acting as the editor, made additional corrections.

The teacher showed and discussed examples of dedication pages in trade books, and the students discussed and dedicated the class book.

A note about the authors was added at the end of the book. This included the teacher's name, grade level, and school.

The layout of the book and possible illustrations were discussed and planned. This included the number of sentences to place on each page and possible illustrations for each page. Then each student chose a page to illustrate. After the children had illustrated the pages and cover, the story was typed on the computer according to the planned layout. Then the book was bound using a white posterboard cover and spiral binding. The book was read to the class then sent to other rooms for other classes to enjoy. It was
placed in the school library for two weeks then returned and placed in the classroom library. After this class lesson, the teacher explained to the students that they were now ready to begin writing individual stories using the same process.

Guidelines were established relating to noise level, movement around the room, conferencing with other students and conferencing with the teacher.

Instructions were given to students as to the use of their writing folders and they were told to place their finished stories in a basket. These stories were checked at the teacher's convenience.

A 30 to 40 minute block of time was provided daily for the writing workshop. Children were guided through the stages of the writing process with each story they wrote. Writing was an ongoing process. That is, as soon as one story was completed by the student, another story was started. After a student had completed several stories, one was chosen for publication. The teacher set up an appointment with a parent volunteer at the publishing center. When the student met with this volunteer, they discussed and planned the layout,
illustrations, cover, dedication page, and an author statement was devised and added at the end of the book. This author was responsible for setting up the publishing center, recruiting and training volunteers, being available to teachers who had questions about the writing process and implementation of the publishing center. The author was also responsible for devising schedules and other record-keeping devices to facilitate implementation and utilization of the publishing center by the students and teachers.

Timeline
Week one:

Administered "The Writing Attitude Scale for Students" to all primary students.

Arranged for a computer and printer to be moved to the selected location.

Reviewed word processing programs and selected one that best met the publishing center's needs. The program selected was "The Children's Writing and Publishing Center," published by The Learning Company.
Gathered bookmaking materials: paper, colored pencils, posterboard, one quarter inch plastic spiral bindings, and a spiral bookbinding machine.

Recruited volunteers to staff the publishing center.

Devised a schedule for students to meet with volunteers at the publishing center.

Week two:

Trained volunteers in the use of the selected word processing program.

Scheduled students to meet with volunteers at the publishing center.

Began implementation of publishing center activities.

Weeks three through twelve:

Students brought their written works to the publishing center and participated in the publication process.

Interacted with teachers and volunteers functioning as a consultant and facilitator.

Monitored activities of students and volunteers and adjusted schedules and procedures as necessary.
Week six:
Reviewed quality and quantity of student work.

Week twelve:
Administered "The Writing Attitude Scale for Students" to all primary students.
CHAPTER IV
Results

The purpose of this project was to study the effects that the implementation of a student publishing center would have on the quality and quantity of student writing and to study the effect that it would have on student and teacher attitudes about writing.

The first objective was to have 75 percent of the primary students demonstrate an increased quantity of writing as a result of using publishing center activities. This was measured by counting the number of thought-units in each student's written products at the beginning of implementation of the publishing center. These were measured against the number of thought-units produced by the students after 12 weeks of implementation of the publishing center. The idea of "thought-units" was discussed and defined by Amodeo (1987).
A thought-unit (T-unit) is defined as a segment of meaningful expression. It contains an identifiable verb and subject that can stand alone. It is a complete sentence. In scoring thought-units, incorrect punctuation, spelling, and capitalization are disregarded, and each unit is counted as though it were done properly. (Amodeo, 1987:20)

For the first objective, teachers were asked to keep a record of each of their students' written works before implementation of the publishing center and again after 12 weeks of publishing center activities. They counted the number of thought-units that each student produced. They kept the records for one week. The pre-program results were compared with the results after 12 weeks of publishing center activities. Eighty-two percent of the students demonstrated an increase in the quantity of writing produced.

The second objective was to have 75 percent of the students demonstrate an improvement in the quality of writing as a result of using publishing center activities. This was measured by the teacher rating the overall quality of student writing as high, medium, or low. They were instructed to consider the mechanics of writing, and to also consider story sense, detail and descriptions. Prior to the implementation of the
publishing center, 15.6 percent of the students' written works were rated as high quality, 66 percent as medium quality, and 18.3 percent as low quality. After 12 weeks of publishing center activities, 41.2 percent of the students' written works were rated as high quality, 51.3 percent as medium quality, and 7 percent were rated as low quality. The actual number of students demonstrating an improvement in the quality of writing was 40 percent. The original goal was to have 75 percent of the students demonstrate an improvement in the quality of writing.

