

**VISUAL METAPHORS AND VISUAL JOURNALS IN
PRESERVICE TEACHER ART EDUCATION: CASE
STUDY**

By

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ABSTRACT

The purpose of this study was to investigate how the addition of visual metaphors and visual journals created by pre-service art teachers supported the ways they made explicit their beliefs about art education. This research was developed based on assumptions about the power of reflective thought to inform teachers about their practice. The creation of visual metaphors and visual journals in the process of becoming a teacher is tied to reflective practice. The research inquiry focuses on the visual nature of this reflective activity in an attempt to discern if this is an effective strategy to access tacit and changing beliefs held by pre-service art teachers.

The thesis that emerged from this research is that when both visual metaphors and visual journals were utilized, they helped all five participants in the study to reflect on tacit and/or changing beliefs. This strategy was most effective when the participants were open to searching into personal issues about teaching.

The study employed a case study approach and an arts-based methodology. The case involved semi-structured interviews with five pre-service art teachers who were nearing the end of their teacher education program. Visual journals and visual metaphors created by the participants were the focus of the interviews. The creation of art in the form of computer-generated collages added insight to the data analysis. Implications for research, teacher education and practice are discussed.

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DEDICATION

This endeavour is lovingly dedicated
to my husband, Terry, and my daughter, Fiona.

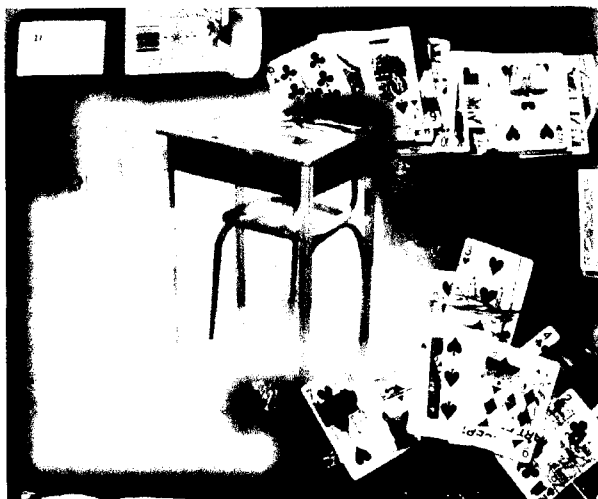
CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

Background to the Problem

I conceived this study from my interest in art as a pedagogical and research methodology in art teacher education. Since art specialist teachers are being prepared to teach art, it follows that their education should involve some form of artistic expression. Visual metaphors and visual journals were strategies used by one university professor in a faculty of education to meet that need, and so I undertook an investigation of this case. The implications for future development of courses in art teacher education are notable from this investigation.

When I was educated to be a teacher, in addition to my practicum experiences, I can recall two kinds of classes; lectures where I was expected to produce written assignments, and studio classes where I was expected to make art. In retrospect, as an art teacher with a history of artistic practice¹, I realize that to meld the two kinds of activities - the research done in my written projects with my research done in studio projects - would be a very good fit. In other words, I would think about my teaching practice visually and write about my art. Hence, when I chose to

1



The image of the desk and chair is a piece of art that I first created in order to reflect on my beliefs about my roles as artist, researcher and teacher. For this study, I distilled the visual metaphor of shuffling cards from my previous art piece. As a reference to the shuffling of ideas and data, I shuffle layers of meaning as the cards flick through my fingers.

I revisited and reworked this concept in light of this study in an effort to discover how the research gives me insight into my own practices. I use the art as a methodology to help me better understand the data.

conduct research in my masters degree in art teacher education, the development of visual metaphors and visual journals by students was of particular interest to me. Here was a form of inquiry that seemed to mix the visual and the written just as I had imagined.

In truth, many teacher education programs are very different from what I experienced when I was a student teacher. One art educator wrote about her recent teacher education experience, "Still present were the emphases on professional knowledge and concerns of practice, but the didactic methodology that I had encountered previously [ten years earlier] had waned, for now, theory and practice interacted" (Byrne, 1995, p. 68). Teacher reflection, in the form of narrative and metaphor as a means by which teachers can better understand their histories and their teaching practices, is one notable change. While this reflective approach to educating teachers has sometimes resulted in more effective education programs, in these instances most metaphorical reflection has been limited to written work (Rolands, 1995; Bullough, 1991; Dooley, 1998; Tobin, 1990; Munby & Russell, 1990; Mahlios & Maxson, 1995). Although this form of narrative has often been successful, when dealing with special subject areas, there may be additional forms of reflection that can enhance the pre-service teachers' experiences. For art educators, whose work is based in the visual, this may be the case (Grauer, 1998; Grauer & Nath, 1998; Jeffers, 1997). Indeed, it stands to reason that for these specialist teachers, expression via art may be a very effective form of reflection. Because they teach art and many consider themselves to be artists, art teachers are very likely to be familiar with the drawn as well as written. Stout (1993) encourages teacher educators to exploit these two areas of familiarity. She states, "What is unique about learning in the visual arts is that students have at their disposal two viable realms for generating, developing and clarifying thought: the visual and the verbal" (p. 42). If art education students are encouraged to use visual expression in addition to their verbal and written discourses as a means by which they can examine their beliefs about their teaching, they may begin to understand their beliefs about teaching more deeply.

Visual Journals and Visual Metaphors

When I begin my creative process, I often pick up my visual journal and begin to draw and write. From this starting point, I move to other media.² Later, I often return to the book and add to it as I reflect about the art that I have just completed. I also read and sift through theoretical concepts and other information from many sources throughout this process, recording what I learn in my book. Although I have presented this process in a linear fashion, it is, in reality, very interactive as I move backwards, forwards and sideways.

The difference between a sketchbook and a visual journal may only be semantic for some people. For others, however, there are important differences to be noted. I understand a journal to be a linear, relatively consistent succession of narrative entries that reveal the journalist's life in some way. While the sketchbook can also have this element, it is described more often as a preparatory device for making art. The visual journal, on the other hand, can be the art object itself. Although there are exceptions to these interpretations, for this study I follow the lead of Grauer & Naths, (1998) as they describe the visual journal this way.

The Visual Journal is similar, yet different from a sketchbook. It is kept as a type of journal, the content showing visual thinking in a variety of forms: drawings, sketches, collages, photographs, graphics and personally meaningful symbols. Words invariably become an

2



I am reminded as I create new images from old that collage is a method that fragments, reshapes and renews. Although the Cubists gave it to us early in the 20th century, it has a postmodern sensibility that is suitable as a representation of my practices.

...a postmodern sensibility that is suitable as

important part of the Visual Journal, as they describe and support depictions, become graphic devices and aid reflection on personal themes and metaphors. (p.14)

Like the visual journal, the visual metaphor is a metaphor that has been developed in an artistic way. Any form of two or three-dimensional representation is possible for a visual metaphor. Often there is a written portion to it. In the case of this study of teacher education, the visual metaphor was an assignment that the students completed in their visual journals.

Statement of the Problem

The problem to be examined in this study is to investigate how the addition of visual metaphors and visual journals support the ways pre-service art teachers make explicit their beliefs about art education. By studying the way in which teacher educators have used visual metaphors and visual journals, I hope to add useful information to the area of student teacher beliefs about teaching. There are many facets to this examination. I have included in this study an explanation of the ways that the participants made art about their beliefs. The participants' views about themselves in the context of art and teaching can create a powerful form of reflection that they may continue as they begin their careers. In my investigation, I also look for changes in beliefs about art education using the kind of reflection that student teachers do when they are requested to create visual journals and a series of visual metaphors about their teaching.

There has been some research focused on the effectiveness of using and/or making art as a metaphor by which student teachers can reflect upon their established and changing beliefs toward art education (Grauer, 1998; Grauer & Nath, 1998; Jeffers, 1996, 1997). It is posited that the results of this bounded case study will add to the literature of teacher education and also to the specialist area of art education. It is therefore beneficial that investigation into this area be undertaken.

Research Question

In this study I examine the many areas within the relationship between pre-service art teacher beliefs and creating art in the form of visual metaphors and visual journals. The following question was the impetus for this investigation:

How do visual metaphors and visual journals created by pre-service art education teachers help them to understand their established and changing beliefs about art education?

Overview of the Thesis

Following the introduction, chapter two, the literature review, encompasses a number of topics that relate to this study. An overview of teacher education that champions methods such as reflection and constructivism³ will begin the chapter. The nature of belief systems as they relate to student teacher development, and a description of metaphor, including various interpretations of it, is provided as a foundation for further discussion. Then I review the special character of the student teacher of secondary art education. Finally, I examine the place of creating art in teacher education research, as it relates to this study of visual metaphors and visual journals. In chapter three, I describe the setting of the study and explain the design and methodology. Also included in this chapter is an interpretation of my role as researcher. In the following chapter, I introduce

3



From a constructivist perspective I understand the collages as moments of my relationships with the people I represent. I build layer on layer. Learning from this activity is about looking inward - totally self-absorbing. And yet, it is also about looking outward to the student teachers in this study.

each of the five participating student teachers through summaries of their interviews that I analyzed with respect to the characterization of tacit and/or changing visual metaphors and beliefs. I also include pages from the pre-service teachers' visual journals to facilitate a more complete understanding of their beliefs. In chapter five, I analyze the findings and categorize the information into these broad themes: visual metaphors and tacit beliefs; visual metaphors, visual journals and changes in beliefs; visual metaphors, visual journals and the public sphere; visual journals and reflection; and lastly, visual metaphors, visual journals and creating art. The research ends with my conclusions, where I review the pedagogical uses of visual journals and visual metaphors in specialist art teacher education. In addition, I discuss implications for the development of visual forms of reflection in research and in teacher education.

CHAPTER 2: REVIEW OF THE LITERATURE

Introduction

As I began this search for relevant articles for this study, I found that the fields of teacher education, art teacher education and visual art were all important to build the appropriate background for studying visual metaphors and visual journals. Therefore, I have included an overview of developments in education that incorporate methods such as constructivism and teacher reflection. I also add relevant issues in the following topics: belief systems as they relate to beginning teachers; the changeability of personal beliefs; the nature of the specialist teacher in art education; a description of metaphors; and the use of metaphor in teacher education. Finally, I have included literature on the nature of images and creating art as a form of inquiry, as they relate to visual metaphors and visual journals.

Constructivist Theory in Art Teacher Education

For the purpose of this study, I draw on McCoubrey's (2000) discussion of the way knowledge is constructed. She states, "Central to the issue of knowledge in constructivism is that knowledge is not external, absolute truth that has been previously established and merely received by the learner, but rather knowledge consists of the personal understandings constructed by each individual learner" (pp. 15-16). In other words, knowledge is slowly gathered and developed based upon the individual's interactions with the world. As Prater (2001) explains, "Learning is the construction of meaning by gathering personal experiences. No fact or single interpretation is so important as to bring a halt to the learning process, or to overrule the learners' personal interpretations" (pp. 44-45).

For artists, constructivist theory is well suited to their personal expression. McCoubrey (2000) phrases the connection this way: "The processes of creating art parallel constructivist principles. Original art works are created not received; art creation and perception are

individualistic; the outcome of art creation and perception is not known in advance because it is not predetermined or directed; and there is personal involvement through interaction with ideas and materials” (p.17). With an appreciation of a constructivist perspective in art teacher preparation courses, the pre-service teachers have an opportunity to relate the theory to their own learning. This kind of experience may help them understand the processes that their pupils may experience. The creation of visual journals and visual metaphors in their teacher education program gives student teachers the opportunity to construct art about themselves and their experiences.

Research on Beliefs and Knowledge

An important consideration in student teacher development is the influence of a pre-service teacher’s belief system on her/his ability to teach. A number of studies have been conducted to characterize the nature of belief systems and their importance in teacher development (Brownlee, 2000; Grauer, 1998; Johnston, 1994; Mahlios & Maxson, 1995; Lasley, 1980; Nespor, 1987; Bullough & Stokes, 1994). The scope of the studies cover these general areas of discussion: the definition of beliefs with respect to knowledge; the tacit nature of beliefs and their power to influence behavior; the relationship between beliefs and feelings; and the possibility of changing or modifying beliefs. A closer examination of these areas has helped me to comprehend how we are guided by our beliefs not only as pre-service teachers, but also as experienced teachers.

Attempts at defining beliefs have lead researchers to scrutinize and discuss the definitions of knowledge and beliefs. Nespor (1987) has detailed four characteristics that separate beliefs from knowledge. These include assumptions about the existence of entities, idealized or alternative realities, strong feelings and a judgmental aspect associated with beliefs, and the development of beliefs from events or episodes.

To describe the intimate connection between beliefs and knowledge from a constructivist perspective, beliefs are based upon experiences and are then used to understand and construct knowledge (McCoubrey, 2000). Grauer (1995) makes the distinction between beliefs and subject matter knowledge but notes that the former influences the latter. She concluded from a study of pre-service art teachers that “the evolving nature of subject matter beliefs and how they interact with subject matter knowledge appears to be significant in the eventual values that prospective teachers ascribe to that subject and, presumably, what and how they will teach” (p. 158).

Because there is some overlap between the two concepts of knowledge and beliefs, a blending or blurring of beliefs and knowledge is at times favoured as a more appropriate description because they both tend to operate in the same way. However, Bullough & Baughman (1997) warn of the necessity of keeping boundaries between definitions of beliefs and knowledge, although it is tempting to combine the two concepts because of their similar natures. Knowledge, they point out, represents a greater truth while beliefs can be false yet still valued. The two terms are not synonymous.

Research on the Nature of Beliefs

Many researchers agree that beliefs are very important and are the basis for a person's values and behaviors (Bullough & Gitlin, 1995, 2001; Clandinin & Connelly, 2000; Marshall, 1990; Grauer, 1998). This builds on the work of Lasley (1980) who described the process this way. “They [beliefs] are acquired and fostered through schooling, through the informal observation of others, and through the folklore of a culture and they usually persist, unmodified, unless intentionally or explicitly challenged” (p.38). The understanding of an individual's beliefs is important if one is to understand that person's actions. Furthermore, a deep understanding of our own beliefs can help us develop greater self-confidence as understanding grows (Grauer, 1998; McCoubrey, 2000). Much of our knowledge and behaviors are filtered through these beliefs.

Here lies the importance of encouraging student teachers to examining their belief systems. Their “construction” of themselves as teachers begins with their own values and beliefs.

To be aware of deeply held beliefs and to acknowledge how they affect actions and behaviors is not easy. Many of our core beliefs are tacit. They are so much a part of us that we fail to recognize them. As Polanyi stated, “We know more than we can tell” (1966, p.4). Many of the beliefs we hold as individuals are hidden and there is a need to bring them to attention in order to contemplate their significance. This power of beliefs to influence and affect how a student teacher develops into a teacher leaves teacher educators with a responsibility to assist their students to understand their beliefs more fully. Hopefully, this will lead to openness on the part of the new teachers as they gain more experience in the classroom. Bullough & Stokes (1994) point out that pre-service teachers are naturally inclined to accept information in an education program that parallels their personal beliefs. People are naturally more receptive to information that secures their existing frames of reference. “Put simply, we see what we expect to see, given our beliefs” (Bullough & Baughman, 1997). This selective learning means that pre-service teachers may prematurely dismiss contrary points of view because the information is perceived to be unimportant or irrelevant. Consequently, teachers can form potentially narrow frameworks from which they then teach.

Mahlois & Maxson (1995) have also noted the beliefs that student teachers hold upon entering their pre-service teaching courses affect and define how they act during their teaching. One motivation for this study stems from the work of these and other scholars who concluded from their research of student teachers that teacher education programs would be more successful if the pre-service teachers could identify their beliefs and values, and be provided with an opportunity to discuss them within the context of their courses. “Such dialogues would enable students to better bridge their held beliefs with the core concepts and responsibilities they will assume as they enter teaching” (Mahlios & Maxson, 1995, p.198). Their conclusions echo those

of a number of researchers who call for a re-examination of how teacher education programs were taught so that student teacher beliefs would be considered (Clandinin & Connelly 2000; Grauer, 1998; Cole & Knowles, 2000; Bullough & Gitlin, 2001).

Changes in beliefs can occur because of the encounters students have during teacher education. A teacher education program is usually an intense experience. Mahlios & Maxson (1995) have observed that it is a time for maturation and thus, shifting belief patterns do occur for some students. Similarly, Grauer (1998) concluded in her study of both elementary and secondary pre-service art teachers that student teachers' prior beliefs were somewhat flexible and that they aligned their beliefs more closely with those presented by their professors in the art methods course. Contrarily, McDiarmid (1990) found that students were reluctant to change beliefs that they held upon entering teachers certification programs. From his study of elementary student teachers he concluded that the pre-service teachers would go to great lengths to keep their beliefs, even when confronted with examples that refuted them. This is not surprising. Belief structures are part of our identities. To hold onto what we believe is very reassuring and secure. If we are faced with a situation where we are asked to examine and possibly change our beliefs, it means looking carefully and critically at who we are as educators and as individuals. This can be unnerving.

Consequently, while change does occur in some pre-service teachers' beliefs, it is often a slow process. Teacher education can be the beginning of change for teachers. I would hope that adjustments in our beliefs continue throughout our careers as teachers. Meaningful change suggests that we are receptive to new concepts and hopefully, that our teaching reflects this openness.

The Role of Reflection in Teacher Education

In order to address the issue of pre-service teacher beliefs, there have been calls for a more reflective aspect to teacher education programs. Reflection is seen as a key to understanding. However, the term "reflective practice" has been used in a variety of ways. It is useful to clarify what reflectivity means as it relates to student teachers in education programs. Donald Schon (1983) is often cited in educational research for his distinctions between the terms "reflection-in-action" and "reflection-on-action". These are hallmarks of his writing. According to Schon, to reflect on one's action refers to a deliberate repose made after one's activities. During this time, one frames and reframes what has happened and draws conclusions that help the individual understand and prepare for future similar situations. Student teachers, for example, reflect on their actions when they discuss surprises and unexpected occurrences that happened in their teaching practica. There is time to ponder the aspects of the experience with colleagues and instructors. "Reflection-in-action", on the other hand, refers to a form of thinking that is done while in the immediacy of a situation: "When someone reflects-in-action, he becomes a researcher in the practice context. He is not dependent on the categories of established theory and technique but constructs the new theory of the unique case" (Schon, 1983, p.68).

Munby & Russell (1990) apply Schon's "reflection-in-action" to education. They conclude that teachers are influenced by their experiences while teaching and often "reframe" a problem during the teaching moment. The classroom context requires an immediate response so that teachers must rely upon their previous knowledge and past experiences to make sense of their problems. As student teachers graduate and begin their careers, they must learn the value of and the distinction between problem setting and problem solving. These endeavors are influenced not by past teaching experiences, because they lack this support, but upon their personal histories, beliefs and values. Therefore, the more cognizant pre-service teachers are of these beliefs, the more aware they will be of their abilities to select and solve educational problems. Hopefully,

they will make well-informed judgments. This is similar to the summation by Taggart & Wilson (1998) that reflective thinking is the ability to make informed decisions about classroom matters and to assess the consequences of those decisions.

There have been cautions, however against the application of Schon's theories to the teaching profession. Waks (1999) warns that further study is needed to analyze how Schon's framework actually fits with teacher education. He states,

The whole point of the reflective practicum is to provide a virtual space for operational moves and 'reflection in action'. This space approximates real-world conditions but does not have real-world consequences. ...teachers do not have ready access to virtual performance contexts approximating real classrooms. Essential element - learners - are missing. Even rehearsals of teaching require students as materials that 'talk back'. The reflective practicum as Schon explains it does not fit the context and media of teaching. (p. 313)

Clarke (1992) counters Waks' criticism of the application of Schon's theory to education by clarifying that this virtual space where the learner is free to experiment, for a pre-service teacher, is the arena of associate teacher/pre-service teacher discussions. Here the student teacher can plan with the appropriate guidance. Clarke explains, "The teaching practica...included both the planning setting and the performance setting (ie., putting into practice that which was planned). Therefore, the students' reflection included both planning as action in a virtual world and performance as action in the 'real' world" (p. 193). Seen in this light, reflective practice as described by Schon has a place in teaching.

Max van Manen (1995) notes that student teacher reflection in the class is limited in scope because of the busy nature of the classroom. As he explains, "What makes reflection in action difficult is that life in classrooms is contingent, dynamic, everchanging: every moment, every second is situation-specific" (p.40). Furthermore, he does not see this kind of reflection in action as a goal for teachers because of the phenomenological nature of teaching. As van Manen explains,

The ultimate success of teaching actually may rely importantly on the 'knowledge' forms that inhere in practical actions, in an embodied thoughtfulness, and in the personal space, mood and relational atmosphere in which teachers find themselves with their students. The curricular thoughtfulness that good teachers learn to display towards children may depend precisely upon the internalized values, embodied qualities, thoughtful habits that constitute virtues of teaching. (p. 48)

Van Manen's approach echoes Polanyi's (1966) notion about tacit knowing. Polanyi too places importance on the physical awareness of learning and knowing. In his words, "our body is the ultimate instrument of all our external knowledge, whether intellectual or practical...When we make a thing functional as the proximal term of tacit knowing, we incorporate it into our body – or extend our body to include it – so that we come to dwell in it" (Polanyi, 1966, p. 16).

The reflective aspect in teacher education is supported by Cole & Knowles (2000) who claim "teaching is autobiography" (p. 22). To be a teacher is to be involved in a lifelong reflective inquiry. The inference here is that reflectivity leads to a self-understanding or self-awareness in the context of teaching.

The debate continues about the best methods for promoting reflective learning experiences for student teachers. Many teacher educators would concur that personal reflective analysis is not effective as a learning process if it is not related to the greater context of the classroom and the teaching profession. Bullough (1989) describes teaching as a "reflective decision making" based upon individual problem solving but "must also build a professional community where collegiality and caring are two essential values" (p.19). I think of the classroom where the pre-service art teachers in this study gathered each day for their classes. Here they were reminded, or learned that collegiality and support among peers is an important and necessary part of being a teacher.

Metaphors in Teacher Education

In a quest to encourage student teachers to be more reflective in nature, many scholars have investigated the use of metaphor (Hardcastle, Yamamoto, Parkay, & Chan, 1985; Grant, 1992; Dooley, 1998; Mahlios & Maxson, 1995; Dickmeyer, 1989; Bullough & Stokes, 1994; Munby & Russell, 1990). Metaphors are closely connected to a person's thinking processes (Lakoff & Johnson, 1980; Munby & Russell, 1990; Haskell, 1987; Hardcastle, et al., 1985; Bullough & Stokes, 1994; Schon, 1993). Lakoff & Johnson (1980) have described the nature of metaphorical thinking this way:

Just as we seek out metaphors to highlight and make coherent what we have in common with someone else, we seek out personal metaphors to highlight and make coherent our own pasts, our present activities and our dreams, hopes and goals as well. A large part of self-understanding is the search for appropriate personal metaphors that make sense of our lives. (pp. 232-233)

If "realities are constructed metaphorically" (Munby & Russell, 1990, p.117), one might assume that student teachers' realities lead them to create vivid metaphors. Tension, contradiction and intense personal development are often associated with teacher education and can sometimes be more easily represented metaphorically by pre-service teachers as they make sense of their practice.

Indeed, the teacher identity that a student teacher develops during the reflective process is, for many, a constantly shifting phenomenon (Bullough & Stokes, 1994). These changes may be indicated by changes in the metaphors as the pre-service teacher moves through the program (Grauer, 1995; Bullough, 1991). As Bullough & Stokes (1994) argue, "metaphor analysis appears to be a means for entertaining alternative roles and can help students to recognize their identities to a greater extent" (p. 209). Bullough (1991) found that student teachers with weak self-images could not look beyond the self and so resorted to compliance in the practicum even though, in one case, the values of the associate teacher conflicted with those of the student. On

the other end of the scale, a powerful self-image can result in an inflexible approach to learning to teach.

However, Dooley (1998) disagrees with this relationship of identity and metaphor. She concluded that metaphorical analysis leads to confusion of identity rather than a clearer recognition of self (p. 8). Perhaps this is the case for some student teachers, but the investigation of self through the creation and analysis of visual metaphors and/or visual journals may be a successful strategy for pre-service teachers to have as beginning teachers. While not all student teachers find that metaphorical analysis is helpful during their year of teacher education, it is one more strategy that may be valuable as they continue in their careers. As van Manen (1994) states, "Each teacher may see his or her pedagogical life as a reflection of a personal identity that can only develop in time by living through experiences and telling stories about one's daily living with children" (p.157). The fact that we, as teachers, evolve into the people we are over time is important when considering the use of metaphors as a form of reflection.

Tobin (1990) concluded from a five-year study on metaphors and changeability of beliefs that a change of metaphor can aid a teacher in redefining her/his role in the classroom. He goes further to state that, "the metaphor used to make sense of a role was a master switch for teachers' associated belief sets" (p. 126). Thus, metaphors are often developed from core beliefs and values so that changes, if they occur, represent important moments for that person.

When the teacher selects a piece of art to stand for her/his metaphor of teaching, the image can trigger very important breakthroughs about beliefs. Jeffers (1996, 1997) found that when pre-service teachers used art as metaphors for their concepts of teaching, they often learned powerful emotional lessons about themselves. "The teachers entered into reciprocal, reflexive relationships with their metaphors through which they gained more insightful understandings both of themselves and of their artworks" (Jeffers, 1997, p. 11).

Metaphors can also be an effective tool for educational researchers. Elbaz (1991) found that the use of metaphor in teacher education research lessened the impact of the researcher's influence. She warned that in the translation by researchers of teachers' perspectives, even the most sensitive approach could distort the teacher's voice because of the nature of the research paradigm. However, methods such as metaphorical analysis are sometimes successful at revealing a more accurate account of teacher knowledge. "Concepts such as 'image' and 'metaphor'...speak particularly to the integrated nature of teachers' knowledge in its simultaneously emotional, evaluative and cognitive nature, and also conveys the personal meanings which permeate this knowledge" (Elbaz, 1991, p. 13).

Munby (1986) concurs with Elbaz on this point. He has noted that metaphorical analysis is "an accurate method of getting at teachers' beliefs and cognitive processes" (p. 198). If we can better understand the way we think as teachers, we may be more conscious of the beliefs and values that we pass on to our students. As teachers, we have an enormous responsibility because of our powerful influence in the classroom. Youngsters look to their role models for guidance in most aspects of their development. Teachers are often placed in this position and it is important that student teachers understand this aspect of their chosen profession.

