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A CROSS-DISCIPLINARY CURRICULUM OF ART & WRITING:
USING THE SENSORY PROPERTIES TO TEACH
PRINTMAKING, BOOK MAKING, AND CREATIVE (MEMOIR) WRITING

by

Leslie Ayn Peterson-Stroz

A Thesis Submitted to the Faculty of the
DEPARTMENT OF ART
In Partial Fulfillment of the Requirements
For the Degree of
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In the Graduate College
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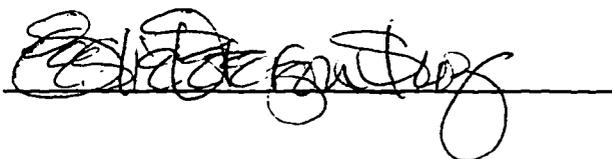
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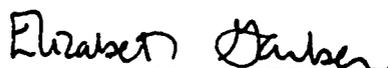
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ABSTRACT

This study examines a cross-disciplinary curriculum that uses guided imagery and writing warm-ups to enhance student awareness of sensory properties in the teaching of printmaking, book making and memoir writing. I questioned whether implementation of such a course could:

1. increase student motivation?
2. show improvement in student writing?
3. show student comprehension and application of basic printmaking and book making techniques?
4. show evidence of experimentation in student artwork that results from an awareness of the sensory properties?

The curriculum was taught to two courses of middle school students during the University of Arizona's SEEK (Summer Education Enrichment for Kids) program. Each course was two weeks' duration for two hours a day.

Quantitative and qualitative results indicate an improvement in student writing and a comprehension and application of printmaking and book making techniques, in addition to experimentation in art as a result of awareness of the sensory properties. Evidence also suggests that both subjects enhance one another when taught together.

CHAPTER I
INTRODUCTION AND METHODOLOGY

My Story

Katrina was my best friend from third through fifth grades. A class photo I still have of her shows me the image of a skinny, red-head with freckles and buck teeth, but to me she was the coolest. Cooler than Otter Pops. I wanted to *be* her. When she wanted to be a nurse, I wanted to be a nurse. We played hospital. When she wanted to be a teacher, so did I. We taught our dolls in a make-shift classroom in her basement. When she wanted to be a writer, I started to write a book too. But when, a week or so later, she moved on to the next profession, the urge to be a writer remained within me. I had fallen in love with words.

When I was fifteen, I wrote my first novel. I'd read somewhere that Jane Austen wrote her first novel at sixteen, and I wanted to beat her record. After that, there were many shorter works: some for school, some not. At nineteen, I wrote a second novel: a romance genre that was certain to be published. I eagerly submitted it to a publisher and was flabbergasted when, three months later, it was carelessly returned to my door-step by some postman who didn't realize he'd broken my heart. I wrote to the editor,

assuring her that she'd made a mistake. That mine was an outstanding work of fiction. She honored my arrogance with a detailed three pages of criticism. My plot was contrived. (Weren't all romances?) My characters lacked emotion. (How could that be?)

I joined a writer's group where for the first time I realized writing wasn't just fun-- it was work. I learned the essence of re-writing. I learned that sometimes less is more. I learned that I needed to live inside of my characters instead of having them live in me. I learned to "show don't tell." I learned all the qualities employed by successful writers, but none of the means to achieve them.

Frustrated, I abandoned my writing, convinced that I'd be better off as an illustrator. I studied art for a few years, eventually completed a degree in something else, and again decided to dedicate myself to becoming a better writer. Around this time, I was invited to a small get-together at a friend's house. In the dining room of that house, I noticed something on top of the piano: a rustic-looking book with rolled-up newspapers woven together to create front and back covers. Different textiles and papers were stitched together to create individual pages, some with scenes sewn on them, others unadorned. I'd never seen anything quite like it!

It took me two weeks, but I was able to make a mini-version of this book for myself. I visited the library and discovered an entire universe of hand-made books, as well as technical books detailing different bindings and book making techniques. I began designing books that illustrated some of my short stories. Finally, I was a published writer! Albeit, my texts were originals, owned only by me, but the result delighted me. And, somehow, by placing my words in a three-dimensional format, my writing began to develop more substance.

I continued making books on my own and studying writing at the university. A turning point came in the form of one of my teachers, Marvin Diogenes, who frequently employed brief writing exercises during class. One of these consisted of giving prompts to the writer. For instance, first each student would jot down the characters and setting for the scene. This was followed with verbal instructions, about one per minute: "Write a sentence with a color in it;" "Write a sentence with a reference to light," "Write a sentence with three words of dialogue," "Write a sentence with an article of clothing in it," and so on. This became my favorite exercise and I practiced it on my own and in writing groups. This exercise provided the missing piece in my development as a writer. Yet I still yearned for this

process to become a spontaneous one, and not one where I was forever dependent on verbal prompts to write powerful prose.

One day, browsing the shelves of a local book store for a good writing manual, I stumbled across "Writing Down the Bones," by Natalie Goldberg (1986). This text outlines methods for writing that include daily writing practice and exercises. Although the author doesn't specifically mention the importance of including all the sensory properties in writing, most of her exercises develop an awareness of how to do this. When I incorporated these writing exercises in my own writing practice the improvement was almost instantaneous.

This process was similar to what I had experienced during the tactile process of making my stories into books, and it began to occur to me that writing is a two-dimensional product that arouses all five senses when it is successful. For me, putting my newer stories that employed these writing techniques into books not only enhanced the quality of my writing, but simultaneously improved the quality of my art.

The turning point in my art had happened through the same process of focusing on the sensory properties, although at the time I was less cognizant of the fact. Like many students who enjoy and are adept at doing art, I often felt

trapped without a subject to paint, or draw, or sculpt. The urge to do art existed, but the ability to know what to do escaped me. Throughout a lifetime of art classes, this had always been the case: I would be excited about the assignment, but frustrated because I didn't know where to begin. I possessed the technical ability but not the creative spark to know what my art should be about. Meanwhile, Rebecca or John or Seymour sitting beside me intuitively produced a magnificent work of art that left me feeling even more powerless to begin. Often in these situations I produced work that I later wanted to hide or destroy.

Then one day, at a particularly resplendent time in my life when creativity seemed to flow through my every action, I discovered a musical group called Poi Dog Pondering, whose lyrics celebrated the simple delights of the senses. One particular song featured lyrics like: "Look at that tree, it's got a brand new leaf;" and "Sticking fingers on paintings to see the way they feel." For me, this sparked a creative outburst which helped me experience the everyday world with an appreciation for all the sensory properties. My paintings became more *process* oriented with a greater variety of texture, color, and themes. For the first time in my life I wasn't frozen with fear before I approached the

beginning of an art work because I felt confident with the abundance of things in the world that could be the focus of art. As with my writing, I realized that art is also a two- or three-dimensional product that arouses all five senses when it is successful.

So it happened that the same techniques that improved my writing had also improved my art. Perhaps this was partly because an awareness of the sensory properties increased my motivation, or perhaps these techniques triggered a realization that other successful writers and artists reach in their own ways, or intuitively know.

Questions and Concerns

For a few years, whenever a friend was interested, I shared my writing and book making techniques. Many an afternoon was passed over my kitchen table, tearing paper into signatures, sewing them together, designing different covers. I enjoyed meeting with other writers to do timed writing exercises and then reading them to one another, all the while developing my own confidence as a writer and a competent book maker.

The opportunity to put together a course teaching these techniques to a group of middle school students came through a summer education program offered by the University of

Arizona, titled SEEK (Summer Education Enrichment for Kids). I wanted equal weight to be placed on both writing and art. My questions remained: could writing and art be placed together in a curriculum where neither is over-emphasized and where both are enhanced? Could students learn how to utilize writing devices on their own that make use of active verbs, specific details that evoke all the senses (and thus the reader's attention), and scenes that show an action instead of describing it? Could student motivation to produce art work rich in detail and design also be sparked by evoking the senses? Such characteristics, when present in student writing and art, are of a higher quality than works not containing them.

The questions I had going into this class were thus: Could a course that equally integrates printmaking, book making and memoir writing through teaching an awareness of the senses:

1. increase student motivation?
2. show improvement in student writing?
3. show student comprehension and application of basic printmaking and book making techniques?
4. show evidence of experimentation in student artwork that results from an awareness of the sensory properties?

For the sake of brevity, I will refer to questions two through four as "enhancing student writing and art" throughout the remainder of this manuscript.

Demographics

The University of Arizona SEEK program is offered to students in grades K-8. The book making and writing course was offered to middle-school students during two separate classes. Each class was two hours a day for a length of two weeks. Because the SEEK program is offered as an enrichment program, age levels were not strictly adhered to, which resulted in a wide range of diversity in students' ages.

Enrollment in Session I was six students, ages and gender as follows:

one boy, age 9

one boy, age 10

two boys, age 12

one boy, age 13

one girl, age 13

Enrollment in Session II was ten students, ages and gender as follows:

one girl, age 10

two boys, age 11

one girl, age 11

one boy, age 12

four boys, age 13

one girl, age 14

Session I contained five male students, and only one female, with a mean age of 11. Session II differed, not only in the amount of female students, but also in the mean age, and contained three female students and seven male, with a mean age of 12.

Due to the high cost of tuition (\$75 for a two-hour class of two weeks' duration) enrollment in the SEEK program tended to appeal mostly to children of middle to upper class parents. Limited partial scholarships were available for some students, although none of the students in my classes were attending on scholarship.

The SEEK program seemed to hold a wide appeal to parents who home-schooled their children, and two of the students enrolled in Session I were taught at home and attending the program as supplemental education (the 9 and 10-year-old boys).

Methodology

There are several currents in contemporary art education: discipline-based art education (DBAE), multicultural, studio-based, and interdisciplinary study to

name only a few. I do not here claim to be a proponent of any one of these. The curriculum I have designed and taught is an interdisciplinary one that combines printmaking and book making with creative memoir writing. As a unit, I feel it is a successful one and one that can benefit students both as writers and artists. That is not to say, however, that I am an advocate of teaching these subjects only in this form.

Creative writing and art each have their own distinguished merit, and mastery of either subject cannot be achieved unless significant attention is paid to them individually. Upon designing the curriculum, my belief was that these two subjects complement one another, and that this subject camaraderie might be used by teachers to instill an excitement in students and arouse their awareness of the sensory properties in both their writing and their art.

Classroom Study

As I approached the writing of the curriculum I was faced with the decision of how to structure the course. There were many questions I had concerning my marriage of book making and writing. I had incorporated printmaking into my own books, and had taught them together to others.

Since these people greeted the combination with enthusiasm, I decided to introduce different printmaking techniques into the curriculum. In terms of the technical aspects of book making, I wanted the students to learn three different binding techniques: Oriental binding, accordion binding, and a version of the Western-codex binding.

Since I wanted students to pay specific attention to all five senses, I felt the best way this could be achieved was by having the students write memoir instead of fiction. The reason is this: it is much easier to utilize the five senses in writing when one is writing about a real-life experience. Since real-life experiences are experiences in a body that (for most) uses all five senses, the concept of "using the senses" is a much easier one to grasp. Students can later take this skill and employ it in characters of fiction.

The use of memoir also enhanced the teaching of art through the senses. Most of the art projects commenced with students visualizing real events from their past and focusing on what it had been like to be there: the sights, smells, sounds, tastes, and feel of their environment and actions. It was also my belief that using these techniques in the printmaking activities would result in less hesitancy

to choose subject-matter, greater attention to detail, more specific images, and compositions with a variety of designs.

The curriculum was designed to explore the idea of using the five senses in a unit where art and writing work together. Since each session met for only two weeks, time constraints limited what could be achieved.

On the first day, students took a writing pre-test, made journals with an Oriental binding (see Appendix A), and did a timed writing exercise. On the second through eighth days, lessons combined printmaking with memoir writing (Session I had one less day due to the Memorial Day holiday and thus printed only on days two through seven). Each lesson was first written and printed in the student journals and then copied onto a folded signature¹.

Students learned how to make accordion books and one of the printmaking and memoir writing lessons was copied within this (see Appendix B). Because this lesson was more involved, two class periods were devoted to its completion. The final two days were spent organizing the signatures into a final book, sewing the signatures together, and attaching

¹The pages of the main body of the book are made up of sections called signatures which are fastened together at the spine. Signatures are traditionally formed by folding a sheet of paper one or more times, sewing it along the main seam, and cutting all the other folds. Because this was a beginning class in book making two separate sheets were folded together to create individual signatures.

them between the covers of the book using a simplified version of the Western-codex binding (see Appendix C). Students were given the option of including their accordion book within the final book, and all did.

By teaching the same course twice I was able to more aptly decide which elements were successful and which were not. The students in the second class were afforded more benefits than those in the first because areas taught in the first class that didn't quite fit the purpose of the curriculum were, of course, eliminated or modified for the second class. Some of these differences will be discussed in Chapters III and V.

The Journal

On the first day of each session, students were instructed in the design and sewing of a 40-page journal. The front and back covers were made of colored construction paper (of each student's choice) and were sewn together using an Oriental binding technique. All timed writing exercises were written in the student journals, as were all writing projects. Students were encouraged to do their test prints and page layouts in the journals.

Combined Exercises in Printmaking and Memoir Writing

The exercises in printmaking and memoir writing were designed to complement one another in their theme and to appeal to the sensory properties. Session I had five of these combined lessons, while Session II had six. One of my concerns was whether or not the writing should precede the printmaking in these exercises, or vice-versa. In an effort to place equal weight on either option, Session I had three exercises where the writing project preceded the printmaking project, and two where the printmaking preceded the writing. Session II had an extra day for a combined lesson and the writing preceded the art in this additional project.

Though the writing and printmaking lessons were designed together, their sources came from various places. The printmaking lessons are standard ones given in elementary and secondary art courses designed to initiate students into the field of printmaking (Johnson, 1963). The writing projects derived from different sources: writing manuals, lessons I have been given as a student, and a lesson a friend had been given by an English professor.

Each writing project was matched with a printmaking technique to develop the six lessons where the two subjects complemented one another. For example, found-object nature prints were done on the day when students wrote about their

favorite place in nature; potato prints were done on the day when students wrote everything they knew about mashed potatoes, and so forth (see Appendix D for a complete course syllabus).

Writing Warm-Ups

Each day began with one or two timed writing exercises borrowed from "Writing Down the Bones" (Goldberg, 1986) and "Wild Mind" (Goldberg, 1990). These exercises were designed to relax the students, focus them on the writing, and provide them with techniques to become aware of their senses when writing.

Writing Rules

The aim in successful writing is "to burn through to first thoughts, to the place where energy is unobstructed by social politeness or the internal censor, to the place where you are writing what your mind actually sees and feels, not what it *thinks* it should see or feel" (Goldberg, 1986, p. 8). The timed writing exercises are a way to bring one's mind to this point, but, as in all things, it is essential for there to be a few concrete rules to guide the process. Too many rules, of course, would only frustrate the followers, much the way too many cooks spoil the broth. I

decided on the five rules that I feel are most important for beginning writers to follow. These rules were written on the board and reviewed every day. They are:

1. Use active verbs.
2. Avoid the word "because."
3. Be specific (geranium, not flower; oak, not tree; etc.).
4. Keep your hand moving!
5. Show don't tell!

Rules two and three work together. Many students think that being specific means adding the word "because" (I like my house because it is large). Rather, it involves paying attention to specific *details* (your racing heart, the bitter taste of your medicine, the smell of mothballs on your grandpa's sweaters). Rules two and five work together in the same way: "because" is a common device used that serves only to tell something instead of showing it. Rules one and five also work together to achieve the same purpose: active verbs help to show an active scene.

Guided Imagery

Just as the aim in successful writing is to bring the mind to a place where you are writing what you see and feel, so it is with art. Often in creating an artwork, beginning

artists become so absorbed in reproducing a subject visually that they forget to take the time to explore how they respond to the subject or how the subject responds to the physical world (is it three dimensional? living? moving? etc.). This is particularly true when students become interested in realism.

Guided imagery exercises were designed that required students to pause: to slow down and experience the moment in all of its intricacies and nuances. The goal of the guided imagery is to take students away from their egos: to free them from the constraints of having to come up with an "idea." By designing exercises that emphasize an awareness of the sensory properties students can more freely create a visual response to the sensory world.

Printmaking and Layout Design

Throughout the course students were taught certain principles that are particularly relevant to the printmaking process: specifically, pattern (a two-dimensional visual repetition), balance (symmetrical and asymmetrical), variety, and harmony. Guided imagery preceded the printmaking lessons and helped students become focused on the project and become aware of their senses.

Art vocabulary words were written on the board before each lesson and introduced throughout the lessons. Each individual printmaking process was taught in three ways: with verbal instruction, with detailed written instructions on the board, and with a teacher-modelled example.

In addition, the importance of the layout design of the signatures was stressed to students and modelled on the board. Students were given a choice of having a folded signature of one page (creating four pages for printing), or of two pages (creating eight pages for printing). Most students selected to use only one page, although a few challenged themselves by selecting two.

Small Groups

After each initial writing exercise students chose a partner to share their written words with. Each pair found a quiet spot in the room, or outside (depending on where we were at the time) and quietly took turns reading what they had written. Much research conducted in diverse settings has demonstrated that when students work together to accomplish goals the results are more productive than when competition is fostered (Allport, 1924; Arends, 1994; Dashiell, 1935). I had found this to be true both as a student and teacher of writing. Reading out loud what you

write serves another important function as well, as Natalie Goldberg remarks (1990):

It is part of the writing process, like bending down to touch your toes and then standing up again. Write, read, write, read. You become less attached to whether it is good or bad. "I wrote this; now I'll read it." No big deal. If you don't read aloud, the writing tends to fester like an infected wound in your notebook. I cannot say why, but the simple act of reading it aloud allows you to let go of it. Do not forget this.

The writing groups had the rule that they could not make comments about their partner's writing, unless it was a constructive remark. For example, instead of saying, "I thought you used too many big words. It makes you sound stuck-up," it would be more appropriate to say, "what you wrote was interesting because (list the reasons), but the words just don't sound like you talking. Maybe if you didn't use so many big words it would be even more powerful." Students were also discouraged from saying they liked something without being able to give a reason why. "I like what you wrote," could be more specific, such as, "I like what you wrote because when you talked about the wind

by the lake it reminded me of being at my grandmother's house in the summer and lying in her hammock."

The small groups provided an important framework for many of the art activities as well. During the printmaking lessons, students worked in small groups around the "printmaking table" at the front of the room, sharing brayers, ink, and sometimes prints. Although these groups varied in size (students printed when they were ready, so the members and numbers of the groups changed constantly) they provided an arena where students could work towards a common goal together.