Perhaps the reason for the objective not being met was due to the fact that students who were rated "high" on the pre-assessment could not have shown an increase in quality because they were already at the top of the scale.

A third objective was to have 75 percent of the students demonstrate a more positive attitude toward writing as a result of using publishing center activities. This was measured by using the "Writing Attitude Scale for Students." (Appendix B:58) This scale is an adaptation of the Emig-King Writing Attitude Scale for Students (1977) and was adapted by
Jones and Wahlers (1990). The Emig-King scale contains 40 items which were designed for use with high school students. Jones and Wahlers consolidated the Emig-King scale, rewording nine of the items so they would be more easily understood by young children. The scale was administered to all primary students before implementation of the publishing center. After 12 weeks, the test was administered again to all students. See Table 1 (p. 48) for results of the pre and post surveys. This table lists the actual number of student responses.

The final objective was to have 90 percent of the primary teachers agree that publishing center activities enhanced their writing programs. This was measured by comparing the results of the attitude survey for teachers before implementation of the publishing center and the attitude survey for teachers given after 12 weeks of publishing center activities.

The results of the post-program attitude survey for teachers responded to by 100 percent of the primary teachers showed that 83 percent of the teachers agreed that children are adequately motivated to write. One hundred percent agreed that the establishment of a
<table>
<thead>
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<th>Attitudes Toward Writing: Primary Students</th>
<th>Pre-Program</th>
<th>Post-Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>I write letters...</td>
<td>37</td>
<td>67</td>
</tr>
<tr>
<td>I write stories</td>
<td>49</td>
<td>73</td>
</tr>
<tr>
<td>I revise...</td>
<td>96</td>
<td>125</td>
</tr>
<tr>
<td>Like topics I choose...</td>
<td>101</td>
<td>156</td>
</tr>
<tr>
<td>Use writing to learn...</td>
<td>133</td>
<td>165</td>
</tr>
<tr>
<td>Like what I write...</td>
<td>134</td>
<td>159</td>
</tr>
<tr>
<td>Write to express feelings...</td>
<td>88</td>
<td>140</td>
</tr>
<tr>
<td>Rather write than read...</td>
<td>57</td>
<td>83</td>
</tr>
<tr>
<td>I leave notes...</td>
<td>69</td>
<td>97</td>
</tr>
</tbody>
</table>

Pre-Program N = 262
Post-Program N = 294
publishing center motivated children to write more. Eighty-nine percent agreed that it motivated children to improve the quality of their writing. One hundred percent of the teachers agreed that children enjoy publishing center activities and 100 percent agreed that the publishing center enhanced their writing programs.

Two of the teachers commented on the survey form about the lack of time slots available to students.

One teacher wrote that "...it was a great addition to our school," and another suggested setting up several computers with more volunteers.
CHAPTER V

Recommendations

This author, with the principal's permission and assistance, will continue publishing center activities at the target school in future academic years.

Next year, access to the publishing center will be expanded to include Kindergarten and grades four and five.

This author shared the information with other faculty members by creating a "Writing Process Handbook" for teachers. This manual gave a brief overview of the writing process and supportive research. The manual contained ideas for implementing the writing process and the writing workshop approach in classrooms. It contained a bibliography of applicable resources.

This information was made available to curriculum specialists who deal with writing and language arts at the elementary level.

This author provided information to other teachers in the district who inquired.
Reference List


APPENDICES
APPENDIX A

ATTITUDE SURVEY FOR TEACHERS
1. Do you believe that children are adequately motivated to write? □ Yes □ No

2. Do you believe that establishing a publishing center would motivate students to write more? □ Yes □ No

3. Do you believe that establishing a publishing center would motivate children to improve the quality of their writing? □ Yes □ No

4. Do you believe that children would enjoy this activity? □ Yes □ No

5. Do you believe that this publishing center would enhance your writing program? □ Yes □ No

Comments and/or suggestions:______________________________

_____________________________________________________

_____________________________________________________

_____________________________________________________
1. Do you believe that children are adequately motivated to write? □ Yes □ No

2. Do you believe that establishing a publishing center motivated students to write more? □ Yes □ No

3. Do you believe that establishing a publishing center motivated children to improve the quality of their writing? □ Yes □ No

4. Do you believe that children enjoyed this activity? □ Yes □ No

5. Do you believe that this publishing center enhances your writing program? □ Yes □ No

Comments and/or suggestions:__________________________________________________

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________
APPENDIX B

WRITING ATTITUDE SCALE FOR STUDENTS
WRITING ATTITUDE SCALE
FOR STUDENTS

Directions: For each item, circle your response.