The nature of metaphorical thought often includes an array of related metaphors. Rather than one metaphor, the development of teaching metaphors is often multi-dimensional. This accurately reflects the nature of teaching. As Collins & Green (1990) concluded from their study of classroom metaphors, "...no single metaphor captured the whole...a relationship exists among these metaphors. These metaphors build a 'web of meaning' that makes visible the dynamic and constructed nature of everyday life in classrooms" (pp. 76-77). I submit that images are suitable as forms for metaphors because they also create a web of meaning whereby there can exist a number of interpretations and associations made by the viewer.

Many scholars agree that to be of any use for student teachers, personal metaphors must be grounded in a student's own reality; developed from personal beliefs and thoughts (Grant, 1992; Dooley, 1998; Bullough & Stokes, 1994; Weade & Ernst, 1990). To create a metaphor about teaching without adequate introspection can result in a superficial image and, consequently, the whole effort is less meaningful. Indeed, Bullough & Stokes (1994) noted problems when pre-service teachers failed to acquire an adequate depth of metaphorical thought. The student teachers who benefited the most from metaphorical analysis were those who thought carefully about their role as a teacher and about their beliefs about teaching. To create metaphors that are offered primarily to satisfy another party, be it researcher or instructor, are of little use.

Other related difficulties arise when metaphors are overused. If the inquiry is not meaningfully connected to the personal, the student teacher often thinks of teaching in a stereotypical way. This is evident when s/he is questioned about her/his choice of metaphor and is unable to articulate reasons for the choice (Cole & Knowles, 2000). The organic growth metaphor of students as a garden is one such metaphor that is reoccurring. Mahlios & Maxson (1995) have noted that such growth metaphors may be contrary to the constructivist understanding of learning. One possible interpretation is that the unilateral directional nature of a growth metaphor suggests that the gardener (the teacher) tends (gives information) and the plant (student) grows in predictable ways.

Through the articulation of personal metaphors, potential contradictions with a student teacher's personal beliefs and institutional teaching philosophies can be revealed (Bullough & Stokes, 1994). When a pre-service teacher's beliefs are detrimental to teaching, neither the teacher nor the student benefits. The analysis of personal teaching metaphors may assist the student teacher to recognize such a conflict. In addition, a student teacher's expectations about teaching may conflict with the realities of the classroom, and metaphors can help uncover problems of this nature (Dooley, 1998).

Metaphors are not without shortfalls, however. The very powerful characteristic of a metaphor to sum up a situation can also oversimplify it (Bowers, 1980; Dickmeyer, 1989). It is useful, therefore, to be aware of what is absent from a metaphor. In addition, Bowers (1980) reminds us that the cultural background of the researcher is an important bias in the interpretation of metaphors when they are used in research. We all form our perspectives from our cultural grounding. As researchers, we need to recognize how and where this bias is manifest. If not fully acknowledged, the influence of our culture-bound points of view can create misunderstandings in the analysis of metaphors. Richardson (2000) also notes this bias.

Metaphors organize social scientific work and affect the interpretations of the 'facts'; indeed, facts are interpretable ('make sense') only in terms of their place within a metaphorical structure. The 'sense making' is always value constituting – making sense in a particular way, privileging one ordering of the 'facts' over others. (p. 927)

The inquiry into beginning teacher beliefs and the development of metaphor takes on a specific nature when it is applied to the specialist art teacher. Students of secondary art education generally perceive themselves to be competent in art. They have a variety of histories and many of them have undergraduate degrees in art or practical experience with some form of art. Some students refer to themselves as artists. This developed sense of artistic identity usually translates into a strong subject matter bias when they enter the classroom (Grauer, 1995; Richmond, Scarr & McLeod, 1993). As expected, although they have competent backgrounds in content knowledge, they tend to have weak fundamentals in pedagogy. Student teachers often lack the ability to effectively translate their studio experience into lessons. This frame of reference is important to note as it affects how the pre-service teachers approach their course assignments and practica.

The relationship between content knowledge and pedagogical knowledge, however, is complicated for many specialist student art teachers. Kowalchuk (2001, 1999) noted from her

research of student art teacher reflections, that content knowledge was extremely important to the student teachers. Although they were knowledgeable in art, they felt that they needed more development in art as well as in technical aspects of teaching. This desire to continue to upgrade in their specialty reinforces the fact that many of these future art teachers placed a high value on their art practices.

However, in an earlier study, Short (1995) concluded that subject matter knowledge was often lacking in pre-service art teachers. Although the students had an average of four years of higher education in visual art, their content knowledge was simplistic. Further study does not necessarily mean that art education students will gain a deeper understanding of art. Still, if they are encouraged to make art in relation to themselves, they can begin to understand the power that one aspect of art holds: that it can be an effective way to gain self-understanding. According to Gray & MacGregor (1990), "to hire a teacher is to hire a curriculum" (p. 132). Art teachers have considerable freedom in their decisions on what and how to teach. From their own experiences with making visual metaphors, the student teachers may decide to pass on the practice of visual journaling to their pupils. Creative ways of learning about personal belief structures can be especially valuable lessons for adolescents who are developing the values and beliefs that will shape them as adults.

The Concept of the Visual Metaphor and Arts-based Research

If metaphors are an effective method of helping student teachers develop reflective abilities, it stands to reason that, for art education specialists, the addition of a visual component would enhance their metaphors. The expression of a personal metaphor can be portrayed in many ways. The nature of a metaphor can lead teachers to draw, collage, paint or otherwise create a visual representation. In this manner, both the creative process and the art become the form by which inquiry into our teaching practice is conducted.

I understand the creation of visual metaphors and visual journals as strategies that may be used in arts-based research. Although this form of research is different from the more traditional quantitative and qualitative methods of inquiry, research that is based in the artistic realm is a unique and valid activity. According to Barone (2001),

The research of artists may not involve inquiry that is rigidly systematic, but neither is it merely 'intuitive' (an unfortunate adjective that serves to perpetuate the myth about how artists work). In fact, the work of artists of all sorts requires deep, intricate research....(p. 26)

From a similar perspective, Watrin (1999) has defined "art as research" (p. 92). In her estimation, the process of creating art parallels qualitative, hermeneutic discovery. However, through her use of a metaphor (ie: art as research), she simplifies these complex activities of creating art and doing research and thus gives the impression that all artists and qualitative researchers proceed in the same way. I hesitate to put the processes of all artists in to one category because I do not believe this does justice to the rich and diverse forms of creating art or conducting research.

In educational frameworks, arts-based research has often been associated with literary forms of inquiry (Barone & Eisner, 1997). This is reasonable since in the post secondary context there is a tendency to favour written discourse. Schratz & Steiner-Löffler (1998) note, "Culturally and historically, the tradition of academia had valued and built on the written word" (p. 236). However, this umbrella term of arts-based research covers all forms of art and is not limited to literature. Barone & Eisner (1997) have ascribed seven qualities to this qualitative research methodology: creation of a virtual reality, ambiguity, expressive language, contextualized language, promotion of empathy, personal signature of the artist, and the presence of aesthetic form. I would argue that some of these qualities fit better than others in the case of visual metaphors and visual journals. I would further add that the qualities fit some artists' work better than it does others. This use of set criteria is defining and, consequently, can be limiting when it

comes to creative endeavours. Therefore I use it only as a guideline from which I develop a more context-specific understanding of arts-based research.

In the quest for metaphorical visual concepts that would describe the student teachers' positions on teaching, the participants in this study were conducting an inquiry that was similar to arts-based research. The difference resided in the fact that the participants' intentions were not to pursue research that would add to the field of art and/or education. The pre-service teachers were simply following the guidance of their instructors and completing an assignment. This is an important distinction. However, their inquiries were autobiographical, where the student teachers investigated their own beliefs through the creation of art. As Barone (2000) has suggested,

...each student is, like each of the rest of us, a person in the midst of writing and rewriting her own life story. Each is comparable to an artist in the middle of a creative process that moves toward a resolution that is not preformulated, but gradually emergent. The end of the story of each living human being is yet to be encountered. (p. 126)

Although traditionally, the use of images as a form of inquiry in teacher education programs and other areas of academia has been the exception rather than the norm, Prosser (2002) has noted a growing interest in some academic circles toward the use of images in research. The notion of the image used as a legitimate and primary form of inquiry is suitable for a number of reasons. As noted by Cole & Knowles (2000), making art is very effective in connecting a teacher's personal life with her/his professional life. For teachers, this connection is necessary due to the nature of the job. A teacher's personality affects how the class is organized and affects learning. The non-verbal nature of making art can bring forth some deeply held views of the artist/teacher. This point is supported by a number of scholars who suggest that the image is understood differently from text (Cole & Knowles, 2000; Barone & Eisner, 1997; Grauer, 1998). "The phenomenon of knowing is elusive when pursued by unidimensional means: words can be a woefully inadequate way to capture the multidimensional nature of teaching" (Cole &

Knowles, 2000, p. 68). Barone & Eisner (1997) have stated that, "Visual images, for example, make it possible to formulate meaning that elude linguistic description (p. 90).

I would agree with their view but also reinforce the fact that the verbal or written forms are still very important in analyzing the image and that to use the image without the text would not be as effective a form of reflection. Words are part of the process. In reference to the visual journal, Irwin (1989) comments,

The visual journal can become a tool to not only draw details but also to write about those details in order to enhance, to refine or to reshape the artist's understanding of the object being drawn or the drawing itself. This is a cognitive process involving the perceptions developed through visual images and written words. (p. 21)

It is important to note that the thinking process is integral to the writing and to the art making.

When added to their written work and their practica, the visual metaphor can be an effective method to help student art teachers reflect upon themselves in the context of their teaching. This kind of inquiry has the potential to generate new perspectives for art teacher education. Fox (2001) suggests following the lead of contemporary artists who push boundaries and engage in unorthodox ways of creating art. "Taking strategies of contemporary art to educational research can urge us to create new sets of questions that go beyond our current approaches on inquiry into practices, consequences and theories of education" (p. 47).

Prosser (1998) notes that pictures are criticized by some members of the academic community as inappropriate research data because of their ambiguous nature. Images are so complex that objective analysis is unattainable. They lack "trustworthiness" (p. 104). They mean different things in different contexts and for different viewers. While this is true of images, it is a strength rather than a weakness in an art education program. As visual art teachers, the student teachers must learn to work and to be in positions that are complex and multifaceted. The very ambiguity of an image mimics the contextual, fluid nature of a classroom. Relationships within a classroom

of pupils are constantly in flux. Deciphering meaning in classroom communications is similar to deciphering meaning inherent in images. Interpretations are context specific. A visual aspect incorporated into teacher education for pre-service art teachers may help to prepare them for this aspect of teaching.

As pre-service teachers develop into teachers, it is important that they acknowledge deeply ingrained belief systems. These beliefs, often tacitly held, affect future beliefs and behaviors. Furthermore, these beliefs strongly influence how teachers teach. Creating art and teaching are both holistic activities. The inclusion of visual metaphors and visual journals as a way of reflecting in art teacher education programs is worth investigating for its potential value. Furthermore, creating visual art as a form of inquiry may have promise for teacher education research.

CHAPTER 3: METHODOLOGY

Study Design and Methodology

This qualitative research is a hybrid of case study and arts-based inquiry. I have used a descriptive case study approach (Stake, 1995; Merriam, 1998; Mertens, 1998). I investigated the nature of pre-service art teachers' beliefs and the efficacy of their personal documents as a means by which they could identify tacitly held beliefs. The case study format was appropriate for the development of rich descriptions of the participants' personal information. In addition, I have visually interpreted the data by creating a deck of cards with fragments of the data and of my own experiences as an artist, teacher and researcher.⁴ Then I incorporated the deck of cards into computer-generated collages and presented them in the form of footnotes and headings. Thus, I have re/created my visual metaphor of shuffling built on an earlier piece of art that followed a related theme. The arts-based method was appropriate given the nature of the subject: visual metaphors and visual journals. In addition, the act of revisiting artwork and developing more art from it using the data moved me to deeper levels of introspection about my method of categorization and analysis.

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The roles of artist and teacher move me from the studio to the classroom and back again. My life's work is a negotiation of my personal and private lives as they form into unanticipated results, shaping my students and myself in ways that can best be understood in retrospect. Hence, the importance of reflection upon these two roles is paramount as I make space for a third: that of researcher. The act of making space is an important concept to consider as I shuffling among my artist/researcher/teacher selves. It is in these points of intersection that new understandings happen; that I recognize my creative edge; that I overlap my lived experiences; that I make art.

The study consisted of semi-structured interviews with the participants using their visual journals and visual metaphors as a basis for talking about their beliefs and experiences as teachers and as artists. I later analyzed their written work and their art that was in the journals and used a continual comparative analysis as described by Glaser & Strauss (1967) to gain insights into beliefs the participants held about selves and teaching. With the research question in mind, I explored the efficacy of visual journals and visual metaphors in an art education course. In addition, the nature of belief systems of the student teachers was a major focus of this research. I looked for possible changes in beliefs over the year as indicated by the data. Finally, a strand of this research focused on the use of images as a form of inquiry.

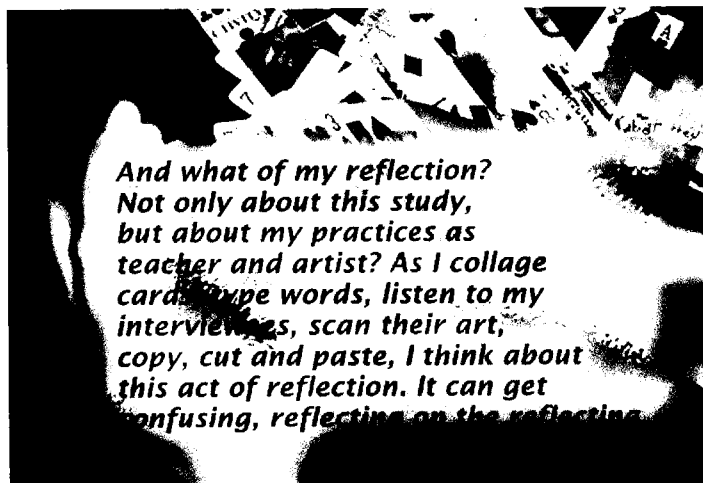
Data Collection

The data were collected from semi-structured interviews, and personal documents in the form of visual journals and visual metaphors. The documents combined note-taking, written narratives and the creation of art in the form of visual metaphors. In addition, the organization and “look” of the journals from an artistic point of view was considered as data to gain understanding about the students. With this information I could better identify beliefs alluded to in their art. The semi-structured interview was particularly effective for this study because the questions were often developed from the participants’ visual metaphors and visual journals. In this way, the images prompted questions about teaching and making art. The visual data were highly personal representations of the participants so that in the interviews, the journals generated idiosyncratic information from the participants, including tacitly held beliefs about teaching and perceptions about their identities. As a further explanation of the analysis of the visual data in this study I looked to the notion of photo elicitation (Harper, 2000). This qualitative method of interviewing uses images as a means to obtain information. In this study, I took this method further by using

the interviewees' personal images to seek information that otherwise might have remained hidden.

I agree with Janesick (1998) who states, "probably the most rewarding component of any qualitative research project is interviewing" (p. 29). The structure of the interview was informal so that I could adapt my inquiry around a core set of questions, depending on the participant. As Wellington (2000) explains, "...a flexible researcher may need to adopt different roles for different purposes, for different situations and for different interviewees" (p.72). My interactions with the student teachers were unique for each interview because of the different personalities in the group. I was sensitive to the projection my personal perspective into the interviews, but at the same time I also used the interview as an opportunity to help the students employ their art as a form of reflection about their teaching.⁵ To a certain extent I interacted differently with each participant, but a general guideline for the interview can be found in appendix A. The interviews took place in the tenth month of the twelve-month program. The participants were finished their practica and many of their classes. At this point in their program, the student teachers had just finished a busy schedule and were preparing for their final courses that ran throughout the summer. Because of the timing of the interviews, the students were feeling more stressed than if

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I had interviewed them half way through their program. However, the ten months of experience in the program was enlightening for them, and this was evident in the participants' comments.

The analysis of the participants' art was a crucial part of this inquiry into tacitly held beliefs. In order to analyze the data from the visual metaphors and visual journals, comparisons were made among the students' spoken, written and drawn or collaged expressions. To provide credence to my interpretations as a researcher, I used my expertise as an artist, an art teacher and art teacher educator as a basis for my analysis in this section. Eisner's (1998) application of aesthetics to education in the form of connoisseurship and criticism as a means by which researchers can qualitatively understand teaching is relevant for this study. To seek a more qualitative experience, Eisner encourages the researcher to adopt the role of connoisseur and critic. Both terms are borrowed from the world of art. In this role, s/he seeks to better understand and to judge the situation. For this study, I viewed the images and other data from the perspective of connoisseur, and critic of art and art education. I also viewed the data from the role of artist, as I studied and combined the text and images from the participants with my own images in the form of collage. This allowed me to move even closer to the data and to the participants.

Limitations of the Study

In this case study, one limitation that I noted in the research was the single interview. It would have been very helpful to interview the participants after each visual metaphor assignment. In this way, the student teachers may have had more opportunity to consider tacit beliefs from an analysis of their visual metaphors and visual journals. With the single interview, in some cases, I did not realize what beliefs were revealed by the art until I had sat down and analyzed the visual materials in conjunction with the interviews. Also, I would have shaped consequent interviews according to what was discerned from the first and second metaphors, and from the development

of their journals throughout the duration of the education program. Going back to the participants for further clarification of my understandings would have been enlightening. This would have helped me to build a stronger comparative analysis (Glaser & Strauss, 1967).

A second limitation of the study is related to limitations inherent in metaphors. As Bowers, (1980) and Dickmeyer, (1989) have noted, a metaphor can focus attention on one aspect of a phenomenon and thus oversimplify it. The relatively narrow focus of a metaphor can blind the researcher to other aspects of the situation under study. Also, Richardson (2000) has commented that the researchers' biases⁶ are embedded in the metaphors that are inherent in the language that we select.

Site

This study was conducted in the secondary art specialist program in the faculty of education of a large university. The program was very intensive. The twelve-month course of study was divided into the following sections. The first four months of the program for all secondary pre-service teachers included general education courses that lay a foundation for further study. These included psychology, educational foundations and a variety of pedagogy courses, and a two-week orientation practicum in a secondary art classroom. During the subsequent four months, student teachers returned to the secondary school where they had spent their orientation

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*The act of consciously making
a place for creating art as research
is very important for me. Here
is my strength and weakness.
A bias.*

practicum to complete an extended four-month practicum. The practicum was the highlight of the year because it was their first in-depth experience with teaching pupils in a classroom setting. As one participant exclaimed, "I can gauge the class of real students. I can see if it [lesson] is working or not and instantly adapt". Finally, students returned to the university to complete further course work, including elective courses related to their teaching fields.

For the secondary art education students, the Arts Methods, Principles of Teaching and Communications courses were combined into a specialist secondary art cohort program. Because the cohort was a combination of three courses, the instructors had more flexibility in designing activities and assignments. For instance, the students were able to visit secondary schools to observe the art classes before they went into their practicum. The cohort met with their instructors for four days each week: three hours on Mondays and Wednesdays and all day on Tuesdays and Thursdays. The instructors aimed at making the class conducive for the development of trust among the group. This was facilitated by the fact that they shared the same classroom everyday. The identification of the cohort with "their space" was important. They had tea and coffee, ate lunches together and used the space to relax in their free time. They formed strong bonds due, in part, to the fact that they spent so much time together. The development of trust was an important prerequisite for the sharing of personal information. The course was team taught by one full time faculty member and a secondary art teacher who had been seconded from a local high school. The group had a lot in common and related well to each other. Many students formed close friendships as the year progressed.

The art methods course was aimed at encouraging student teachers to reflect upon their beliefs and their personal histories through their art making as they learned about teaching art. The foundational document for the cohort was the provincial secondary art guide. This document is based upon a constructivist approach that promotes three core statements. First, the learner is seen as an active participant whose beliefs and knowledge are an important part of constructing

knowledge. Second, it supports individual learning styles and the students' individual rate of learning. Third, the document follows the edict that the construction of knowledge is both an individual and social process. In addition, readings from a book entitled, Readings in Canadian Art Education (Irwin & Grauer, 1997) was part of the course structure. During an informal interview, one instructor voiced her intentions for the course this way: "We encourage the students to examine their own beliefs and values and develop a philosophy that is in line with their own perspective". A constructivist perspective on learning was valued in the course. The course was subject-centered and made connections between art and pedagogy, honouring this constructivist perspective. All of the participants in this study took an elective in the fall that was a studio course in an unfamiliar art discipline. In addition, they took further studio electives in the summer.

Visual Metaphors and Visual Journals

Two components of this course that were consistent with a constructivist perspective were the pre-service teachers' visual journals and the creation of visual metaphors.⁷ The visual journals were volumes designed by the students to reflect their individual learning and their artistic work. The books recorded information taught and reflections about the student teachers' experiences

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I believe that a multifaceted approach, incorporating all three perspectives of artist, researcher, and teacher which involve theoretical and practical discovery, sharing of results, and seeking new understandings, is most effective in improving one's practice. It is a similar process that the participants of this study experienced when they were assigned their projects of visual metaphors and visual journals. The participants and I were pursuing an inquiry into our personal practices and the results were unique and relevant to each of us.

over the year. These reflections were often created in visual form or with a combination of visual and written formats. The student teachers were encouraged to experiment with their journals, and the books often became works of art. For many students in the class, the visual journal was a source of accomplishment and pride.

Included in these journals was an assignment that was repeated three times. It was geared to helping student teachers reflect upon teaching and/or themselves as teachers. The assignment was to create a visual metaphor for teaching and to write an accompanying explanation. The first metaphor was done at the beginning of the twelve-month program. The second one was assigned in late autumn after the pre-service teachers had visited schools and had experienced their two-week orientation practicum. The third metaphor was completed in the spring, after the four-month practicum and nearing the end of their teaching methodology course. The student teachers were shown examples of visual metaphors that used collage, real objects and other combinations of art media. Many people in the class favoured the method of collage as a form of art making. This may be the resulting influence of the examples on display or the materials that were made available. It may also have been because collage is a relatively fast medium to use. However, regardless of the media that were used, the metaphors were to be personal explorations into the meaning of teaching.

The members of the class shared their visual metaphors in informal critiques among themselves throughout the year. In addition, partners from another educational institution were randomly assigned to each student teacher so that the metaphors and other information could be shared via email on the computer. Finally, the student teachers' metaphors, personal teaching philosophies, photographs and other information were posted on an art cohort web site that was constructed by a university technician.

The visual journals and visual metaphors were part of a larger evaluation in the art methodology course that also included student participation, presentations and unit lesson plans. Peer evaluation was combined with teacher evaluation for the course.

Participants

The university ethical review committee approved this research with the condition that I provide all art specialist students in the secondary education program with the opportunity to participate. I visited the cohort classroom and explained the research in the spring, after the student teachers had returned from their four-month practicum. I explained to the class that the research was aimed at investigating their beliefs through the examination and analysis of their visual journals and visual metaphors. Then I outlined the participants' involvement, should she or he volunteer for the study. Participation would include one interview and an examination of the pre-service teacher's visual journals and metaphors. The participants would have the option to withdraw from the study at any time without penalty.

Five students from the cohort elected to participate in the study. There were four female participants and one male participant. This gender and ethnic ratios were indicative of the entire population. The ethnic background of the student teachers was mixed but the majority of participants were Caucasian. All of the study participants held undergraduate degrees in visual art. In addition, they were double art majors in the teacher education program. This meant that they were developing expertise in only one teaching subject. Other student teachers in the secondary programs had two teaching subjects. Therefore, the pre-service art teachers in this study all took an elective studio course in lieu of a second teaching specialization. Their areas of specialization were varied and ranged from computer art to ceramics. Four of the participants were in their late twenties and one was in her thirties. The average age of the cohort was twenty-seven. All of the participants had had work experience before entering teacher education.

Researcher Role

In qualitative research the researcher is an integral part of the study as an active interpreter of others' views (Stake, 1995; Merriam, 1988; Janesick, 1998). Although the research is focused on the participants, it is also about the researcher. From the design of the study to the final conclusions, my subjectivity shaped all aspects of the project. Other scholars agree with Stake (1995) that the power of the researcher to affect all parts of the study means that an awareness of one's biases and frame of reference is crucial when discussing the views of the participants (Glesne & Peshkin, 1992; Merriam, 1998; Lancy, 1993; Marshall & Rossmann, 1995; Mertens, 1998).

As I listened to student teachers talk about their teaching, as I read their journals and as I analyzed their art, I filtered everything through my own unique perspective. Glesne & Peshkin (1992) advise the researcher that if s/he is "aware that there is something to seek, to uncover and to understand about yourself, you are ready to be informed through the research process (p. 10). The research was an opportunity to reflect on my beliefs⁸ as I reflected on those of the participants.

As I sat with the interviewees, and as I created my art using the data collected from the participants, I found myself returning in my thoughts to my pre-service year of teacher

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My beliefs form my identity. Ironically, two of my beliefs - that it is important to be open to new concepts and that there are no meta-truths - result in an ongoing deconstruction and reconstruction of identity. Because of my beliefs, my identity is built up and torn down. I shuffle and each hand I deal is a new aspect of me.

education. The memory was very clear to me, although I had experienced these events almost twenty years ago. This was an important discovery. That year was pivotal in my life as I, like the participants, began to examine my beliefs about teaching. Some key issues that the student teachers were wrestling with were also important for me: adjusting to a position of authority, class management and finding time for creating art were all reminiscent of my previous situation. This helped me to empathize with the participants. I understood their contradicting, confusing positions as they adjusted prior beliefs about themselves with the new experience of teaching. It helped me to understand their emotions as they made their journals and as they talked about their metaphors.

Over the years, although I learned my own methods for dealing with the issues facing teachers, I continually adjust and modify my practice with each new teaching context. I agree with May's (1997) comments about teaching.