Through this cooperative learning students were able to help one another learn successful techniques in the printmaking process and share ideas about design, color, texture, and composition. Because supplies were limited students collectively chose the colors we used in printing each day. Students were encouraged to help one another with the various stages of the art process (such as selecting a layout design), and to learn by observing the qualities they liked in their peers' work, rather than having a teacher-deemed "successful" print modelled for them. In this way, learning the components of printmaking became a process of discovery rather than a dictated one.

Because the students formed an intimate bond by reading personal things to one another they were able to work together harmoniously when it came time to print. This was even more important on the last two days of class when the final book binding was taught separately to groups. Certain students who caught on quickly to the process helped those who had more difficulty.

The Final Book

On the final two days of class students arranged their signatures in the order they wished them to appear in their final book. Students in Session I, who had five combined writing and printmaking lessons, each had an end result of four signatures. The option to affix the accordion book onto the inside back cover of the book, thus creating an additional signature, was offered and all students wished to do this. Students in Session II (who had an additional day) each had an end result of five signatures in addition to their accordion book.

Data Collection

In an attempt to cover as many relevant details as possible, I gathered data from the following sources: pre- and post- writing tests, student journals, teacher journal

and fieldnotes, student books, and a case study of one student. Since middle-school students have rarely had exposure to printmaking or book making, measurement of improvement within these media could not be gauged.

However, artwork could be assessed by looking at student comprehension and application of basic printmaking and book making techniques, and students' experimentation resulting from an awareness of the sensory properties. While an increase in these features could not be measured, the incorporation of them into art work could be observed, in addition to student enthusiasm and time-on-task.

Observations were recorded in the fieldnotes.

Pre- and Post- Writing Tests

Pre- and post-writing tests were designed as one way to measure student success or changes in writing. On the first day of each session, after brief introductions, students were given paper and pens and asked to write for ten minutes about one of the following: the first place they lived that they could remember; or a house they lived in that they loved. On the last day of class, after the final books were completed, students were again given the same two options to write about for ten minutes.

A teacher-made method for evaluating student writing was developed to compare the overall pre-tests to the post-tests. This evaluation measures the students' writing based upon three criteria: the use of vivid, or active, verbs, the reference to different senses in their writing, and the amount of specific detail included in their writing. These three criteria were measured using a point method to determine inclusion of them in student writing. This method is explained in detail in Chapter III preceding the results.

In addition, an informal assessment was noted, comparing each student's post-test to his/her pre-test. Such qualities as length of essay, use of action verbs, descriptive words, and incorporation of more than one sensory property in the post-test essays were attributed to student improvement if such qualities were minimal or not present in the pre-test essays. Three student examples will be presented in Chapter Three, along with quantitative results from the formal evaluation.

Student Journals

Because the student journals were the one place where students recorded everything (timed writings, preliminary writing lessons, test prints, design layouts, student responses, etc.) they were collected at the end of each

class and reviewed by the researcher. At the end of Session II each student journal was photocopied, with the students' knowledge, for future review.

Final Books

All the final books from Session II were photocopied since student progress in art can best be determined by studying the product. Color copies were made of certain pages from student books that were determined to be representative of individual lessons.

These books were evaluated using a teacher-designed rubric that examines the following criteria:

1. Craftsmanship of the binding
2. Clarity in the design of the prints
3. Variety of patterns with individual prints
4. Experimentation with symmetrical and asymmetrical balance
5. Layout designs on signatures that are balanced harmoniously
6. Experimentation in artwork that results from an awareness of the sensory properties

The method for scoring and evaluating the final books using these criteria will be presented in detail in Chapter III, in addition to three student samples of artwork.

Teacher Journal and Fieldnotes

"One of the most productive ways to foster reflective thinking is by using a journal" (Arends, p. 503). Armed with this knowledge, I kept a journal along with the students to record my observations, thoughts, and class happenings after the end of each class period. This journal proved to be a useful tool for teacher reflection. In addition, elaborate notes were recorded in a separate notebook during and after each class period in an attempt "to capture the slice of life" that is inherent in each experience (Bogdan & Biklen, 1992, p. 119). These fieldnotes were also instrumental in the modification of some aspects of the syllabus prior to Session II.

Case Study

Because of the time constraints of the two sessions, I was unable to determine the long-term affects this curriculum had on the students. I wanted a means for answering some of the questions I had that couldn't be answered by working with students for only two weeks. Thus, a student was selected who I had done writing exercises with prior to the beginning of the course. This student was willing to work with me after the completion of the course, and we met several times to do book making as well as to do

timed writing exercises together. In addition, the student allowed me to read stories and poetry that she had written on her own.

Working with her proved invaluable in beginning to answer such questions as: do students who show improvement at the end of the course maintain the same level of writing performance months later?; do students employ the device of timed writing exercises on their own after the completion of the course?; and, do students continue to use writing and book making together after they have learned some basic book binding techniques?

Only by answering these questions could I begin to understand the positive long-term affects the curriculum has on student writing and art. If student improvement in writing remained consistent, yet writing exercises were no longer practiced, would this imply that these exercises were not important for continued development? If improvement was not consistent and writing exercises were no longer practiced, would resuming them again improve student writing?

Similarly, if a student continued to combine writing with printmaking and/or book making this might evoke questions regarding the long-term affects of the interdisciplinary curriculum: if students still combine

these media does it affect the quality of both of them? Or do students use one medium to enhance the quality of another? The benefits of following a student's development after the course provide a host of implications for future studies in the combination of art and writing.

Summary

In my own life, combining book making and writing has proven to be a successful mix. But is this success due merely to personal preference, or can combining the two subjects help to motivate others and enhance their writing and art as well? In teaching a course designed to place equal emphasis on each subject and a similar methodology in the teaching of these subjects, my goal was to gather data that might begin to answer this question.

As I have mentioned, I do not wish to claim that book making and writing should be taught together exclusively, or that an interdisciplinary approach to art education should be employed all the time. Rather, I am suggesting that teaching two subjects together using a similar technique of appealing to the five sensory properties may be an empowering, effective way to gain student interest, increase motivation, and enhance the quality of student writing and art.

Chapter II provides a review of related literature and examines how this literature influenced the formation of this study and the examination of its results. Chapter III presents the data from Sessions I and II of the SEEK program, and Chapter IV offers an in-depth look at one student's art and writing during the course and six months after. A final summary, conclusions, and implications for future study is furnished in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

The nature of this study necessitates a review of literature that is both broad in its historical scope and specific in its methodology. I will begin with an overview of the history of interdisciplinary studies involving art, and the integration of art in the curriculum. Studies involving the integration of art and writing will be discussed for their individual merits and for their implications on this study. Data on motivation, self-esteem, and achievement will also be presented insofar as it relates to the curriculum. Finally, rationale and support for the teaching of memoir, and for using the senses in teaching will be provided.

History of Interdisciplinary Studies Involving Art

The notion of integrating two or more subjects in a combined curriculum is one that has ridden the proverbial rollercoaster throughout the history of education. A number of exploratory interdisciplinary schools were introduced in the early twentieth century, which have provided a foundation for educators who continue to experiment with the notion of interdisciplinary curriculum.

The Dewey School (1902-3) was set up as a social experiment for students to work collaboratively on projects that interested them and that would help them develop skills so they could live productive lives as adults (Dewey, 1901; Cremin, 1964). The integration of curriculum was expected to evolve naturally and specialists then designed activities as a result of their observations.

In 1916, Abraham Flexner published the essay "A Modern School" in which he proposed a similar model school. This model came to life in the Lincoln School (1926), which offered child-centered units to stimulate the intellectual and aesthetic development of children that would enable them to lead productive lives in the larger community (Cremin, 1964; Tippett et al., 1927). The curriculum was cross-curricular in nature and designed to provide students with "real-life situations." Although subjects were frequently taught together, this was not always the case. Units within individual subjects were often taught separately as well.

From 1924-1930 the Houston public schools also conducted an experiment in integrating curriculum, the first account of such a curriculum being implemented outside of a private institution (Oberholzer, 1937). This project was influenced by the work of Dewey and Kilpatrick, with the difference being that the curriculum was built upon "big

themes," usually involving social studies. "Interdependence was addressed at all grade levels except Grade 4, control over nature in Grades 2 through 7, adaptation in Grades 3 through 7, and cooperation in Grades 6 and 7. There seems therefore to be a pattern of development from more concrete themes to those that are more abstract" (Martinello & Cook, 1994, p. 42).

From 1943-1948 The Bank Street Workshops were implemented to teach preservice teachers at the Bank Street College of Education techniques for teaching children using a realistic, integrated curriculum (Cremin, 1964).

Integration of Art in the Curriculum

During this same period, innovations linked art education to the larger school curriculum. In the late nineteenth and early twentieth centuries, Ruskin advocated teaching drawing in concurrence with other branches of education. Later, Reconstructionists, influenced by "Dewey's concept of experience as the stuff that brings about the reconstruction of knowledge and, ultimately, social institutions as well," emphasized an integration of subject matter that interests children in order to promote effective learning (Efland, 1990, p. 203).

These philosophies led to exploratory schools that integrated art with other subjects. In the Industrial Arts Program at the Fieldston School (1878) art was taught in conjunction with other subjects. Art teachers worked together with teachers of other subjects to create curricula that complemented what the students were learning in other classes. For example, students learning the history of the first white settlers might learn to dye, spin, and weave wool, make soap, candles, wooden tools, etc.

In 1931, the Owatonna School Art Program divided art into broad areas: art in commerce, industry, printing, recreation, basic design principles, and color. The premise was to help develop well-rounded people and taught drawing, painting, and sketching. Many art activities addressed art problems in the environment: designing houses (or models), landscape architecture, window decorating, graphic design, etc. In addition, art teachers created curriculum that complemented the lessons in subjects such as history, literature, and geography. In 1938 this program was adopted by the University High School in Minneapolis.

In 1939, Leon Winslow's "The Integrated School Art Program" encouraged creative expression in art to enhance students' aesthetic growth and enrich their social perceptions. This program balanced integration with other

subjects, with specific focus on art. Lessons were sometimes directed and other times free in their encouragement of student creativity.

These programs were viewed favorably, but soon, in the years after World War II, "the feeling grew that art had become the servant of other studies, that it was not valued as important in its own right" (Efland, p. 210). The approach was also criticized because public school could rarely provide teachers who were versatile and capable enough in various subjects to teach the curriculum successfully.

Recent literature once again places interdisciplinary curriculum in the spotlight of educators' scrutiny. It has been argued that "to isolate curriculum from the context of teaching and learning sets up a false dichotomy of content versus practice" (Palmer, 1995, p. 55). This is reminiscent of Dewey's approach which calls for the spontaneous linking of curriculum as it relates to student interest. Such a trend, however, is problematic in its implementation because it requires teacher expertise in many diverse subjects and such a prerequisite is usually unrealistic.

There is a current trend in interdisciplinary education to place equal emphasis on the combined subjects. This type of curriculum is labelled cross-disciplinary study and is

defined as being a curriculum which "seeks to connect the disciplines, to find points of attachment in the form of central themes, topics, problems, issues, ideas, objects, and experiences" (Boston, 1996, p. 8). Such cross-disciplinary studies often involve team-teaching which alleviates the earlier conflicts that arose when teachers were proficient in one subject, but not another. In this study, I will use the words "cross-disciplinary" and "interdisciplinary" interchangeably.

Unfortunately, the integration of art into various curricula has often been undertaken by teachers who have had little or no experience in teaching art. Art education is too often regarded as an area which does not require an art specialist because its use is merely intended to enhance students' interest and proficiency in the other subject areas. Recent literature indicates that this misconception might be changing (Boston, 1996; Martinello & Cook, 1994; Panaritis, 1995).

In a publication by the College Board and The Getty Center for Education in the Arts (Boston, 1996) two key arguments are made for the integration of arts into the curriculum. The first, the Cognition argument, "suggests that the arts promote both the broad and deep thinking necessary for sophisticated cross-disciplinary study. The

arts potentially provide a series of pathways through which students can learn to create meanings that exist on many levels and that are expressed in various ways" (Boston, p. xiv). The second, the Curriculum Argument, "states that the arts, by virtue of their capacity to embody and share the rich diversity of human experience (especially across time, space, and cultures), are prime sources for meaningful themes and curricular centers for inter- or cross-disciplinary approaches" (p. xiv).

Integration of Art and Writing

Teaching creative writing with art has proven to be an effective teaching method to improve student writing. Perhaps this combination provides positive affects on student writing because "discovering an image of what you're writing opens up new possibilities that wouldn't occur to you except visually" (Kuriloff, 1989, p. 179). Approaching writing after an illustration has been drawn provides students with a visual reference more concrete than the tenuous glimpses of memory.

In her unit combining writing and drawing, Beth Olshansky (1994) noted that "most children (even in the upper grades) choose to begin the process [of writing and illustrating a story] with a visual image" (p. 14-5). A

two-year study through the Laboratory for Interactive Learning at the University of New Hampshire revealed that integration of art and writing resulted in "dramatic improvement in writing abilities, particularly in areas of plot development, descriptive language and imagination" (Olshansky, p. 17). Art has also been used as a motivation for students to appreciate and write poetry (Campbell, 1995; Ferriss, 1995; Lund & deOris, 1994).

Unfortunately, the trend of focusing on the degree to which art improves writing has not provided enough information about how writing might improve art. Mythology and art have been combined as a means of evoking "new insights and personal awareness" in students (Dimondstein, 1992; Thurber, 1995). Storytelling and art have been linked in order to promote understanding of art history and to demonstrate the diversity which exists among different cultures (Erickson, 1995; Stokrocki, 1994; Johnson, 1995). Nonfiction writing about art history has been practiced to enhance students' knowledge and appreciation of art history, but not to improve the quality of their art production (Stokrocki, 1995).

Yet the notion that writing can improve art is one that some researchers have found to be legitimate. In her article "Stories and art: Creating multiple levels of

meaning," Alice Arnold (1997) discussed the results of a unit which used the poetry of Maya Angelou to evoke specific images in the minds of the students, who then illustrated the poetry they heard. She found that "stories can provide a point of departure for arts explorations that allows multiple levels of meaning to emerge" (p. 22). However, this study does not provide information about how students' own writing might affect their art.

Another teacher, Louise Cameron (1997), reflected on her experiences teaching a unit where students wrote and illustrated autobiographical stories. She found that "developing a theme to both writing and art not only helps students increase the amount of description in their written work, it also encourages them to include more details in their drawings" (p. 20). These findings indicate that a cross-disciplinary curriculum which combines art and writing can not only improve student writing, but also student art.

Motivation, Self-Esteem, and Achievement

When I designed this curriculum, I believed that teaching writing and book making together by drawing attention to the five sensorial properties would result in enhancement of both subjects. I suspected that this might be partly because of the teaching methods used, partly

because the two subjects complement one another, and partly because of the influence the content might have on student motivation, self-esteem, and achievement. I will now focus on literature that supports motivation, self-esteem, and achievement.

Because book making provides almost immediate, concrete results I believed that it would increase the achievement motivation of the students, an important consideration since the self-perceived ability of students tends to decline throughout the junior high school years (Covington, 1992). Engaging the students in the subject studied increases the likelihood that students will develop intrinsically motivated behaviors with regard to the subject. Edward Deci defines intrinsically motivated behaviors as types of motivation influenced directly by personal interest, satisfaction, or enjoyment (in Good & Brophy, 1995). This is particularly relevant to the mastery of book making since "people feel competence and self-determination when they are able to master challenges that are optimal for them (novel enough to be interesting, difficult enough to be challenging)" (p. 360). Most middle school students interested in art seem to find book making both interesting and challenging.

In his research on motivation, Mihaly Csikszentmihalyi (1990) studied "states of optimal experience," or times when people experience complete involvement, concentration and enjoyment. He referred to such moments as flow experiences and suggested that teachers attempt to create situations where this could be evoked in students. "Schools and teachers who can structure learning activities so students become totally involved and experience flow are much more likely to enable students to excel in academic and social learning" (Arends, 1994).

When students write for teachers they often emulate a literary style that they think the teacher wants to read. While literature supports the practice of modelling writing to learn technique, this method does not spark student creativity or motivation. "Motivation is crucial to writing-- students will write far more willingly if they write about subjects that interest them and that they have an aptitude for" (Zinsser, 1988, p. 15). Thus, focusing on memoir writing, a subject that often interests students because of the personal element it entails, seemed a natural selection for this curriculum.

Memoir Writing

According to William Zinsser (1988) there are two kinds of writing. The first, Type A, is explanatory writing that transmits existing information. The second, Type B, is exploratory writing that enables us to discover what we want to say. Most teachers focus on Type A writing when they teach because it allows emphasis on grammar, punctuation, and spelling: components important in the teaching of standard English. However, Type B writing offers many benefits that are often overlooked by teachers of writing, and is the only type that many of America's best writing teachers believe is worth teaching. It offers "a voyage of discovery into the self. Only by going into uncharted territory, they feel, can a writer find his potential and his voice and his meaning" (p. 57).

Teaching memoir writing provides students the opportunity to focus "on one period that was unusually vivid or that was framed by historical events" (Zinsser, p. 168). In doing this, students are able to envision and write scenes, events, and descriptions which are more specific because they come from real experience. "Elizabeth Bowen said, 'Physical detail cannot be invented.' It can only be chosen" (in Welty, 1984, p. 99). What better way to choose

physical details than by recalling events where these details were real?

"Memoir is a window into a life" (Zinsser, 1987, p. 21). Likewise, it provides a window for the writer to peer through when searching for the right words to convey the story. In teaching beginning writers to portray vivid scenes, special attention must be paid to enabling them to recall specific details. It is this component that separates successful writers from their unsuccessful counterparts.

Teaching students to include specific details in their writing often requires specific instructions in how to achieve this. Educator Kenneth Koch recommends proposing opening lines to children that are more specific than "my summer vacation." He argues that "one of the main problems children have as writers is not knowing what to write about. Once they have a subject they like, but may have temporarily forgotten, like wishing, they find a great deal to say" (in Gardner, 1973, p. 289). Some of the lines and themes he uses to elicit student writing are: "I dreamed," "I wish," "Write as if you're a snowflake," and "Tell a poem with a lie in every line."

Natalie Goldberg (1990) proposes similar writing prompts to elicit vivid writing, such as: "I'm afraid of,"

"I remember," "I am thinking about the time," etc. The methods by Koch, Goldberg, and others lend support to the teaching of memoir writing to improve the use of original and specific detail in student writing, and to encourage the recognition of these qualities in later writing of all genres.

Using the Senses in Teaching

"Educating for personal knowing requires an approach to learning that is based in direct sensory experience... All knowing begins with sensory experience" (Erikson, 1985, p. 85). The phrase *to sense* means that all the senses are used to acquire information and create what we call "perception." "The role of the senses is to inform the mind. Perception will thus be as keen or as dull as the quality and the validity of the information the senses affirm" (Erikson, p. 85).