I write letters to my family and friends. Almost always Often Sometimes never

I write stories and poems. Almost always Often Sometimes never

I revise what I've written. Almost always Often Sometimes never

I like topics I choose myself. Almost always Often Sometimes never

I use writing to help me learn. Almost always Often Sometimes never

I like what I write. Almost always Often Sometimes never

Writing is a very important way for me to express my feelings. Almost always Often Sometimes never

When I have free time, I'd rather write than read. Almost always Often Sometimes never

I leave notes for my family and friends. Almost always Often Sometimes never
APPENDIX C

PUBLISHING CENTER STUDENT AND EDITOR SIGN-UP
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<tr>
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<th>EDITOR'S NAME</th>
<th>DATE</th>
<th>STUDENT'S NAME</th>
<th>ROOM</th>
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<td>2:30-3:00</td>
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THE WRITING PROCESS
HANDBOOK FOR TEACHERS

WRITTEN
BY
KAREN L. WASSON
WRITING and THINKING

Writing is a form of problem-solving, and each step of the writing process employs creative and critical thinking. (Olson, 1985)

DEVELOPMENT OF WRITING IN CHILDREN

Adults tend to believe that children must learn to read before they can write, but research shows this is not the case. Babbling is the beginning stage of speech and scribbling is the beginning stage of writing. This progresses to drawing and eventually to writing real words and sentences.

THE WRITING WORKSHOP

In the writing workshop approach children get the practice they need because they write every day.

WORKSHOP COMPONENTS and TIPS TO SAVE OUR SANITY (S.O.S.)

1) Plan for a 30-60 minutes block of time for writing daily.
2) Let children choose their own topics.
3) Encourage the children to use invented spellings by sounding out words.
4) Let the children consult with each other: sharing, reading, and commenting on each other's stories.
S.O.S. TIP

Set guidelines for student conferences. The decision to revise or not is left to the author. Don't allow children to write on another child's work.

5) Create and enforce firm guidelines for procedures students are to follow during the different stages of writing process.

S.O.S. TIP

It may be best to have children who are conferencing with other students do so in the corner of the room.

THE WRITING PROCESS IS:

- Pre-Writing
- Writing
- Revising
- Editing
- Publication

STEP ONE: PRE-WRITING

Allow children time to:

- Experience their ideas
- Think
- Draw a picture
- Brainstorm
- Discuss
- Doodle
-- Visualize
-- Look at books to see what other authors have done.
-- Create outlines, story webs, diagrams, etc.
-- Create something concrete to draw from such as a model made with manipulatives: Legos, clay, paper-mache, popsicle sticks, toothpicks and marshmallows (Yummy!)

STEP TWO: WRITING
(also called drafting or composing)

This is the stage in which the ideas generated in the pre-writing stage are transferred to words on paper.

ENCOURAGE CHILDREN TO:

-- Get their ideas down while the creative juices are flowing.
-- Use invented spelling (sounding out of words).
-- Not worry about punctuation (that comes later!).
-- Not worry about neatness (that comes later too!)

STEP THREE: REVISING

ALLOW AND ENCOURAGE CHILDREN TO

-- Choose their own topics (children learn the basic principle of revision when they choose their own topics. As children sort through their list of
topics contemplating some and excluding others they are learning to revise!) (Graves, 1979)

-- Clarify by adding details, explanations, new anecdotes, descriptions.
-- Fill in any missing information on the page.
-- Make deletions by scratching out.
-- Use carets and arrows to add words.
-- Move whole sections by cutting and taping.
-- Get feedback from others (sharing, responding, conferencing).

-- REMEMBER: Writers need to maintain a sense of responsibility and ownership over their writing; therefore rules must be established for those students acting as listeners.

Children need lots of experience revising their writing. Professional authors regularly make several revisions, even dozens before they consider their work complete.

S.O.S. TIP

An added benefit to having students listen to each other's work is that by the time the teacher reads the piece it has already gone through some revision. This means you can concentrate on students who are in later stages of the revision process.
STEP FOUR: EDITING

"There is a time when published writing leaves the writer's hands and becomes a public document" (Calkins, 1986:209). As such the conventions of spelling, punctuation and grammar should be observed.

HAVE THE STUDENT

-- Work with a partner.
-- Use an editing checklist.
-- Re-read the story, checking for punctuation, capitalization, etc.
-- Look up misspelled words (but be careful that your editing system does not put too much stress on young children. If children are pressured to look up every misspelled word they will learn to use "safe" words such as big instead of enormous. (Calkins, 1986)
-- Place the work in a box so you can look at it later and BEGIN ANOTHER STORY.

STEP FIVE: PUBLICATION

Children like to know that their writing will be read by someone other than the teacher.
REMIND THEM

-- That not all stories go to publication.

-- To share their stories with classmates, parents, friends, relatives and other students at the school.
Calkins, Lucy M.  *The Art of Teaching Writing.*