Learning to teach is a lifelong endeavor. Were we to know all there is to know about art, teaching, students, and ourselves upon initial certification, the remainder of our life's work would be incredibly predictable, unresponsive, and boring. Fortunately, neither life nor any profession is like this, and learning things that matter to us is never predictable or boring. (p. 223)

For me, with each new teaching circumstance, I reevaluate my belief that creating art and teaching art are symbiotic. Both my teacher and artist roles are important for me to acknowledge and understand. Whether it is a novice teacher or a twenty-year veteran, teaching and creating art are about journeys into the self. Therefore, in a sense, this study is about me as I talk about others. I agree with Tom Barone (2000) who commented about his research, "I have defined the project as it has defined me" (p. 1).

The qualifications that I bring to this research provided a solid background from which the study was conducted. My experience as an art teacher, an artist and a supervisor of student teachers all contributed to my particular interpretation of the interviews and journal data. I have

over fifteen years experience as an art and English teacher of high school and adult students. I continue to teach in the secondary system. In addition to my teaching experience, I have supervised pre-service art teachers during their practica. I found myself in the role of mentor, negotiator, and, in some cases, friend. I visited the student teachers in their sponsor schools and observed their teaching. I had no previous contact with the study participants before I asked for volunteers. My experiences helped me recognize and understand situations and empathize with concerns that the student teachers had about teaching. I believe that I listened during the interviews with greater understanding because of my own background.

I was cognizant, however, of the danger that too much empathy can distort the findings of the research. Pinar, Reynolds, Slattery & Taubman (1995) warn that, "Empathizing with another, if it means losing one's distance from the other, one's sense of a critical edge, might lead to collusion. Pinar suggests that the educational critic might be careful not to lose his or her critical distance in the effort to empathetically understand" (p. 583). With this in mind, I listened to the participants carefully and with the perspective of an artist/researcher/teacher with a similar but separate history.

As an artist, I bring to the research years of experience making, critiquing and talking about art. It, like most specialties, has a specific language.⁹ The participants and I would sometimes

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As I build layers of images and text into a collage, the juxtapositions highlight aspects of the data. Thus, I begin to see the information in different ways. Visually, the interpretations are endless.

speak together in this language of colour, line and texture. My familiarity with many aspects of the art world makes me a relative expert in the field. However, the analysis of images has an element of subjectivity inherent in it. In some of the interviews, when I discussed my conclusions with the participants, they recognized parts of themselves in their art that had hitherto remained hidden. In other cases, the interviewees offered alternate interpretations of their images to those I had constructed. In all cases, I delved deeply into the art in the pre-service teachers' journals during the interviews from an artistic point of view as well as a teacher's point of view. My position as researcher and my background as teacher and artist allowed me to do this with confidence.

CHAPTER 4: PARTICIPANT PROFILES

Introduction

The sun through the windows made long patterns on the tables and chairs. I squinted and tilted my head, mentally measuring the angles in the patterns and transposing them onto a canvas. I was waiting for my first interviewee to arrive. In that same classroom where the student teachers had shared so many classes, lunches and cups of coffee, I sat with each of them and recorded their musings. Luckily, the sun shone for most of our meetings.

I was surprised at how nervous I was when I began. Brad met with me first, and was my “guinea pig.” He didn’t mind. We doodled on paper as we talked. We were there for an hour or more – I lost track of the time. With Brad and the other participants, I asked similar questions and organized the answers into the categories of background, visual metaphors and beliefs, visual journals and summaries. I have used their words as much as possible in an effort to introduce them as they presented themselves to me. Unless I indicate otherwise, all of the quotations are taken from the interviews.



Figure 1: Portrait of Brad

BRAD

Background

Brad was the only male student whole volunteered for the study. However, this ratio of male to female students was proportional to the ratio in the entire population. He came to the teacher

education program with considerable experience around children. He drove a school bus prior to entering the teacher education program. In addition, he worked as a camp counselor. These experiences lead him to the profession of teaching. "I think [that I would be a good teacher] because I had some experience working with teenagers, youth and kids, and I felt that I just sort of had a natural way of getting along with kids to some extent." Not only did Brad consider himself to be compatible with children, but teaching was something he had thought about pursuing for a long time. "...It's [teaching] what I planned after high school. I had considered other options but it was something that I had always had on my mind." His upbringing was a further influence on his decision to enter the teaching profession. "...I guess it's probably the influence of that [both parents are teachers] but partly because I live...in an academic neighbourhood with lots of educated people who value education. So that is probably one of the reasons why I ended up going in that direction."

As an artist, Brad preferred painting over other media. He was feeling uncomfortable during teacher education because he could not work on his own art as much as he would have liked. "It [not painting that] makes me a little anxious." His inactivity was due to a hand injury and to the fact that his time was limited. Consequently, His creative endeavors were kept to the visual metaphors, visual journals, and his elective studio courses.

Brad was very familiar with computers and had designed his own web site before entering teacher education. Thus, he felt hindered by the limited flexibility he encountered in the teacher education program. Here the student teachers' personal information was framed and organized by a technician so that the work of everyone could be viewed on one site. The students did not partake in the design and construction of their own sites. Brad's capabilities in this area were not challenged and he would have enjoyed greater autonomy. Of all the participants in this study, Brad was the most knowledgeable about computers. "I felt I learned a lot more by doing my

own [web site] than doing that one [the art teachers' cohort site] because I didn't actually get to learn about web design." Brad's accomplishments were displayed in a virtual gallery that he had created on his web site. This public venue for his artwork showed Brad's professionalism as an artist. "The main part of it [web site] is an art gallery right now with my artwork on it." By moving from the private arena of his studio to the public realm of the web he revealed considerable confidence and maturity in his position as an artist.

Visual Metaphors and Beliefs

Brad selected collage as the medium for all three of his metaphors. He also completed a fourth visual metaphor that he did not use as one of his assignments. All four artworks are similar in style. They combine fragments of image and text in colourful combinations. One influence on the style Brad chose for these metaphors was the fact that they would be posted on the web site and viewed electronically. He was very aware of presenting material via computer. He considered the best colour combinations for his metaphors based on the formatting.

Well, if it's going to be public, it's got to be presentable. It's got to be something that's, I guess, attractive, like an advertisement...I mean, hypothetically, an employer could look through that or something, so you want it to be attractive. Also, being familiar with computers, I guess I sort of had an idea of what kind of colours would show up on a computer. So I know that on a computer screen colours are important and contrast is important so I wanted to do something that had colour and contrast that would show up on a computer screen as opposed to something like a ball and string which would not have any impact on a computer screen.

Indeed, the images in the collages were taken from advertisements. They are bold and colourful. Yet they are fragments. The result is a sense of something that is hidden. For example, half a face revealed leads the viewer to contemplate the missing half. Brad's distinctive style of collage hides as much as it presents. The visual metaphor represents the student's concept of teaching

and it also expresses parts of her/himself. Brad's verbal expressions of his values and beliefs about being a teacher did not often coincide with his visual metaphors on teaching.

One such belief was about the appropriateness of an education for everyone. Although Brad valued education and grew up in an environment that nurtured this attitude, he was cognizant, through his work experience, that higher education was not the best choice for all people. He was realistic about this point after having driven the school bus for two years.

You know, going off and being a school bus driver and actually meeting people... who have different world views and different values and beliefs about education and that it's not necessarily - I mean, some of the people in my neighbourhood or teachers in my schools maybe looked at education as the answer to all the problems in life. Where, over in the bus driving world, education is not the answer, it's one thing that may help you get a little further ahead in life but is a tool to help you find, maybe, another answer somewhere else...education's valuable, but it isn't everything.

Brad's realistic attitude about the limits of education was an unusual stance for a pre-service teacher. Generally, student teachers hold more idealistic views about education. They often see the benefits of education as a priority. Brad, however, acknowledged that some students might pursue avenues other than school in order to succeed in life. This never surfaced in his visual metaphor assignments, yet it is a significant stance and reveals a belief about education.

Another very important belief that Brad held was the necessity of providing a safe environment for students. Again, his experience as a bus driver reinforced for him the importance of safety.

Providing teenagers with a safe place - safe comes up again. It has always been something I consider important. One morning, a little girl was crying as soon as she got on to my school bus because she was afraid to go to school. After seeing this little girl's tears, I aspired that if I was an art teacher, my classroom would be a safe place - a place where no one was afraid.

He mentioned this safety issue frequently, but the images in his collages were about risk taking, travelling and stretching oneself. The climber in the center of the collage is not in a place of safety. It was this figure with which Brad associates himself. He commented, "With this one [first metaphor], I probably identify a little bit with the hiker." It is possible that the choice of images for this collage represented Brad's belief about who he might become. Tacitly held desires and beliefs are, according to Cole & Knowles (2000), more easily expressed through artistic means rather than verbal or written methods. After Brad completed his year of teacher education he travelled to Taiwan where he accepted a teaching position. This was a risky, adventuresome move for Brad. His collages are the only indication from this study that he was considering this path.

In the text that accompanied his first metaphor, Brad was very specific about the symbolism embedded in the images in his art. In this collage, animals are predominant.

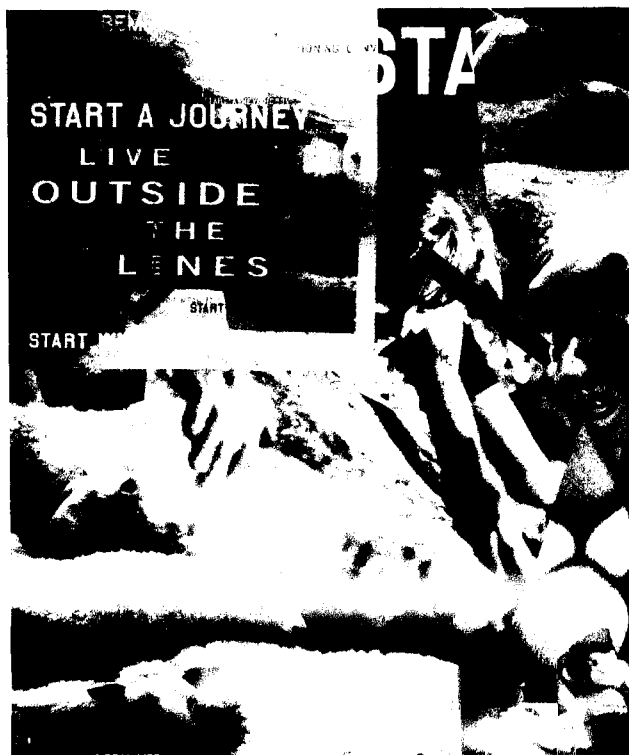


Figure 2: Brad's Visual Metaphor #1

My personal metaphor expresses a search for courage and creativity. The sheep in the image represent the students who are afraid to be different and are afraid to have different ideas from the norm. The lion and the mountain climber both represent courage. Many students lack the courage to express their original ideas. The monkey and the wolf are creativity and individuality. I hope to provide students with a safe learning environment where they can find the courage to be creative.

In this written explanation, Brad has attached some clichéd meanings to his images. For example, the lone wolf, the courage of a lion, and the sheep willing to be lead, are all familiar personifications of animals in Western culture. However, he presented other deeply personal metaphorical images as he incorporated text in the design. The word "start" was repeatedly used. The phrases "start removing obstacles", "start a journey", and "start where others stop" all suggest that Brad was very aware of his own beginning as he entered the teacher education program. For Brad, this was a time of important decisions that affected his perceptions of who he was.

Well, "start a journey" was this idea that I was starting - this idea of becoming a teacher, so changing my idea of being an artist and a bus driver. So I guess that's a bit of an identity issue...It [identity issue] is kind of complicated because it means that I had my feet in a lot of different cultures and worlds in the sense that the bus driver was more the working class culture, the artist sort of the art world culture, and the teaching world is more of an academic culture...I guess that sort of creates a split personality.

These different milieus were helpful for him as he began teacher education. His confidence in his ability to teach grew because of his life experiences as an artist and a bus driver. The idea of being split among different identities was not without its troubles, but generally, Brad concluded that there were more advantages than disadvantages associated with his various roles.

Well, in some ways it [multiple identities] can be a lot of strength and in some ways a lot of weaknesses because sometimes you can be good at a lot of things and sometimes you can be bad at a lot of things...But usually it works out to be strengths. I think a lot of the experiences I've had sort of contributed, so I knew what I could do. Be a teacher and do the job really well.

This sense of his own accomplishments and his abilities was a strong base from which he began to build his identity as a teacher. This constructivist approach to teaching echoed the creation of

the collages. Bits and pieces built up the present. Teaching is about the personal. In this way, Brad's autobiographical journey developed uniquely because of his combined identities.

In addition, "start where others stop" indicates a strong desire to achieve success and to individuate himself by his achievements. This desire was further supported by the text "*Live outside the lines*" which was prominent in the collage and important for Brad:

But the creativity was the idea of being able to - that comes from, I guess, this text "live outside the lines" is to be creative but different from everyone else. And yet, to be free, not afraid that people are going to tease you for doing something a little creative.

Together, with the image of the climber, these parts of the collage emphasize Brad's belief that creativity was an individual journey and that to be creative was to be different. Furthermore, Brad was aware that there were risks associated with that kind of individuality. The image of the climber is large and centrally located in the design of the first visual metaphor suggesting that it was important. This image of climbing, coupled with the text, imply that there is a high level of difficulty in the decision to "*live outside the lines.*"

Community and individuality were two themes that were evident in all of Brad's visual metaphors. Brad believed that the group mentality was uninspiring and undesirable. The clichéd image of the sheep and his explanation of the symbolism attached to this image was where he began this concept.¹ He used the image of the sheep to represent the anonymous nature of a group. Traditionally, in Western culture, the metaphor of sheep indicates a blindness or thoughtlessness of a group being lead without individual will. Brad's use of sheep to represent the group revealed his concept of a class of students. This was to change as Brad gained practicum experience. Brad's first visual metaphor presented his belief in individual creativity over a herd mentality. In addition, he located himself at the beginning of a journey. Travel and journeys are a secondary theme that Brad continued into his subsequent metaphors.

The collage that Brad created for his second visual metaphor is balanced with a constructed image of a compass in the center. Travel and path-finding are suggested by this image. Brad's compass has been cleverly constructed with images from education along with images of a compass. The words "explorers", "travelers", and "adventurers" float in one corner. Other exotic images suggest Brad was associating a journey metaphor with teaching. In the middle of the collage a globe centers the composition. During our discussion about this theme Brad revealed more of its significance.

I guess a being is...alive and it is changing. It is not just something that's just static and, I guess, around here [indicating the words in the collage] the explorers, travelers and adventurers have a lot to do with movement. It is not static. It's moving. Same thing, I guess, with pedagogies. The philosophies. They're not that static either. My own philosophy would be changing over time. I want to find - always just some details about how to apply my philosophies, but they are always sort of slightly changing.

Clearly from his comment, Brad recognized that as a student teacher his beliefs about education were in flux. He recognized that his position as a student and later, as a teacher, would be characterized by change.

When he completed this second visual metaphor he had finished the short, two-week practicum so he had gained some experience with students. The words, "a little further" collaged onto the central image of the compass depicted his perception of where he was in the program. He was neither at the beginning nor at the end of his year.

A major difference between the first and second metaphors for Brad was the understanding and importance of considering a class of students as a group of individuals. The sheep image had disappeared from this second image along with the derogatory concept that it implied. Brad's reflection on his first metaphor suggests this shift in belief about students.

I felt my September metaphor did not address the individuality of students adequately. The 'who' is an important part of teaching, not just the 'what'...I guess this one [first visual metaphor] didn't address it as much, and this one [second visual metaphor] is more about an individual student with different parts...This is where I was at that stage. Thinking about who it was - that there were a whole variety of individual students out there. When I was thinking about this one [first visual metaphor], I guess I was thinking that the students maybe just needed some creativity and stuff. But, in fact, not all students need that. Some students maybe just needed some basic skills or maybe they just needed to have an art task that they could be successful in so that they could feel like they can do art. So there were students with some very different needs in that art class.

This change may have been influenced by his experience in the two-week practicum. He had a successful and enjoyable time in the school.



Figure 3: Brad's Visual Metaphor #2

My visual metaphor expresses a journey of an individual. The red face represents an individual student. Being either a teacher or a student is more like a journey than a destination: the compass in the center of the image symbolizes the journey and the need for navigation through the journey of learning. The car factory in the background represents the "non-art world." And the globe in the center can represent three things: travel, an individual's worldview and the "art world." Individual students will have individual personalities, interests and needs. I hope to incorporate the lives of my students into the material I teach so that it will be relevant and real to their world.

Again, in this second metaphor there are not many images that suggested a safe environment. The sparks flying from the car factory that represent interests outside the art world suggest a hostile place. The fact that it is a car factory also suggests a lack of imagination or creativity in that environment. However, without the written text, it would be impossible to conclude this because the viewer is not given enough specific information from the collage. Thus, the hidden nature of his artistic style again is evident in Brad's second metaphor. The ambiguity of the image is exploited in this collage. It implies that Brad was familiar and comfortable with negotiating multiple meanings. It suggests a flexibility that would serve him well in the teaching environment. Teaching requires a multi-tasking ability that can be related to this ability to perceive many levels of meaning.

From his experience in his practicum Brad was very aware of the hard work involved in successful teaching. His comments about his teaching confirm that his own needs were very important if he was to remain healthy and avoid teacher burn out. The practicum was tiring for him.

I was tired but I guess it was very positive. I mean, there were definitely hard things that were challenges – that made me think, “Oh, my God, this is a lot of work. This is a lot of challenge here.” I think just the whole challenge of negotiating a lot of things all at once – huge learning curve! When I say learning curve, it's not necessarily learning about teaching but learning about the system, you know? Negotiating personalities – that kind of stuff. For the most part, I wasn't too worried about that but at the same time it just takes



a lot of energy to do. It was very exhausting. I was surprised that I could work a sixteen hour day driving a bus and go home but after just being in the school for six or so hours, I went home and would crash and go to sleep. It was shocking that it took so much energy.

This reflection and image from his journal was further evidence of

Figure 4: Brad's Visual Journal

how he felt. "Wow, I'm tired. I feel like I was attacked by a bear. That [practicum] was exhausting. I learned a lot..." In this case, the image of the bear reinforced his feelings at that point in the practicum.

The belief that a balanced life is necessary to maintain one's strength reoccurred with Brad. He believed that a sense of balance in life was vital if one is to be successful. As he explained, "Yep, balance is important. In his third metaphor Brad continued to investigate the concept of the individual and community that he considered in his second visual metaphor. Balance is another topic that surfaces here.

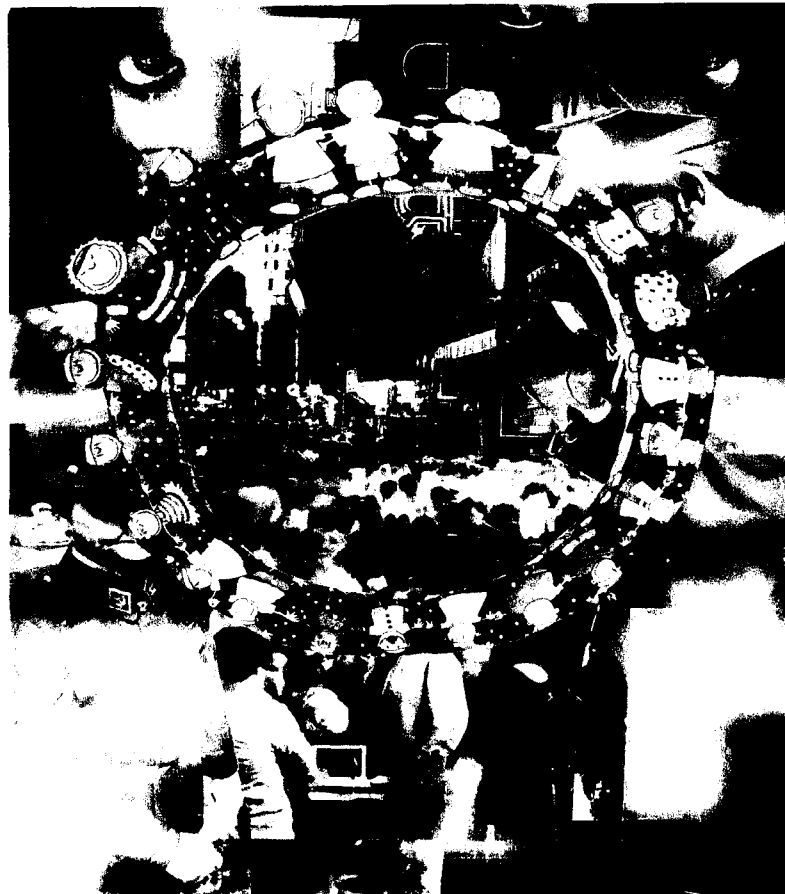


Figure 5: Brad's Visual Metaphor #3

visual metaphor #3 is about finding a balance between the individual and the community. The ideas are similar to number two. However, I am considering how individuality fits into a community. Individuals are comprised of many parts just

as communities have **many parts and** all the parts constitute the whole. All parts are valuable. Balance is also another issue I am considering in this metaphor. How can a classroom find a balance across various areas? For example, authority, equality, respect, democracy and individuality. Teaching is about all aspects of the individual including body, mind, love, hate, emotion, anger, joy, pain, desire, life, sweat, and tears.

These comments reveal that Brad was considering the large philosophical issues about teaching and about life. He was also trying to discover a personal style of classroom management as he developed his teacher identity. He did have trouble reconciling the need for control in the classroom in order to make it safe for everyone, with the desire for a democratic environment.

I guess it would be nice for the kids to have an opportunity to learn more about sort of a democratic or cooperative model but the [teacher-student] hierarchy seems so much more simple and efficient and it just works and gets the task done...Discipline is a dirty job so as long as you can avoid doing it, you don't have to do the dirty job of giving out detentions. And you're hoping, crossing your fingers thinking, "well, maybe I will never have to give out detentions if I'm lucky."

His ambivalence about his role as disciplinarian was evident in his comments as well as in his third metaphor. The two uniformed individuals framing the collage represent the negative aspects of discipline. They are reminiscent of totalitarian regimes. However, Brad believed that a strong disciplinarian figure would help guide his students so that they could be socialized and function in the community. He held two opposing beliefs about classroom management. On the one hand he believed it was important for students to be safe and well adjusted, but he also believed, perhaps from his own student days, that a teacher who was a strict disciplinarian was unpopular. This resulted in his mixed feelings.

These two figures deal with the idea of the authority role that teachers get thrust into. That is not my favorite part of teaching...but at the same time, although it is not something I enjoy, the authority role is something that I guess I need to learn to provide that kind of quality authority figure for them in order not to deprive them of that kind of learning

experience. They need to learn things like right and wrong and morality and structures in society in order to live in our country.

As Brad was beginning to teach, he was in what researchers have identified as the survival mode. He recognized his lack of experience this way.

In hindsight, I could say, "Well, I needed to know this, this and this", but I don't know that even if I had known "this, this and this", if I would have been able to implement "that." It did seem that, "Oh, my gosh, I am doing this and I am missing some crucial key of information." But then, maybe the only way of getting that crucial key is just experience.

Brad realized a very important aspect about teaching early in his career: that becoming an effective teacher can only be learned over time and with experience among students in classrooms.



Figure 6: Brad's Visual Metaphor #4

This wasn't an official one [visual metaphor] that I handed in or anything but it's just one I did and it was about - not about the student, but about being a teacher - but also relating to that. I guess it's yourself here [indicating the black and white image] sort of like a mirror, here, thinking that you've got to look at yourself too, and consider how you fit into teaching and what are your needs? Not always looking at the students' needs but you've also got to be looking at your own needs. It's never easy but not too difficult. It's just a matter of making it a priority to create a balance.

He described this balanced life style by clarifying how he composed this collage about the teacher. It was a vehicle for presenting an important belief.

I like to balance a lot of things in life and even in this artwork you can see that the tiger, he's cut up and balanced everywhere in the image. There's black and white balanced everywhere. There's green balanced around. Now, I think not everything in life can be balanced and sometimes, there are some exceptions where maybe two things, rather than being balanced, co-exist simultaneously, but often I like to think about balance.

Visual Journals

Brad enjoyed the process of making visual journals. He continued to use one in his practicum as a place to jot down his thoughts or to doodle his ideas. He experimented with different sizes as well. Most of the work is image-based, with a large number of cartoons and collages filling the books. Writing is minimal and it has a scribbled quality.



Figure 7: Brad's Visual Journal

The books have a spontaneous sensibility to them. The way in which he writes is reminiscent of the playfulness of a child. Throughout the books, Brad uses this childish script to write about important and serious pedagogical issues. In fact, on one page about pedagogy, the collage is a humorous design that pokes fun at the authority inherent in the word. I would argue that he used this kind of minimal discourse as a form of quiet rebellion against the adoption of a teacher identity. To adopt such an identity may have signaled for Brad a relinquishing of his

interpretation of a modernist, artistic identity of one who exists on the fringes of society and is relatively anti-institutional (Efland, Freedman & Stuhr, 1996). For some student teachers, becoming a teacher is a difficult move to a position of responsibility within the established institution of education.



Conflict
13

Reflection:

Conflict Resolution

Relationships are important to value. Since, I value relationships I find that conflict resolution is not too difficult for me, although it is exhausting. My problem is that, usually, I do not see a need to create a conflict, when sometime I need to take a stand on an issue. I find that most conflicts can be avoided with amble communication, early.



Resolution
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Figure 8: Brad's Visual Journal

Throughout his journals there are also examples of irony in his juxtaposition of text and image. His written reflection on conflict resolution accompanies an image of a battle scene where a soldier is spearing an indigenous person. The words are totally opposite the fight that is presented in the picture. Brad wrote:

Relationships are important to value. Since I value relationships, I find that conflict resolution is not too difficult for me, although it is exhausting. My problem is that, usually, I do not see a need to create a conflict, when sometime I need to take a stand on an issue. I find that most conflicts can be avoided with ample communication, early.

Written in pencil at the bottom of the page is the word “conflict.” On the opposite page there is a peaceful image of an Egyptian relief sculpture and the word “resolution” is written in the lower right corner. Taken together, the two images are a straight presentation of the two opposite words. However, by breaking it up as Brad had done and by placing the text beside the violent scene, the page can easily be read as a parody of the task of reflection. Also, the splitting up of the phrase “conflict resolution” reveals a creative playfulness that makes the reader think of the phrase as an oxymoron. It is a postmodern moment that Brad had provided. The parody, the appropriated images and the juxtapositions of image and text create layers of meaning.