In 1770, Johann Heinrich Pestalozzi proposed educational techniques that emphasized sense impressions received from nature. He also advocated a new method to teach drawing that stressed observation of lines, curves and angles instead of drawing. One of the fundamental principles Pestalozzi introduced was that children should be taught to observe (*anschauen*). This included observing with

every sense. "Each object deserved complete attention and should be handled, smelled, tasted, listened to, and looked at from a variety of angles" (Erikson, p. 92). Pestalozzi advocated using the senses in all learning procedures and abhorred the customs which required 6-year-olds to sit at desks in classrooms for hours. He felt children of the elementary school age would be better taught at home under the guidance of their mothers, and in 1894 published *How Gertrude Teaches Her Children* (which chronicles how a poor mother struggles to teach her young children).

In today's society some parents share a similar philosophy to Pestalozzi's and choose to home school their children. It is, however, unrealistic to expect that this would be everyone's option or choice. Rather, a compromise seems to be evolving which incorporates teaching methods that are far removed from the traditional way where children sat at desks that were bolted to the floor and were "seen and not heard." One such framework is to teach "through appeals to the immediate reality of the excitement of the senses" (Sutro and Gross, 1983, p. 118).

Erikson (1985) recounts observing a little boy playing on the beach, intent upon discovering the feel of sand upon his body. "He caressed it, let it run through his fingers, tried it out with his toes, wiggled in it, and poured it on

his tummy, completely absorbed" (p. 86). His father came along and urged him to place sand into a toy truck with a small shovel. The toddler watched for a moment, then crawled away. The father's behavior is typical in our Western culture which is "a nontactile, kinesthetically dull, success-ridden society" (p. 86).

Piaget (1952) described the motor sensory stage that dominates learning in infants and young children. This theory has been since been expanded on by others to include children in the elementary and middle school years; specifically, in regard to the incorporation of sensory stimuli in teaching (Gardner, 1983; Erikson, 1985).

Using the Senses in Teaching Art and Writing

A central technique in teaching the combined writing and book making curriculum was to stimulate student awareness of their sensory properties. This was done through guided imagery, exercises designed to call specific attention to individual senses before writing and drawing.

In art, recognition of the sensory properties can provide the right stimulus that will "evoke a torrent of creativity" (Gardner, 1973, p. 292). "Some people are natural visual thinkers and prefer to represent their ideas graphically rather than in words. Even if you don't

ordinarily think visually, you can learn to do so with practice" (Kuriloff, 1989, p. 179). One of the means for achieving this is through enhancing awareness of the senses in preliminary exercises designed to lead into the assignments. This technique brings students away from the preoccupation of what they will write or draw and requires them to instead focus on smaller details. It is the inclusion of these details which enhance student writing and art.

Unfortunately, because our society stresses the visual and auditory senses, students often don't know how to incorporate an awareness of the other senses into their writing. Yet evocation of *all* the senses is one area that can help students create writing that includes vivid, memorable descriptions, and artwork that exhibits variety in color, pattern, texture, and movement. The writing warm-up exercises, memoir writing lessons, and guided imagery were designed with this principle. If students practice writing which incorporates specific detail through awareness of the sensory properties, this might stimulate their use of such details in later writing. If students practice guided imagery to enhance their awareness of the sensory properties, they might show experimentation in art as a result of this.

Erikson (1985) asserts that art can play an instrumental role in teaching an awareness of the senses because throughout history we have become so attuned to our physical senses to the arts: "music and poetry became the arts of the ear; the visual arts the aesthetic media of the eye; sculpture and ceramics the arts of touch; dance the experience of motion motivated by the pure enjoyment of body movement" (p. 90). I will take this notion one step further and say that good creative writing should help us to see and hear, as well as to taste, smell, and feel. Natalie Goldberg (1986) recalled one day where a student suddenly exclaimed: "Oh, I get it! Writing is a visual art!" Her response to this is, "Yes, and it's a kinesthetic, visceral art too" (p. 50).

Summary

This study introduces a cross-disciplinary curriculum that uses sensory properties to instruct students in book making, printmaking, and memoir writing. While interdisciplinary curricula were explored in the early 1900s they soon met with disfavor, largely due to the shortage of teachers who were underqualified or underexperienced to take on instruction that required mastery of more than one subject. Recently, the notion of team teaching used in the

reintroduction of interdisciplinary education has evoked a response to the advantages such a curriculum might present.

While many studies have documented the improvement that art has upon writing when the subjects are combined, not as much has been done to consider the effects writing has on art. It is, however, evident that student motivation in such a curriculum might increase self-esteem, and thus achievement.

Psychologists and teachers alike have reported the benefits of instructing students by involving the sensory properties. The incorporation of memoir writing to encourage students to become familiar with using specific sensory details in their writing is a technique that has been implemented and praised by many successful teachers. Thus, I have selected to teach memoir writing with printmaking and book making, along with guided imagery to heighten students' awareness of sensory properties.

CHAPTER III

PRESENTATION OF DATA

This study commenced during the 1996 summer session of the SEEK program at the University of Arizona. Students were informed that each day they would combine a printmaking and memoir writing exercise to be put into a final book on the last two days, and that their work might be used later in research.

I will first examine the role the student journals play in student motivation by looking at examples of one student's writing within the journal. Next, the combined exercises in printmaking and memoir writing will be reviewed by describing a typical day beginning with writing, and a typical day beginning with art. This will show an example of the framework of the course and what it means to teach using methods that enhance awareness of all the sensory properties.

Next, quantitative and qualitative results of the pre- and post- writing tests will be presented as a means for determining if student improvement in writing occurred throughout the duration of the course. I will then examine the art work in student books by presenting quantitative and qualitative data to measure student comprehension and

application of basic printmaking and book making techniques, and to explore the role the sensory properties played in the production of student art. Finally, the teacher fieldnotes will be summarized as they pertain to observations of student motivation, improvement, and comprehension, and the use of the sensory properties in writing and art.

The Journal and Student Motivation

Student journals were collected and reviewed daily. Journals of Session II students were photocopied in their entirety. The purpose behind keeping a journal was to furnish students with a self-created space wherein they could pen their writing warm-up exercises and the first drafts of their writing lessons, experiment with test prints, and plan the layout for their signatures.

The journals additionally allowed students the opportunity for an informal discourse with me since they knew I reviewed them nightly. This factor helped me determine which exercises were working to enhance student writing and how much planning-time they used to design the layout of their prints. It also afforded me a more intimate look into the lives of some of the students who revealed personal details: this helped me better address individual needs that arose. "Increasing the number of informal

conversations has the potential of increasing teaching dilemmas, but it also increases the possibility that teachers will gain useful insight into student mediation of experience thus improving the classroom climate for meaningful, co-regulated learning" (McCaslin & Good, 1996, p. 160).

In some cases, students disclosed information which allowed me to break down barriers they had about writing. One such student, Lottie¹, related a chilling anecdote in her "I remember" exercise:

I remember when I went to Golf and Stuff. I went on the bumper boats and I fell in the water and I came out all oily. My mom had to take me home, wash me off with the hose, and I got a lot of ant bites. I heard that ants are poisonous, but I don't know. My 5th grade teacher said that I was dumb and I should go to a retarded hospital. She said that I won't make it to college. I want to go to college at the U of I, University of Illinois...

The truth was that I thought Lottie possessed a rare ability to write in a "stream of consciousness" fashion unattainable even by many successful writers. People pay

¹All names and identifying features of students have been changed.

thousands of dollars every year to learn to manipulate words as effortlessly as Lottie. Her discussion of falling into water, coming out full of oil, getting hosed off and consequently getting ant bites reveals the type of personal, unique, and memorable details that most beginning writers aren't able to remember when they are recalling events.

That such vivid narrative is followed by the memory of a teacher telling Lottie she would never make it to college is not only appalling, it indicates that Lottie had good reason to think her writing was inferior. Unfortunately, Lottie is an example of "the fear of writing [that] is planted in countless people at an early age... the loss of confidence stays with us for the rest of our lives" (Zinsser, 1988, p. 14). Lottie's grammar, spelling, and punctuation were among the worst I have seen in a twelve-year-old² and I suspected that this caused problems in her classes at school. Arends asserts that "students who have histories of low grades come to see themselves as failures, and another low grade only confirms this perception" (1994, p. 214).

I made the decision to take Lottie aside and tell her how talented I thought she was. I also explained that

²All students' spelling, grammar, and punctuation have been corrected for the purpose of clarity and to provide an unbiased assessment of their writing.

sometimes people get caught up in looking at spelling and grammar errors and that, since she was so gifted, I thought it would be a shame if that happened to her. Thus, an arrangement was made where she showed me the first draft of all writing exercises and I helped her correct them for the final draft. After this conversation, Lottie thrived in class. Not only was she the first student to offer to help with clean-up, but she worked diligently at all the writing and art exercises.

I believe that this situation, and others like it, lends support for the integration of art and writing in the classroom, most significantly for the argument that art can enhance students' writing abilities. Lottie took the course because of her interest in art (an area where she also had considerable talent), and through the integration of the two subjects, the required writing in a journal she made, and the use of assignments designed to teach writing by increasing awareness of the sensory properties, personal issues were able to be addressed. This led to an end result which presented Lottie's writing in a book she had made, ensconced between prints she had designed, and without grammatical error. Hopefully, Lottie left the class with greater self-esteem that might lead to increased effort in improving her grammar and spelling.

Combined Exercises in Printmaking and Memoir Writing

The printmaking and writing exercises were designed to explore the way the two disciplines interact with one another. They were also designed to examine the technique of emphasizing the sensory properties when teaching both subjects. The premise was that heightening students' awareness of their senses might in turn enhance their work in both subjects.

Each class period was two hours long and students wrote during one hour and did printmaking during the other. My plan was to begin some days with the art lesson, and others with the writing lesson in order to give equal emphasis to each. Discussion of some specific lessons will provide an example of what it means to "use the sensory properties" to increase student awareness of specific details. The course syllabus in Appendix D lists topics of sensory exercises.

A Day Beginning with Writing

The day began with a writing warm-up exercise that required students to write for ten minutes beginning with "I remember." Keeping in mind rule number four, keep your hand moving, students were instructed to write "I remember" any time they felt they didn't have anything else to write.

After students had read their exercise to a partner they returned to their seats to begin the writing lesson.

"Okay. I want you to write down five nouns."

"Can they be proper nouns?" someone interrupted.

"They can be any nouns you want. Then I want you to write down five verbs, and then five adjectives, and five adverbs. These should be the first words that come to your mind. Write them in columns in your journal."

There was confusion among some students about what adjectives and adverbs were, so after providing a brief and unexpected grammar lesson, the students were given a few minutes to make their lists. When they were finished, they looked at me expectantly.

"Now, I want you to write a poem about your hand using as many of the words that you wrote down as you can. Your poem should be at least five lines long." I had selected this for the first writing assignment of the course because it encourages students to look at words differently and provides a freedom to experiment with language without any parameters. I wanted students to feel free to write the first things that came to mind, without feeling the pressures of a rigidly confining assignment. The poem assignment also encourages students to use verbs that they might not normally include in a sentence. Whereas students

will naturally use passive verbs within a sentence, they will rarely write passive verbs on a list when they are told to think of verbs. This assignment, I felt, would set the tone for the remainder of the course and encourage students to experiment.

Surprisingly, all the students immediately began the task of composing their poems. I had anticipated that some students might be hesitant to write because the subject potential was so broad, but the requirement of using as many of the words on their list as possible provided them with an instant framework. Some students used their free hand as a model while writing with the other, manipulating their fingers into a fist and then stretching them wide, turning the palm upwards, and then placing it flat on the desk.

After all poems were complete, students took turns reading them aloud for the class. Everyone listened intently, marvelling at the vivid, and specific images shared by their classmates. When all poems had been read, I said, "Now I want you to pick one image from your poem. Pick a simple image, one that you will be able make a clear print from." I told the students that the image they chose did not have to be an illustration of the poem, but could be an image within the poem. Before students sketched their designs in their journals I explained the definitions for

signature and layout (two of the vocabulary words for the day) and showed how I wanted them to sketch their layouts in their journals.

I demonstrated the type of prints we would be doing, styrofoam prints, by selecting an image from my own poem (which I wrote while the students wrote theirs) and which I had also read aloud. The image I selected was a ring and I showed the students that they could cut an image out to print, or they could draw an image into the styrofoam with a pencil or pen to create a relief print. I showed them how to print both of these variations and how to spread the ink using the brayer (the third vocabulary word for the day).

The written instructions on the board read:

1. Do sketch in journal
2. Cut or carve styrofoam print
3. Sketch layout in journal
4. Write poem on signature
5. Do print on signature

I played a cassette of Enya for the students while they began their sketches. One student, Jaclyn, said "Oh, I know this. My mother listens to this all the time."

"Yeah, so does mine," Ethan responded.

Students flurried to the front desk, or raised their hands, discussing and comparing images with me and with one

another. Some images were rejected as too complicated to be able to carve the details, and some students needed help deciding which image would be the most appropriate for the assignment. After the prints had been cut and tested in the journals, and the design layout had been sketched, students copied their poems and prints onto their signatures.

Fieldnotes about Day Beginning with Writing

The success of this assignment surprised me, not only in the interesting poems that resulted, but in the diversity of images students chose to illustrate them (these will be discussed later in this chapter in the section *Artwork in the Final Book*). Though many students did prints that were a variation of a hand, some students actually selected specific images from their poems like an apple or a flower. Initially, I hesitated to incorporate styrofoam prints into the curriculum but decided that they would be an inexpensive introduction to the principles of printmaking. This was the only poetry assignment in the entire curriculum and I thought that the idea of writing poetry would be abhorrent to the students. Much to my surprise, they instead attacked the assignment with relish, using as many words on their list as they could, and then painstakingly searching for the perfect image to represent the finished poem. For example,

one student who wrote about a ring in the palm of her hand chose to make a print of a tiny ring laying in the palm of a hand.

A Day Beginning with Art

Class began in a shady, outdoor courtyard near the classroom. I sat on a concrete bench and the students scattered about, some sitting cross-legged on the ground, others seated on benches. "Okay," I began. "I want you to close your eyes and concentrate. Don't talk, just feel yourself relaxing and sinking into your environment." I paused, surveying the closed eyelids and the steadily rising chests of the students as they complied with the instructions.

"Now, concentrate on the sounds around you. What do you hear? Listen to everything around you. The sound of your breath, the chirping of the birds, the noise from the construction workers. Just focus on everything you can hear. Now I want you to focus on what you smell. Breathe in deeply and focus on the scents around you: the smell of the newly-laid asphalt, the blossoms on the trees, the perfume of the person beside you..." I allowed a moment for the students to concentrate and then repeated these verbal instructions by appealing to their other senses: "What do

you taste (the toothpaste in your mouth, the aftertaste of the blueberry muffin you had for breakfast, etc.)... feel (the hard ground beneath you, the pencil between your fingers, etc.)?"

After this rendezvous into the sensory realm we walked to the classroom. When students were seated I again asked them to close their eyes. "Now, I am going to place something in your hands and, with your eyes still closed, I want you to hold the object. Feel it, explore it with your fingers, become aware of every ridge and bump on the surface." I placed a potato into the hands of each student. Some giggled at first contact, others solemnly undertook the assignment of "feeling" the potato.

"What are you feeling? I want you to concentrate on that for a moment remembering everything you've just experienced outside," I instructed. "Okay, now open your eyes and sketch an image that comes to your mind." Students opened their journals and drew for a few minutes.

"Okay," I interrupted. "Now I want you to think about a food you love. Focus on that food remembering the way we just focused on being outdoors and the way you just focused on the potatoes. Think about what the food tastes like, what it feels like in your mouth, what it smells like, what it looks like. Now, sketch an image in your journal."

Potatoes had been sliced in half before class and I passed one half to each student, instructing them to transfer one of their images onto the smooth, slippery surface. Vocabulary words had been written on the board and I explained the definition and importance of each of them as I carved a sample print into a potato. The words on this day were: balance, composition, pattern, symmetrical and asymmetrical.

Several examples of prints that illustrated the vocabulary words had been placed along the chalkboard at the front of the room and I passed these around for students to see. I stressed the importance of keeping the design simple in order to achieve maximum clarity, and explained how a simple design could be used to create a pattern. Next, I showed how patterns, or individual prints could be arranged to create a symmetrical or asymmetrical design. Examples were shown to students and they were asked to collectively identify whether the designs were symmetrical or asymmetrical and why, and whether each design created a balanced overall composition.

I finished showing students how to carve into the potato, being careful to cut away from their bodies, and offered tips like tracing their pencilled-in designs with the craft knife and then slowly cutting pieces away. One

student asked me how she could make a clear print of a bunch of grapes and I offered suggestions for cutting around each individual grape within the bunch.

I placed a cassette of Bach into the portable cassette player and walked around while students chose one of the images they had sketched in their journals to make a potato print from. One student remarked, "Oh, I can play this on my violin." To appeal to the visual learners in the class, instructions were written on the board:

1. Draw a design to print
2. Design layout
3. Draw sketch on potato and carve
4. Do test print in journal
5. Print on signature

Students designed a layout in their journals, marking where the prints and text would be printed on the signatures by using a method modelled to them in class (see Appendix E). After showing their sample layout to me they printed on their signatures. After the printing component of the class, when the signatures were strewn about the classroom to dry, we again retreated to our semi-private courtyard.

We reviewed the five essential writing rules of the class (use active verbs, avoid the word "because," be specific, keep your hand moving, and show don't tell).

Students were given a ten minute writing warm-up: "Write everything you know about mashed potatoes." After students had completed their writing and read their words to a partner, they were given another writing assignment: "Think about the food you love that you thought about earlier. Be specific. Give us the details. Where did you eat it? Who were you with? What season was it in? What did it taste like? You have ten minutes to write. Go."

After the writing lesson, students returned inside to copy their writing onto their signatures. During Session I, students chose whichever writing exercise they preferred. While the prints did not always work in harmony with the text, the sensory exercises which led to the development of each was comparable, and in this way the prints and writing were of a similar vein (see Ivy's potato print lesson in Appendix H). Nevertheless, in an attempt to better unite the two subjects, the option to choose which image they could use to make their print, or which lesson they could use to write on the signature, was not afforded to students in Session II. This, of course, allowed less freedom, but ensured that the writing and art worked together to create a cohesive final result.

Fieldnotes about Day Beginning with Art

The assignment of writing about a food you love seemed to be met with general disinterest for the writing component, but aroused students' interest for the printmaking component. Thus, especially in Session I, students wanted to print their image related to the food they love and write the text from the mashed potato assignment, which the majority of the students had been more interested in writing.