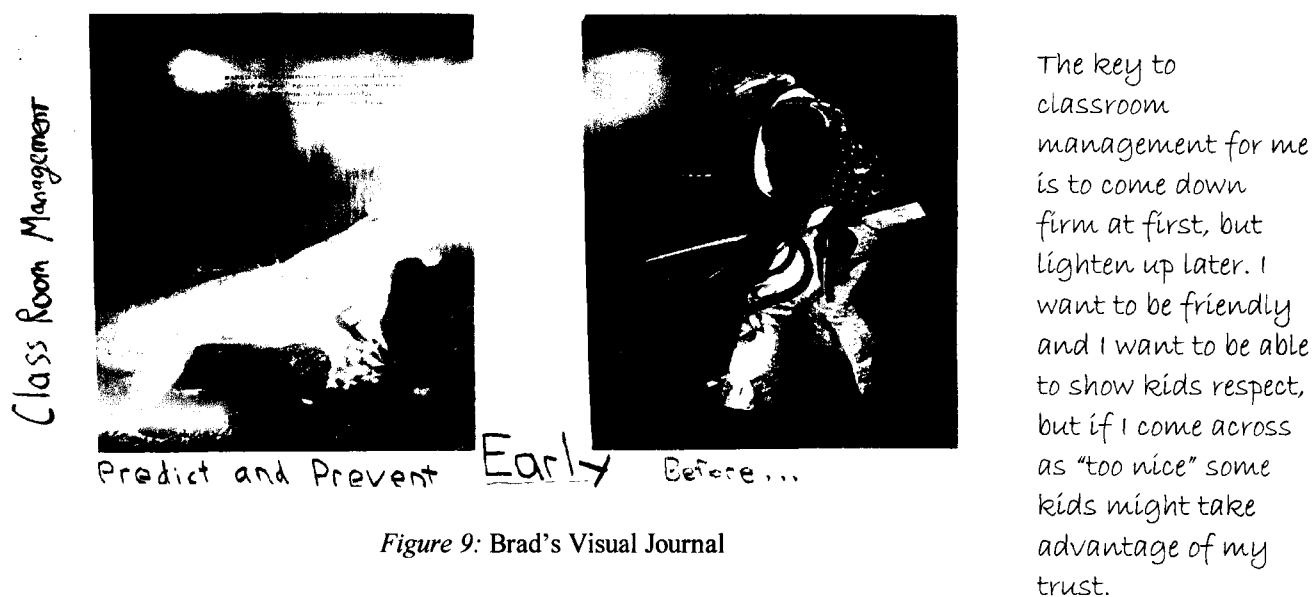


Figure 9: Brad's Visual Journal

Similarly, on a page on classroom management Brad juxtaposed his written reflection with his visual response. The written one is serious in tone when compared to the images. Accompanying this statement were two pages of dangerous situations. The first was a lion tamer in a cage with an attacking lion. The scribbled text reads: “classroom management. Predict and prevent early. Before....” In the second example, directives like “no smiling, no fun” and “eat

quietly" were superimposed onto pictures of a happy crowd scene. The resulting incongruity is very comical.

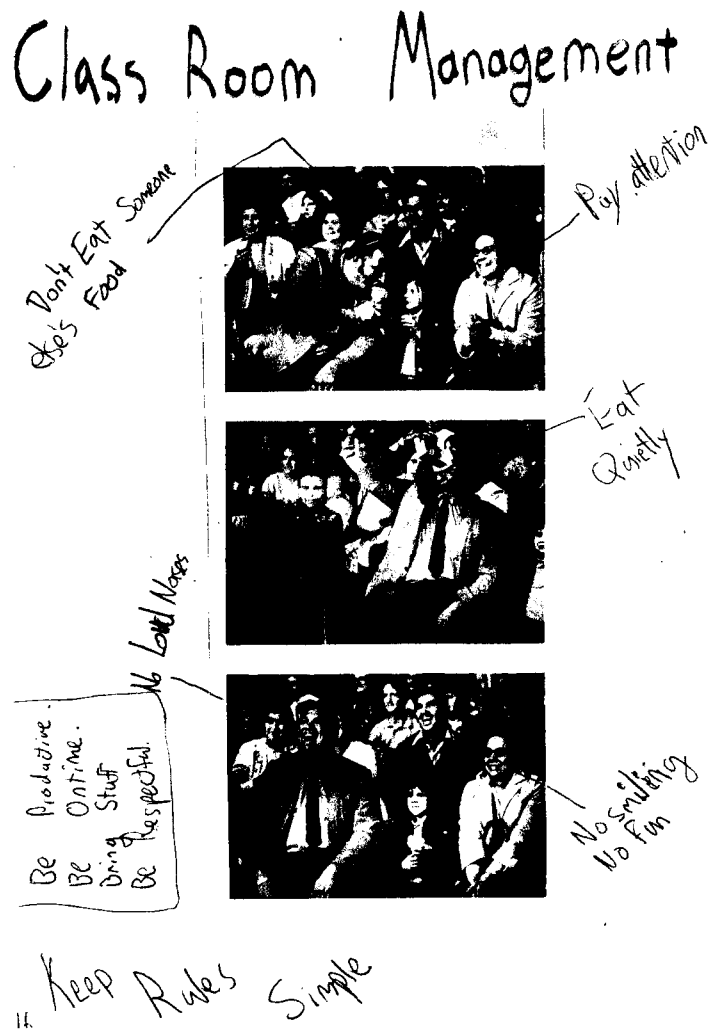


Figure 10: Brad's Visual Journal

One tool that Brad created to help him maneuver among different environments in different roles was humour. He felt that humour was a universal communicator. Cartoons are plentiful in his visual journals. "Thinking about things that are common denominators between the various groups, you know? Bus drivers and artists, teachers can all relate to students. Thinking about accessibility [humour is one of those places]."

Brad considered humour to be very important, and the examples in his visual journal reveal that he used it to reflect on his conflicting beliefs about the teacher's position of authority. As he indicated through the inclusion of a comic strip about dictatorships, "that [the comic] sort of, I guess, goes to the role of the teacher as the dictator or more of a democratic [situation] and kids sometimes steal the role. [They] want to steal the role of the classroom dictator."

When he considered the future his comments included the use of a visual journal. "I'm sure I will [continue using a visual journal]. I mean, I've always kept sketchbooks in one form or another. It is just a matter of what it will look like." Brad completed two full journals and was working on his third by the end of June.

Summary

The majority of Brad's art making was focused on collage. All four visual metaphors and numerous other pages in his journals display a bold, clever juxtaposition of images. Brad's tacitly held beliefs about education were sometimes revealed through his images although he also wrote and spoke about important beliefs and values. There is a hidden quality to his images that suggests that there was information conveyed by its absence rather than its presence.



Figure 11: Portrait of Eva

EVA

Background

Eva came to the teacher education program with a Bachelor of Fine Art degree and with considerable experience using computer design programs. She had worked in computer graphics

and had acquired the competence to teach others in her group. This experience, coupled with teaching Sunday school and coaching field hockey lead her to consider teaching as her chosen career. Her selection of high school art as the subject for her specialization stemmed from a love of art.

I wanted to get into a position teaching art with kids who wanted to do it or kids who really wanted to take this and go somewhere with it or who were really wanted to be there. I kind of wanted kids in my class to leave the classroom and go, "Oh yeah, I totally want to do art!"

Her subject-oriented belief influenced her choice to teach older students. Although she enjoyed the company of younger children, she favoured the high school level students for what she believed to be superior abilities.

Visual Metaphors and Beliefs

The relationship between beliefs and visual metaphors in Eva's art did not necessarily include her stated beliefs. For Eva, respect was valued above all else. She considered it the most important part of relationships among people.

Definitely respect. That was something I stressed when I was in the classroom teaching. Respect for everyone. Regardless. I think, I mean - it's hard for me because I come from a Christian background, myself, so I know that my values follow that faith. And in the classroom because respect is the number one thing, regardless of anything, that would be my biggest concern.

As Eva has stressed, respect and the values of the Christian faith guided her both in and out of the classroom. A desire to help others was an important aspect of this belief system for Eva, and was one major reason that she chose the teaching profession.

How can I get into a position where I am helping other people learn about different things? Teaching was one of them. And that was, at that time, when I was teaching Sunday school and teaching in camps for field hockey and really enjoying working with the kids. I think I've enjoyed that and I needed to find a way to bring the two together. To bring my enjoyment of working with kids and then my knowledge of computers and art [together].

Eva demonstrated a variety of styles and images in her three visual metaphors. The three metaphors were very individual in media and in meaning, indicating a willingness to experiment within the parameters of the assignment. The creation of three metaphors paralleled her progress through the teacher education program. Eva's first visual metaphor was a found image from a magazine. Images taken from magazines as collage or single images were often the media of choice among the participants. This could be a result of the instructor's use of collaged images as examples when the assignment was introduced. Eva's tentativeness with the visual metaphor assignment may have contributed to her selection of a found image. This inexperience may be reflected in her choice of metaphor for her first efforts.

Furthermore, for Eva, the choice of an abstracted image for her first metaphor was directly related to her feelings of uncertainty as she began the year of teacher education and as she began the assignment of creating a visual metaphor. By expressing her doubts with the selection of an abstracted image, Eva revealed her preference for realism. She felt more comfortable with a realistic depiction, but used the abstract style to her advantage.

When I started initially, when it [visual metaphor] was introduced, I was very apprehensive about what to do and how to do it and I kind of wanted someone to tell me, "This is exactly what you have to do." And when there was not, kind of a guideline, it was like, "No, you find out what you need to do." For the visual metaphor, I couldn't myself interpret that to be my...I wasn't so specific about everything I knew and I didn't want it to be a specific image – a literal image. I wanted it to be just abstract because that's how I was feeling at the time about the whole thing.

The relationship between her choice of artistic style and her feelings is an indication that there can be strong connections between art making and beliefs. Her feelings stemmed from her belief that she lacked the ability to make visual metaphors. When she did the first metaphor she had just begun the program and had not yet gained any teaching experience. Eva's artistic choices in this case were influenced by her beliefs.



The ideas of planting seeds for growth and the sharing of ideas for knowledge is what I see as my personal metaphor... At the moment I see myself as this flower in bloom – in a stage of vulnerability... I'm a flower dispersing seeds about knowledge and life... The heart in the middle that is being intertwined with a flower displays my love for art and children. I want to plant seeds in the students that will keep on growing and learning.

Figure 12: Eva's Visual Metaphor #1

This written explanation that accompanied her metaphor specifically relates the images to her ideas. Thus, she attempted to eliminate the ambiguity that is inherent in any image. In this explanation, Eva attached specific meaning to the image and thus made it a detailed expression of her educational philosophy for that point in her development. However, the idea was a clichéd metaphor about planting and growth, and therefore may not have been truly representative of Eva's philosophical position.

Mahlis & Maxson (1995) have noted that a clichéd image, like that of plant growth, is sometimes selected when a student has not fully reflected upon her/his beliefs and values. It can be the result of a lack of intense self-scrutiny. In addition, the growth metaphor can suggest a unilateral development instigated by an outside force because the metaphor relates the teacher to the role of a flower dispersing seeds. In Eva's metaphor, she portrayed learning as "seeds" that come from the "flower" that represents the teacher. It suggests a belief in a teacher-centered environment. This runs contrary to a constructivist perspective on learning. *"The depiction of seeds*

leaving the flower and fading out into the unknown means that I am tentative right now, going out and teaching, or sharing what I am presently learning."

However, as Eva became more experienced with teaching and with the theories of education she was learning in her classes, her visual metaphors developed and changed.

Her second metaphor was partially the result of an increased exposure to her classmates' attempts at visual metaphors combined with a stronger belief in her identity as a pre-service teacher. Also, her confidence had increased after she had successfully completed her first try at making a visual metaphor.

I think once I did that image [the first metaphor], and saw what other people had done as well, I kind of said, "Oh, I can do other things." And perhaps that's why I decided this time I would do – the second visual metaphor – I'd do a drawing. Something that required me to use some media, as opposed to just finding an image and cutting it out.

Eva selected a well-loved medium, watercolour, for her second visual metaphor. "Watercolour is something I love to do. I hadn't done anything in a while so I was missing it." This choice indicated that Eva was moving toward a more personal expression of herself in the visual metaphor assignment. She valued her painting and drawing more than the selection of her first visual metaphor that was a found image selected from a magazine. The watercolour image was also the most difficult of the three metaphors because the choice of medium was a technical challenge for Eva and she put a lot of effort into the art. In addition, the painting tended to bring to the forefront the artistic dilemma of deciding when a work of art is complete. For Eva, the tendency to continue to add more and more to the watercolour reflected her personality.



Figure 13: Eva's Visual Metaphor #2

The second one was kind of - I wanted to do it and once I had finished it, I wanted to add in pencil, like, just to make more detail and I thought it was too plain. And I was really - I'm very, this is my - because it's art - I'm a perfectionist. It's something that I always, always do and so when I did it, I kind of thought, "Oh, I don't know if this looks real enough. Should I do this? Should I do that?" And finally I said, "no, just leave it. You don't need to do any more."

As she talked about her artwork, Eva raised personal issues with ease. Her uncertainty at this stage in making her image is common in the process of making art. It is interesting, however, that when discussing her art making process, she describes her personality as a means of explaining this behavior. Her belief in herself as a "*perfectionist*" by way of an explanation of her artistic practice emphasizes the strong connection between art and the personal. Making art is often a deeply personal activity. This second metaphor was a successful trigger for Eva to express her reflections about herself as well as about teaching. The image was a powerful means by which she examined parts of her personality.

The subject of this second visual metaphor was a mandarin orange, a favorite fruit that, at the time, she was enjoying immensely.

I was eating so many mandarin oranges at this time and I was just loving them...that kind of, well, maybe I should do an orange and how can I? And then, how can I use an orange, a mandarin orange, to represent what I'm feeling right now in education? And then I just kind of broke it apart and made it pretty.

This visual metaphor was very individual in both media and subject. The unique nature of her image and the writing about it revealed an intensely personal aspect that was not as evident in her initial metaphor. Eva had moved in her metaphors from a clichéd concept of teaching as planting seeds to an original and elegantly simple metaphor of sections of an orange eaten like her class topics were consumed.

I was loving the program. I really was enjoying it and when I got to doing this [second] visual metaphor I wanted to do something that incorporated everything that I was learning. Because I was eating them [oranges] so much and I brought them to school everyday when I was going through the courses. So it was the part of being in the school, learning the education – I'm a "fruitaholic" you could say. I eat them all the time and this was another way to, kind of, it [eating oranges] is another love of mine, you could say.

There is a visceral quality to this metaphor of eating, suggesting that it was a lived experience of Eva's that she had recreated in her metaphor. She brought to the task her experience in art and the personal favorites of oranges, art and her courses to create a new concept.

In Eva's third metaphor she incorporated her considerable experience in computer graphics into her visual metaphor. Again, the choice of media reflected her personal knowledge and experience. *"I decided to design this image using the computer as my medium. It seemed appropriate because I spent a fair amount of time teaching computer art and graphics while on my practicum."*

This is how she explained her third metaphor in the written portion of the assignment.

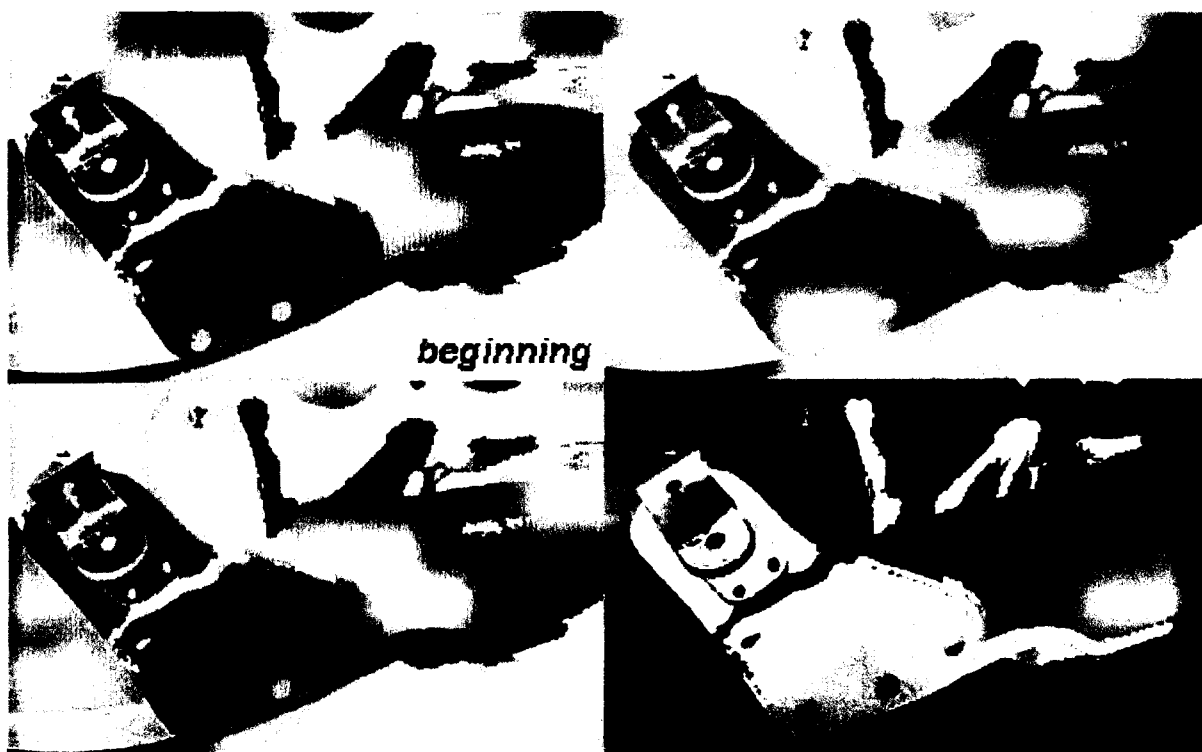


Figure 14: Eva's Visual Metaphor #3

This last visual metaphor represents the steps that I have taken and still am taking to be where I am today... I began in an air of uncertainty where for the most part my thought about teaching were a little clouded... Gradually things became clearer and I began to walk through new doors of understanding. As I have now had the opportunity to climb into the shoes of a "real" teacher, I am certain that is where I should be.

The symbolism that Eva related in the shoe metaphor is a double metaphor. The image of shoes, which was representative of teaching, was further symbolized as stepping stones.

This metaphor paralleled her progression in the teacher education program as she moved from a position of inexperience to one of experience. She manipulated visual elements so they symbolized specific aspects of her development.

I changed the colour quite a bit and what I wanted to do was to show progress from this - was the beginning, kind of thing, this was the black and white - the gray - kind of unsure but excited but... the black and white. So then gradually getting colour as I learned more, and then having this image at the end was more colourful, representing more information that I'd learned. How I'd felt. And the shoes for me are like stepping stones. In those - taking those steps to a position where I know I felt really excited to go into the profession.

In a very creative way, Eva corresponded her maturation as a teacher with the progression from black and white to colour. In artistic terms, a move to colour can result in more intricate relationships and juxtapositions in the art. A more visually stimulating image can result from the incorporation of colour. For the artist, working in colour raises a number of compositional problems. S/he must consider value, tone, saturation and hue when dealing with colour. In addition, the combination of colours, both mixed or, as in the case of computer art, in juxtaposition, can lead to more complex artistic decisions.

Visual Journals

Eva was enthusiastic about making visual journals. She considered the maintenance of a visual journal to be an enlightening experience.

I'm so glad we did this, this visual journal because I go back in it so much. I mean during my practicum I looked at it quite a bit and I found it really useful because I really spent time on it. I just didn't kind of take it as another project that I had to do, you know? To hand in and get marks for. I really enjoyed it.

Her journals were used most often during classes. Here she would use them as an alternative method of taking notes. The combination of writing, drawing and collaging was a novel approach for her and she considered it to be a very successful method of learning. It was a liberating method for her as a way to enjoy her classes.

...when we were told we could do that [work on the journals during lectures] I thought, "Oh, this is weird, we can actually, you know, we don't have to look like we are listening all the time. We can actually do something." So I really took advantage of that and I actually found I learned more doing that than just sitting and staring at the teacher and writing notes...I mean, in class I had my colours out, I had my scissors, my glue and I was cutting and pasting in class while we were talking.

Eva's development as a teacher was positively affected by the introduction to visual journaling. This form of expression was an excellent method for her to study about being a teacher as she sifted through the information learned in her classes. She often added encouraging statements like "leave your mark" embedded in her notes. In addition, the experience opened

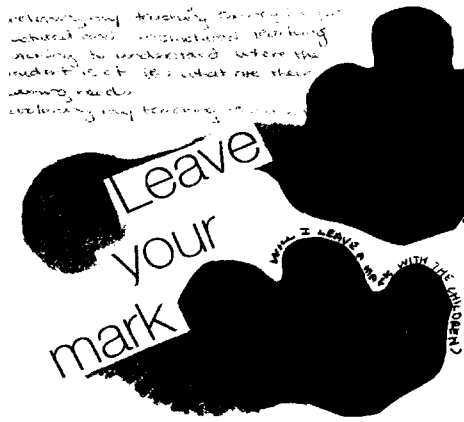


Figure 15: Eva's Visual Journal

I found that it was a great way for me to learn. I hadn't thought about learning visually. In all my other subjects that I had taken at university, it's all – just sit and take notes. I hadn't thought about, you know, doing doodles on the side of the page, and a little doodle might make you remember something. I hadn't thought about actually doing that to allow me to learn.

The visual journal was such a success for Eva that she expressed a desire to continue making journals as a form of reflection when she began her teaching career.

I'd use it [visual journal] more as thoughts and ideas and things, that's what I sort of used on my practicum. And it works for me. Just something to reflect back and think about or even if I have an idea I'll write it in there and I'll go back and take the ideas and work on it elsewhere.

Clearly the use of the visual metaphor offers Eva a successful method of reflection. As she moves to the world of teaching, the ability to analyze and reflect on her teaching will be enhanced by the use of the visual journal.

Summary

Eva's first visual metaphor was somewhat clichéd and did not wholly reflect her artistic or personal nature. Her second and third metaphors, however, were creative responses to her immediate situation. They reflected her personality and her confidence as an artist and teacher. As her belief in herself as a successful teacher developed over the year, she experimented more freely with her visual metaphor assignments and this resulted in constructed image/text combinations that were successful as artworks and as reflections of her changing beliefs. In

addition, the creation of visual journals was a successful undertaking for Eva. She learned more effectively through the use of images and was able to reflect on her role as a teacher in a very personal way using this method of expression.



Figure 16: Portrait of Mary

MARY

Background

Mary was born in Taiwan but was raised in Canada. She was familiar with both cultures and spoke English and Mandarin fluently. She had a Bachelor of Fine Art degree from a Canadian educational institution. Like many of her colleagues, Mary

entered the teacher education program after having gained work experience. She had been an administrative assistant for an art department in a Taiwanese high school before beginning teacher education. In addition, she had taught as an intern teacher for one year. This experience exposed her to the daily activities of teachers.

Visual Metaphors and Beliefs

Mary believed that one very important role for her, as an art teacher, would be to encourage an awareness of different ethnicities through a study of art. She highly valued cultural diversity. As she stated at the beginning of the program:

I believe art teaching is about inspiring each student to think that he/she can create art, appreciate art and have a greater understanding of other cultures through art. I think it's important for me to be a good "eye-opener" for my students in their early years of art making.

Mary's description of herself as a teacher who is an "eye-opener" suggests a desire to be an important influence on her future students. Because of her personal experience straddling two cultures, she was acutely aware of a need for cross-cultural understanding. She stated her concern about cultural inclusivity as she pondered the teacher's job. "I just feel like there's so much to know to be a teacher – there are so many different cultures within a classroom now. And we can't focus on one and not acknowledge the rest...It [lesson content] has to be so global oriented so that it covers pretty much every culture." This would be a difficult task given the time constraints affecting the school year but to include as many different cultures as possible would be Mary's intention as a teacher.

Mary selected a found image from a magazine to stand for her first and third visual metaphors.



Figure 17: Mary's Visual Metaphors #1 and #3

The ability to give inspiring leadership is an inner quality of the spirit. It requires people who live from a great depth of being. And such spirituality does not come upon us suddenly. It accumulates gradually from persistent study and regular cultivation. I see myself in an inspiring leadership position as I

prepare myself to teach. I hope to be a great guidance to my students as some of my teachers had been for me.

When Mary's visual metaphor was compared to the written portion of the assignment, there seemed to be an incompatibility between the two. Although the image did not present a cheerful and positive tone, Mary's written accompaniment for her first visual metaphor had an idealistic quality. The written portion of the assignment conveyed a different feeling or message than the image Mary had selected. Possibly the image related more closely to her belief that she was unprepared for the classroom, although she had taught for a year before entering the teacher education program.

I just feel so overloaded, I mean, maybe because I just went through that last six weeks of – of information overload, I feel so overwhelmed right now... I just feel like there's so much to know to be a teacher! ...I mean, I discovered that teaching isn't as easy as I thought it would be.

The image suggests the concepts of climbing, struggle and support. The central figure in the picture is divided in her/his focus between climbing upwards and helping the climber below her/him. There is a sense of toil in the image in the strained body positions of the figures and the rocky crag. The dark colours and heavy lines reinforce the concept of a difficult and harsh environment. It does not present a cheerful place. In this metaphor, Mary identified with the central figure that was both supporting and being supported. This is the way that she envisioned the role of teacher.

This [the central figure] is, I guess, a role model or a teacher or a leader giving a helping hand to the students and you can't do ...without the others around you. ... Right now, I would think I'm that person [central figure] that's trying to reach out and make a difference in my students' lives but having to be aware of what's around it.

Her description of the forces pulling the central figure (herself) indicated her increased awareness of the multiple tasks and choices facing a teacher each day. "This [the figure pulling the

central person] could be [a] leading goal or it could be the immediate influence or the culture influence and everything else around.”