Many students chose to do prints on the final signature that did not illustrate the text. Though some found this amusing, it did not seem to perturb them to have a border of leaves or grapes or pizza surround text about mashed potatoes. Informal dialogue with these students revealed that they wanted simply to copy on their signature what they considered to be the better writing and the better print, with no real concern that the two subjects might not match. Because of time constraints, we were not able to embellish as a class on whether the prints needed to illustrate the writing, or in what way the two worked together in spite of their differences (beyond their relation to the guided imagery). In a class of longer duration, such aesthetic questions could provide rich material for classroom discussion.

In retrospect, I think that this lesson might have met with greater harmony between the prints and writing if I had not been so rigid and secretive about what the writing component would be. Informing students before they designed their prints that they would be writing about the same image might have affected the results and encouraged students to work toward a common theme. Of course, another option would be to have only one guided imagery exercise (instead of two) and use the same for both the writing and the printmaking.

Pre- and Post- Writing Tests

On the first day of class, after brief introductions, students were asked to write for ten minutes about either of the following two topics: a house they lived in that they loved, or the first house they lived in that they could remember. This same assignment was given on the final day of class. During Session I five of the six students completed both the pre- and post-tests, while one completed only the pre-test. During Session II six of the ten students completed both the pre- and post-tests, three completed only the pre-test, and one completed only the post-test. For the quantitative portion of assessment, only those scores of the eleven students who completed both pre- and post-test are considered.

Quantitative Results

A rubric designed to measure improvement of student writing offers an indication of performance ability. This rubric was based on research in combination with my experiences as a writer and teacher of writing. I have found that beginning writers' work is characterized by a proclivity for certain similar features:

1. chronic use of passive verbs
2. writing about unfamiliar topics
3. listing details or events without being specific
4. "telling" instead of "showing"

As a result of these beliefs, the writing rules listed in Chapter I were developed, in addition to the exercises that explore students' awareness of their sensory properties. Since the course did emphasize the importance of including sensory properties in writing, improvement might be expected in students' abilities to list details more specifically and to "show" instead of "tell."

Because the course, and the pre- and post-tests, centered on memoir, and the overuse of passive verbs was addressed only briefly and not reinforced, I was especially interested in seeing if student improvement would occur in the use of more active verbs.

For the evaluation of student writing, a teacher-made rubric was designed using as a model the Selective Correction form from the Texas Education Agency as a guide (1993). This rubric assigns points for grading important components of student writing. Three categories were assessed in the student pre- and post- writing tests: use of active, or exciting verbs, reference to sensory properties, and descriptive details.

The criteria for grading verbs is as follows:

- 4 = Verbs active and exciting 50-100% of the time
- 3 = Verbs active and exciting 40-50% of the time
- 2 = Verbs active and exciting 25-40% of the time
- 1 = Verbs active and exciting less than 25% of the time
- 0 = No active or exciting verbs

A verb was deemed active and exciting if it was not derived from a passive verb (am, is, are, was, were, can, could, have, has, had, go, gone, went, was, would, etc.), and if it was not modified by a passive verb. A verb did not need to be a main verb to be counted, but could be any verb within a sentence. Since sometimes passive verbs are necessary to use in writing, the highest score allows for inclusion of them some of the time in student writing. Verb use was measured by counting the number of verbs in each composition and determining the percentage of passive versus

active verbs within it. In this way, the scores more accurately reflect whether or not there is an actual increase or decrease in the amount of active verbs used within a composition. A verb did not need to be a main verb to be counted, but could be any verb within a sentence.

The criteria for grading references to sensory properties is as follows:

4 = four or more sensory properties referenced

3 = three sensory properties referenced

2 = two sensory properties referenced

1 = one sensory property referenced

0 = No sensory properties referenced

Reference to a sensory property is evidenced when writing directly or indirectly refers to one of the sensory properties. An example of a direct reference would be to say "the rind of the orange tasted bitter." An example of an indirect reference would be to say "the bitter orange." Students were given one point for each time they referenced a sensory property, regardless of which property it was. If a student made four auditory references they would be given four points. Thus, the maximum amount of points a student could receive is not seven, but is infinite.

The criteria for grading use of descriptive details is as follows:

4 = four or more descriptive details

3 = three descriptive details

2 = two descriptive details

1 = one descriptive detail

0 = No descriptive details

Scoring the students' use of details in the tests proved difficult since it was the quality of the details that improved in the post-tests, and not necessarily the quantity. In fact, many times a large quantity of details might indicate a lack of specific details. The dilemma here was in defining "detail." I solved this problem by developing a method which allotted students one point for an overall description. For instance, if a student discussed the basic floor plan of the house they would be given one point for detail. If they listed items of furniture in a room they would be given one point, even though two items might be listed. This is because *listing* items is not the same as *describing* them, but the very nature of listing a few things in a room does, in effect, help describe the room.

The maximum number of points a student could receive on the pre- and post-tests was 12, which would indicate that the student demonstrated use of active verbs, references to sensory properties, and descriptive details in their

writing. Tables 1 and 2 illustrate the results of the pre- and post-tests in relation to student improvement in these areas. Table 3 shows the final scores of the pre- and post-tests and indicates the level of improvement for each student. Appendix F provides several pre- and post-writing tests with their scores.

The tables indicate that the mean score of the student writing was higher on the post-test than on the pre-test. The mean of 5.6 points on the pre-test increased to 9.5 on the post-test, a difference of 3.9 points. A mean of 9.5 on the post-test indicates that the majority of the students demonstrated vivid writing. This is particularly significant since none of the students received a score higher than 8 on the pre-test and 64% of the students scored lower than 6. On the post-test, none of the students scored lower than 6 and only 9% scored a 6. The remaining 91% scored a 7 or higher.

As might be expected, the greatest improvement was in the students' use of different sensory properties in their writing, with a mean improvement of 2 points in this category. In the pre-test 55% of the students had no references to sensory properties, but in the post-test this number decreased to 9%. While in the pre-test 90% of the students referenced one or no sensory properties, in the

post-test 73% referenced more than two sensory properties, and of these students 56% referenced more than four. These findings indicate a dramatic improvement in students' awareness and use of the sensory properties in their writing.

Of greater surprise was the evidence that students' use of active verbs increased 61% on the post-tests. The average mean on the pre-test of active verbs was 1.7 and this increased to 2.8 on the post-test. The most significant finding here is that in the pre-test 33% of the students used active verbs less than 25% of the time and 18% used only passive verbs. On the post-test none of the students used passive verbs exclusively, only 9% used them less than 25% of the time, and 91% of the students used active verbs more than 25% of the time.

These scores are especially interesting since use of active verbs is considered by most teachers and researchers to be a quality of good student writing. The fact that active verbs and passive verbs were only discussed briefly during class time and reinforced only through their existence in the writing rules might indicate that the sensory exercises, whether through the guided imagery or the art projects, played a role in the increase of active verbs in student writing.

The quantitative findings indicate a small increase in the amount of details included in student writing, with a .6 difference in the mean between the pre- and post-tests. The most interesting finding measurable by this evaluation is that in the pre-test 45% of the students included three or less descriptive details in their writing, whereas in the post-test 100% of the students included four or more. Not evident in the quantitative research is the metamorphosis from the basic, lackluster description so prevalent in the pre-tests, to the more vibrant, engaging descriptions apt to occur in the post-tests. The qualitative research gives a clearer depiction of this.

Table 1 - Results of Writing Pre-test

	PRE-TEST			
	VERBS	SENSES	DETAILS	TOTAL
MAX	1	1	2	4
IVY	1	2	4	7
KEVIN	0	0	2	2
ANTHONY	0	0	3	3
ALEX	3	1	4	8
TREVOR	2	0	4	6
NOAH	3	0	3	6
MARK	1	1	4	6
ETHAN	4	0	3	7
BILL	1	1	4	6
CALEB	3	0	4	7
<hr/>				
mean:	1.7	.6	3.4	5.6

VERBS = Usage of verbs that are active and exciting

SENSES = Reference to sensory properties

DETAILS = Usage of descriptive details

Table 2 - Results of Writing Post-test

	POST-TEST			
	VERBS	SENSES	DETAILS	TOTAL
MAX	4	4	4	12
IVY	2	4	4	10
KEVIN	2	2	4	8
ANTHONY	2	2	4	8
ALEX	3	2	4	9
TREVOR	4	4	4	12
NOAH	2	2	4	8
MARK	1	1	4	6
ETHAN	4	4	4	12
BILL	4	4	4	12
CALEB	3	0	4	7
<hr/>				
mean:	2.8	2.6	4	9.5

VERBS = Usage of verbs that are active and exciting

SENSES = Reference to sensory properties

DETAILS = Usage of descriptive details

Table 3 - Comparison and Improvement of Writing Pre- and Post-tests

	PRE-TEST TOTAL	POST-TEST TOTAL	IMPROVEMENT
MAX	4	12	+8
IVY	7	10	+3
KEVIN	2	8	+6
ANTHONY	3	8	+5
ALEX	8	9	+1
TREVOR	6	12	+6
NOAH	6	8	+2
MARK	6	6	0
ETHAN	7	12	+5
BILL	6	12	+6
CALEB	7	7	0
<hr/>			
mean:	5.6	9.5	3.8

Qualitative Results

An informal assessment offers comparison of students' post-tests to their own pre-tests. I have selected three students' pre- and post- writing tests that are representative of student development. Two of the students selected (Anthony and Ethan) showed an improvement of 5 points between their pre- and post-tests. Since this is the closest score to the mean improvement of 3.8 these students were deemed to be the most accurate representation of the majority. The third student (Max) was selected for the dramatic difference between his pre- and post-tests, and his improvement of 8 points between the pre- and post-tests was the greatest in the class. Unfortunately, the samples presented are only from male students. This is because an overwhelming 75% of students were males, and only one female student completed both the pre- and post-tests: since she is the subject of the case study I will discuss her work in Chapter IV.

Anthony's Results

Anthony was a thirteen-year-old student in Session I who completed the assignments, was generally well-behaved, and seemed to put forth very little effort in his writing assignments throughout the course. He enjoyed the art

portion of the course and expressed verbal satisfaction with the class, but would often break the rule of "Keep your hand moving" and stop writing after a few sentences. This behavior remained consistent throughout the course.

Anthony's Pre-Test

My first house was in the Philippine Islands. My dad was the mayor of the town and we were living in a very big house. I don't remember much about it because I was not old enough. In the back of the house there was a small pond.

Anthony's Post-Test

I remember the house I had in the Philippines. It was huge. My favorite part was the pond in the back of the house. When it was filled up completely it had little tadpoles in it. When they grew up I thought some of them were poisonous because some of them were very colorful. Once, when we were having dinner one of our dogs had rolled in another dog's droppings, and he always followed my mom around, so when nobody could eat because of the smell I thought it was very funny.

Fieldnotes Regarding Anthony's Pre- and Post-Tests

I was surprised at Anthony's post-test because most of the time he seemed so uninterested in the writing assignments. Many days I had the feeling that he was just biding his time until he could do art. His pre-test is a wonderful example of what many students this age consider to be creative writing: just the facts, with little room for the interesting details that make a story memorable. It impressed me that Anthony began his post-test by writing about the same house that two weeks earlier he didn't have much to say about. The most notable difference is that in his pre-test he used no active verbs or sensory references, whereas in his post-test he used active verbs 25-40% of the time and included two sensory references.

Anthony didn't mention many specific details about the house itself in either the pre- or post-tests. In the pre-test he wrote that he didn't remember much about the house except that it was very big. This "I don't remember" phrase was seen often in the pre-tests and students used it as a reason to stop writing. Through teacher reinforcement of the rule "Keep your hand moving," in combination with the sensory exercises, Anthony, as well as other students, selected other things to write about when they couldn't remember, or didn't want to write about the assigned topic.

This deviation was encouraged since I believe that good writing often stems from remembrances that the student might not write about if the exercises didn't provide a general direction or starting point.

Anthony's anecdote about the smelly dog is not only a sensory reference, but is the type of detail that engages the reader. This is combined with a reference to taste when Anthony writes that "nobody could eat because of the smell." Readers of the pre- and post-tests might not remember that he lived in a "very big house," but will be more likely to remember that one of his dogs rolled in another dog's droppings and that nobody could eat because of the smell.

Ethan's Results

Ethan, a thirteen-year-old in Session II, was the one student who resisted memoir writing. During the first week of the course he was rude, surly, and blatant in his insistence not to do any of the writing exercises. At one point, when students were doing a writing exercise that required them to write about foods they love he wrote, "I came in here to write stories, not about foods."

Several telephone conferences with his mother revealed that Ethan didn't want to write memoir because events in his past were too painful for him to think about. Ethan wanted

to write fiction. At the beginning of the second week, I took Ethan aside and explained that he could interpret the writing assignments to be what he wanted them to be. For example, if the assignment was to write "I remember," he could write the exercise from the standpoint of a fictional character. Such an exercise would still be beneficial in becoming acquainted with the finer details of the character's personality. This arrangement suited Ethan: his attitude improved, and he began to participate in some, though not all, of the writing assignments.

Ethan's Pre-Test

The first house I lived in that I remember was a relatively large farm house on top of a hill in the middle of a forest. There was a stream running by it and once it overflowed and carried away a neighbor's motor home. This and an attack by a swarm of mosquitos is all I can remember.

Ethan's Post-Test

The first house I lived in that I can remember was large. It was painted white and the shutters green. It was on top of a hill somewhere in a forest. A neighbor had a trailer parked nearby that they lived

in. There were two streams nearby that filled the woods with their music. Once it had been raining for several days and our neighbors had been in their trailer. The streams rose and just as the neighbors got out, carried their trailer away. They arrived, sopping wet on our doorstep, and my mother took them inside and warmed them up. I loved that house in the middle of the forest and I wish I could go visit it.

Fieldnotes Regarding Ethan's Pre- and Post-tests

Working with Ethan the first week frustrated me because my mood fluctuated from being angry that he was so disruptive about not doing the assignments (by sighing loudly, throwing his pencil on the floor, uttering expletives, etc.), to being concerned about his unusual behavior. Once we reached an amicable agreement that allowed him to deviate slightly from the assignments he became much more interested in participating in the class. Unfortunately, he copied very little writing into his final book.

Ethan blatantly declared that the writing assignments we did were useless and that he had no interest in doing them. Although half way through the course (when we came up with the solution for him to interpret the assignments

differently) he began to do some of the writing exercises and assignments, but only some of the time. Yet he still showed an improvement of 5 points in his writing between the pre- and post-tests, most significantly in his inclusion of sensory references. In his pre-test he had no sensory references, while in his post-test he had over 4. For instance, in his pre-test he wrote "There was a stream running by it [the house] and once it overflowed and carried away a neighbor's motor home." In the post-test he told the same anecdote, but this time it was filled with sensory references: "There were two streams nearby that filled the woods with their music. Once it had been raining for several days and our neighbors had been in their trailer. The streams rose and just as the neighbors got out, carried their trailer away."

This finding leads me to speculate that perhaps the guided imagery and art exercises played a role in improving his writing. Though it is often common for students to include things in their writing or art that they know the teacher wants, Ethan definitely did not fall into this category of student! The only way he was willing to compromise was on his terms and he had no interest in placating me. Because of this I suspect that the art might have played a role in improving Ethan's writing.

Max's Results

Max was a twelve-year-old student in Session I who took the course because he was interested in the subject, specifically the book making portion. Mild-mannered and pleasant to interact with, he completed assignments diligently and seemed to enjoy the course.

Max's Pre-test

I have lived in my one house for six years. But we are moving out in Oct. My room has one window and is fairly large. It has a large shelf in the back that my dad made. There is a glass case on the left when you go in. My bed is a loft. In the living room we have a medium size Oriental grey, white, and brown couch. We also have a large entertainment center.

Max's Post-test

In Texas I lived in a little white house. Honeysuckles grew on the back porch. Almost every weekend my mom, dad, and I went to the beach. We went fishing off the dock. I remember seeing the hammer-heads swimming below us. Sometimes we would go on a little island where there were holes in the sand and when the waves came up little eel heads popped up.

When you reached your hands into the sand you could pull out sand crabs and watch them bury themselves back into the sand. At the house on summer nights we would sit on the porch and watch fireflies. One day when I was in the back yard I found a grub. At first I thought it was a golf ball. Then I picked it up and realized it was a grub. Another time, after a flood on our porch we found what we think was a leech. It had a hammer-head's head and a long, grey wormlike body.

Fieldnotes regarding Max's Pre- and Post-Tests

After completion of the course, Max's descriptions became much more specific and indicated that he was beginning to think about all the senses when describing a scene. For instance, in his pre-test he described his house the way many beginning writers describe things: by listing features without embellishing (e.g. "my room has one window and is fairly large," "my bed is a loft," etc.). In the post-test Max not only became more descriptive in his writing but included sensory references. "When you reached your hands into the sand you could pull out sand crabs and watch them bury themselves back into the sand," is not only a kinesthetic reference, but a visual one, and includes more exciting verbs (reached, watch, bury) than in the pre-test.

"At the house on summer nights we would sit on the porch and watch fireflies," is a visual reference that provides detail and also gives the reader insight about the writer as a person who enjoys nature and shares relaxing pastimes with his family.

Max exhibited the greatest improvement (8 points) between his pre- and post-tests. Especially dramatic was his increase in active verbs and sensory references. His writing style also became more free on the post-test and instead of writing about a topic citing only technical aspects, he began to interpret assignments more loosely. In the post-test, he allowed his writing mind to carry him away from talking about the house, to recalling times spent near the house with his parents, and even recalling memorable events such as finding a grub and a leech. His use of the phrase "I remember" is a direct result from some of the writing warm-ups practiced in class.

Artwork in the Final Book

Student artwork in the final book was evaluated by examining six criteria that indicate comprehension and application of certain principles of design. These findings provide evidence of learned skill in printmaking and book making, particularly since most students had not done any

printmaking prior to the class. Further evaluation of three students' artwork in the final book provides a more intricate look at the use of the sensory properties in art.

Quantitative Results

Throughout the course students were taught some of the basic principles of design that are essential to the printmaking medium. Especially relevant to the type of prints taught in class were pattern, balance, variety, and harmony in the final composition. These principles are particularly important in printmaking and contribute to the overall unity, "the quality of wholeness or oneness that is achieved through effective use of the elements and principles of art" (Ragans, 1995).

Student comprehension and application of some of the fundamental principles of design was measured using a teacher-made rubric similar to that used in the evaluation of writing. Complete data for nine students was available through black and white, and color copies of student journals and books: one student from Session I, and eight students from Session II.