The selection of a found image rather than the creation of an original work of art for her visual metaphor may have been influenced by time constraints. The program was very demanding and when this first metaphor was assigned, the students were committed to many assignments in their classes. As Mary explained, “I didn’t have time to make one when [the instructor] said to do a visual metaphor. I didn’t want to bring in something I had relating to education specifically so I went through the magazine.” The problem of limited time was an issue that Mary resolved by using an image from a magazine. This does not suggest, however, that the meaning she attached to her visual metaphor was not a true indicator of deeply felt beliefs she held about herself as a teacher. It does imply, however, that her skills as an artist were not being fully utilized.

If the intent of the assignment was to help the students reflect deeply on their beliefs by acknowledging and honouring their artistic talents, then Mary’s choice of a found image did not fully reflect her artistic style. Her usual medium was oil paint and she stated about her work, “I would say it is more of an impressionist style.” Oil paint would not have been a practical choice due to the long drying time necessary but there may have been other more appropriate choices of media. As she stated, “I did not have time to do it.” Her conclusion reflected her belief about the relative importance of the visual metaphor in relation to her other work. If she had placed a higher priority on the creation of the metaphor, she may have taken more time and created one using more of her artistic skills.

For her second visual metaphor, Mary selected an image of a sign from a magazine. The sign stated the words, “you are here” and depicted a graphic of a climber. The theme of climbing remained from the first to the second metaphor. For Mary, she envisioned herself as being in the middle of her development as a teacher. The sign seemed to emphasize for her that she was not

yet a teacher. As she talked about the meaning of this metaphor she was very specific about her position.



Figure 18: Mary's Visual Metaphor #2

That's me climbing and someone says, "You're right there. You're almost there." I wanted to do something with the timeline for where I am and I came across that [the sign]. That's like - wait there. It tells me that I'm worried here.

Mary's concerns about teaching stemmed from a lack of confidence. Again, her belief that she was not prepared to teach was evident in her comments.

I mean, I know a lot of people in this art cohort are ready to go out and say, "Let's do it. Let's jump right in and just start teaching." I don't know if I'm ready, to tell you the truth. I feel like I'm right here [indicating the climber on the sign] and I'm not at the top yet.

She believed that she did not have enough knowledge and experience to begin her teaching career. This belief affected her confidence level and caused her concern.

Mary kept the image from her first visual metaphor for her third metaphor. However, the written portion that accompanied the third metaphor changed. Her belief in herself as an

“inspired leader” altered over time. After her experiences with her courses and her practicum, Mary was much more cognizant of outside influences upon a teacher.

Ideally, I came to this teaching profession thinking that being a teacher is probably one of the easiest careers there is in the world. I definitely will be able to teach more than one student’s love without a doubt, and that I am somehow a teacher and that my students are all going to follow me. The great leader of all. Well, after thirteen weeks of reality, I finally came down to the ground. Although I had a very positive practicum experience, I was in the perfect ideal environment with great bunches of ideal students – [all] that a teacher could dream of having in a class, I had to really push myself to be the kind of Y2K leader of the era that is well accepted by the students.

This adjustment in her beliefs indicated that Mary had reached a new understanding about teaching. Mary’s belief in herself as an inspired leader changed with exposure to the classroom and to her courses. She was very aware of the great skill and effort that are required to be the teacher she envisioned. Her modified belief indicated a sense of realism about teaching that was not present when Mary began the program.

Mary’s choice to keep the same dark image for her third image also reflected a deeply held belief that did not change over the year; that Mary did not believe she was ready to teach. Part of her accompanying statement reflected this concern.

My personal visual metaphor still stands. The closer I am to completion of the program the heavier the weight I feel on my shoulders. I am not sure if I am ready to go out there and teach. Somehow, I feel I’m under-prepared still.

This belief lead Mary to make an important decision for her future. She decided to remain in university and enter a Masters of Art Education program rather than enter the teaching profession. As she explained, “I’m in the process of applying for the Masters. I don’t feel that I am ready to hand my [teacher] applications out and say, ‘Here’.”

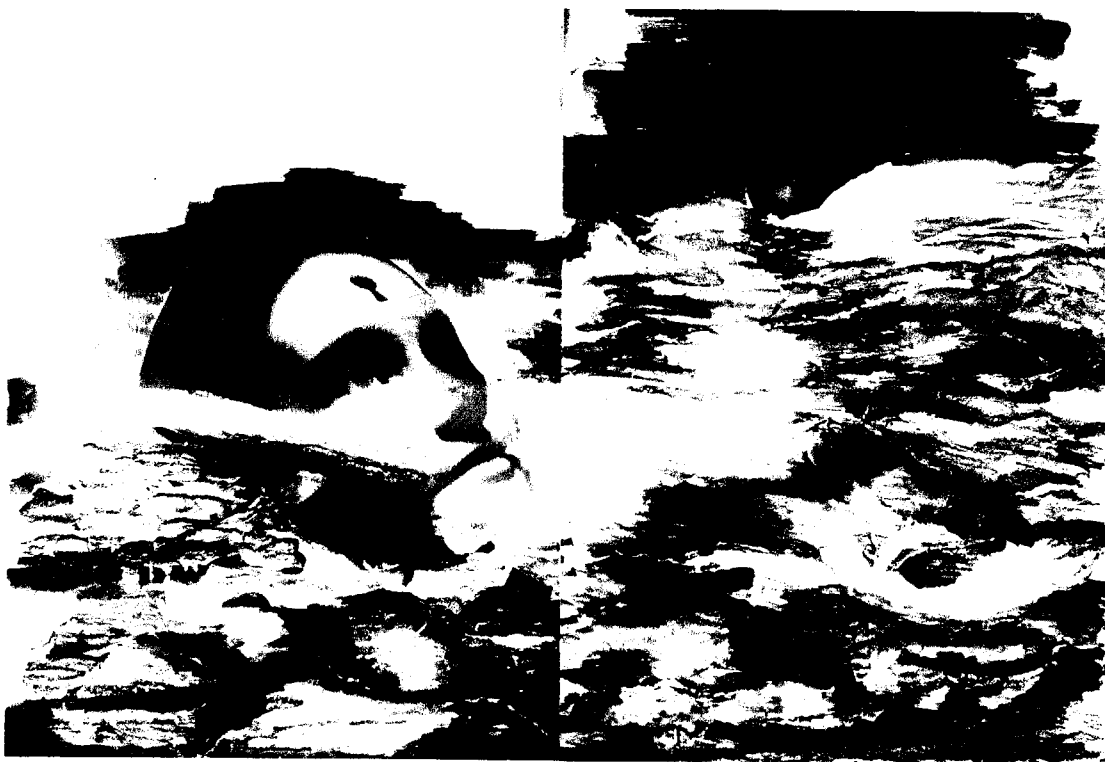


Figure 19: Mary's Visual Metaphor #4

Mary did another work of art in her journal that was a powerful indication of her feelings. It is a mixed media combination of collage and drawing of a woman underwater. Mary connected the dark, black areas of the image to her emotional state at the time.

I have another one. Actually, it's right here [indicating the page in her journal]. This is the overwhelming state that I was at three weeks ago. I felt like I was drowning and I was overwhelmed by all these [coloured bits of paper]. I would say, these symbolize the issues that we dealt with or touched on... I don't know what to say about that [the collage]. I think, well, I was stressed and I just felt that this big cloud was covering my head. That I was drowning. The key is, I don't know what it is, but sort of to open my mind. Opening up to other things around me and saying, "It's not that bad." You could almost see the light at the end of the tunnel.

The emotion that was a driving force behind the creation of this metaphor was not entirely negative. She considered the amount of information that she was being exposed to in her year of teacher education to have positive aspects: "Well, it's not, I wouldn't say it [the visual metaphor] was negative. It's more like overwhelming and I wasn't sure I - how to organize them [the colours in the image]."

Mary spoke of her emotions and the artistic problems that faced her almost seamlessly. She explained her choices of artistic elements by talking about her feelings. This connection is important when looking at the nature of the visual metaphors. It was when talking about the process of making her metaphors that Mary revealed deeply held beliefs. As she described her artistic style she admitted a change in her behavior over the year.

Before this program I used to be a really anal person. I'm very organized - even my painting. When I'm painting, I don't wear aprons. I am a neat painter. I think that need, it is sort of, it was destroyed somehow along this whole year of learning to be fast and to be precise and to be loose...Feels great! I think it was because I have so much to do and also because I don't know how to be neat anymore. It's what the environment has done to me. Also, during the practicum I just didn't have time to write everything down. I used to write everything, including the words I was going to use - step by step and then I looked at it - Gosh, this is too much when you are teaching seven classes. You just don't have the time to do that.

She believed that the personal change to become less concerned with neatness was liberating. Although the change was forced upon her because of the busy nature of the teacher education program, for Mary, there was a kind of release associated with this adjustment in her belief about the relative importance of being neat.

Mary's practicum experience was a positive one despite the fact that she believed that she was not yet ready for teaching. She was very encouraged from the work that she saw in the classroom. "I was amazed by the students' participation in the class! They were so into it. Students even came up to me and asked if they could take the popcorn assignment home. I was amazed! I was impressed." Her surprise at this reaction from her students indicated that she believed the level of interest that she had generated with her teaching was low. In fact, the opposite was true and this surprised her. Unfortunately, Mary did not receive enough guidance from her sponsor teacher. It was a case of different communication methods where the associate teacher would verbally explain things to Mary, but she wanted more information in writing. This conflict may also be partially

because English was not Mary's first language, so that listening to her sponsor teacher instead of reading information from him was an added challenge. She commented about the situation:

But I also notice that he [associate teacher] doesn't have notes. No handouts. And he would just come into the class he would tell me what he was going to deliver five minutes before the class. He can deliver it and I wonder if that comes with experience for one thing, and from doing the same projects over and over again. So he knows exactly what to do, when to do it, what to say, what to pull out when he needs it. But nothing like the other sponsor teachers - "Here is my handout or my collection of handouts. Go through them." Nothing like that.

Her beliefs about the responsibilities of an associate teacher did not parallel her experience with the teacher with whom she worked on her practicum. Her visual journals were filled with many detailed notes and reflections. This suggests that Mary's learning style was more visual than auditory but she failed to act upon this conflict during the practicum. She described her associate teacher this way, "He was very good at verbalizing everything to me...I didn't have anything concrete...Unless there was a conversation and he goes, 'Oh, I remember I have a book on this and that'. And I would have to be on him for a week or two to get him to give me the book that he mentioned." These differences between Mary and her sponsor teacher are common for student teachers. Often the combination of the student's lack of experience with the sponsor teacher's greater experience results in a miscommunication about the extent of mentoring that is needed. Also, the mix of personalities, and teaching and learning styles can hinder the associate/student teacher relationship.

Mary's developing awareness about issues affecting teachers changed her beliefs about teaching. Initially, she believed that teaching would be easy. At the end of June she had changed that belief. She was enlightened about the many social issues affecting students and teachers through many of her classes during the year. Her underlying belief that students' individual differences should be acknowledged caused her concern. Although her ideal class would honour

this belief, the enormity of the cultural injustices she perceived in the reality of a large and busy classroom made acting upon this belief difficult.

I thought I was very aware of the multiculturalism in today's classroom. Well, I have to admit that I was only aware of the "superficial" side of things. The race, ethnicity, cultural identity, stereotyping, racism and discrimination – and a whole lot more on gender issues. I think I could be going to school forever and still challenging myself on the perception of gender equity. So many things that I've said or done with quick remarks that I often don't think about the effect it would have on my students. The courses that we're taking right now help me to realize being a role model or a leader or simply a teacher isn't easy.

Visual Journals

Mary enjoyed the process of making visual journals. The style of her journal reflected an organized and neat character. There were many detailed notes that were indented and titled. Also, she had attached identification tabs to the pages for easy access. When I commented on the organized nature of the journals she laughed, "This is how anal I was." It was an indication of her personality being expressed through her style of artistic endeavour. With hindsight, she decided that the high level of organization was not really necessary, but she was proud of the work she had put into the journals.

Mary did believe that the visual journaling helped her reach deeply held beliefs and she recommended it to teachers for an effective way to reflect on their beliefs. When I asked her if she would continue to use one, she was emphatic. "Yes! I will. I will use a smaller one, in fact. This one is too big to carry and too heavy. It is so thick."

Summary

Mary reflected about her beliefs through the creation of her visual metaphors and visual journals. She highly valued an environment that honoured different cultures and throughout her year in teacher education she believed that it was very difficult to be inclusive. This belief was partly the reason for her lack of confidence in her teaching abilities. Through our discussion of

her artistic process, Mary revealed personal beliefs about the way she saw herself as a person who was overly concerned with neatness and organization. However, the heavy demands of the teacher education program were an impetus for change and she was very glad that she had re-evaluated this part of her life. Mary reflected on these and other beliefs by writing and drawing in her three journals. She was enthusiastic about the journaling and anticipated that she would continue to make journals.



Figure 20: Portrait of Rosemary

ROSEMARY

Background

Rosemary entered the teacher education program with considerable art knowledge and experience. Like many of the secondary art specialists, she had a Bachelor of Fine Art degree. Her main areas of expertise included ceramics and drawing.

Rosemary acknowledged that her parents were an influence on her decision to become a teacher, although she first tried a career as an artist.

I knew something was waiting but it took awhile to figure it out... My mom is a teacher, an elementary teacher and my parents, my father, had always encouraged me to go into teaching because he thought that I was very much like my mom. My mom is this type of teacher I mean when I talk about [someone who] has firm expectations but with a lot of heart. So anyways, she had always pushed me into teaching and I had always rebelled. "I am not going to be a teacher, Dad. I don't want to. I am going to be an artist." And look where I am... It took me years to figure this out.

She entered teacher education at the age of twenty-seven, after having worked as a ceramicist. This experience working as an artist further influenced her decision to become a teacher because she felt that teaching would offer her more satisfying work. In addition, she had interacted with children when she was a camp counselor and art instructor so she had had experience working with groups of children.

I tried being an artist on my own right without being a teacher and I found it very unfulfilling. I was doing production pottery. Maybe that had something to do with it. But I knew that there was more to me than just expressing myself in that way and I knew from my experiences as a camp counselor and as an art instructor that I did – even though I found it challenging – I did gain a lot and I did feel like I could be a mentor to younger people. So [Rosemary] as an artist is great, but she satisfies only herself. [Rosemary] as teacher – there is a bit of both and I think that that is a beautiful combination. I think I do have stuff to offer the world in that way. I'm not meant just to be an artist.

Rosemary believed that being an artist was not as valuable as being a teacher because an artist's focus was centered mainly on the self. She believed that teaching would be a more fulfilling life for her because she would be focused on assisting others and this supported her belief that helping others learn would be a satisfying career.

Rosemary was one of the least knowledgeable of the participants about computers. She did not create her visual metaphors with awareness that they would be placed in the public sphere of the Web.

I think I was surprised that it was going to be on the Web. I thought it was just going to be in our books. I was actually a little bit embarrassed. I wasn't embarrassed until we went down to the computer lab... and I brought mine up and I read my little visual metaphor and I went, "Oh, Jesus, I'm a little bit embarrassed." It sounds way too flowery, you know? But I'm not changing it because that's how it is for me and that is was the visual metaphor is about. But I was a little bit embarrassed. I hope not too many people think it is bizarre.

As an art medium, Rosemary described the computer as “pretty rigid” and she found the computer limiting. “Because I like line – I don’t care much for computer generated line and I like to use lines a lot... I don’t like it [line] ruler straight, I like it a little bit askew...I would rather get in there and erase with my hand...On the whole I could do without it [the computer].”

Visual Metaphors and Beliefs

Rosemary’s three visual metaphors were very different images, although she used combinations of collage and drawing for all three artworks. Collage was not a medium that she enjoyed but she tried it because of the instructor’s influence. Although Rosemary’s collaged visual metaphor held particular meaning for her, the choice of artistic medium may have lessened the depth of inquiry that she made into her beliefs.

We were encouraged [to do collage] from the word go. There were glue sticks, scissors, lots of magazines in the back of the classroom. A lot of people just went for it and I thought, “Oh, I must be missing out on something in life. I had better start collaging”...I would rather just draw...My lines [are] my interpretation of what it’s like.

Collage was not a medium that was personal for Rosemary. She believed that to make a very personal statement, the physical act of using her hands as directly as possible was necessary. Ceramics, where she molded the clay with her bare hands, allowed her to work very directly. Drawing also afforded her this opportunity and it was a favourite medium. She stated, “I am not a fan [of collage]. It is just not me. I am much more of a ‘draw-y’ girl.”

Rosemary had no difficulty understanding and creating visual metaphors. For her first metaphor, the selections of images for her collaged work were highly personal. She used a photograph of her favorite pot that she had previously made. It became the focal point for her metaphor. “It’s [the pot] a very special one because it’s probably my favorite and I have it at

home and it's on my shelf." An image of Rosemary's head is coming out of the pot in the picture.

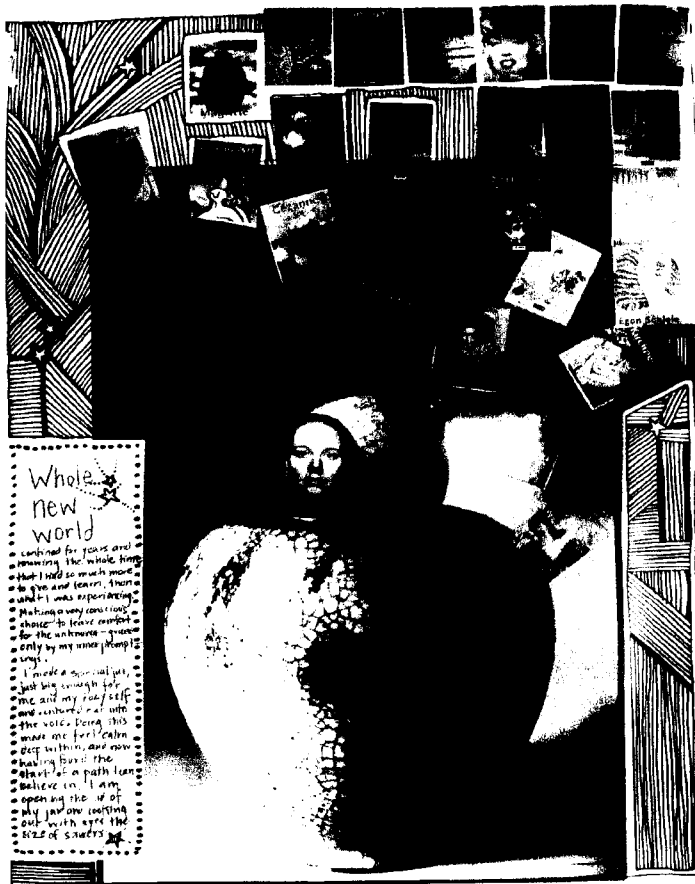


Figure 21: Rosemary's Visual Metaphor #1

Whole new world. Confined for years and knowing the whole time that I had so much more to give and learn than what I was experiencing, and then making a very conscious choice to leave comfort for the unknown, guided only by my inner promptings, I made a special jar that was big enough for me and my oozy self and ventured into the void. Doing this made me feel calm deep within, and I'll have found the start of a path I can believe in. I am opening the lid of my jar and looking out with eyes the size of saucers.

The written portion of the assignment came easily to Rosemary. After she had done the image the prose was a spontaneous, unedited response to the experience of creating the work. It was very connected in meaning to the image. Even the organization of the writing as part of the image suggests that Rosemary perceived the two parts as one project. She was as open and personal with her prose as she was with her image.

At the top of the page, small reproductions of famous art float above her head. The background for the composition is dark. The background colours and design held significant meaning for Rosemary.

Maybe [the significance of the background is] a little bit about what's out there in the world, kind of. I'm coming out but it's kind of dark with a few illuminating stars but it is still quite dark. Maybe it is indicative of how I felt at the beginning where it was a little bit like stepping into the void. Stepping into the darkness but knowing, being guided by those special little sparks that told me I was heading into the right direction. Those would be the stars. Maybe something like that, because the background here, I really did not want to cut away the background.

She directly connected her feelings of apprehension about beginning teacher education with the elements in the background. As a visual metaphor, this is a successful example of deeply held beliefs that were translated into the visual. She did not yet believe in herself as a teacher.

Rosemary had specific reasons for selecting all of the visual components. She identified strongly with certain elements of art. She built her story in terms of the dark background and bright colours. "The colours are in there [the jar]. If you could peek your eye in where my head is poking out of, there would be lots of colours. Colours represent my inner self." The association of colours with her "inner self" reflects a positive self-concept. She explained the intent of her visual metaphor by the artistic choices she made. As she explained:

I wanted to include some of my own art in it because it was a visual metaphor. I am a very visual person and I am very proud of my own art and I wanted to show that in my visual metaphor. I wanted it to be from me - distinct, you know?

The little images of famous artworks that Rosemary pasted at the top of her visual metaphor were the least personal aspect of the work for her. Rosemary explained her reason for including them. "...Why I put them around the jar and myself is that they are the knowledge that I'm bringing to the art education program." However later she re-evaluated the addition of these coloured patches when she contemplated the meaning of her image. She concluded, " The little

cutouts on my first visual metaphor are add-ons. Maybe because it is not from me. I would much rather draw little things, interpreting the covers, rather than glue them on."

Evidently, Rosemary had considerable confidence in herself as an artist when she began the teacher education program. As with many of the participants, she had a strong background in subject matter knowledge and a belief that art was an important part of her identity. However, she perceived this artistic side as a weaker, vulnerable part of her identity. She described it as vulnerable because of the very personal nature of many of her artworks.

Most of my artwork is very open and vulnerable with all these naked women in it and on and on. And I didn't want to expose that because there was more to this program [becoming a teacher] than that side of me and my artist-ness.

The fact that Rosemary wanted to distinguish her "artist-ness" from her teacher-self revealed her belief that to be artistic was not enough to be an art teacher. She believed that other parts of her personality would show a strength of character that belied the open and vulnerable parts. This belief is understandable because she was new to the program and an element of trust among the students in the class had not yet developed. However, it is very courageous for an artist to publicly present her/his private and inner feelings and concerns, and thus place herself/himself in a vulnerable position. Unlike many of her colleagues, her first metaphor was a self-portrait. She made a conscious decision to represent herself at the beginning of the teacher education program. Rosemary was adamant about how she perceived the assignment. "I thought, damn straight! Yes! I'm going to use myself. This is all about me."

As Rosemary read the prose of her visual metaphor to me she began to cry, and she knew she would because it represented a very important step in her life. "...I'll probably cry during this [reading] but anyway...." She interpreted the meaning of this visual metaphor as a beginning of an intense period of personal development. She described the process in terms of an inner and

outer, or private and public self. "It's kind of like an inside coming out." The changes that took place for Rosemary during the first ten months of the program helped her to evolve this perception of private and public personas as she contemplated this first visual metaphor that she had made in September. She reflected,

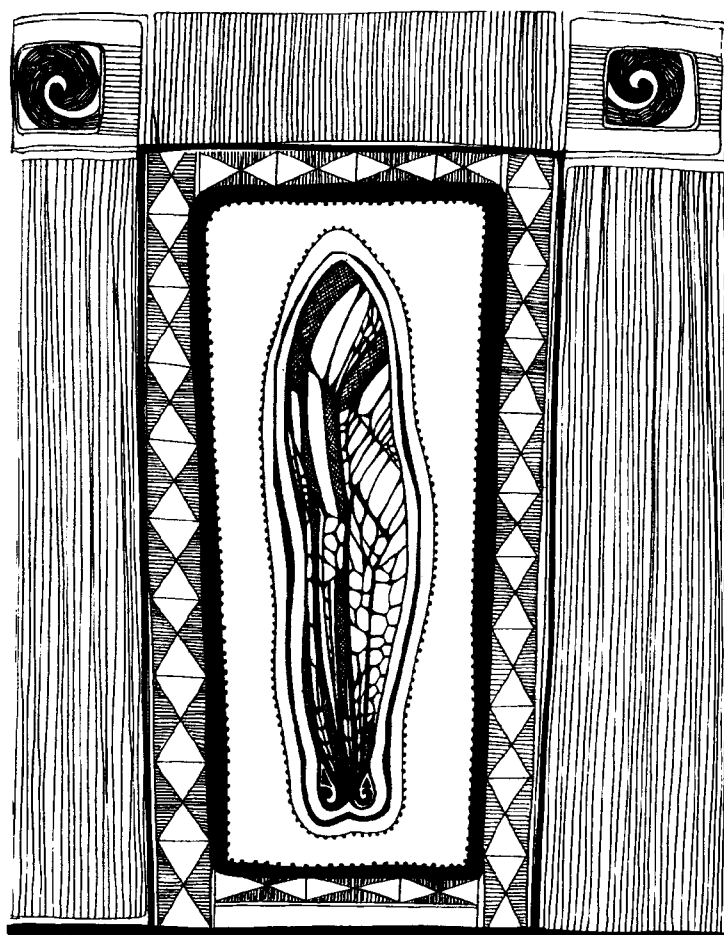
Now it feels like I am standing outside of the jar and the jar is small again and it's on my shelf at home and now I know where I came from and I know what I have learned and I feel much more confident. I don't need to hide inside the jar with just my eyes poking out anymore.

The discussion that transpired during our interview about the visual metaphors helped Rosemary to realize that she had evolved as a teacher during the program. Her confidence as a teacher had increased and she expressed this by revisiting and talking about the metaphor. By reflecting on the artwork ten months after she had made it, Rosemary came to new insights about her beliefs. The notion of visiting works of art after time has past is a powerful way for an artist to reflect on the meaning and construction of her/his work. For the art teacher, using visual journals and reflecting as a teacher and as an artist is a form of reflection that can be carried throughout one's teaching career.

Rosemary's second metaphor was a combination of ink drawing and collage. The black and white image is centered by a transparency of a drawing of a feather. Surrounding this are patterns of line drawing. During our interview, Rosemary described her visual metaphor this way:

It is an overhead copy of one of my drawings and then I cut out the wing from it and I glued it onto a white page and that is how it started. And I knew I wanted the wing because for my second visual metaphor, this was just before the Christmas holiday, and I knew that upcoming was the practicum and I was very nervous, but at the same time I was very excited. I felt like I had gained so much information and knowledge during the fall term. So this is a lot about having the wing to take flight!

Evidently from her explanation, Rosemary created this second visual metaphor partially as a way to bolster her courage in preparation for what she thought would be a nerve racking practicum. Working on an artwork can be a calming influence where the artist directly focuses on the present as she/he manipulates materials. For Rosemary, the challenge of teaching was growing nearer so she made a visual metaphor that reflected her position within the teacher education program. She wrote about this metaphor with a positive attitude but did not include her nervousness.



As I experienced the past four months unfurling, at the same time, unbenounced to me was a precious wing, delicate but strong with it's awareness of it's sense of purpose. I woke up one night a week ago, with the knowledge that I can be all that I am and there was a beautiful gift awaiting my realization – the wing – to help me take flight into the realm of learning. I can do it. The wing represents the skills that I have learned and take with me into the classroom.

Figure 22: Rosemary's Visual Metaphor #2

As we talked about this metaphor, I commented that there were many geometric lines surrounding the organic lines of the wing. Rosemary had not noticed this before and commented on it.

Hey, Yeah! Well, it kind of protects it [the wing] right? And encases it. And maybe I am a little bit like that. We are very complex people but I know that deep inside, there is a real solidity within me and so I think maybe I like symmetry and solidity but within that solidity I ooze all over the place. So maybe this is kind of representational like that, you know?

Rosemary connected her "organic, oozy self" with softer curved lines and strength of character with the geometric lines. Again, the connection that she made between her personality and her art was direct and automatic. I interpreted the line work differently. The element of protection that Rosemary talked about and that was evident in the image may have been related to her nervousness about the upcoming practicum.

The repetition of lines into patterns also held significance for Rosemary. She revealed very personal information about her nature as she explained why she liked patterns. This idea came to her after she had reflected on the metaphors and our discussion about them.

I support my inner self by some strength that is repetitive. I don't know how to describe it but my inner core is protected by a very, very rich and full outer self that has a lot of substance to it. And I think that it repeats in patterns and patterns. Anyways, I think that it's very indicative of me that I feel - I think it's almost like a metaphor - a visual metaphor for who I am. Well, they are. This is specific to teaching but it's also me.

With this comment, Rosemary highlighted the act of making patterns with lines from the images she had made for her metaphors. This act of repetition represented a building of a framework that supported her inner, private self. She may not have reached that conclusion without an intense examination of the images that we did in the interview. The importance of sharing reflections about the visual metaphors was evident.

She was careful to keep this private self separate from her public self as a teacher in the classroom. In this way, the inner and outer metaphors of containers and fields of drawing translated to her teaching.

[As a teacher] it's fine because I know my role. My role as a teacher....And I keep my life – I am quite, I am able to really keep my life in it's separate place so my personal, of course, it's going to flow into my professional – but as for, as who I am at the moment in the classroom, it doesn't. Like, I am able to stay really fixed. My insecurities that I might have been my personal life don't really touch upon my teaching. But they do – but I can keep them separate. So I have that ability.

Rosemary believed that as a teacher she should present herself with less emotion than she often presented in daily life. She believed that boundaries between her private and public selves were necessary for her as a beginning teacher.

Rosemary returned to the vessel metaphor for her third visual metaphor. She collaged a wishbone in a cooking pot for her last assignment.



Even though I'm feeling overcooked, I have to remember to look beyond the stew pot and see the magical wishbone what I am learning is useful and relevant. It's just so much information I have to remember who I am, grounded in myself, are in my depth and breathe deeply. All this information will take time to settle and I will be all the richer for it. After all, it's the yummiest stew I have ever had.

Figure 23: Rosemary's Visual Metaphor #3

The accompanying written portion emphasizes the extent to which Rosemary was feeling overworked. She was beginning more classes after having finished her four-month practicum.

Although she did comment on her fatigue after the ten months of intensive coursework she had just completed, when she described herself as "overcooked", the tone of the written portion was

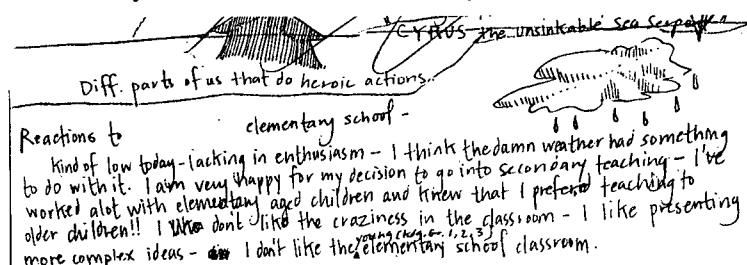
positive and so was the inclusion of the wishbone. However, at that time, Rosemary had very mixed feelings about the program. As she explained:

This one [the third metaphor] is not my favourite. The reason being this last term at school since May to now has been rather difficult for me and my other classmates. I found that only one of my three courses engaged me, and the other two frustrated me a little. Now, I did learn stuff from them but I felt resentful about being here and not because I think that I am fine to go out and teach the world now. But I think that I wanted the courses to be more compacted and more thought through. I thought there was a lot of repetition... Give us something else.

She was not happy with this metaphor because the creative spark for it did not come from her. She explained the origins of the image. "It wasn't my original saying - the overcooked thing. And if it had been, I would have felt differently about it but it was a bit of a buzzword and I wasn't too happy with that. ...I felt like I didn't put as much of me in it." The personal, original aspect of the visual metaphors was very important to Rosemary.

Visual Journals

Rosemary valued the process of visual journaling. It appealed to her artistic nature. She recorded her thoughts, experiences and feelings about the changes she went through as her identity as a teacher evolved. In many cases, pages were expressions of difficulties that student teachers typically face as they enter into their new roles. As part of her course, she went into an elementary school to teach for a day. Her reactions raised some doubts about the experience and



some relief that she had chosen the secondary program.

As we browsed through her journals

Figure 24: Rosemary's Visual Journal

during our discussion together, Rosemary indicated a few important pages. On one page she wrote about her confusion in the role of teacher. The expression of her doubts in her journal helped her to feel more comfortable adjusting to this new identity of teacher.

This is one of my favorites...when I came off my first two weeks I thought, "Who the hell am I? I'm some weird teaching woman"...because I had to be so responsible. No swearing in the classroom – not that I am a big swearing person, but...I just wanted to be me again. And then you realize that you can be who you are and there can be different aspects of you. When I came off it [the practicum], I was a little bit frightened and so I put these people [friends] in my journal to remind me of who I am.

Learning to be comfortable in a position of authority is one adjustment that Rosemary was experiencing as she sorted out her beliefs about teaching. As a way of coming to terms with shifts in her beliefs about her role as a teacher, she used her journal to ground herself by recalling friends who knew her well. She indicated another page from her journal that again evoked strong emotions about her identity as a teacher.

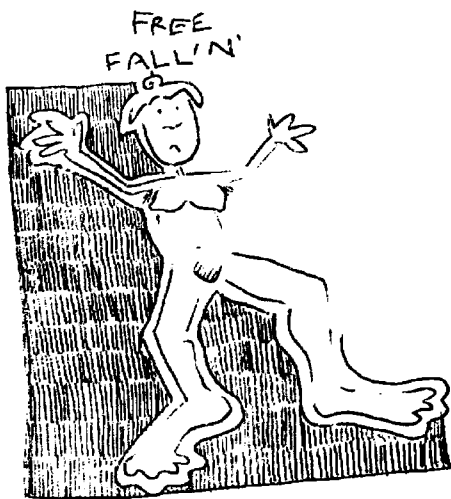


Figure 25: Rosemary's Visual Journal

"That's another good one. 'Freefalling'. That's how I felt on the first two weeks of the practicum." The personal nature of the visual journal was reflected in Rosemary's examples. She shared these personal thoughts openly with me as we toured her journals.



Figure 26: Rosemary's Visual Journal

A very powerful critique of her physical presence was an issue that she wrestled with as she was learning to be in a public role. "Some of my strongest visuals are after the videotaping sessions where I never focused on my teaching. I focused on my body. This was after one videotaping [indicating a page in her journal]: I'm sad, big...it's this whole body image thing." There seemed to be a continuum for Rosemary so that the more personal the issue the better the art. She

believed that her very personal issues were subject matter for good art.

A common complaint with many of the participants was a lack of time during the practicum so they did not use their visual journals at this time. Rosemary, however, did use her journal at this time but because she was so busy, the journal entries were limited to writing. Images were time consuming and thus, she did not complete many during her practicum. "I think there is more writing than visuals even though I prefer to do visuals, they take more time."

Rosemary gained confidence from her experience teaching but she still felt hesitant to begin a teaching career. Although she had applied for one job, she believed that she needed more experience so she applied to become a teacher-on-call for the next school year. As she explained,

The position was given to a "B" qualified person and it was such a relief. I don't know if I am completely ready to go in and teach full-time. I think I'm looking forward to TOC-ing [Teacher-on-call]. To gain a little bit more confidence. Maybe to have time to process this whole year. To jump in and plan units – maybe I would be the most frantic teacher

alive. So it's kind of, I feel like I'm kind of letting go and just taking it easy. I think I need that. It's been a very intense year.

Summary

Rosemary's beliefs about her developing role as a teacher raised emotional issues that she expressed in an artistic form in her visual metaphors and in her visual journals. Issues of authority, self-image and identity all were emotionally charged topics for her. She believed that she was a visually oriented person so she included her own art in her visual metaphors because she was very proud of her work. Her visual metaphors were original expressions of her view of herself as a teacher. Over time, her beliefs about her readiness to teach changed to a degree. The written portions were well aligned with the visual metaphors. Rosemary enjoyed the opportunity to use a visual form of reflection and expressed interest in continuing the activity after she began teaching.

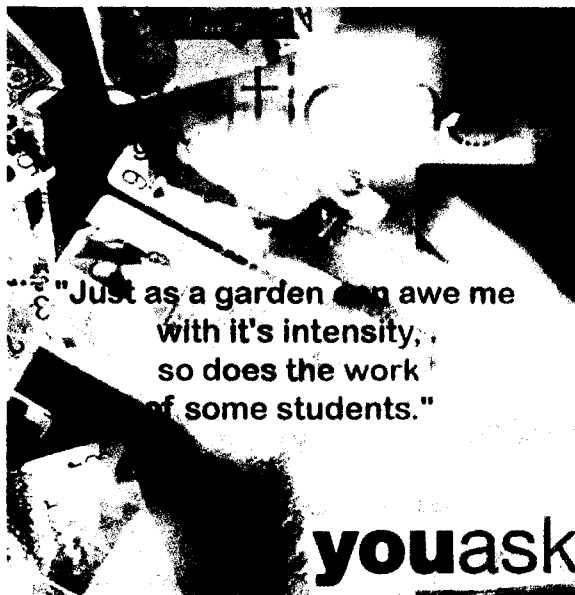


Figure 27: Portrait of Jane

JANE

Background

Jane entered the education program as a mature student. She came to teacher education with a variety of work experiences. She was a mechanic, a computer animator, and had been a member of the army. Compared to most of her classmates in the art cohort, Jane was very familiar with a

number of career environments. Occasionally she felt this difference in experience and was frustrated by it. "Young people [in her courses] would go, 'Wow', and I'm going, 'Oh, God!'. It's like they maybe lived in this little world. Well, they have, maybe, I don't know, lived in this school and this is all they know...." Jane's life experiences

were much broader than those of many of her fellow students and she believed that many of her classmates were inexperienced. Jane implied that her colleagues did not have much in common with her.

Her education included a Bachelor of Fine Art degree that she earned through an unusual route of happenstances and choices. She did not initially gravitate toward the teaching profession.

At thirty-two I had counted how many jobs I had. I had had thirty-six so I decided to go back to university as a mature student when I was thirty to get a degree and get serious. I started out in Phys. Ed. I put out [injured] my kneecap...and so that was the end of Phys. Ed. I went to geography - failed stats. Twice. So geography went out the window. Three years into a degree I looked around and I said, "Well, I've got to finish!" And I was getting good grades in art so I just went into art. I had intended on teaching art then except I didn't have the patience...I just didn't have the patience for young people so I just didn't want to teach.

Unlike some participants, Jane's family influence was a negative factor when she was initially contemplating teacher education. "My brothers are all teachers and I didn't want to teach." However, after her army experience, Jane considered teaching once more.

I think I went into teaching because when I got back from Bosnia and I was injured - I think that was my second life crisis. I think of all the jobs I had and all the things I like about them. What is a good job that has all of those things, and it just happened to be teaching.

Jane considered art to be a calming therapeutic activity that was very private.

My art is very therapeutic for me and when you do a pen and ink you have to go through it all. I do. I have to go through it until it is finished. Otherwise, my hand changes. If you are used to using this stroke and the next day you come back and you are happier and you are using this stroke, it is a different texture, so these [drawings] go from three to thirteen hours.

Jane indicated that her moods affected the way she drew. Her personal characteristics were connected to the way she made her art. She tended to be obsessive, very organized and neat.

I like to know what is coming up, organized. That is the army side of me - I like to know things are nice and straight... I like computer graphics. It is clean, precise and fast. When I teach,

generally speaking, I am quiet spoken and I get my point across and it's very linear – very concrete.

As she describes her art making process, "This [ink drawing] is obsessive work. This is something I go on – like an alcoholic binge, I go on a pen and ink binge." This compulsion to make art revealed that Jane's emotional needs were directly related to making her art. Unfortunately, Jane did not believe that there was enough time during the program to do much of her own art. This was a stressful situation for her. "It's [not making art] annoying, it's extremely annoying." Although she had art studio electives and created her visual journal, she still felt that there was not enough time to do the kind of art that she wanted to do.

Visual Metaphors and Beliefs

When Jane began the visual metaphor assignment she was unsure of herself. Although she had used metaphors in the past, she had not created one in this format. "I didn't know what metaphor was. I didn't know - like, I knew what a metaphor was, I knew how to use a metaphor, but I didn't know how to explain [it]." Like many literary and grammatical devices in language, the use of metaphor is often internalized and taken for granted. It is used without actually thinking about it. Therefore, Jane's admission of doubt when she was asked to visually create a metaphor is not unexpected. She researched the term, however, and asked questions until she understood it. Then she created her version.

Jane's extensive knowledge with computer graphics influenced her choice of media for her visual metaphors. She collaged her images using computer software. Knowing that the metaphor would be shown on the web influenced the technical formatting of her image. "Only [influence of the web was] in the resolution of the image when I scanned it in when I was finished because I wanted it to load fast."

For Jane, the image she developed for her first visual metaphor did not significantly change for her second and third metaphors. According to Jane, "This [visual metaphor] stays the same all the way through. This visual metaphor worked all the way through for me." Jane was unique among the participants in her decision to use the same image for all three metaphors. Jane reasoned that the best representation of teaching for her was a visual metaphor that did not change. It accurately reflected her perception of students. "Well, the kids stayed the same. I changed little bits but the kids stayed the same...the kids are still kids." Jane's changes she refers to are related to the adjustments in teaching that she learned to make during her practicum.

Jane's visual metaphor implied a traditional approach to education. She amalgamated two familiar educational metaphors to make her image. Students were likened to sponges in a garden. The images of sea sponges were superimposed onto flowers to create the image. Both the garden/growth metaphor and the sponge metaphor reflect some of her beliefs about teaching. The concepts of the garden and the sponges are both clichés for a teacher-centered view of education. The description that Jane wrote to accompany this first metaphor reinforced this point of view.



As a teacher I plant seeds of thought into the minds of students. The students absorb the information. I tend the garden, feed it when necessary and watch it grow. The students, like sponges, need to be squeezed gently to give back information.

Figure 28: Jane's Visual Metaphor #1, #2 and #3

Jane adopted the idea of the sponges after input from friends. "I went to my friends...and I said, 'If you were to use a metaphor for students, what would you use?' And they said, 'A sponge.' " The notion of student passivity is often associated with the view of students as sponges. They are ready to absorb everything the teacher gives them. This belief about students is further entrenched when they are viewed as plants in a garden. Here they are given nourishment in the form of knowledge and are expected to "grow" or develop in anticipated stages. For Jane, however, the sponge metaphor was not negative so she brainstormed the concept, and created the garden. Ironically, when the two metaphors are joined, the result is a stronger sense of a teacher-centered concept of teaching. Jane did not seem to grasp this relationship. "Here [indicating a page in her journal] I have a living space. A garden and living sponges and the kids will absorb another gardener. It's kind of brainstorming here."

As previously mentioned in this study, students often choose clichéd metaphors if they have not reflected deeply about their own beliefs. However, because the visual metaphor did not change as Jane gained teaching experience, the image she made may have reflected her beliefs. It is possible that this lack of change represented a steadfast resistance to change. It suggested, also, that Jane had a strongly rooted belief system about teaching and students.

Jane viewed students homogenously when she made her first metaphor. Her beliefs about learning reflected her inexperience. Initially, Jane constructed her concept of students from sources other than teaching. Her description of students reflects her beliefs.

Kids are kids, no matter where they come from, what colour they are, or what their cultural background is. They bring a history. It is that child's story. Whether it is a cultural history or not, it is that child's history and it makes them all different but every one of them will respond to the same thing because they are all kids and they want to learn.

Although Jane acknowledged that students come to the class with different experiences, she did not connect the influence that the students' backgrounds had on their ability or inability to learn. Jane did not embrace a constructivist theory of education. She prioritized two conflicting beliefs

about students and concluded that the similarities among the students – that they were kids - would supercede their individual differences. Consequently, Jane believed the students would all learn in a similar fashion. In a constructivist framework, the student has more autonomy to develop new understandings by building on her/his unique vision of the world. The students' backgrounds are very important. When I pointed this out to her she agreed, "that all kids learn differently." However, her visual metaphor and her descriptions of students' learning conflicted with this statement.

Jane strongly believed that one's background should not warrant special consideration.

I disagree that I have to know all of your history – your ancestral history to understand you. I don't agree with that...I need to know you now. You, for now, I take you from now. Face value forward!...Look at the kid that is in front of you - that person - not where they have come from.

In further reflection, Jane makes reference to her visual metaphor.

We are all that garden. It also represents the world. We are all the same. Even if I have red hair and you have brown hair, we are still the same. If the culture is different, it's just a part of that person – they are still a person.

This notion of universality was an underlying belief that did not change significantly throughout the year. There were developments in Jane's beliefs, however, that were reflected in the written portions of her metaphors. The written explanation accompanying each visual metaphor changed. It reflected an increased awareness of teaching as her experience as a teacher developed throughout the year. The difference between her first and second visual metaphors was found in these written explanations. Her instructional approach was adjusted to meet the needs of her students and thus, she wrote about this change.

I had to be careful what size of feed I fed them because these sponges – if you take a very fine sponge it won't soak up oil because the oil molecules are too big. Some kids can't take a big chunk so you have to know how much [and] what size of information to give them.

These comments represent some of the lessons Jane learned when she was on her practicum. Like many student teachers, she presented too much information too quickly when she taught. She learned to adjust her lessons to fit the level of her students as the practicum progressed.

For Jane's third visual metaphor, again, the image remained the same and the text changed. As she became more experienced in her teaching practicum, she adjusted her beliefs about students by adding a representation of classroom management into her garden.

My visual metaphor still stands, which is the first one with another addition. As well as being aware of the size of information, I would want to watch what I plant next to each other. Poppies can overwhelm pansies. But what I created in the garden pales to the exceptional raw talent that lies quietly within the students. Just as a garden can awe me with its intensity, so does the work of some students. When the students accomplish what they thought was impossible, it's like watching a sapling grow into a mighty tree. That's awesome.

Ironically, as Jane experienced the students' talents through her interactions during the practicum, she continually constructed her vision of teaching. She seemed unaware that she was using a constructivist approach to her learning. Yet, her image remained teacher-centered and did not change. Although Jane had been introduced to the constructivist learning framework and she believed that she was familiar with it, she had not analyzed her own experiences in this context. When I commented about constructivist theory in relation to the students' learning, she confused it with a multicultural curriculum in art education. "I have not quite figured out how to incorporate it [constructivism]. I have not quite figured out how to celebrate the individual cultures in art because we are still working so much, trying to get art out from the White Anglo-Saxon masters."

Jane's visual image did not reflect all of the beliefs that Jane espoused. For example, she believed that females were exploited through sexually explicit images presented in advertising. She had hoped to convey this belief to her students and to influence them. "I was disappointed in their [students'] concept of advertising. They did not see the objectification of women or little girls.

They just did not see it." On another occasion, her belief in a disciplined, simplified life style lead her to comment on the behavior of the students.

I don't mind pushing them. There are times when they need to be pushed or squeezed. They are kids. I think there is a lot of freedom in this society and I think sometimes it's too much freedom. I think sometimes it's just nice to know that this is what is expected of you and if you do that, that's all you need to do.

Jane was suggesting that too many choices can be confusing and that small goals would lead to the larger goals. This comment was made in the context of her practicum.

It is notable that Jane's slight changes in beliefs were manifested in the writing rather than in the image because writing came more easily for her. "I am a literal person. I write a lot and the visual side is really difficult." Jane's belief that she was a literal, straightforward person was confirmed in her repeated description of herself as such during our conversation. Consequently, writing reinforced this belief because words had clarity of meaning for her that images lacked. An image can be interpreted in a variety of ways, but Jane could be very specific about what she meant if she wrote it. This appealed to her. She held on to the image through out her three assignments, as if by doing so, she could eliminate or lessen the multiplicity of meaning that is inherent in any image. I sensed that it was important for Jane to have this stability. She felt that as an older student, she had already gone through so much change and growth in her life so that she did not need to document and consciously record further changes. She did not believe that she needed to change in the same ways that she thought her younger colleagues might need to change.

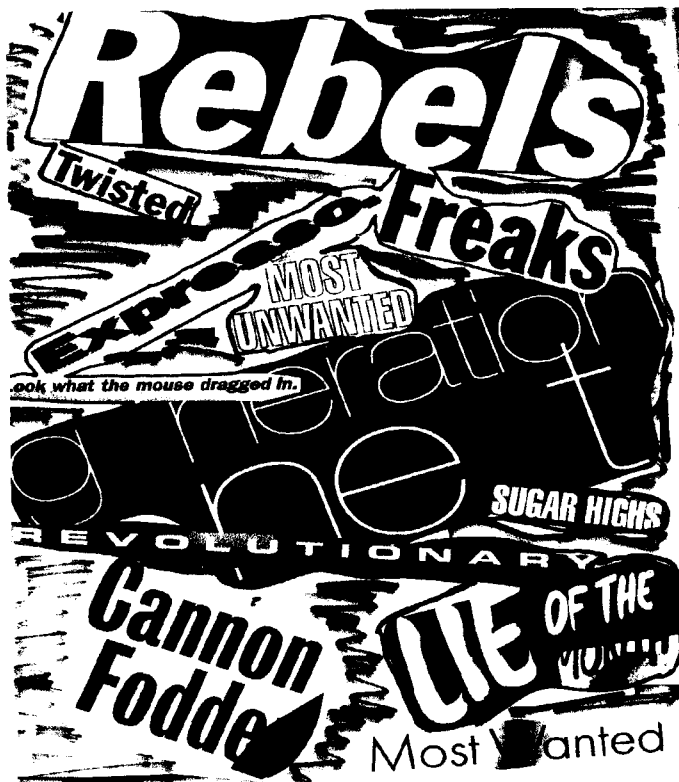
Visual Journals

Jane enjoyed making the visual journals. She had completed three by June of her year in teacher education. She felt that creating the journal with a combination of image and text was a

successful way for her to become aware of deeply held beliefs. "I would not have believed that [making metaphors visually gets to a deeper level of beliefs] until this [journal]."

The journal experience afforded Jane the opportunity to express her experiences with the secondary students and with elementary students in an emotional way. For example, one afternoon she taught grade two students. She hated the lack of order and control that she experienced and vowed never to teach young children. The children acted in contradiction to Jane's belief about student conduct. Her belief was built from her own childhood.

Jane's need for order surfaced throughout her journals and during her interview. However, the experience with the younger students was the most poignant example of a contradiction that she experienced between her beliefs about the student's role and teaching. The eleven pages of images in Jane's journal are very emotional. She felt they were uncharacteristic for her. The images are bold, chaotic collages with dark angry marks and words. She described her response to the experience and her art making this way.



It seemed like a waste of time to see them [some students] sit there while I showed the others how to do it again and again and again. Four little kids on this side of me...I had three little guys here [beside me] Just, I don't know. ...Everything that we were doing, these guys would say, "I don't want to." I was thirty-one before I spoke back to my dad!...Talking back is just not part of my life. I never talked back as a kid. I don't talk back now, and I just don't know what to do with that. I have no concept of this! What to do. ...Three times in that hour and a half I almost quit! I almost went to the teachers and said, "I can't do this. I'm out of here. I can't do this."

Figure 29: Jane's Visual Journal

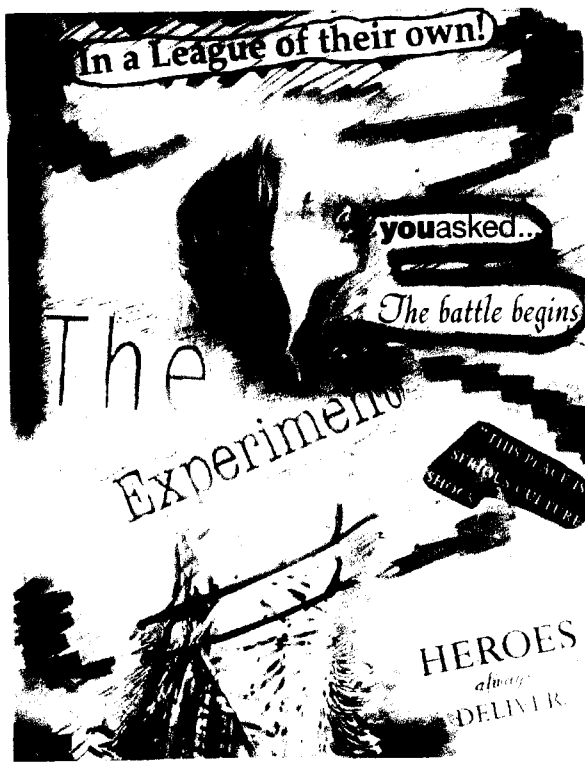


Figure 30: Jane's Visual Journal

It was a feeling of anger inside me like I was going to snap. Total disbelief at what they [students] would say. I couldn't find a way to say it so I did this [art]. And this is brand new for me. I went through... You can't say this without getting arrested, right? So I put it in a piece of art. If I say they are little rebels and pieces of shit and I want to smack them all across the head I would get arrested. Grade Two's. So I put it in here. They are rebels, they are freaks, I just want to shoot them right over the fence. I don't remember a time like that in my life except in Bosnia. I went through quite a lot in Bosnia so I think it's the last time to remember that anger.