Student artwork was scored using a point system to determine comprehension and application of the following six categories: craftsmanship in the final book, clarity in the

design of prints, variety of pattern in the printmaking exercises, experimentation with symmetrical and asymmetrical balance, harmony in the layout designs, and evidence of experimentation using the sensory properties in artwork.

The criteria for grading craftsmanship in the final book is as follows:

- 2 = Craftsmanship of the binding is neat and clean
- 1 = Craftsmanship of the binding is mostly neat and clean
- 0 = Craftsmanship of the binding is sloppy

A binding was considered to be neat and clean if the signatures were sewn together with a fairly consistent tension, if the glue had not been applied so thickly that it seeped onto the covers or pages, if the space between the covers was not too narrow or too wide to enclose the signatures, and if the signatures were aligned and not crooked. Since the financial budget for the course did not allow for such diverse features as various cloth bindings or different types of paper, and since the printmaking and writing lessons determined what the book would include, craftsmanship was the single most important criteria in grading student comprehension of the book making skills.

The criteria for grading clarity in the design of prints is as follows:

- 2 = Shows frequent evidence of clarity in the design of the prints
- 1 = Shows some evidence of clarity in the design of the prints
- 0 = Does not show evidence of clarity in the design of the prints

Unlike many other media, such as painting or ceramics, printmaking requires a certain amount of precision in the original planning. In particular, clarity in the original design of the prints is essential for a clear reproduction. If a design is too intricate to allow for clear cuts the ink will become clogged in these thin grooves and the image will not reproduce well. Skill in making cuts is important too. In relief printmaking, cuts that are not deep enough will also result in a build-up of ink that mars the visibility of the final product. Students were thus evaluated for their implementation of designs that were simple and carved with a certain degree of mastery which, when applied to the paper, resulted in a clear image.

The criteria for grading variety of pattern in the printmaking exercises is as follows:

- 2 = Shows frequent evidence of creating a variety of patterns with individual prints

1 = Shows some evidence of creating a variety of patterns with individual prints

0 = Does not show evidence of creating a variety of patterns with individual prints

The options for creating various patterns in printmaking are innumerable. It is possible, for example, to take a simple shape and make different designs, patterns, and borders through repetition which create a unique rhythm to the finished piece. Students were shown the potential for creating different patterns and were encouraged to experiment and not simply place their prints, one in each corner of a page. Students' skill and comprehension in printmaking can be measured by their success in forming different patterns with a single image.

The criteria for grading experimentation with symmetrical and asymmetrical balance is as follows:

2 = Shows frequent evidence of experimentation with both symmetrical and asymmetrical balance

1 = Shows some evidence of experimentation with both symmetrical and asymmetrical balance

0 = Does not show evidence of experimentation with both symmetrical and asymmetrical balance

As with pattern, balance is one of the design principles that has particular relevance in printmaking.

Through creation of pattern, overlapping, and placement of prints within a composition, symmetry or asymmetry can be achieved. Balance, however, is often a tricky principle to master, and students were encouraged to experiment with different types. Students who experimented with symmetrical and asymmetrical balance were evaluated as having a clear comprehension of the importance of balance and were graded for this understanding, regardless of whether their experimentation was always successful.

The criteria for grading harmony in the layout design of the signatures is as follows:

- 2 = Shows frequent evidence of balanced layout designs
- 1 = Shows some evidence of balanced layout designs
- 0 = Does not show evidence of balanced layout designs

This category in the rubric evaluates whether students' experimentation with the above criteria (pattern, repetition, symmetry and asymmetry) led to individual compositions that were balanced. A student who shows frequent evidence of balanced layout designs is considered to have mastery of the printmaking medium.

The criteria for grading evidence of experimentation using the sensory properties in artwork is as follows:

- 2 = Shows frequent evidence of experimentation in artwork that results from an awareness of the sensory properties
- 1 = Shows some evidence of experimentation in artwork that results from an awareness of the sensory properties
- 0 = Does not show evidence of experimentation in artwork that results from an awareness of the sensory properties

The combined exercises of printmaking and memoir writing, along with the guided imagery, contributed to an understanding of students' incorporation of features in their artwork which resulted from an awareness of their sensory properties. Since this awareness of the sensory properties was one of the techniques used in teaching printmaking, students' experimentation in their artwork as a result of this is considered to show comprehension and application. This category will be examined in greater detail in the qualitative results.

The maximum number of points a student could receive in the evaluation of artwork was 12, which would indicate a frequent comprehension and application of the six criteria. A score of 6 points would indicate that a student evidenced some comprehension and application of the six criteria,

while a score falling below this might indicate that the student's comprehension and application was low. This rubric is illustrated in Table 4.

The results indicate the 89% of the students showed some comprehension and application of the six criteria, and 33% showed frequent comprehension and application of them. The significance of these findings is that the majority of the students demonstrated a learned ability to master principles essential to printmaking and bookmaking, two media that most had not encountered before the course.

While these findings might be similar to those found in a printmaking course that did not incorporate writing or guided imagery of the sensory properties, there are certain features which distinguish this study from one that measures only students' skill. Consider Table 5, which illustrates the same rubric without the category grading the experimentation of the senses. This rubric assesses only those components that any art educator would deem appropriate for measuring student understanding and application of printmaking and book making.

The maximum number of points a student could receive in the rubric measuring only the technical aspects of their artwork is 10. This rubric indicates similar findings to the first: 89% of the students scored above 5, showing some

comprehension and application of the five criteria, and 33% of the students scored a 10, showing frequent comprehension and application of the criteria. What is perhaps the most interesting result of this finding is that *the four students whose art shows the most concrete evidence of being influenced by the sensory properties received the highest scores in the technical evaluation of their artwork.*

It might be argued that some students are simply good listeners and can follow instructions well, thus producing high results that meet a teacher's set criteria. Rather than negate this theory, I might counter that increasing students' awareness of the senses might in turn increase their desire and ability to listen to and follow teachers' instructions well. For example, Lottie, one of the highest achievers in art, was a student with a history of low achievement in school. Although students' academic grades were not available to me, I suspect that others (who may not normally produce high results) also achieved a success in this course that exceeded what they normally achieve in school. That student interest during the course was high is evidenced by the remarkable time-on-task of all the students, and the fact that no student was at a loss for a design idea.

That students who scored highest on the technical portion also scored highest on the sensory portion is particularly interesting because of its implications for the inclusion of writing and/or guided imagery of the sensory properties in the art room as a means to improve student artwork. A detailed examination of the artwork of three of the highest scoring students provides clear evidence of how an awareness of the sensory properties worked directly to influence the students' artwork in this course. The fourth student is the subject of the case study and will be discussed in Chapter IV.

Table 4 - Results of Rubric for Evaluating Student Artwork

	<u>BOOK</u>	<u>CLARITY</u>	<u>PATTERN</u>	<u>BALANCE</u>	<u>HARMONY</u>	<u>SENSES</u>	<u>TOTAL</u>
IVY	2	2	2	2	2	2	12
JACLYN	2	2	1	1	1	1	8
TREVOR	1	1	2	2	1	1	8
MARK	2	2	1	2	2	1	10
JASON	1	1	1	1	1	0	5
ETHAN	2	2	1	1	1	1	8
BILL	2	2	2	2	2	2	12
LOTTIE	1	2	2	2	2	2	11
CALEB	2	2	2	2	2	2	12
<hr/>							
mean:	1.7	1.8	1.6	1.7	1.6	1.3	9.6

BOOK = Craftsmanship in the binding

CLARITY = Clarity in the design of the prints

PATTERN = Variety of patterns with individual prints

BALANCE = Experimentation with symmetry and asymmetry

HARMONY = Layout designs on signatures that are balanced

SENSES = Experimentation in artwork that results from awareness of the sensory properties

Table 5 - Results of Rubric for Evaluating Technical Aspects Only of Student Artwork

	<u>BOOK</u>	<u>CLARITY</u>	<u>PATTERN</u>	<u>BALANCE</u>	<u>HARMONY</u>	<u>TOTAL</u>
IVY	2	2	2	2	2	10
JACLYN	2	2	1	1	1	7
TREVOR	1	1	2	2	1	7
MARK	2	2	1	2	2	9
JASON	1	1	1	1	1	5
ETHAN	2	2	1	1	1	7
BILL	2	2	2	2	2	10
LOTTIE	1	2	2	2	2	9
CALEB	2	2	2	2	2	10
<hr/>						
mean:	1.7	1.8	1.6	1.7	1.6	8.2

BOOK = Craftsmanship in the binding

CLARITY = Clarity in the design of the prints

PATTERN = Variety of patterns with individual prints

BALANCE = Experimentation with symmetry and asymmetry

HARMONY = Layout designs on signatures that are balanced

Qualitative Results

"Interpretation of an artwork can be based on two types of information: internal evidence and external evidence. Internal evidence consists of what is in the work itself; it is drawn from a description of the work. External evidence consists of relevant information not within the work itself: the artist's other works; [and] the artist's biography, including gender, race, age" (Barrett, 1994, p. 146). Because evidence of both internal and external factors increases an understanding of artwork, I will here include information on both as they relate to students' art.

This section will examine the artwork of three of the students who scored highest on the technical aspects of printmaking and book making. These same students showed the most frequent evidence of an awareness of the sensory properties in their artwork, which indicates that the sensory properties played a significant role in the production of their artwork. Whether this is a result of the guided imagery, the memoir writing exercises, or a combination of both is not clear. What is clear, however, is that the writing provides internal evidence that the students were thinking about different sensory properties when they were creating their art.

Thus, descriptions of students' artwork will be provided to present internal evidence of its composition, along with student writing as it pertains to the artwork. Two examples are provided for each of the three students: one from a day where the writing lesson came first, and the other from a day where the printmaking lesson came first. Discussion of how the sensory properties influence the use of details in student artwork will follow.

Presentation of the first student's results will include information on the class format for each day as they pertain to the development of the artwork and provide a framework for understanding the assignments and the guided imagery and writing that accompanied them. Appendix G provides samples of those exercises which showed clarity in the reproductions.

Bill's Results

Bill, a thirteen-year-old student in Session II, approached both subjects of the course with enthusiasm and seriousness. He especially took great care in designing prints that were neat and clear, and experimented more broadly than any of the other students in applying a variety of different layout designs on the signatures. His use of repetition and overlapping, as well as his combination of

colors within a single print, indicate a mature understanding of the art concepts taught in class. Bill was also the only student who chose to use two folded pages in most of his signatures, instead of only one.

Bill's Styrofoam Print Lesson

This printmaking lesson complemented the writing exercise where students wrote a poem about their hand (described in the section *A Day Beginning with Writing*). For his styrofoam print, Bill chose to cut an image of an apple and place one print in the lower left corner of an open signature, and the other in the upper right corner. The shape of the apple print was like a Schoolboy apple and Bill included a curved stem and single leaf with veins carved into it.

The last line of Bill's poem is as follows: "Some days my hand is cute and even beautiful, while others it is sad and even very slow as my lazy fingers twitch as I grasp an apple." This phrase indicates that Bill's awareness of the sensory property of touch influenced not only his poem, but his representation of an image to illustrate the poem.

Bill's Nature Print Lesson

The day of this lesson began with a short field trip around the building where students were told to pick flat items in nature that were interesting to them and that they thought would make good prints (leaves, flowers, weeds, feathers, etc.). After a guided imagery exercise where students were asked to envision a place in nature that they love, and to focus on how it smells, what they see, what they hear, and what they might touch, students designed layouts in their journals which left space for the writing lesson, and printed on their signatures.

For this exercise, Bill chose to use two folded sheets for his signature, creating eight individual pages for printing. The layout of each page was asymmetrical and balanced, creating a harmony in the printed product. After the printmaking component students were again asked to envision the place in nature that they love and were led through a writing exercise with sentence prompts ("Write a sentence with a color in it," "Write a sentence with a sound in it," "Write a sentence where you touch something," etc.). They then selected portions of the writing lesson, or the entire piece, to copy onto the signatures.

Two pages of Bill's signature are particularly interesting. On one page he printed a small feather with

blue ink, twice on the top of the page with the tip of the feather pointing to the left at an angle, and twice on the bottom of the page with the tip of the feather pointing to the right at an angle. Between these prints he wrote text from his writing exercise, including the following: "What I see is blue sky with puffy, soft clouds that are like marshmallows that sweep across the sky." This prose indicates that Bill was thinking about the visual and textural quality of the clouds in both portions of the assignment. The verb "sweep" is illustrated with angled feathers that are blue, the color of the sky.

On another page, Bill printed a yellow circular leaf in the center with text above and below it. Above the yellow leaf he wrote: "The place I am thinking about is filled with light." On the page opposite this Bill printed a green leaf with small splotches of yellow paint above and around the it. Bill's use of the color yellow indicates that his awareness of the quality of light in the place in nature he visualized played a role in his printmaking. This is reinforced by the text which illustrates it.

Final Observations of the Senses in Bill's Artwork

Bill's artwork indicates that the sensory properties influenced his experimentation within the printmaking

medium. His styrofoam print shows an awareness of the tactile sense, and his nature print shows an awareness of both sight and touch. In both instances the writing reinforces the fact that the sensory properties played a role in his choice of subject-matter and application technique within the prints. While in the styrofoam print, the poem lesson led to the tactile stimulus for the apple, the stimulus in the nature print lesson was most likely the guided imagery which preceded it.

Lottie's Results

Lottie was an eleven-year-old student in Session II. As discussed in the section on the journal and student motivation, her impetus for taking the course was her interest in printmaking and book making. Lottie's ability to experiment with designs that were both symmetrical and asymmetrical, as well as her experimentation with pattern and overlapping were two distinguishing characteristics of her printmaking.

Lottie's Styrofoam Print Lesson

Lottie's styrofoam print is unique in that the evidence of the sensory awareness that led to its production is obvious even without the writing to confirm it. For this

lesson, Lottie chose to do two styrofoam prints, each four inches square. One print is a tulip-shaped flower with a stem curving around and over it like a vine. The other print shows two hands reaching toward one another, with a sun in the center: one hand reaches up diagonally from the lower left corner, and the other reaches down diagonally from the upper right corner.

Lottie's experimentation with pattern in this assignment is impressive. On one page she printed the flower print flush left above the hand print, both with blue ink. Beside these prints she positioned the flower print twice more with red ink, extending off the page so that only the stem-like vine is visible. In these two prints she also rotated the print so that different views of the stem are presented. The tactile and visual stimulation that preceded this print is evident in the subject of its design: two hands reaching to touch with a sun between them. Lottie's experimentation with design might indicate that the image of touch encouraged her own tactile response as she carved two separate prints and rotated them in their application.

Lottie's Nature Print Lesson

Lottie's nature prints show an experimentation of different sensory properties that is verified by the written

text which accompanies it. For this lesson, Lottie chose to use two folded pages in her signature. Six of these pages are covered with a variety of different leaves printed in different patterns and unaccompanied by text. Two of these pages are accompanied by text and this text reveals the motivation for her application and design choices.

On the first page, Lottie created a border prints (with a single small leaf) which circles the entire page. The color of this border is green, though some leaves are a darker green, others are lighter, and some are so faint that they are almost indiscernible. Inside this border Lottie wrote the following: "The color of the willow tree is dark green inside and light green outside. The wind blows through the leaves. It travels through the air. Seems to be calling me. Very little light, but the sun peeks through the leaves."

The variation in the value of the green ink indicates that Lottie might be attempting to show the different colored leaves, and perhaps even the areas where the sunlight shines through them, a result of an awareness of their visual properties. That these leaves are placed in different directions to create a circular border gives movement to the piece, and might be an illustration of the tactile stimulation of the wind blowing through the leaves.

On the second page, Lottie printed only a large blue leaf and wrote: "The smell was like dry greens." This might indicate that Lottie's blue leaf print is a symbol of the color of dry leaves, which are darker than moist, new leaves.

Final Observations of the Senses in Lottie's Artwork

Lottie's artwork shows that her creation of it included an awareness of the sensory properties of the subject matter, and that this awareness encompassed more than just one sensory property. Her styrofoam print offers not only a clear example of her perception of the tactile sense, but also of the visual sense. Similarly, her nature prints include experimentation with color, value, symbols and movement which indicate awareness of sight, touch, and smell.

Caleb's Results

Caleb, a thirteen-year-old male, gave strong indications that he was a predominantly kinesthetic learner. He was physically restless when required to sit still for long periods, and happiest when he could move about, doing artwork or interacting with his peers in small groups. He thoroughly enjoyed extracurricular sports and played both

baseball and soccer. He was enrolled in another class during the SEEK program, a dance class. His artwork and writing also showed evidence of his tendency for movement, with three-dimensional properties in his prints, featuring overlapping and texture, and words that were often capitalized or set in quotations for emphasis.

Caleb's Styrofoam Print Lesson

Caleb's poem provides a strong framework for assessing his artwork in this lesson and will thus be presented in its entirety:

The rain drips down my hand,
I look at the ground,
It is no longer dry land,
It is mud, so cold. The
sand is wet, that I touch
with my hand. But the
sun comes a shining and
the land, is sand.

For the printmaking portion of the lesson, Caleb cut three raindrop-shaped pieces of styrofoam: one large, one medium-sized, and one small. The largest raindrop was placed in the upper center portion of the page, the medium-sized one was placed to the lower left of this, and the

smallest one was placed to the lower right of the medium-sized one.

The text illustrates that the impetus for the raindrop stems from Caleb's tactile awareness of the rain on his hand. The variation in size and the placement of the drops from largest at the top to smallest at the bottom indicates a visual awareness of the evaporating raindrops as they fall from the sky and are dried by the shining sun.

Caleb's Nature Print Lesson

Caleb's artwork in the nature print lesson shows a bold and vivid example of his experimentation in art as a result of awareness of the sensory properties. This is evidenced in the prints themselves, and confirmed by the text which accompanies it.

One page features a leaf printed in green and placed once in each corner of the page, facing different directions in each position. Connecting the leaves are splotches of green and yellow ink, and in the center are the words, "I smell fresh air from the trees above." The placement of the leaves suggests a canopy of branches above, and the accompanying specks of green and yellow suggest a movement indicative of wind.

Another page in this lesson is quite remarkable in its variety of texture and boldness of color. On this page, Caleb rolled a background of green ink on the top portion of the page, with some areas of white showing through. To this, he stuck a real green leaf in the center surrounded by the bright pink leaves from a bougainvillea. Above this he lightly applied a few faint leaf prints in yellow ink. Below this print he wrote: "Gaps between the trees let the light shine through." This print offers a remarkable example not only of his illustration of the light shining through the trees, but of the tactile quality of the trees themselves.