Jane favoured this journal above the rest because it opened a new creative style for her and an emotional outlet. She freely expressed her negative emotions through her collages. This was not done in any of her visual metaphors. She was enlightened and satisfied with this breakthrough in her art. She indicated her favourite journal because of this experience. "This one is my favourite because – I say this one because it one brings out a new side of me here [indicating figure 29 & 30, depicting the elementary school experience]." Jane really enjoyed creating the visual journals and found them to be a powerful tool with which she explored beliefs and feelings that she previously had not verbalized.

Summary

Jane was unique among the study participants in that her visual metaphor remained the same for all three assignments. Only the written reflections were altered. They changed in direct response to classroom management and teaching skills she learned during her practicum. Jane

had firm beliefs that were represented by her visual metaphors. These beliefs about teaching resulted in deeply emotional experiences when she was confronted with events that ran contrary to what she expected. The journals were a successful outlet from which she reflected about her reactions to her experiences.

CHAPTER 5: DISCUSSION

Introduction

In analyzing the data, I revisited the participant profiles several times, compared and contrasted images and text in the form of collaged cards and computer-generated collages, and re-examined the related literature in order to reach a better understanding about the relationship between visual metaphors and visual journals, and pre-service art teacher beliefs. In order to maintain the focus of this discussion, I reiterate the research question that instigated my inquiry:

How do visual metaphors and visual journals created by pre-service art education teachers help them to understand their established and changing beliefs about art education?

With this question in mind, I organized the data along these themes: visual metaphors and tacit beliefs; visual metaphors, visual journals and changing beliefs; visual metaphors, visual journals and the public sphere; visual journals and reflection; and finally, visual metaphors, visual journals and creating art.

Visual Metaphors and Tacit Beliefs

I realized, as I shuffled transcripts and looked through journals that the data had been given to me in three forms: the visual image, the written text and the spoken discourse. As dictated by the parameters of the metaphor assignment, a written response or explanation accompanied each visual metaphor. The relationship between the written text and the visual image is significant. The written explanation can sometimes instill critical thinking about the visual image. Conversely, the visual image inspires the writing. Stout (1993) has advocated the use of narrative writing in the art classroom. She cites a rich history of artists who have made use of this symbiotic relationship between written and visual forms in artistic process.

Recall the intermingling of words and images in the notebooks of Leonardo da Vinci; the intimate, self-interpretive notes of Frida Kahlo; the expressive sketches and extensive

dialogues in Charles Burchfield's journals; and the reflective writings of a multitude of individual artists like Audrey Flack, Kathe Kallwitz, Paul Klee, and Frank Lloyd Wright. Given its established heuristic role in critical thinking and writing across the disciplines and time-honored tradition of the journal in the artist's studio, it seems most appropriate that this for individual, expressive thinking should be a natural fit to the contemporary art curriculum (p. 40).

In most cases, the participants in this study wrote detailed briefs that linked the images to metaphorical concepts. Also, they sometimes included value statements about themselves and/or teaching that otherwise may not have been expressed through the visual material. The participants relied on the written accompaniments to explain how the images were to be interpreted. The images then played a different role. Making the art allowed the participants to present their artistic sides and all of them valued this. The images sometimes revealed different kinds of information than the written text. Furthermore, when the participants were interviewed, additional beliefs were uncovered from looking at the visual metaphors and visual journals.

The visual metaphors revealed tacitly held beliefs in some cases. These beliefs were not discussed in the prose that accompanied and explained the metaphors. At times they were implied during the interviews but not always when the discussion was centered on that particular metaphor. Participants sometimes talked about beliefs when they were referring to pages in their visual journals. At other times, beliefs were implied visually in tone or feeling, using the language of images. This language relies on the elements of art such as line and colour to communicate. It is also strongly connected to emotion and deeply held beliefs. It is dependent on the subjective interpretation of the viewer. The nature of images is such that without time taken to adequately discuss the meanings inherent in them, some of the effectiveness of images to uncover beliefs is lost. Therefore, much of our conversation revolved around the art. In my case, my expertise in the art field afforded me the necessary background to initiate dialogue with the student teachers about their art. Thus, together we reflected on levels of meaning that were

evident. At times this helped the student teachers to reflect on their practices further. At other times my interpretations were not in keeping with their intentions and they expressed the difference.

Mary's selection of image for her first and third metaphors is an example of a discrepancy between her beliefs as revealed in the image and the accompanying statement. The dark image of mountain climbing suggested a difficult environment and apprehensiveness. Yet, the written portion in her first metaphor was idealistic and positive in tone. The tacitly held belief that she was not prepared to teach was hinted at in her image. It was clarified in our discussion as we looked at her work. "I think I don't mind TOC-ing (teacher on call) but if I were to go ahead and apply for a job, I don't feel that I am qualified enough yet".

In a different way, Brad was also influenced by his tacit beliefs. The elements of risk and danger were echoed in images throughout Brad's first and second metaphors as well as his extra, fourth metaphor. However, Brad wrote that a safe environment was of paramount importance. This was a strong belief that he had formed before entering the teacher education program. "*I don't think I would have called it a philosophy at that point [at the beginning of the program] but was definitely that, you know? I definitely had a thing with safety in the classroom*". He mentioned the issue of safety repeatedly throughout the interview. It was an important requirement for teaching that Brad felt very strongly about, yet the opposite impression was revealed in three of his collages.

Rosemary's prose connected closely to her images in her visual metaphors. In her writing she connected the visual metaphors to the stages of her development as a teacher. However, when looking for patterns in her visual metaphors I noticed a consistency in the images that suggested a tacitly held belief. The repetition of inner and outer structures in all three images indicated a belief in a need for protection. We discussed the images and the belief became clearer for

Rosemary as she studied and compared her visual metaphors. She concluded, "I'm very sensitive so it's [protection] important to me". She spoke about her teaching and her method of coping with this need for protection. As she explained, "My insecurities that I might have in my personal life don't really touch upon my teaching. They do – but I can keep them separate". This candid explanation was in keeping with the personal information that Rosemary was willing to share in the interview. She may have felt the need to demarcate boundaries in a definitive way because of her openness.

In Jane's visual metaphors, the image of sponges in a garden was a stereotypical representation of teaching. Jane's written portions of the metaphors related to the visual parts but there were not many tacit beliefs evident from her garden image. If a larger picture of Jane is painted from a comparison between her visual metaphor and other images in her journal, however, it reveals a particular view of the world that is one of extremes. During the interview, Jane's statements paralleled her belief in a teacher-centered, controlled learning environment, but strong feelings about teaching were expressed in other parts of her journal. The fact that she created art about what she was feeling regarding the elementary experience was a liberating experience for her. As she reviewed the images from this experience she admitted that she could only present these beliefs through art. To express them in any other form would "get her arrested!"

Jane connected her "army" side with her garden visual metaphor. She connected her "artist" side with the emotional, spontaneous drawings in her journal.

This visual metaphor is the army...this is the nice constructed, it's in a nice frame – a clear image. This [elementary school drawing] is the emotional artist. This is the life of a grade two class. It has everything all over the place. No order, chaos, anarchy. Emotionally this one [grade two drawing is more powerful] because this was like, Oh my god!

The labeling of the artwork into two extremes not only reveals strongly held beliefs that at times contradicted each other, but also indicates that Jane's beliefs lead her to view things as black or white. She held strong moral convictions that translated into her vision of teaching.

In Eva's visual metaphors, there was little indication of tacitly held beliefs from her visual metaphors. Her written portions were well connected to the images she made. In her interview, she reinforced the concepts from her visual metaphors. She was very enthusiastic about beginning teaching and her excitement was evident in her writing and in the positive tone of the images. The strength in her work lay in the written connections she made with the visual metaphors. The prose was very necessary so that the depth and creativity of her personality could be understood. On their own, the images seem to lack a personal, creative edge. Eva's images were lovely but somehow impersonal. They could have been made by anyone. It was in her written responses to the images that Eva's belief in her chosen field was individual and creative. For example, her description of eating oranges and "eating" information in her courses enlightened me as I gazed at the traditional painting of the fruit.

For three of the participants, Brad, Rosemary and Mary, tacitly held beliefs were revealed through their visual metaphors. For Jane, deeply held beliefs were revealed when her visual metaphors were compared to her visual journals. Finally, in Eva's case, her personality shone through in the relationship between the prose and the image in her visual metaphors, but I did not perceive tacitly held beliefs from her metaphors. Perhaps this may have changed had I interviewed Eva for a second time. In all cases, the students learned more about themselves in the context of their teaching because they had made their visual metaphors and journals and/or as a result of being interviewed about them.

Visual Metaphors, Visual Journals and Changing Beliefs

When examining changes in the beliefs of student teachers, I realized that the change was often an adaptation of a prior belief. Among the participants in this study, the development of visual metaphors and visual journals sometimes reflected a change in beliefs due to a greater awareness and understanding about teaching. However, the elaborate connections among beliefs and behaviors made singling out one belief unrealistic. It must be remembered that one belief is examined in the context of other supporting beliefs.

For some participants, change in beliefs was indicated in their journals rather than in their metaphors. For others, the visual metaphors reflected shifts in beliefs. Also, discussions about changes in beliefs based on the participants' art were sometimes accompanied by strong emotional reactions during the interviews. This suggests that the beliefs were highly valued and that talking about the art may have triggered these emotions.

Eva, Mary and Rosemary experienced changes in beliefs centered on the development of a teacher identity. Their beliefs in themselves as teachers became stronger or weaker as they went through the teacher education program. These changes were evidenced in their visual metaphors and visual journals, and confirmed in their written and spoken comments.

Eva represented the strongest example of a developed sense of a teacher identity. In the first visual metaphor, she was unused to the role of teacher and this may have contributed to her selection of a clichéd image. She indicated that she saw herself *"as this flower in bloom – in a stage of vulnerability"*. In our conversation she described herself as *"tentative"* about going out and teaching. This was further emphasized by her selection of an abstract style in the image, which represented her disquiet. Her second visual metaphor was the most personal in the selection of subject matter and media. It was also her favorite and it focused on her situation as a student teacher. This shift to the personal in her visual metaphors paralleled her development as a student who was learning about teaching. By the end of ten months in the program, Eva's tone was more

confident and her third visual metaphor reflected this. This change in beliefs was indicated by Eva's choice to repeat the image of the shoes and to manipulate the colour. As she noted, "*shoes, for me, are like stepping stones*". This belief that she was ready to teach gave her the necessary confidence to begin her career. Eva's visual metaphors became more personally relevant in subject matter and media as she progressed in the program. In this way, her visual metaphors reflected her changing belief in her development as a teacher. In her visual journals, Eva used images to add to her notes about her experiences and her classes. Her comments throughout her journal indicate that over time her initial doubts that she had in her abilities to teach were replaced with issues about the daily activities of the classroom. The journal entries reinforced the changes that were indicated in the visual metaphors.

Mary's visual metaphor reflected a belief that changed in the opposite direction from Eva's belief. Mary entered the program with some confidence in her ability to teach. She had taught for a year before beginning the program. By end of the program some of her confidence had eroded. Her decision to keep the first visual metaphor for the third is evidence of this shift. The image was one of struggle and suggested difficulty. The more she learned in her university courses, the more inadequate she believed she was. This stemmed from a strong desire to create an equitable environment for the students under her charge. Mary strongly believed that all aspects of equality were important and should be honoured. Her background as an ethnic minority member may have fuelled this desire to establish an equitable environment for her future students. This deeply held belief actually hindered her development as a teacher because she did not think she could meet the many diverse needs of her pupils. This change in her belief was a reaction to what she had experienced in her courses and in her practicum. Mary expressed her worries as we talked during the interview. "I just feel like, 'Wow, what else do I have to know before I go out there to teach?'" This reaction was partially due to the fact that she was processing a lot of information quickly. She had finished ten months of the program when I interviewed her.

Mary's experience is not uncommon. According to Zeichner & Tabachnick (1985) beginning teachers often experience a loss of their idealistic notions about teaching as they gain more experience. As Mary wrote about her third metaphor, "...The great leader of them all. Well, after thirteen weeks of reality, I finally came down to the ground". Images and comments in her visual journal reinforced the change that was indicated in her visual metaphors. Here she created a fourth visual metaphor and some collages that were about her uneasiness concerning her belief in her ability to teach. The images were more emotionally powerful than the metaphors that she completed for her assignments. This is partially because the journal images were not found images, but ones created by Mary. Therefore they were more personal. Mary's doubts about her teaching were reflected in her decision not to enter the teaching profession after she graduated.

Rosemary's three visual metaphors also reflected the development of her belief in herself as a teacher. All of her images and prose were highly personal reflections of her situation as a student teacher. By her second metaphor she was "ready to take flight". In her third she had been "stewed in the pot". All three images show a change in her belief about her teacher identity. By the end of ten months of teacher education, Rosemary's belief in herself as a teacher had developed considerably but she was not yet at the point where she felt ready to teach with a class of her own. Her doubts did not show in her visual metaphors as much as they did in her journals. She tended to be more open and spontaneous in the visual journals. Her concerns about her physical presence, her feelings of discomfort in the position of an authority figure and her mixed feelings about the place of censorship in the art classroom were revealed in drawings and notes to herself. When I studied the visual journals along with the visual metaphors, I could understand her decision to teach on call in order to gain more experience.

For Jane, all three metaphors were the same image of sponges in a garden. She did not view the sponge metaphor as negative, and the images and her written work show a very traditional

approach to education. The only changes in the visual metaphors were limited to slight variations in the sponges and the written portions. She was mainly concerned in her metaphors with her teaching methodology. Her understanding of the visual metaphor assignment did not include personal aspects of herself. With this distancing, she focussed on the students and the classroom situation rather than on herself. This is an interesting decision, for it shows that Jane was only willing to reveal a limited amount of personal information in the visual metaphor assignment. Her ideas about students and teaching developed as she gained more experience, and these changes were evident in her written discourses accompanying the visual metaphors. They are not changes, however, about deeply held beliefs. The visual metaphor form of reflection was not very successful for Jane in reaching and understanding tacitly held beliefs about education. Her changes reflected an academic exercise about teaching methodologies that remained at a relatively superficial level.

Until Jane was ready to be open on different personal levels and be open to interpreting them with others, changes in beliefs may not occur. This problem has been noted by Bullough & Stokes (1994), who also found that student teachers who were not willing to invest personally meaningful introspection when making metaphors did not benefit significantly from the activity. When I recently visited Jane, I suggested my hypothesis that the metaphors did not change because she did not want to reveal too personal information about herself. She denied this. "It is because I'm old", she said, "I don't need to change like the younger ones in the group". Her comment revealed her belief that there was not really a need for her to change. Consequently, Jane did not change very much in her visual metaphors. However, Jane revealed this kind of change in her beliefs in her journal. Specifically, the collages that she created in response to her elementary school teaching experience reflect a change, not in kind, but in degree. She believed more strongly than before that the elementary level was not for her.

Brad created visual metaphors that were similar in style and media, but they indicated a change in his belief about the concepts of the individual and the community. As the year progressed, his belief changed as he reflected more about community in his classes and in his practica. His belief that to be creative, the artist or art student must individuate her/himself from the community rests in a larger, modernist concept of the artist as an isolated, creative genius. This point of view typically presupposes that isolation is necessary for creativity. For Brad, this idea manifested itself in his first visual metaphor where the lion and wolf, that represent courage and individuality, are enemies of the sheep. The sheep represent the community and have a derogatory connotation. By the time Brad had created his final visual metaphor this relationship had altered. The circular format that he used in the third visual metaphor to represent the community was integrated with the other images of people. In addition, instead of mindless sheep, personable cartoon figures are depicted as the community members. As he stated, *"visual metaphor number three is about finding a balance between the individual and the community. All parts are valuable"*.

The visual metaphors and/or the visual journals reflected changes in the beliefs for Brad, Eva, Rosemary and Mary. In Jane's case, the visual metaphors reflected the maintenance of an original belief about students and a change in beliefs was indicated in her visual journal. Also, the visual journals reinforced the changes in beliefs experienced by Rosemary, Eva and Mary.

The participants enjoyed doing the visual metaphors and visual journals, so in this way they were effective activities. The aspect of enjoyment should not be undervalued in the development of tasks designed to assist student teachers to learn and reflect about teaching. As Pintrich, (1990) reminds us, "...it is important to integrate motivational and cognitive components in comprehensive models of student learning [and] models of teacher development and learning should be no exception" (p. 827). If the pre-service teachers enjoyed making the visual

metaphors and visual journals, it stands to reason that their motivation was high and that the activity was successful on this level.

Visual Metaphors, Visual Journals and the Public Sphere

The issue of presenting one's personal information in the forms of visual metaphors and visual journals is about notions of privacy and publicity. In this study the participants presented personal information with varying degrees of public exposure. Reactions of the participants to their private information becoming public varied. There were six public spheres that the student teachers experienced which varied in degree of publicity from limited exposure to full exposure. They included the student teacher and the instructors, the student teacher and the art cohort, the student teacher and the researcher, the student teacher and the practicum context, the student teacher and the email partner, and finally, the student teacher and the web site.

The level of trust that is associated with this list is inversely proportional to the level of public exposure. As Bullough & Stokes (1994) found from their study of pre-service teachers' metaphors, "The issue of trust was an important one. Without a reasonable level of trust, these students were hesitant to risk honesty. And, without openness and honesty, students' writing about metaphors became superficial or distorted by an overwhelming desire to please" (p. 217). In this study, I found that the larger the audience, the less trust was developed because the sharing of personal information by the two parties also lessened. This sharing is a prerequisite for trust. The instructors and the cohort built a high level of trust in the ten months before I met the participants. The frequency of their meetings and the sharing of personal information facilitated the development of this trust. The instructors valued an environment where the pre-service teachers could develop strong bonds. In order to assist that process, the instructors used art in an effort to make the class personal. For example, the introductions that lead the initial class were made through an explanation of a famous work of art. The students selected a reproduction that

best represented themselves and used it to introduce themselves to the class. In conversations with one instructor, she commented that the pre-service teachers revealed far more personal information using this format. This echoes the findings of Jeffers (1996, 1997) who used art reproductions in a similar fashion.

For the teaching practicum, the element of trust was built between the student teacher and the associate teacher as they shared the experience of teaching the classes. Next, the pre-service teachers who volunteered for this study made a decision to trust me. This trust was further developed during the interviews partly because we used their art as the foundation for discussion. I honoured the student teachers' work as we talked about it by expressing my appreciation where appropriate. This positive feedback helped the student teachers relax during the interviews.

Less trust was developed between the between the pre-service teachers and their email partners. Although images and information were shared, there were not enough connections to form a high level of trust. Rosemary expressed her dissatisfaction with the relationship as she talked about the email experience.

It wasn't useful at all and it is a shame that it wasn't but it never happened. I don't know. Part of me thinks it is because we are already so busy and have a lot of stuff going on and part of me thinks maybe it is because of those people who we were supposed to connect with - I wrote my partner a couple of times and never got a response. Maybe if it was started from the first week of term, we got our buddies right away and that was just going to be our buddy and we had to email them once a month and show proof. It didn't [build community] and maybe it doesn't ever need to because these are people who live in the States and are really far away. Maybe building community with people from [a closer university] who are doing a different art education program than us might be interesting. But it is so far away that you can just forget about it and never email again. It doesn't make a difference.

The infrequent communications, the medium and the differences in education programs all may have contributed to this superficial level of discussion. For Jane, the medium was not immediate enough to give her satisfactory feedback.

When I have a problem teaching, I want to talk about it now. So I search out one of my classmates who knows what I'm talking about and we talk now or we talk on the phone. Sending an email is one-sided and maybe they reply tonight and maybe they are going away for a week and they don't reply for ten days and it's gone.

The lack of intimacy in the correspondences was echoed in Eva and Brad's experiences. As Brad explained, "Our correspondences were pretty brief. It usually said, 'I'm enjoying this or that', but we didn't get into much depth so I couldn't really describe the person's personality and characteristics".

The only participant who developed a bond of trust with her email partner was Mary. The reasons for this trust stemmed from the fact that they were both from the same cultural background.

We emailed back and forth and I told her I think she must have checked my web page because she emailed back and said, "I'm from Taiwan too! Are there many Asian or Chinese in your group?"

"No, there's just me."

And she goes, "Wow!"

And I was like, "Wow! This is neat!"

I don't think she knew I was from Taiwan. It was really, really cool.

In the very public arena of the cohort web site there was no intimacy because of the nature of this site. It was a one-way conduit of information and anonymous viewers saw the work. As noted earlier, the student teachers' visual metaphors contained different levels of intimacy. This may be the result of different levels of participation from the student teachers. It may also be a consequence of the public spheres into which the assignments were posted. The savvier the pre-

service teacher was about computers, the less likely s/he was to present deeply personal beliefs in the metaphors.

Mary was not very familiar with computers at the beginning of the program. Mary's interactions with computers had been limited to word processing before she entered the teaching program. She did not mind the information being posted on the web. She considered it an efficient way for her friends to see what she was doing. She felt that she did not have as much time for social activities as she did before teacher education began. As she recalled, "It [web posting] didn't really bother me. In fact it was a way [the instructor] had suggested, 'Tell all your friends if they want to know what you're doing, tell them to go to the web site' ".

On the other hand, Rosemary and Eva were more concerned about the publicity. They did not realize just how personal their information seemed once it had been posted on the web site. Only after they thought about it and saw the site did they realize their level of public exposure. Rosemary, who was not very computer literate, felt embarrassed that she was so personal in her visual metaphors and that they would be posted publicly.

I was, actually, I was a little bit embarrassed. I wasn't embarrassed until we went down to the computer lab and checked out what [the technician] had done on the website. And I brought mine up and I read my little visual metaphor and I went, 'Oh Jesus, I'm a little bit embarrassed'. It sounds way too flowery, you know?

Although she felt vulnerable with such a public exposure, she was adamant that she would not change the visual metaphors because she felt they accurately expressed her beliefs as a beginning teacher and as an artist. I appreciate the courage it must have taken for Rosemary to firmly place her personal perspective in the public realm. Rosemary's emotional forthrightness is considered a valid stylistic approach to inquiry that is supported by some scholars. As a researcher, I can learn from Rosemary's example as I consider my personal style of conducting and presenting research. As Ellis & Bochner (2000) query,

Why should caring and empathy be secondary to controlling and knowing? Why must academics be conditioned to believe that a text is important only to the extent it moves beyond the merely personal? We need to question our assumptions, the metarules that govern the institutional workings of social science – arguments over feelings, theories over stories, abstractions over concrete events, sophisticated jargon over accessible prose (p. 746).

It was unclear whether or not Rosemary discussed her concerns about the public venue with her instructors. Because this incident occurred closer to the beginning of the program, Rosemary may not have yet felt secure enough to comment on her feelings.

Eva's visual metaphors, while personal in subject matter and media, were created with an awareness of her intended audience. The doubts that she had expressed in the interview were not overtly stated in her visual metaphors. As she explained:

When this [visual metaphor] first came up on the net, I think I was excited to see it. But then I was thinking, my goodness, so many people will, can read this now and what if I'd really gotten personal – Like really personal on this, you know? Would I want everyone to be able to read this?

She admitted that she was more intimate in the journals rather than the metaphors but that she was also censoring her entries because of the public element.

I knew that probably a lot of people wouldn't be going to this web site at the time, but there it was. It was open for everyone to read. And I also thought that with this journal. I mean, I wrote a lot of stuff in here that - I was aware of the fact that it was going to be looked at by other people. So you do tend to hide some stuff that perhaps you wouldn't in another journal. I mean, for me, I think a journal has always been - yeah, it's a way to get release and share and to - whatever, but it's also personal. So sometimes some of the stuff that I will want to put down in those books I won't because I'm aware that somebody else is going to read it... at the same time, with these images [visual metaphors] they are public so it's a little bit different than if I had a journal at home that nobody was going to look at, you know? You might be a little more personal.

Eva had worked in computer technology while doing her undergraduate degree and she was well acquainted with the medium. She was very conscious of how her personal information would be viewed. Consequently, Eva was somewhat guarded in her journal and her metaphors.

She maintained an emotional distance from her viewer. Tierney (2000) suggests, "Western epistemology was shaped by the belief that emotion needed to be cut out of the process of knowledge production. When we write vulnerably, we invite others to respond vulnerably" (pp. 548-549). To respond vulnerably suggests that by doing so we gain insight or sensitivity. However, like many of us, Eva may have equated good scholarly activity with a lack of emotion and may have been intimidated by the public exposure of the web site.

In the case of Jane, she only thought about the formatting of the image for the computer. She was not very concerned that the information would be posted in a public space. This may have been because she did not invest a lot of exploration into deeply personal beliefs in the assignments. This is evidenced by her reluctance to change the image in her visual metaphors. Therefore, she did not feel vulnerable because she had not exposed very personal parts of herself. She felt more confident expressing personal issues in her journal. Here she could control the public exposure to her instructors and to other people of her choosing.

The most computer literate participant was Brad. He prepared the visual metaphors so that they would look effective when viewed electronically. He likened them to advertisements promoting himself. Consequently, there was superficiality to the images. There is a sense that Brad hid as much as he revealed. In many of his collages, the cut fragments of faces lead the viewer to contemplate the missing parts. The fact that there is a hidden sensibility to his collages is understandable given that he was consciously trying to project a particular image. He was aware that his assignment would be a public representation of who he was and so he made the metaphors with this in mind. What he did not realize, however, was the fact that the very attempt to edit his images revealed more than he may have anticipated.

The aim of the visual metaphor assignment was to help pre-service teachers reach tacitly held beliefs about themselves. In order to do this they needed to delve into very personal issues. The inclusion of the metaphors on the web site thwarted this aim. The visual metaphors would have

been more successful if they had been limited to sharing within the art cohort. In this environment, student teachers may have felt encouraged to open up more readily. However, even within this cohort, the structure of the visual metaphors as an assignment meant that the participants were aware that their work would be judged in some way. This is inevitable because of the context of the teacher education courses.