Final Observations of the Senses in Caleb's Artwork

As with Bill and Lottie's books, the text in Caleb's serves to confirm the role that awareness of the sensory properties played in his creation of artwork. In particular, his awareness of touch and sight is evidenced in the styrofoam print exercise, and his awareness of these senses and smell is evidenced in his nature print exercise. Caleb's work is unique from the other students in his choice of placing actual objects onto the printed surface, a tactile process itself, much like Lottie's rotation of an individual print to create a design.

Summary

While student motivation may have played a role in the production of writing and art, as evidenced by the student journals, the most significant findings of this study lie in the examination of the writing and artwork. In interdisciplinary curricula art is commonly used to enhance other subjects (English, science, math, social sciences, etc.) and research has reported the successes of such combinations. The findings of this study indicate a similar observation: that the reference of sensory properties in writing was increased through guided imagery and art lessons that complemented the writing lessons, and that this awareness led to more vivid and specific details.

Some research has indicated the success of writing about art history to enhance knowledge of art history, and writing about artworks to enhance knowledge of art criticism and aesthetics. I was particularly interested in whether writing could likewise enhance production of art. The evidence provided in the qualitative examination of students' final books indicates that students' awareness of the sensory properties led to the implementation of vivid and specific details in their artwork. Writing, in combination with the guided imagery, may have enhanced this

awareness, and provides evidence of the students' thought processes as they created their art.

Closer examination of the student writing as it reveals the processes of experimentation in the artwork also provides evidence that awareness of the sensory properties played a role in the production of art. In particular, those students who demonstrated frequent comprehension and application of the technical aspects of printmaking and book making also demonstrated the most concrete evidence of being influenced by the sensory properties in their production of art.

CHAPTER IV

CASE STUDY

Student Profile

The opportunity to work with Ivy, a thirteen-year-old student, provided many additional insights that the constraints of the two-week sessions could not. Ivy had just completed seventh grade and was excited about taking a course in book making and writing. Her parents wanted her to choose an educational extracurricular class to take during her summer vacation and Ivy selected this one. She was the only female student in Session I.

Writing and Art Before the Course

This was not Ivy's first experience with making one of her stories into a book. When she was in sixth grade she wrote and illustrated a story for her Language Arts class that was bound by the teacher with a plastic spiral binding. Ivy had first written the story and later filled in the illustrations. Ivy seemed displeased about many of the illustrations in this book, even though many of them contained specific details which related to the story. Her main complaint was that she didn't have enough time before

the book was due to complete the illustrations and some of them were done in a hurry.

Ivy's writing ability surpassed many of her peers' and, accordingly, she liked to write stories in her free time at home. Ivy's knack for poetic phrases and her honesty in regard to her characters' feelings were two qualities that made her writing stand apart from others'. Many beginning writers tend to make their characters' motives and actions too perfect, but Ivy possessed a natural flair for developing believable characters. Though her talent was evident, Ivy still used many writing devices employed by beginning writers: telling instead of showing, not being specific enough, using passive instead of active verbs.

Writing and Art Throughout the Course

Ivy's writing and art flourished throughout the duration of the course, and her incorporation of printmaking and writing was perhaps the most successful of all the students. She made scrupulous efforts to use her best handwriting when copying the final text onto her signatures and her prints were neatly executed, and demonstrated a proficiency in color application, symmetrical and asymmetrical balance, overlapping, detailed patterns, and exquisite borders.

Ivy's Pre-test

The house I used to live in was in Waldwick, New Jersey. I had the upstairs room which I shared with my two sisters. The house had lots of windows so the house was always bright. When I would wake up, the sun would shine through the many windows and show me all the mountains for miles. The house had four levels, the basement, the first floor which had the kitchen, living room and dining room. The second floor had two bathrooms, the study, guest bedroom, and my parents' bedroom, and the last floor had our room.

Ivy's Post-test

The house that I loved was the house in Waldwick, New Jersey. It was located on a quiet street with many friendly neighbors. It had four floors. The basement was one floor itself. The second floor had the kitchen, dining room, and living room. In the living room was a big green couch. We had gotten it from a neighbor years before. When we moved from that house on Stuart Street though, it was too large, and too heavy to bring. The third floor had both the bathrooms, the study, which my parents shared, the guest bedroom, and my parents' bedroom. The fourth

floor was my bedroom that I shared with my sisters. It was really the attic, so when we first moved in it had a musty, foggy smell to it. My room had six gigantic windows in it. It was always the lightest room in the house even though it was the attic. When I moved from that house, it was the saddest day of my life (so far). I don't really miss my old house anymore, but once in a while I do think back at all the old and great times I had in those six years I lived in the house on Stuart Street.

Fieldnotes regarding Ivy's Pre- and Post-Tests

Although Ivy's pre-test contained many details, they were the uninteresting kind that are commonly seen in beginning writer's descriptions. For example, "The house had four levels, the basement, the first floor which had the kitchen, living room and dining room," does not reveal much about the character of the house or its inhabitants. This early writing sample does, however, show that Ivy's writing included some sensory awareness: "When I would wake up, the sun would shine through the many windows and show me all the mountains for miles." Although she was referencing the most common sense used by beginning writers (sight) the fact that

she included such details in her writing at all indicates an understanding for their importance.

While Ivy's post-test showed an increase in sensory properties and specific, engaging details, her use of active verbs increased only marginally. Nevertheless, this writing sample illustrates a much keener awareness of the surroundings and of Ivy's ability to mentally transport herself to the house and include physical details. In the post-test Ivy mentions the light in her bedroom, but also reveals that "It was really the attic, so when we first moved in it had a musty, foggy smell to it." Mentioning the musty smell of the attic arouses recognition in the reader because it is a unique smell that anyone who has gone into an attic (without a head cold) would notice. "Nothing is more memorable than smell... Smells detonate softly in our memory like poignant land mines, hidden under the weedy mass of many years of experiences. Hit a tripwire of smell, and memories explode all at once. A complex vision leaps out of the undergrowth" (Ackerman, 1995, p. 5).

Ivy's Styrofoam Print Lesson

In this lesson, Ivy chose to make an illustrative print of her hand poem. She carved the shape of a hand into the styrofoam and pressed in intricate details of knuckles,

fingernails, and of an ant in the center of her hand. The image of the ant on the back of the hand in the print refers to the tactile stimulus of feeling an "ant on my hand."

Her poem is as follows:

I see the ant on my hand,
It slips across my short fingers,
And scoots happily through
My cold palm.
My weak fingers flick the ant
Across to a seed laying on the ground.

Ivy's Nature Print Lesson

Ivy's nature prints exhibit an explosion of color, pattern and sensory references. The page preceding the text offers an elaborate experimentation of the primary colors: the background is yellow with a border of red prints and a blue feathery leaf print in the center. When you turn the page, two side-by-side pages which include the text are displayed.

Each page has a different border with a single yellow print in the center. A tiny leaf pattern printed in blue along the width and red along the length creates a border for the left page, with a delicate stem containing five sprouts of leaves printed in the center beneath the text.

On the right page a blue feather print pattern creates the border with a single yellow feather print in the center beneath the text.

The writing contains phrases such as: "The birds jump on my hand, I stroke their soft feathers. I put the bird down and move closer to the opening of the vines. I open it. A streak of light shines through showing a glowing dust path... I pick a leaf, finding that it has a citrus sort of smell. I think in my mind, This is lemon. We used to put lemons in our water. Mom thought it tasted good."

The use of the feather in creating the border seems to be a direct tactile stimulus, stemming from Ivy's imagery of touching the "soft feathers" of the birds. The use of yellow to create center prints on both pages could result from one or both of the following: the reference of light shining through the leaves, or the stimulus of the lemon, which smells of citrus and evokes remembered instances of the taste of lemon in her water.

Final Observations of the Senses in Ivy's Artwork

Ivy was the first, and one of the only, students in Session I who understood the concept of planning a design layout before copying text and prints onto the signature, and her use of borders was exceptional. A portion of her

final book is illustrated in Appendix H. Ivy's prints and writing also complemented one another nicely, particularly in her references to *all* the senses. The above exercises illustrate examples of her experimentation with sight, smell, taste, and touch. In her potato print lesson, she also included symbols referring to sound: a leaf print and a print of a bird, which resulted from listening to the rustling leaves in the wind and the chirping birds in her guided imagery.

Ivy's writing especially took on a new dimension as she practiced the warm-up exercises designed to increase an awareness of the senses. She began to naturally include details of smell, touch, sound, and taste in addition to the sense of sight that usually predominates in beginning writers' descriptions. Her final book is a testimonial of her dedication and hard work.

Writing and Art After the Course

Several months passed since the completion of the course and I hadn't read any of Ivy's writing. We met one afternoon at Ivy's request because she wanted to make another book using the Western-Codex binding variation she'd used in her final book. We worked together (I made a similar book beside her), incorporating some Safety-Kut

block prints into the cover design. Later, Ivy made another book at home. She was frustrated that the binding was not as tight as the ones in her previous two books, so I showed her how to avoid this problem in the future, and assured her that not all of her books would be perfect.

A short time later, Ivy showed me the book she'd made on the afternoon we worked together: she'd written a story inside and asked me to read it. She'd written another story inside a handmade journal she received for her birthday. Though these stories were not accompanied by prints or any other artwork, Ivy still enjoyed incorporating writing and book making into a single art form.

Ivy's combination of writing and art work did not end here, however, but took on a new form. She'd become interested in writing poetry and kept a sketchbook where she copied the final versions of her poems and illustrated them. Writing and art for Ivy still worked together, and each took on more vivid details as a result of the merger. This is noteworthy coming from a student who had declared before the onset of the course that she wasn't really that "into" art anymore.

Although Ivy continued to integrate art and writing in various ways, it was interesting to note that the writing techniques we had practiced in class, as well as the writing

rules, seemed to play no part in her regular writing habits. Ivy no longer practiced memoir writing, or any writing warm-ups at all. She reverted to her earlier habits of writing stories or poems, an indication that she did not regard the memoir exercises as beneficial to the development of her writing.

Though Ivy continued to integrate writing and art, and also continued to write stories and poems in her free time at home, many of the qualities of her writing before the class, which had changed considerably by the course's end, again made themselves evident in her writing months later. Consider the following two writing samples, the first written during the course, and the second written about six months later:

Sample One

[Excerpt from final book]

When my family first came back to Arizona, I was nine years old. At that time my family shopped at a fruit market. My mother brought me the first time she went. "We can pick out apples together," Mom had said. "The first thing you need to do to find a good apple is to feel with the tips of your fingers for soft spots on the apple. If you find a soft spot, it's not a good

apple," she told me. "You have to find a round apple without any bruises or dents."

I picked one up like my mother had told me to do. I felt the apple for the bruises. "This one is good, Mom," I had said.

"Good, you're catching on quickly," Mom told me. Ever since then, I have gone shopping for my family. It felt good to know how to do things on my own.

Sample Two

[Excerpt from a story in progress]

Things were different after Miles got sick. The people around me acted different and from personal experience I knew they were feeling different. Me, I felt like I was only half living. Like the other half of me was dead. Dead as stone.

Each time I would visit Miles, I saw no improvement, but I saw him weakening. Not only was his body getting weaker every day but his soul as well. He didn't have the enthusiasm for life as he did a month ago.

In Sample One, Ivy has painted a specific scene for the reader with her words. Here, she is "showing" us the time

when her mother taught her to pick apples at the market, instead of telling. By going through the motions with Ivy, listening to her dialogue, watching her feel apples for soft spots, the reader almost steps into her world momentarily.

In Sample Two, Ivy reverts to her earlier tendency to tell the reader about something. This is comparable to her pre-test, where she lists the details of her house much the way a real-estate broker would list a newly marketed property: there is little personal detail to engage the attention. Instead, she is "telling" that people acted differently and that from personal experience the main character knows they are feeling differently as well. She doesn't, however, share what this personal experience is. She describes feeling that half of the main character is "dead as stone," but doesn't show scenes that might indicate what this means. Finally, she reveals that Miles shows signs of weakness every day, but does not share these signs with the reader. These are all tendencies shared by many beginning writers (and even some advanced!) that tend to distance the reader from the character, and, thus, from the story.

Ivy's later writing did, however, retain some of the qualities apparent in her final book and her post-test.

Consider the following scene from the same manuscript as Sample Two [Excerpt from a story in progress]:

I popped a piece of popcorn in my mouth. "He was awful upset last night, Mom."

"I know." Mom folded her legs up and put them crosslegged style. "I know," she said again. Mom grabbed her ankles, then pointed to each one of her toes as if she was counting them.

Unlike the Sample Two, Ivy has here managed to illustrate a scene that the reader can almost feel. By assigning the mother a unique and specific action the reader's mind conjures an image that would be unattainable if Ivy had elected not to include it.

The three preceding writing samples led me to wonder about the success of the writing warm-ups and the assignments intended to enrich the quality of student writing. At the end of the course, after practicing specific techniques daily for two weeks, Ivy's writing showed an improvement that indicated her writing had progressed. However, this newer ability to "show don't tell," in conjunction with her reference to sensory properties, was limited in her later writing.

Sometimes, in Ivy's later manuscript, her scenes captured a tangible physical essence, whereas other times

she slipped into listing events: telling the reader instead of showing. I suspected, from my own experiences as a writer, and from having worked with many students throughout the years, that this could be due to one of the following factors, or a combination thereof:

1. Ivy committed herself to telling a long story, filled with many events and emotions. Oftentimes, such an endeavor can become overwhelming and the writer is not as interested in telling some aspects of the story as they are in telling others. Consequently, it is often easier to quickly "list" those areas that don't seem as interesting, in essence building a bridge between the scenes which the writer does find interesting. An informative bridge, albeit a rather uninteresting one to digest.

2. Like many beginning writers, Ivy undertook a writing subject that she knew very little about. In this manuscript, the main character, referred to in the first person, has been confronted with her best friend's battle against leukemia. The subject matter here is similar to Ivy's favorite book, *Say Goodnight, Gracie* (Deaver, 1988), a story about an adolescent girl whose best male friend is killed in an automobile accident. While this scenario fascinated Ivy, it was an experience that she knew very little about. Though she had experienced the deaths of her

grandparents, she had not experienced the death of a peer. It is not surprising, then, that the areas of the story where Ivy herself had little personal knowledge would be written about rather clinically. Ivy knew certain facts from her own experience as a reader (that people's actions and feelings change after the terminal illness of a loved one, and the loved one often deteriorates physically), but, because she had been fortunate enough not to encounter such an event in her own life, she could not experience the emotions or provide specific details that might transport the reader.

While Ivy's fiction writing, which was done in a handmade journal or a spiral notebook, was unaccompanied by either printmaking or drawing, her poetry was illustrated with drawings. The greatest difference between Ivy's fiction writing and her poetry lies in the inclusion of specific sensory details. While Ivy's fiction after the class retained only some of the specifics she had exhibited in her post-test, her poetry remained rich in details (tears, the smell of flowers, blood, etc.). There could be a correlation between this and the fact that Ivy illustrated many of her poems, or it could be a result of the fact that, like memoir, her poetry was autobiographical and thus more familiar.

Some Modest Conclusions

Working with Ivy after the completion of the summer course proved to be an informative and beneficial experience. At first it appeared to me that Ivy had not retained the level of writing proficiency months after the course that she had exhibited throughout the course. Upon closer examination, however, I realized that Ivy did indeed incorporate many of the same techniques in her later writing. They were simply used in smaller quantities. I surmised that this could partially be a result of the fact that Ivy no longer practiced the writing warm-up exercises, that she chose to write stories which required her to include scenes she found uninteresting, or that her stories involved unfamiliar subject matter.

The fact that Ivy still used writing and art together, by writing in handmade journals, and by illustrating her poetry, might indicate that combining the two subjects is merely a motivational aspect. However, the art might just as likely serve as a reminder to approach writing as a visual art and thus incorporate references to the sensory properties as well as to specific details. Conversely, the writing might serve as a reminder to approach her poetry writing by appealing to the sensory properties.

CHAPTER V
SUMMARY, CONCLUSIONS & IMPLICATIONS

Summary

The purpose of this study was to examine the affects on student art and writing when a curriculum that stresses an awareness of the five senses is used in the teaching of printmaking, book making and writing. A cross-disciplinary study was designed and taught to two classes of middle school students during the University of Arizona's SEEK (Summer Education Enrichment for Kids) program. Each course was two weeks in duration for two hours a day. Instructional methods of guided imagery and writing warm-up exercises focused on awareness of the five senses as they apply to printmaking, book making, and memoir writing. My questions were whether such a course could:

1. increase students motivation?
2. show improvement in student writing?
3. show student comprehension and application of basic printmaking and book making techniques?
4. show evidence of experimentation in student artwork that results from an awareness of the sensory properties?

Although I suspected that student motivation might play a role in regard to achievement my main goal was to first determine whether the practices of art and writing could be enhanced by the teaching method.

Specifically, I was interested in the results of teaching writing and art as visual, visceral, and kinesthetic arts. Writing warm-ups and guided imagery exercises were designed to use techniques that taught students to focus on sensory properties: my belief was that these exercises would help students learn how to include more specific details in their writing and art through a heightened awareness of the sensory properties.

The qualitative nature of this study required that I gather data from a variety of sources: pre- and post-writing tests, student journals and final books, teacher journal and fieldnotes, and a case study.

Conclusions and Implications

While researchers have concluded that integration of fiction writing and art improves writing (Campbell, 1995; Ferriss, 1995; Lund & de Onis, 1994), there have been no previous studies examining whether the inverse is true (that writing and art improves art). Such findings were evident

in this study and provide a host of implications for future studies.

My intention at the onset of the study was to learn more about how stressing the sensory properties when teaching printmaking, book making and memoir writing might improve student motivation and enhance their writing and art. My interest was not only to see what ways art might enhance writing, but how writing might subsequently enhance art. I will begin by providing the information gleaned in response to my thesis questions. Implications for future study will follow.

The Curriculum and Achievement Motivation

My belief at the onset of the study was that writing, printmaking and book making are enhanced when the subjects are combined. One reason for this, I speculated, was that students might work harder to improve their writing when it would be placed in a book that they knew they would want to keep and show to others. Conversely, the very nature of book making presupposes that all materials included on the signatures must be completed before the book is sewn together. Thus, if students have spent time improving their writing and are pleased with the results, a new motivation develops: to make the book where they will place the

writing an aesthetically pleasing one. The impetus, then, for this simultaneous improvement comes from intrinsically motivated behaviors (Deci, 1975, 1991).

One of the most significant findings this study unearthed is the implication that students' achievement motivation might indeed play a role in improving student writing and art. This belief was confirmed by my observations and fieldnotes of students in Session II. On the first day of class I showed one of the final books from Session I to the students. The impetus for this came from the reaction from students on the final day of Session I (after the final books were finished), when several students indicated remorse that they hadn't put forth more effort on all of the assignments. Observation of students in Session II revealed that their time-on-task and their interest in doing well in both the writing and art aspects of the course were greater than that of the students in Session I.