Because this web site was also a new experience for the instructors, they were not very familiar with the ramifications of the public nature of the web when they included the metaphors assignments as part of the site. In retrospect, one instructor commented that she would not insist that the public forum be used for posting the students' visual metaphors in the future.

Visual Journals and Reflection

As the participants and I looked at the visual journals during the interviews, the student teachers became more animated than when the discussion centered on the metaphors. They were all very proud of their visual journals. Each participant expressed positive responses to the maintenance of a visual journal. They all indicated that they would continue to use them after they graduated. The visual journal was a way to combine subject matter knowledge, beliefs and pedagogical knowledge in a form that was conducive to personal reflection. Kowalchuk (1999) has noted the need for more coherence between art content and teaching methodologies. In a study of student art teachers' reflections about their beginning teaching, she concluded that students not only had concerns about pedagogical matters common to most student teachers, but they also had concerns about their content knowledge. Although they were competent in art, their knowledge and abilities in art were very important to them. Visual journals have the potential to address both of these areas: subject matter knowledge and pedagogical knowledge. The needs of the student teachers are better met with this visual form.

In this study, the ways that visual journals helped the participants learn and reflect varied. Eva was most explicit in her support of visual journals. She admitted that they opened up a whole new way of learning she had not anticipated.

I found that it [visual journal] was a great way for me to learn. I hadn't thought about learning visually...so in doing this I found, like I can go through now and I see an image and then I think, 'Oh, okay, I remember what we were doing'. And I remember what that's about. I think I remember things better and it was easy for me to express sometimes, as opposed to writing something to explain what I was feeling or thought about something.

She differentiated between this kind journal and her previous sketchbooks.

It was great because I hadn't done that before. As a journal, I should say. All my journals prior to this have been just sketches and maybe a couple of notes on a project if I was thinking about how I was going to create this project. That's what it was, but there was nothing else in there. And this [visual journal] is class notes, thoughts about class notes. This [journal] is images that I feel about things...I'm so glad we did this, this visual journal, because I go back to it so much. You're internalizing it [information] differently and you're understanding it in your own sort of terms. That was what was more fun!

Eva's comments are an illustration of the connection between art and the constructivist approach to learning. As Maitland-Gholson (1988) notes of constructivism, "The ultimate goal is synthesis of experience via individually developed strategies and judgment via personally derived values: art in the service of bettering the world through understanding the multiplicity of world views" (p. 49). Eva was able to reflect on her teaching through her art and she learned from this approach.

Similarly, Mary agreed that the journal was more than a sketchbook. She made the comparison this way.

I think when I was in the art school, I used my journal like a sketchbook and it was just images rather than text and reflection. And this [visual journal] is actually more suitable from the artist point of view [and] especially from a teacher's perspective of reflecting on what needs to be done. What my thoughts are and what my responses to things around me that influence me, the way I am or who I am [is expressed in my visual journal].

Mary used the visual journal to reflect on her beliefs about teaching as well as her art. In her reflective responses to various articles about pedagogy that were assigned by her instructors, she, like the others, often expressed a value-laden reaction to her reading. Mary showed her journal to her students during the practicum and received an encouraging response. She recollected, "They [the students] were like, 'Wow!' A couple of them went out and bought them [journals]". This sharing of her art with her students was a positive experience for her and for the pupils. They were inspired by Mary's example.

Brad echoed the others enthusiasm for the visual journals but considered them similar to his previous sketchbooks. He commented, "I mean, I've always kept a sketchbook in one form or another. It is just a matter of what it will look like". Brad's interpretation of the journal was in line with the way he worked in sketchbooks. He anticipated introducing it to senior students as a form of reflection. "I think it would be particularly valuable for the grade 11's and 12's".

In Jane's case, the visual journal allowed her to develop a new form of expression. She indicated her favorite journal based on this development. "This one because – I'd say this one only because this one brings out a new side of me here". In the journal that Jane selected as her favorite, she experimented and integrated the image and text more than she had done previously.

The visual journals were also used as a means of reflection during the interviews with the student teachers. In the case of Rosemary, Mary, Eva and Jane, the discussion of art in the journals prompted them to reveal very personal information about their characters. Eva described herself as a "*perfectionist*": Mary explained that she was "anal": Jane said that she was "very opinionated": and Rosemary was teary when we looked at her visual metaphors. All of the female participants allied their beliefs about their characters with their art; either in their explanations about their art making process or in their preferences. Brad was less inclined to describe his character through his art. Instead, he tended to express favoured ways of using

devices such as humour to express his beliefs. Conceivably, the issue of gender and/or shyness was a factor in this case. In his metaphors and in other places in his visual journals, the images were fragmented and tended to hide as much as they revealed.

In keeping with the intent of combining subject matter knowledge and pedagogical knowledge in the visual journals, all of the students used their journals to reflect about their teaching concerns and experiences in their practica using combinations of text and images. In similar studies by Stout (1993) and Henry (1999), student teachers who kept written journals also expressed concerns about beginning teacher issues such as motivation, relationships with supervising teachers, and planning. In my research, Brad, Jane, Rosemary and Mary reflected on issues surrounding authority. Brad used humour in the form of cartoons to work through his ambiguous feelings about being in the authority figure. Jane became very angry in the elementary class experience when the students did not respect her as a figure of authority. Consequently, she was very forceful in her collage work about that experience. Rosemary was trying to adapt her behavior as she moved from the student to teacher role. Although Mary had a very successful experience during her practicum, she too wondered about her ability to be effective in the role as leader.

Rosemary, Jane and Mary noted conflicts with their associate teachers. Rosemary and Mary recognized that they did not believe in as strict a teaching approach as their sponsor teachers. On the other hand, Jane found one of her sponsor teachers too lenient, especially in the level of noise she would allow in the classroom. Also, Jane assigned her students essays to write and was disappointed that her sponsor teachers did not support this move.

Jane and Rosemary commented on difficulties over evaluation. During their practicum, both student teachers marked the pupils' work too high. Jane had many examples of her pupils' art in her visual journal. She referred to it often during our discussion and spoke about it with

enthusiasm and pride. This was similar to the perspectives of the other participants who also included pages that showed their admiration for the art that the high school students produced.

Eva, Jane and Mary reflected on their nervousness and difficulties they had following their written lesson plans. All of them found that they would begin and then lose where they were in the lesson when they began to teach. This is a common problem for beginning teachers and soon the student teachers learned to clarify their presentations.

The problems that the pre-service teachers were thinking about and experiencing are not uncommon for student and beginning teachers. In the relative privacy of the visual journals, however, the participants were afforded the opportunity to fully express themselves regarding their beliefs about relevant issues. This may have created a freer environment than the student teachers would have otherwise had. In Jane's case, for example, her negative comments about elementary school that she collaged in her journal would not have been expressed in a form other than visual. In Jane's words, "I couldn't find a way to say it so I did this [collages]...You couldn't say this without getting arrested, Right? So I put it in here [visual journal]". Jane felt that the journal was a relatively safe place to express her beliefs.

There was a variety of creative expression in the pages of all of the student teachers' journals. During the interviews, the student teachers used these pages as departure points from which they discussed issues that concerned them about teaching. They frequently returned to the images for emphasis as they spoke, using various pages to explain their points of view. Bresler (1993) has concluded that, "the focus [afforded by the maintenance of a journal] on the interaction of experience, reflection and theorizing enhance professional growth as well as the knowledge-base in the field of arts education research" (p. 37). Clearly, the student teachers valued the journals and were using them as a way of explaining their beliefs about what they had experienced in their practica as they gained professional experience.

Visual Metaphors, Visual Journals and Creating Art

There was a consistent theme in all five participants' comments with relation to their art practices. All of them mentioned that they were not making art during their teacher education courses and that this caused them anxiety or disappointment. Brad's reason for his abstinence was a hand injury and a lack of time. Mary, Rosemary, Jane and Eva also believed that they did not have enough time to do their art. None of the participants was considering the art that they had made in their visual journals or in their studio elective courses as a significant part of their artistic practice. They had a different concept of what it meant to make art.

I was curious about the pre-service teachers' reluctance to include their visual journals and studio elective courses as part of their art practice. Perhaps they kept this distinction because they were equating their art practice with recreational free time or with particular works of art. The student teachers were very busy with assignments and practica throughout the entire education program. Undoubtedly, this restricted their free time and they had to adjust to their new routines. Therefore, the comments that the participants made during our interviews may have been a reaction to this.

Another possible reason why they made this distinction between the art in their courses and the art they made outside of the university was because they were constrained by the institutional context. Regardless of the freedom of expression afforded them in their courses, evaluation of their work by their instructors was influential. When they used the phrase 'making art', the participants may have meant making art as an artist, separate from the context of the university and from the role of student art teacher.

Although most of the student teachers differentiated their art practice from their course assignments, they were still very positive about the visual journals and visual metaphors. Also, the styles of making art in their visual journals and visual metaphors varied in different degrees from the artistic styles with which the participants began the teacher education program.

In the case of Brad, his self-portrait that he painted in his journal was similar to his usual artistic style. Although he chose collage over painting for most of the work in the journals, a comparison between his painting and his collage reveal similarities of style. There were bold colours, fragments, and images of the eye in both works.

Rosemary had deemed not to create her visual metaphors using the female form, although it was often the subject of her art practice. She was intimidated by the presentation of the nude form in this educational context but she did include them in other parts of her visual journal. In addition, her style of drawing line and her medium of pen and ink were very consistent with her artistic style.

Most of the work that Mary and Jane did in their visual journals differed from their artistic styles. Mary, in particular, did not make art the same way. This was, in part, because it was not practical to use her usual medium of oil paint in her journal. She described her usual style of painting as similar to the Impressionist style. However, the work in her visual journals and her visual metaphors was based upon collage. For Jane, the time involved in doing her usual pen and ink drawings prohibited her from doing many of them in her journals. Collage was the medium of choice for Jane and it was a relatively quick form of self-expression. Eventually, collage became an inventive form for Jane as she freely expressed her emotions in bold text, bright colours and gestural drawing. Had she remained with her usual style of black and white ink drawing, she may not have experimented to the same degree. Jane valued her experimentation highly and was proud of her new artistic style.

All of the participants in this study valued and acknowledged the importance of artistic forms of expression. They felt that their teacher education experiences were enhanced because of their visual reflections. They were able to delve more deeply into tacitly held beliefs and some participants acknowledged changes in their beliefs by using their art as a departure point for discussion. The participants anticipated using the visual journals as they began their careers.

CHAPTER 6: SUMMARY/ IMPLICATIONS

Introduction

I began this research because of my interest in the use of visual metaphors and visual journals as a form of student teacher reflection into beliefs. The relationships among student teacher beliefs, visual metaphors and visual journals, and the nature of text and image constructions are central to this concluding discussion. Implications of these findings for art teacher education, teacher education in general, and for research are included in this section.

Relationships between Visual Metaphors and Visual Journals

The visual metaphors and the visual journals had different but complementary functions in this art education program. The visual metaphors represented three distinct points in the program whereas the visual journals represented a continuum throughout the year. This combination of visual metaphor and visual journal was worthwhile in helping art student teachers reflect on their beliefs about teaching. To provide one visual form without the other might result in a less effective form of reflection for the student teachers because some students reflected on their beliefs in one visual form better than the other, or differently in one form than the other. This brings to light the differences in the ways the visual metaphors and the visual journals helped the student teachers to reflect.

Firstly, the nature of the visual metaphor has both positive and negative consequences. The very effectiveness of the visual metaphor is also a weakness inherent in it. The pre-service teachers often gained insight because the creation a visual metaphor meant that they focussed very deeply on their views about teaching. The written text reinforced this focus. In order to create relevant visual metaphors, the pre-service teachers were required to think carefully about their understanding of teaching and to select images and text that best represented this reflection.

For the most part, their efforts resulted in thoughtful and personal expressions of their beliefs. Consequently, tacitly held beliefs were sometimes revealed. However, as Dickmeyer (1989) has noted, this very focus can be limiting because the metaphor often highlights only one aspect of a phenomenon, in this case, only some of the participants' beliefs. Therefore, other beliefs or clusters of beliefs are sometimes left unnoticed or de-emphasized.¹⁰

Secondly, the fact that the visual metaphors were assignments given out to be completed at three set times during the program meant that at other times during the year the pre-service teachers' experiences may not have been recorded as thoughtfully. While the visual journals provided a place where continual reflection could occur throughout the program, the student teachers often did not focus as succinctly on their beliefs here as they did in the visual metaphors. Frequently, the journal pages held comments about incidents or course work in distinct styles, depending upon the nature of the learner. The visual journal showed details of daily activity. It gave an overall picture of the student teachers' experiences in the program. The reflections in the journals tended to be shorter than those in the visual metaphors, and usually not as deeply investigated and/or as personal. This difference resulted in two different kinds of reflection made by the student teachers. The visual journal was the place where the pre-service teachers freely drew, collaged and wrote about experiences both major and minor in importance. It was very effective at revealing the nature of the student teacher. Some participants, like Brad and Rosemary, seemed to learn more visually and this was reflected in their journals. Mary

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The paradox of a metaphor is that it both frees and limits. Its specificity can blind one to other areas. The cards do this for me. The hard work and hours of study, planning and execution as an artist/researcher/teacher are missing from this act of shuffling. To play cards suggests an ease and lightness that belittles this aspect of hard work and of stress resulting from the uncertainty that is present in the creative process. By using the metaphor of "shuffling" this consideration may be lost.

showed a preference for a neat and orderly book while Jane, Mary and Eva used prose more often than images, but when they were incorporated, the images often were related to important moments of understanding.

Art as a Form of Reflection

As a learning tool, the visual metaphors and the visual journals were only as effective as the level of discussion that ensued from them. In other words, if there was not enough emphasis placed on the analysis and discussion of the images, either in the metaphors or the journals, then the opportunity to reflect and share discussion about beliefs was diminished. Jane's confusion over the relationship of her visual metaphors to a constructivist approach to learning, for example, was one area where more discussion may have helped her to see this connection.¹¹ In a busy education program, adequate time reserved for discussion is a concern because thoughtful analysis requires a number of one to one interviews so that trust can develop. Also, discussions and analyses require that someone who has a substantial background in teaching and in art give the student teachers feedback, so that tacitly held beliefs are part of the subsequent understanding. While peer discussions are effective on one level, the instructor is the person who is most qualified to facilitate inquiries into student teachers' beliefs because of her/his greater

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My immediate response to Jane's visual metaphor of sponges in a garden was consternation. Here is my bias in favour of a constructivist approach. I question how this bias colours my interpretation of the information. Only a fraction of Jane has been presented in this data.

experience. This requires a number of instructor/student interviews throughout the year to take full advantage of the rich sources of information embedded in the visual metaphors and visual journals.

Interplay of Meaning Between Text and Image¹²

The combination of text and image in the participants' visual metaphors and visual journals supported many levels of meaning. There were moments of playfulness in the participants' work that moved beyond a straightforward written explanation or title of an image. Sometimes, the juxtaposition of text with image opened up a space for further reflection because of the meanings that ensued from it.

For example, in Brad's journal entry about classroom management, the trailing sentence, "Classroom management, predict and prevent early, before..." juxtaposed to the lion and lion tamer image leaves the reader/viewer wondering about the next sentence. By leaving us with the trailing sentence, we are left to ask the question, "before what?" Furthermore, when viewed beside Brad's serious comments about his strategy for classroom management, the play between the action in the image and the dignified explanation leaves the viewer questioning how Brad balances these opposing sensibilities. We are invited to consider other meanings associated with the combination of text and image. For example, the opposite approaches conveyed by the arrangement could refer to a dissonance between theory and practice with regard to classroom management.

¹² *The relationship of the reader/viewer to my work is an ever-changing phenomenon. In an earlier art piece I printed instructions on an overhead transparency about how to interact with the art. As viewers studied this art in the gallery, they often squinted and picked up the transparency in an effort to read it, separate from the surface of the desk that was marked and engraved with graffiti. Why make the instructions so hard to read if they are intended to give the viewer instructions? In my anticipation of the lesson or the exhibition, I sometimes forget that the authority to create meaning lies with the audience. I cannot dictate how the art, or the learning will be received. Directions are useless. Thus, the instructions are lost in the surface of the graffiti.*

Similarly, the very traditional still life painting of oranges done by Eva as a representation of her activity of eating oranges like eating information is another such moment that opens room for further understanding. There is irony in the fact that such a visceral, messy activity has been represented by a style of painting that falls under the still life category; frozen in time, inactive and stationary. This ironic connection leads the reader/viewer to consider unspoken motives in Eva's selection of media and metaphor. Was she concerned with creating a traditional painting that revealed her talents while she investigated her beliefs about teaching? If so, were there enough opportunities in the program for her to present her talents? What insights might be gained by comparing the idea of eating oranges with a representation using the still life genre? There are a number of possible inquiries that could help Eva to probe deeper into her belief structures, given adequate discussion and analysis.

In a third example of levels of meaning uncovered by the interplay of text and image, the association of the army as a garden from Jane's metaphors is incongruous with Western cultural norms about the army. Generally, ideas of command, power and force are connected to aspects of the army, but in Jane's association, the opposite feeling is presented by using the garden. Jane did not consciously make this ironic juxtaposition. She was associating the organization and neatness of her way of working on the computer-generated image with the order she found in the army. Nevertheless, the unusual interpretation of the army as a garden opens a number of considerations for the reader/viewer and for Jane.

There are many other moments that open a space for multiple interpretations within the participants' work. The unique aspect of this combination of image and text is that many levels of meaning can be conveyed with few words and images. This quality is playful, is revealing and is an excellent entry point for discussions into student teacher beliefs. It also emphasizes the postmodern notion that meaning is reliant on context, and is never predetermined. This way of considering combinations of text and images is important to introduce in an art teacher education

program because the student teachers will be involved in this kind of inquiry into images and text as they work with art in their careers.

Summary

I would conclude that, in an art education program, this combination of visual metaphor and visual journal is worthwhile in helping art student teachers reflect on their beliefs about teaching. The inclusion of a visual means of expression in this art teacher education program held promise for the promotion of student teacher reflectivity. Some of the participants were quite emphatic that their artistic work helped them to reflect on tacitly held beliefs. For example, when I asked Jane if she thought that making her work visually helped her to understand unstated beliefs, she commented, "I would not have believed it until this [indicating her journal]". Clearly she valued the exercise and learned a new method of expressing herself.

Mary was also enthusiastic about the artistic nature of the metaphors and journals. She agreed that for her, the artistic work helped her to see some beliefs that she had not thought about in the context of teaching. She was able to analyze her beliefs about the role of the teacher in light of her courses and practicum. Her decision not to enter teaching right after teacher education was one response to this personal inquiry.

Eva was very dedicated about the reflection she did concerning her classes and her practicum. Every day after teaching, during her practicum, she wrote and drew about her experiences. This was an effective way for her to make sense of her day of teaching. In this way, she gained a greater understanding of her beliefs in relation to teaching.

Rosemary and Brad were the most visual of the participants. It became noticeable to me as I leafed through their books that they had come to the program with a preference for a visual way of thinking about and reflecting on their personal beliefs. This was indicated by the way that they constructed their journals. They usually incorporated concepts from their courses into images as

they reflected about teaching issues. Rosemary mainly did this with drawing and Brad did it with collage. Therefore, the visual metaphors and visual journals were suitable methods for them to use to investigate their beliefs about teaching. All of the participants benefited from their artistic responses to events they experienced during their teacher education program. The way that the participants expressed personal aspects of their characters when they discussed their art is an indication of the very powerful relationship between their art and their personalities. These results reinforce the scholarly inquiry into the use of visual reflection that has been suggested by a number of researchers (Grauer, 1998; Barone & Eisner, 1997; Cole & Knowles, 2000).

The participants highly valued this method of learning. All five of the student teachers enjoyed the visual aspect of the books. They were very proud of their visual journals. Three of the five participants shared, or indicated that they would share the concept with their pupils. All five participants mentioned that they would continue to make visual journals after their teacher education program had ended. In recent conversations with three of the participants, they all mentioned that they had continued to make visual journals. This was almost two years after I had interviewed them. As before, the participants were eager to share the journals with me. The fact that there was such a good response from the pre-service teachers indicates that visual journals were a worthwhile learning strategy.

Implications for Research

The possibilities for using an arts-based methodology combined with a case study have potential for further research in the field of art education. The act of creating art by using data from the participants, in combination with my own experiences, allowed me a deeper connection and understanding of their perspectives. By creating and shuffling the collaged cards that incorporated words and images from the participants and from me, I used art as a filter through which I made sense of the data. Consequently, I found that my study was more emotionally and

intellectually rewarding. I was creating a visual metaphor using image and text. In this way, my activities were similar to the experiences of the participants. Also, by combining images and text about the study, I leave the reader with possible points in the work where they might perceive other levels of meaning. As always, the reading is open to interpretation.¹³

If there is a methodology that allows the researcher to more fully understand the data of the inquiry, and to be able to collect data and present research findings in unique and personal ways, then it is valuable to education. To continue to keep education, in the classroom and in the university, current and connected to the lives of the students is a goal that we, as educators, must always keep in the forefront. Further investigation into the possible applications of images and/or art, and other non-traditional forms of research can be a vehicle for the continual rejuvenation of educational research.

Implications for Art Teacher Education and Teacher Education Programs

The participants in this study demonstrated the personal nature of their reflections about teaching. The results of my study highlight the nature of tacitly held beliefs and changing beliefs. The research points to the use of visual metaphors and visual journals as a form of reflection about one's teaching practice. The fact that the metaphors were done three times is an effective way to examine changes in beliefs. Because the student teachers learned so much in their teacher

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education program, multiple points of reflection, in conjunction with the continual entries in their visual journals, were effective in helping the student teachers see where they had modified or held on to their beliefs as their courses progressed. Comparisons between the visual metaphors and the visual journals also helped the student teachers see where and how they reflected upon their beliefs throughout the program.

I would recommend some changes, however, for this art teacher education program that may be applicable to other similar programs. It is clear from this study that the element of trust is a necessary aspect to consider so that the environment encourages reflection. This suggests that the visual metaphors and visual journals be kept relatively private. The inclusion of this personal information on a web site should be eliminated because this public venue hinders the student teachers' inclinations to delve into very personal information.

Also, if the teacher educators introduce a wide variety of media for the visual metaphors and visual journals, the pre-service teachers might gravitate towards ways of creating art that are true to the artistic styles they hold upon entering the program. This may be an important point for some individuals who identify strongly with their art. Consequently, the pre-service teachers may feel like they are creating art as they define it. Therefore, they may be able to acknowledge their beliefs easier because they are starting from personal places as artists. Finally, the use of visual metaphors and visual journals are most effective when there is considerable time spent in discussion with peers and with the instructor.

This use of visual reflection need not be limited to art teacher education. In teacher education in general, there is a need for a genuine personal reflection about beliefs concerning teaching (Clandinin & Connelly, 2000; Burnaford, Fischer & Hobson, 1996; Mitchell & Weber, 1999). The visual creation of a metaphor has potential as an alternative way of uncovering unspoken beliefs. Indeed, there have been calls by some teacher educators for an inclusion of visual reflection in teacher education (Cole & Knowles, 2000; Grauer, 1998). Therefore, although the

student teachers would not be trained in art, they might benefit from an opportunity to reflect on their beliefs in a visual manner, either with found images or art they make. I suggest that in a nonjudgmental environment, the possibilities for visual reflection into student teacher beliefs holds considerable promise.

The inclusion of a visual element in teacher education could have potential in a number of different ways for the different parties that are involved. For the art education pre-service teachers, the freedom of an alternative form of expression, the possibility of better understanding their beliefs about teaching, a chance to make art, and an enjoyable activity included in their teacher education make the addition of a visual component a good practice. For pre-service teachers in general, many of the same positive aspects apply. However, rather than a chance to make art, which is a familiar activity for the student teachers in art, the inclusion of visual metaphors and/or visual journals is perhaps an opportunity to try a new form of expression. In an accepting environment, this may enlighten the student teachers about new facets of themselves that they had not investigated.

For art teacher educators, the inclusion of visual forms of expression may be an opportunity for personal reflection as university professors and as artists. This hybrid research of case study and an artistic form of methodology is an example that may serve as a model.

Finally, and most significantly, the inclusion of visual metaphors and visual journals for pre-service teachers may affect their future pupils. If pupils are introduced to a visual form of inquiry, they may enjoy aspects of their learning more fully. Consequently, they may develop and maintain positive attitudes toward their education. The students may construct their worlds with a creative, visual component that enlightens them to new possibilities.

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APPENDIX A

Guideline Questions for the Semi-Structured Interview

The interview was aimed at obtaining information from the participants about their beliefs concerning their teaching. These questions served as a guide for prompting further questions that developed during the discussions. In addition, the visual metaphors and visual journals prompted further deliberations.

- Before you came to teaching, what helped you decide to enter the teaching profession?
- As a teacher, what do you believe is important in your classroom for you and your students to be successful?
- What has surprised you about your experiences in teacher education?
- Would you describe yourself as an artist?
- What kind of art do you do?
- Did you make art during your teacher education?
- Do you think that keeping a journal was useful? In what way(s)?
- How often did you use your journal? What was your typical pattern?
- Looking at your journal now, what parts are particularly important to you? Why?
- How would you describe your process of working on your visual journal?
- Will you continue to use a visual journal after you graduate?
- Do you remember how the visual metaphor assignment was described to you?
- Can you describe how you selected the images that make up your first visual metaphor?
- Did this activity of making a visual metaphor come easily to you?
- Did you enjoy this assignment (visual metaphors)?
- Was the visual metaphor assignment useful for you?
- What was your practicum experience like?

- Did you think about your metaphors while you were teaching?
- Did you work in your journal during your practicum?
- Did the fact that the visual metaphors would be posted on your web site affect your selection of images in any way?
- Do you think it was a worthwhile activity to post your metaphors on the web site?
- Did you know very much about computers before you entered the program in September?
- How did you use computers this year?
- Did you receive many comments about your visual metaphors from other students?
- Do you think the web partner was a worthwhile activity?
- How did you select a partner for the online discussions?
- What kinds of topics did you discuss online?
- Do you think you will continue communicating with your partner after you graduate and begin teaching?