Observations of students in the two courses provided evidence that combining writing with book making and printmaking can provide opportunities to reveal learning obstacles that might be overcome. Some students included passages in their journals which supported this premise.

An example is Lottie, a low academic achiever in school, whose journal entries revealed a history of being

told by her 5th grade teacher that she wasn't smart enough to "make it to college." Although Lottie's spelling and grammar were poor, her writing revealed a capacity to create vivid, memorable and entertaining prose. I took Lottie aside, praised her talent, and offered to help her with her grammar and spelling so that others could enjoy her writing as much as I did without being side-tracked by technical errors. Thereafter, Lottie thrived in the class.

Writing, Art and the Senses

Another finding of consequence is the success of teaching students methods to approach writing and art using techniques that increase their awareness of the senses. I believe that the success of this technique was a direct result of the memoir writing warm-ups and the guided imagery. This method improved the immediate writing abilities of the students, and remained a component of later writing. In addition, it enhanced student art by an evidenced increase in details specific to the sensory properties.

A teacher-made rubric evaluates the improvement of student writing between the pre- and post- writing tests. This rubric measures students' use of active or exciting

verbs, reference to sensory properties, and descriptive details.

The quantitative and qualitative data indicate that students' writing improved throughout the course. The teacher-made rubric shows a combined increase of +5.6 in students' use of active verbs, sensory references and specific details between the pre- and post- writing tests. Most indicative of changes, however, is the qualitative examination of students' writing. This reveals an increase in length, vivid descriptions, and exciting prose throughout the course.

While it was possible to measure the improvement of student writing (through the pre- and post-tests and the final books) there was no such means of measuring the improvement of student printmaking or book making, since most students had no previous experience in these areas. Instead, student art was evaluated using a rubric to measure student comprehension and application of basic printmaking and book making techniques, and student evidence of experimentation in artwork as a result of an awareness of the sensory properties. The evaluated techniques were: craftsmanship in the final book, pattern, balance, variety, and harmony.

Examination of student art reveals a richness of such things as color, variety of patterns, repetition, symmetry and asymmetry, texture, and harmony. Students who achieved the highest scores in the technical evaluation of the art also achieved the highest scores in their reference of sensory details. At least one of these students had a history of low achievement in school.

In this course, students' responses to the sensory properties were often represented by symbols. For example, Ivy, in her potato print exercise, used prints of a leaf and a bird to express her response to the rustling leaves and chirping birds. Students also commonly used colors to symbolize sensory properties (the light coming through tree branches, the smell of dried leaves, etc.). Gardner asserts that "language is an articulated symbol system, with discernible units, rhythmic patterns, sequences, and transformations" (1973, p. 198). That students create symbols in their artwork seems a natural result of this.

Case Study Results

Through examination of Ivy's writing and art after the course I was able to determine that at least one student still included techniques of using specific details and sensory properties in her writing. This result provides

evidence that instruction which enhances an awareness of the senses helps students write scenes that are more tangible, lively and rich in detail, and that this ability might be retained by students months later.

The case study also revealed that Ivy's use of the techniques learned during the course remained inconsistent in her writing. This could possibly be attributed to the fact that she committed herself to writing long stories which included subject matter beyond the realm of her personal experience. Would continued practice in memoir-writing exercises provide Ivy with the tools to learn how to write about situations unfamiliar to her if she practiced them consistently? Goldberg stresses the importance of writing practice and compares it to athletes practicing daily, sometimes for years, to compete in events: "It is odd that we never question the feasibility of a football team practicing long hours for one game; yet in writing we rarely give ourselves the space for practice" (1986, p. 11). Further research in this area could provide additional, valuable information for educators.

Another topic of relevance to this study came about as a result of examining Ivy's writing and art six months after the course. I noticed that Ivy liked to illustrate

her poetry with her own drawings. These drawings included specific details that Ivy had mentioned in her poems.

This led me to speculate about the connection between drawing and writing. Was the use of specific details in Ivy's drawings enhanced as a result of the fact that the poems preceded their development? If so, might this be true for other students as well? And if the drawing preceded the writing would the writing be more specific than if no drawing had been done? Especially interesting is that Ivy's poetry, which contained more specific details than her later fiction writing, were illustrated with drawings. Her later writing was not. While it might be true that her poetry writing aided in her inclusion of details in her art, it also might be true that, when the art preceded the poetry, it might have aided in her inclusion of details in her poetry. This lends support for the conclusion that the two subjects work together to create an awareness of details.

Implications for Future Study

Although this study provides a qualitative analysis of the enhancement of student writing and art through teaching techniques that enhance awareness of the sensory properties, it gives only an infinitesimal view of the possibilities and outcomes such a curriculum might elicit. Additional studies

in this area would provide more substantial evidence that such integration and teaching techniques enhance not only student writing, but student art as well. A unit that integrates book making and *drawing* with memoir writing would provide additional, and perhaps more conclusive, results in terms of measuring the extent to which writing can enhance art.

While this study shows the role of achievement motivation on students' performance, future studies on the role of journals in revealing obstacles that inhibit student learning would provide additional insight on this topic.

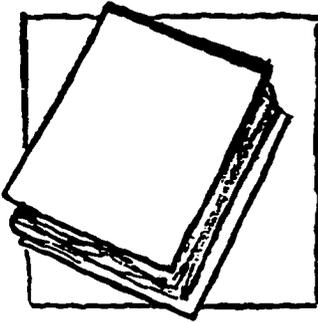
Student pre- and post-tests to evaluate improvement in art might be implemented in future studies. Although it might not be possible to measure improvement in a medium that is new to students, a test might be designed where inclusion of sensory details in their art is measured. An increase of specific details, in combination with technical aspects of art, might indicate improvement. Additionally, future studies might examine the academic achievement of students in school prior to such a course to provide more concrete evidence of whether or not the students who perform well have a history of such achievement.

Future studies involving the semantics in such a curriculum would provide more information on the use of

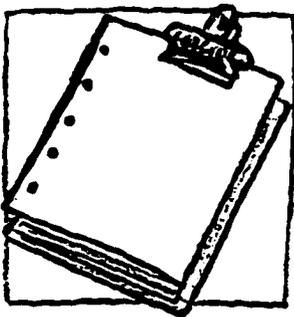
symboles in student art to express sensory properties. Studies might also discuss alternative ways for students to express sensory properties (such as Lottie's use of motion to indicate the feel and sound of the blowing wind).

In the past, art has been used to enhance learning in other subjects. While integrating art with writing is only one approach to art education, and is commonly employed to improve performance in writing, its success and relevance can be perceived in the enhancement of *both* subjects. In addition, writing lessons combined with art provide evidence of students' thought processes as they approach the creation of artwork.

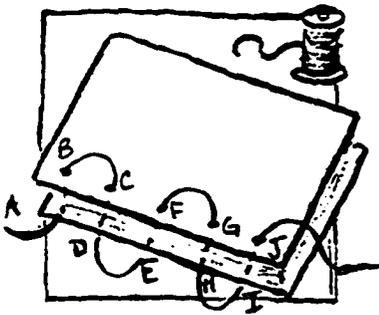
APPENDIX A:
ORIENTAL BINDING DIAGRAM



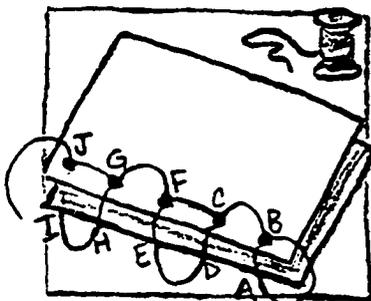
Stack several sheets of paper in a pile.
Choose a front and back cover.



Using a ruler, mark 5 points $\frac{1}{4}$ inch
from the spine, spaced evenly.
Pierce with needle or drill.

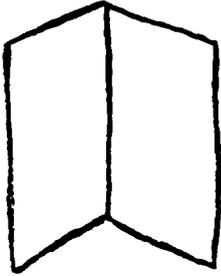


Thread the needle with a strong thread.
Sew around spine in direction shown.

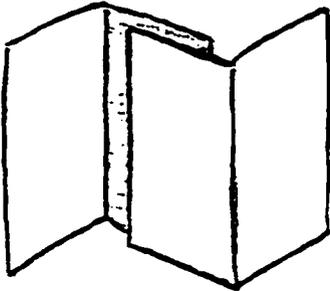


Sew back along spine in the opposite
direction. Tie the two loose ends
together.

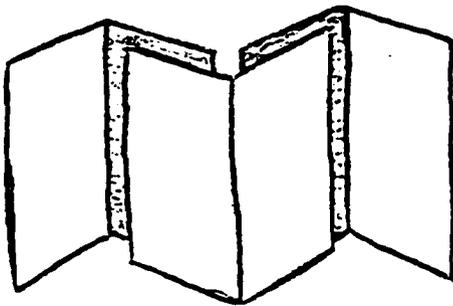
APPENDIX B:
ACCORDION BINDING DIAGRAM



Fold a sheet of paper in half to create two pages.

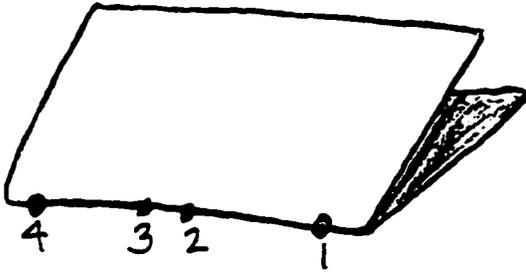


Fold another sheet in half and join to first by joining in shaded area to create a zig-zag.

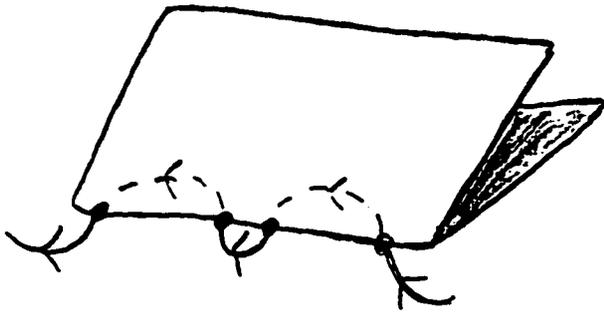


Add another folded sheet to the second by joining in the shaded areas.

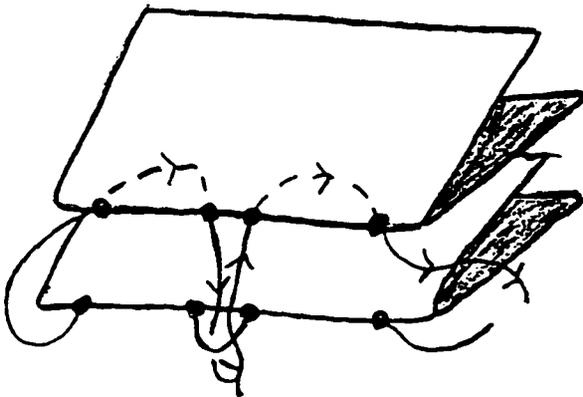
. APPENDIX C:
WESTERN-CODEX BINDING VARIAGION DIAGRAM



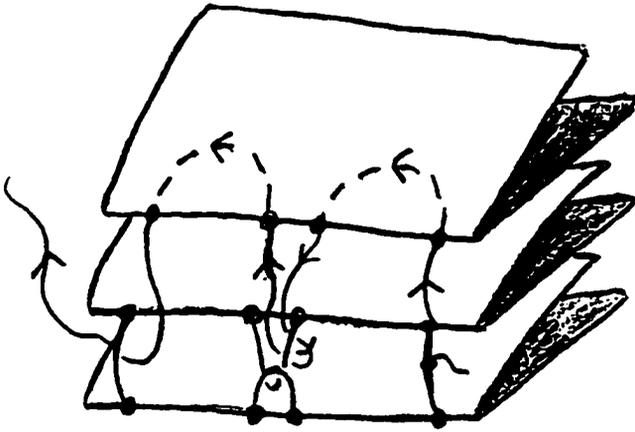
Each signature has
4 (four) holes.



Thread needle and go
through holes as
illustrated.



To add another signature,
sew the thread into the
4th hole of the 2nd signature
and out through the 3rd.
Loop the needle around the
thread on the 1st signature
and then back into the 2nd
hole of the 2nd signature.
Push the needle out through
the 1st hole of the 2nd
signature and tie a knot
with both ends of the thread.



To add additional signatures, continue to weave the thread in and out. Between the 2nd and 3rd hole of every signature, loop the needle around the thread from the signature beside it to sew them together. Do the same every time you reach a hole at either end of a signature. When finished, tie a knot with the string and cut.

APPENDIX D:
SEEK COURSE SYLLABUS

**SYLLABUS-SEEK 1996
SESSION II (10-21 June)**

Course Title: BECOMING AN AUTHOR/ILLUSTRATOR: Print-, paper- and book-making techniques for the young artist & writer

Instructor: Leslie Peterson-Stroz

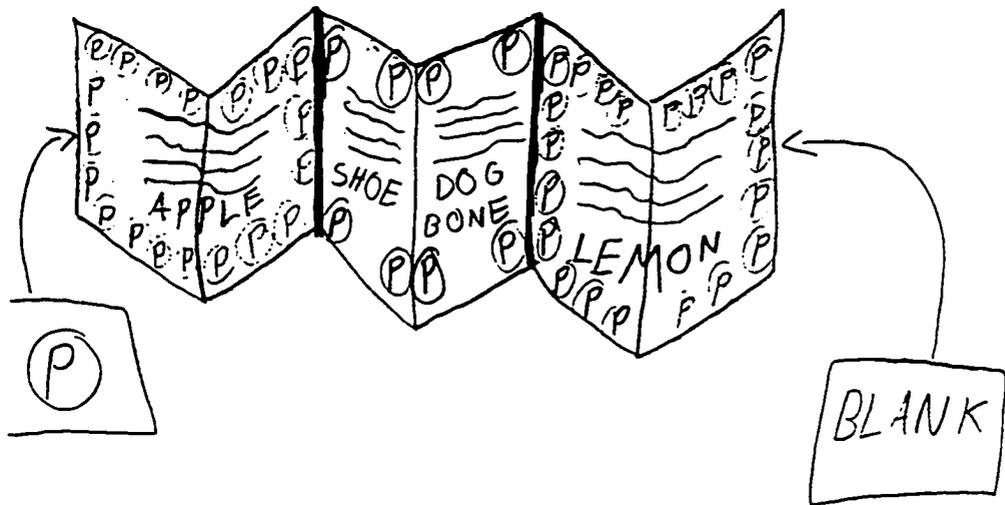
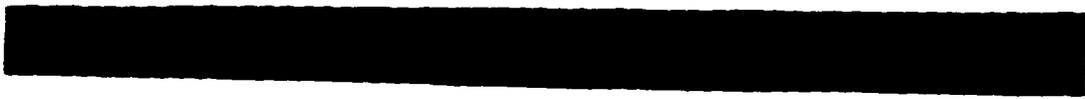
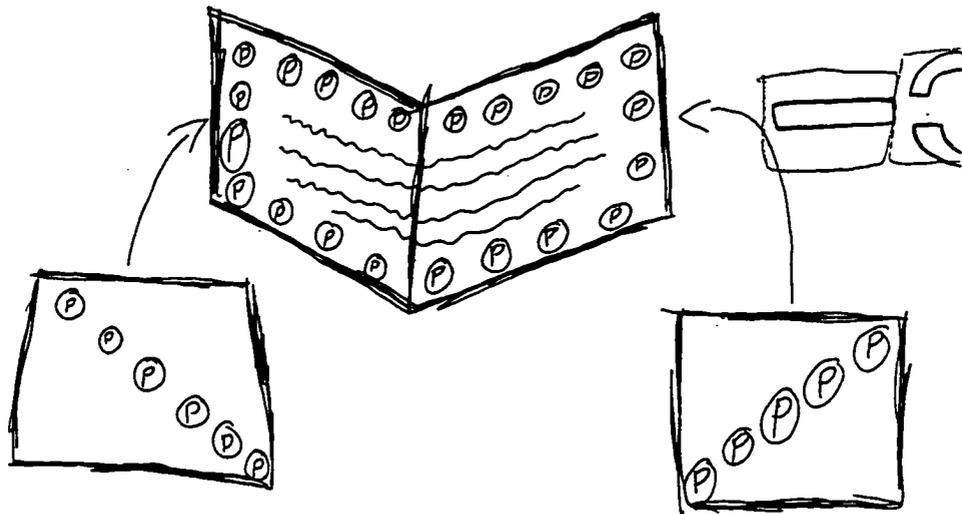
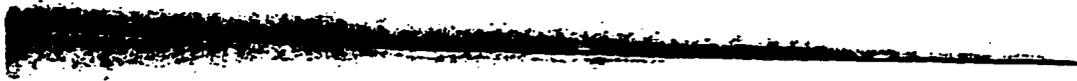
Brief Description: Students will learn various printmaking, paper-making, and book-making techniques and create their own memoir stories through short class writings and journal entries (in journals they make themselves). All the senses are equally valued as students learn to see how words and pictures work together to tell a complete story.

- DAY 1** Monday, 10 June
 * pre- writing tests
 * Historical overview of paper, printmaking & book-making
 * brief writing project
 * students make journals to use throughout the course for sketches and short writing practices
- DAY 2** Tuesday, 11 June
 * writing warm-up ("I remember")
 * writing project (poetry)
 * styrofoam prints
- DAY 3** Wednesday, 12 June
 * potato prints
 * writing project (memory)
- DAY 4** Thursday, 13 June
 * writing warm-up ("I am thinking about the time...")
 * writing project (senses)
 * found object prints
- DAY 5** Friday, 14 June
 * writing warm-up ("What I'll miss when I die.")
 * accordion book

- DAY 6** **Monday, 17 June**
* nature prints
* writing warm-up (senses)
* writing project (nature)
- DAY 7** **Tuesday, 18 June**
* writing warm-up ("A time I felt completely happy was...")
* writing project (memory)
* Safety-Kut block prints
- DAY 8** **Wednesday, 19 June**
* writing warm-up ("I'm afraid of/not afraid of...")
* writing project (fears)
* eraser prints
- DAY 9** **Thursday, 20 June**
* writing warm-up (an early injury)
* students sew signatures of art and writing projects from days 2-8 for final book
- DAY 10** **Friday, 21 June**
* writing warm-up (a lonely time)
* post- writing tests
* students finish final books

* slight revisions to syllabus may be made where necessary

APPENDIX E:
SAMPLE LAYOUT FOR SIGNATURES



APPENDIX F:
PRE- AND POST- WRITING TESTS WITH SCORES

Trevor's Pre-test

My first house was a big house with three bedrooms. It has an organ in the living room. I lived there for about six of my first years. It is now just my Grandmother's house. We had two dogs living there. An Australian Shepherd and a Doberman Pincher. They've both passed away. In my old room is now a computer room. My newest room is now a storage for music things. The kitchen is still the same. Our two bathrooms just got re-tiled and our backyard holds twelve cars old and new.

Verbs = Active and exciting less than 25% of the time

Senses = No senses referenced

Details = More than four specific details

Trevor's Post-test

A house I loved was in a forest. My mom and I lived there in the fall where the leaves were brown, red, orange, and yellow all at the same time. I would listen to them fall against the window sill. I would also listen to the dripping faucet. Drip... Drip... Drip... it would say like it was talking to me. But as the drip slowly put me to sleep it dimmed down. Drip, drip, drip. The next day when I would be up and adam at six o'clock playing the Smurfs on the Atari sometimes I would quit and turn around and see a picture of my dead Grandma and just stare.

Verbs = Active and exciting 50-100% of the time

Senses = More than four senses referenced

Details = More than four specific details

Kevin's Pre-test

I have lived in Tucson, Arizona for as long as I can remember. My house is at 123 South Main Street. There are two bathrooms on either side of the house. The room the farthest North is the living room. Moving south there is the kitchen, then the dining room.

Verbs = No active or exciting verbs
Senses = No sensory references
Details = Two specific details

Kevin's Post-test

I have lived in my house for as long as I can remember. My room is pretty big. It is at the West-side corner. It used to be my parents' room and the room I had is now my sister's room. Until recently my room looked like a bomb had gone off, but now my room is fairly clean and my bathroom is a mess. My house is quite large. There is only one other kid that I know of that lives on my street. His name is Carlos Romero. He has a grandma that used to be the principal of my old school. My house is one story with red orange brick walls along the outside.

Verbs = Active and exciting 25-40% of the time
Senses = Two sensory references
Details = More than four specific details

Mark's Pre-test

In Chicago I lived in a Victorian house that was three stories. I was afraid of the basement because it was dark, crumbly, and dreary. But it was a cool house and we had a huge garden out back. One of my best friends just lived two houses away. We had a huge kitchen in this house and I had a huge bedroom.

Verbs = Active and exciting less than 25% of the time

Senses = One sensory reference

Details = More than four specific details

Mark's Post-test

It was a huge house. A Victorian house with three stories. It had a huge kitchen that we remodelled to be a really awesome kitchen. I had a huge bedroom and there was a huge attic to play in. We had a huge backyard with a garden, an herb garden and a place for my swing set and sandbox. The basement was dark and crumbly and I did not go down there very much. I loved that house and still do. I was very sad when we had to move away from it and Evanston. My best friend lived just two houses away and we would play together all the time.

Verbs = Active and exciting less than 25% of the time

Senses = One sensory reference

Details = More than four specific details

Bill's Pre-test

When I lived, or actually visited Cape Cod in Massachusetts we lived in my grandfather's house. It is located on a street called Oster Pond because of the pond about 200 yards down the road. It has about 20 boats always in the water at one time or another. The house has 3 layers, a basement for my grandfather's shop, a ground level which has 2 bedrooms, a family room, 4 bathrooms, and a kitchen. The second floor has a bedroom, a bathroom and the other half is attic. There is a forest in back of the house with a gate around it to keep people from dumping waste into the forest. It has a lot of ferns and trees and there is only one trail to keep from getting poison ivy. There used to be, or still are, I don't know, 2 boats that are turned over. The porch on the ground level is raised. I have heard of racoons and foxes living in the thick forest behind our house. Across the street from the house is another thick forest.

Verbs = Active and exciting less than 25% of the time

Senses = One sensory reference

Details = More than four specific details

Bill's Post-test

I have never moved so I am still in the same house. My house is 1 story with a flat roof on one edge of it-- the rest is slightly slanted. When you climb up onto the coarse roof the cooler overpowers you with it's throbbing sound as the neighborhood dies as if by a knife. If you turn to the backyard there is an immense hard green figure with a hidden secret of a tree house that was built many years ago. The tree leans out over our pool that is a broken-glass blue. On the other side of the tree is a small forest followed by a barren desert. On the porch there are piles, almost mountains, of furniture that is wrapped in plastic. In the living room there is a fantastic view of the Catalinas from the transparent window. The couch, as if a guard, stands in the corner and waits as the two chairs on the opposite side of the room seem to be charging. This all leads into an overpass that finds the kitchen, which usually has some good smell in it. The back door of the kitchen leads into a long

hallway that leads to one musty bathroom and three cozy rooms.

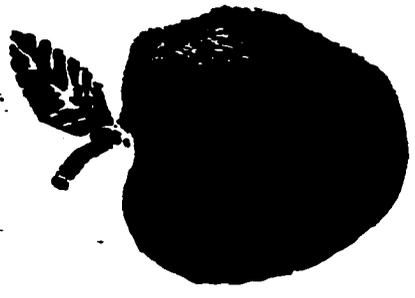
Verbs = Active and exciting 50 - 100% of the time
Senses = More than four sensory details referenced
Details = More than four specific details

APPENDIX G:
SAMPLE PAGES FROM STUDENT FINAL BOOKS

All day my hand, neck
 embraced by
 Kijari, Koof, ...
 and ... more ...
 of clay by my hand and
 enlarged by some ...
 power, some ... my hand looked
 sad like a frog
 even in exercise my hands
 work like swimming, ...
 walking my hands ... to help
 This morning I ate breakfast



my fingers clasping my spoon
 now I can feel a cold bead
 of condensation hit my palm
 hands seeping to my palm
 Some days my hand is cute and
 even beautiful, while others it is
 sad and even, very slow as my
 fingers twitch as I
 grip an apple





What I see is blue sky
 with puffy soft clouds that are
 like marsh meadows that sweep
 across the sky. I hear silence
 and in there I hear kind words,
 gentleness, nature. All around
 me are panderas that feel



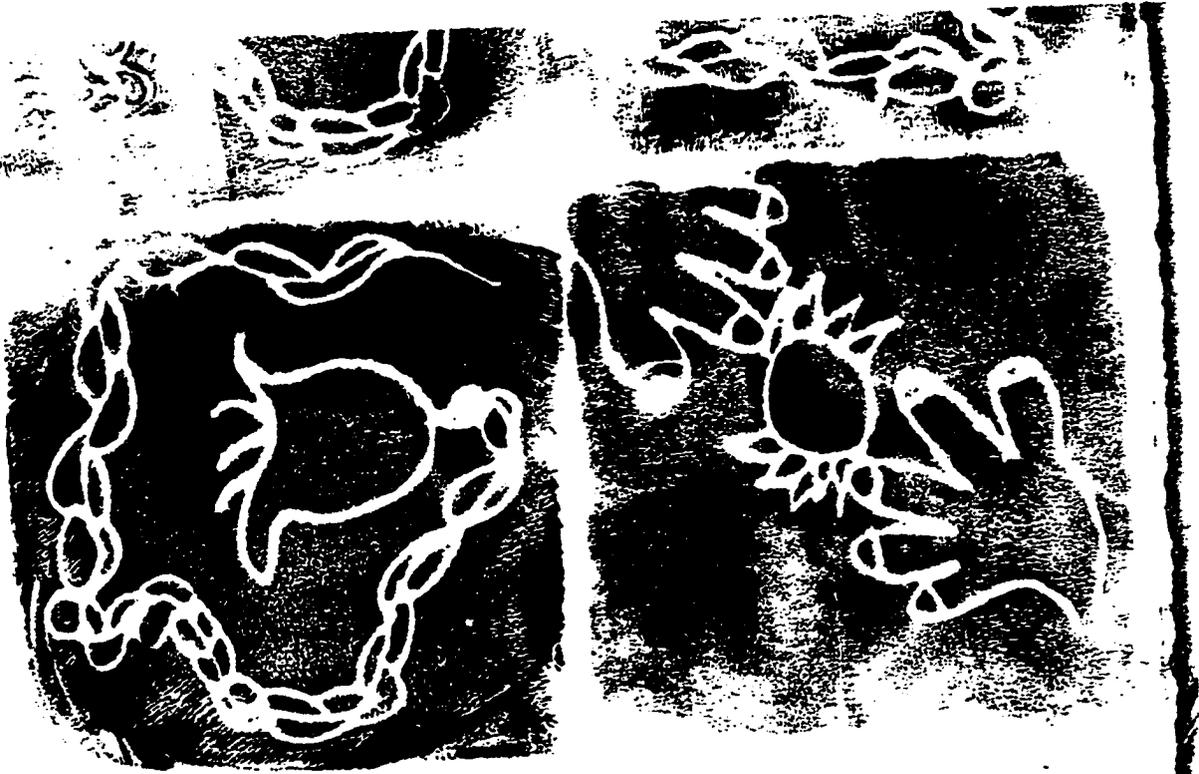
Course but have a
softness in them.
The place I am thinking
about is filled with
Light.



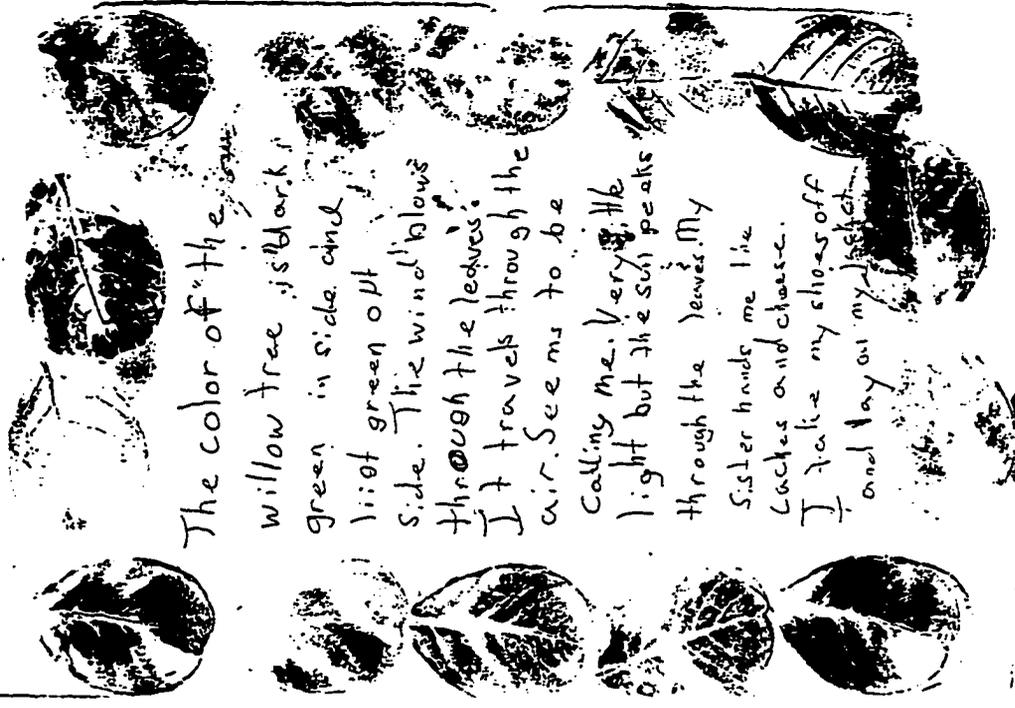
It has no trees to block
your view. If you lay a
cracker down it will be
wicked away by a squirrel
or bear. As I walk here the
limbs would hold you back
like by grabbing your flannel
or T-shirt to restrict you from



My hands dark
 all a d think of all
 the things that my
 hands and I have been
 through. Worst of
 the time it was dizzy.
 Did not smack it on
 time to cover my mouth
 when I would sneez
 but I will all ways
 love my hand



The smell was like dry greens.
Me and my sister played
under the tree. The pocket of water
spilled.



The color of the
willow tree is dark
green in side and
light green on
side. The wind blows
through the leaves.
It travels through the
air. Seems to be
calling me. Very light
light but the sun peaks
through the leaves. My
sister hides me like
cactus and chase.
I take my shoes off
and lay on my stomach.

The rain drips down my hand, I look at the ground, it is no longer dry land, it is mud, so cold. The sand is wet, that I touch with my hand. But the sun comes a shining and the land, is sand....

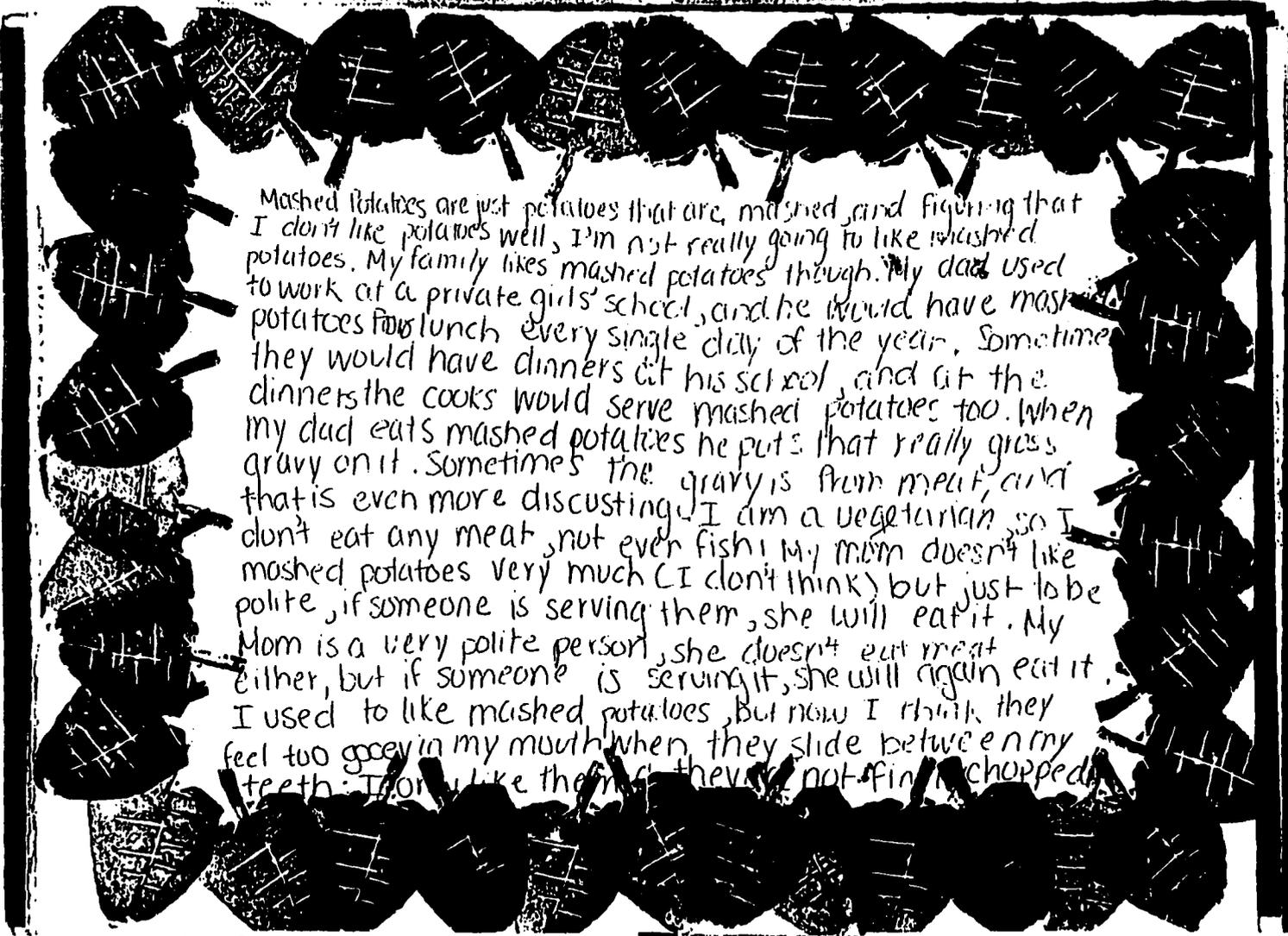


APPENDIX H:
PAGES FROM IVY'S FINAL BOOK



The thick vines I see are
 covering the whole fort
 making it look a beautiful
 green. I move the green
 vines over, and sitting in the
 middle of a small nest filled
 with baby birds. The birds
 jump on my hand, I stroke
 their soft feathers. I put
 the bird down and move closer
 to the opening of the vines,
 I open it. A streak of
 light shines through showing
 a blinding dust path.
 My reflect in my pocket
 put out a white reflecter. I
 put it into it. The crabs fly
 all over my striped red
 and blue shirt of checky

brush them off giving the
 rest of the crabs to the
 birds. I walk over to a
 tree that gives out an odor.
 I pick a leaf, finding
 that it has a citrus sort of
 smell, I think in my mind.
 This is lemon. We used to
 put lemons in our water.
 Mum thought it tasted good.
 I turn around, my friend
 walks in.
 "Time to go," she says.



Mashed potatoes are just potatoes that are mashed, and figuring that I don't like potatoes well, I'm not really going to like mashed potatoes. My family likes mashed potatoes though. My dad used to work at a private girls' school, and he would have mashed potatoes for lunch every single day of the year. Sometimes they would have dinners at his school, and at the dinners the cooks would serve mashed potatoes too. When my dad eats mashed potatoes he puts that really gross gravy on it. Sometimes the gravy is from meat, and that is even more disgusting. I am a vegetarian, so I don't eat any meat, not even fish. My mom doesn't like mashed potatoes very much (I don't think) but just to be polite, if someone is serving them, she will eat it. My Mom is a very polite person, she doesn't eat meat either, but if someone is serving it, she will again eat it. I used to like mashed potatoes, but now I think they feel too gooey in my mouth when they slide between my teeth. I don't like them if they're not finely chopped.

I am going to miss everything when I die, even the things and people I would love to get away from now. I'll miss playing my violin in concerts, starring in front of 200 people and reciting lines from a play. I'll miss the people who I have known, the people who have taught me, the people who have helped me sweat out all my problems, and the people who gave me friendship. The things I am going to miss and how much I am going to miss them is indescribable. I am going to miss being frightened about going on an air plain for the first time, being frightened about the first day of school, or being terrified of walking down an old street with strangers by myself. I am going to miss the plants that have kept me alive all this time with their fruits and vegetables. I'll miss the animals that have been so friendly to me, and

the wildlife that I needed to
 live all the time. There are all different
 things that I am going to truly miss
 when I die.

I am going to miss my parents
 that have bright me up being so
 healthy. I am going to miss having
 choices that they help me make, and
 choices they leave for me on my
 own.

There is no one thing I will
 miss.



I see the ant on my hand,
It slips across my short fingers,
And scuts hopply through
My cold palm.
My weak fingers flick the ant
Across to a seed layin' on the ground.



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