Running Head: Studying a Creative Teacher

Teaching Outside of the Box: Studying a Creative Teacher

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This has been an extraordinary journey for me. I have experienced both despair and illumination. I feel I have aged both cognitively and emotionally, not to mention physically. I know more, yet am aware of how much I don't know. I must first therefore, acknowledge myself for persevering and possessing somewhere deep down inside, the belief and hope that I would complete this segment of my journey.

Fortunately, I have not operated in complete isolation during this process. I have received support from many and proudly consider them very special people in my life. To begin, Grace and her husband have provided me with inspiration, kindness, friendship, understanding, feedback and affirmation. They have provided food for my soul and passion for my goals. I would also like to acknowledge the student participants in Grace's class who offered their time and insight into the process of creative teaching.

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and goals, my brothers have been supportive and propitious in my personality development and striving spirit.

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To all of these people and the many friends and students I have worked with who keep me enchanted with life, I offer my eternal gratitude.

DEDICATION

I dedicate this dissertation to those who have experienced disenfranchisement.

Individuals of poverty, poor mental or physical health, learning difficulties, minority

culture, religion, philosophical or political beliefs, gender, sexual orientation, the aged,

and those considered by society to be physically unattractive all experience varying

degrees of disenfranchisement. The disenfranchised battle self-doubts, struggle against

cynicism, and often persevere in the midst of prejudice. These are my heroes, the resilient

ones. They continually remind me of the depth and importance of contributing to the

betterment of society through education.

The following message Grace discovered when she was in the middle of an

overwhelming, challenging, difficult and painful school situation. It was her astrological

reading for that day and Grace passed it on to her students, laughing.

The more you are challenged, the more you respond.

The more you respond, the more you achieve.

The more you achieve, the happier you feel.

So don't get annoyed today just because you find the going tough.

Negative situations are designed to bring out the positive side of your nature.

ABSTRACT

The following is a qualitative portrait of a creative teacher and her teaching process. It

has been written as chronological narrative using an evolving systems approach as a

methodology for an instrumental case-study design. The creative teacher is a 47-year-old

female with over 20 years experience with elementary, secondary, college, and university

students. Five interviews were conducted with the teacher before, during, and following

the course. Data sets include classroom observations revealed in field notes, documents

such as course materials and audiotaped interviews. Two interviews were conducted with

six students at the beginning and end of the course. One interview was conducted with

the teacher's husband at the end of the course. The research context was an

undergraduate university classroom of 146 preservice teachers studying how to plan

curriculum and instruction for diverse learners. All interviews were audiotaped and

transcribed verbatim. The overarching themes represented constructs involving intense

and thorough course preparation, teacher-student connections, and reflective teaching.

Overlapping subthemes guiding the process of creative teaching emerged including

constraints placed on preparation and reflective teaching, an awareness of self and

students within the process of preparation and connection, feedback from colleagues and

students guiding the connection and reflective teaching, and the values and goals formed

from personal history and philosophy of life shaping all three major themes. The

teacher's personality acted as a conduit for expressing her creativity in the classroom. Her

creative process was directed by her personality to choose the materials and methods of

developing curriculum and instruction, and to guide her in her reflective teaching. This

revelatory case example of creative teaching possesses characteristics resembling studies

of creative giants, however presents a model of the process of creative teaching that can

be inspiring to all educators.

RÉSUMÉ

Cette introduction est un compte rendu d'un enseignement créatif et de son professeur. La

narration a été écrite dans un style chronologique utilisant des approaches évolutives

comme méthodologie contribuant ainsi à l'étude de cas. Le professeur est une femme

agée de 47 ans et possédant 20 années d'éxpérience avec des étudiants de niveaux

élémentaire, secondaire, collégial et universitaire. Nous avons conduit cinq entrevues

avec le professeur durant, pedant et après le cours. Les données, déterminées en classe,

incluèrent toutes les observations relevées par des documents tel que le matériel du cours

ainsi que toutes les entrevues enregistrées sur audiocassettes. Deux entrevues prirent

place avec six étudiants au début et à la fin du cours. Une entrevue avec le conjoint du

professeur fut aussi conduite à la fin du cours. Le contexte de la recherche était une classe

universitaire de 146 professeurs-en-formation étudiant la planification d'un programme

scolaire destiné à plusieurs étudiants de différents niveaux d'apprentissage. Toutes les

entrevues ont été enregistrées sur magnétocassette et transcites mot-à-mot. Les

transcriptions ont été analysées par le professeur pour trouver les thèmes émergeants et

toutes les autres informations ont été utilisées comme source de triangulation. La ligne

directrice émergeant des différents thèmes a été utilisée pour construire un cours intense

et exaustif en tenant compte de la relation professeur-étudiant, afin de donner une

reflexion sur l'enseignement reçu. Ce qui est emergé du processus créatif d'

enseignement est le chevauchement de sous-thèmes annexés aux contraintes de la

préparation et de la réflexion du matériel d'éducation. Suite à ce processus, il est ressorti

de ces trois thèmes la collection des données émises par ses collègues et ses étudiants,

une connaissance approfondie de soi et aussi des étudiants; le tout en tenant compte des

valeurs et des buts issus de sa vie personnelle insi que la philosophie de vie qui ont permis la formation des trois thèmes majeurs. La personnalité du professeur agit comme ligne directrice quant à l'expression de sa créativité en classe et aussi por le choix du programme d'étude ainsi que du matériel et des méthodes de cours pour la guider dans la réflexion de son enseignement. Cet exemple particulier du processus d'enseignement créatif possède toutes les caractéristiques ressemblant à l'étude des maitres de la créations, mais à l'avantage de présenter un modèle du processus créatif qui peut être inspirant à tous les éducateurs.

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PROLOGUE

Imagine yourself in your grade three classroom, your grade ten classroom, your freshman semester of university, or your final seminar in graduate school. In any one of these classrooms you might have been fortunate enough to experience a creative teacher. Consequently, you might remember this person as energetic, supportive, knowledgeable, and somewhat eccentric. You might remember the classroom as brightly colored, cleverly designed, comfortable, and welcoming. You might remember the students in your classroom as cooperative, friendly, excited, and interested.

Conversely, your educational experience might evoke less pleasant memories. For example, you might remember your classrooms as having prosaic walls and institutional furniture. You might remember your classmates as competitive, nervous, angry, or disinterested. And you might remember the teacher as boring, mean, controlling, or you might not remember the teacher at all.

If you fall into the former category of students, the following account might seem oddly like déja vu. If you fall into the latter category of students, the following account might seem unreal. This inquiry and its message are vitally important precisely because of the large number of individuals associated with this latter category of student.

The following is the narrative of my experience studying a creative teacher. It is one possible account. It is what I know to be a plausible, credible story.

CHAPTER ONE

TEACHING OUTSIDE OF THE BOX:

STUDYING A CREATIVE TEACHER

> *Each second we live in a new and unique moment of the universe, a moment that never was before and will never be again. And what do we teach our children in school? We teach them that two and two make four, and that Paris is the capital of France.*
>
> *When will we also teach them what they are? We should say to each of them: Do you know what you are? You are a marvel. You are unique. In all of the world there is no other child exactly like you. In the millions of years that have passed there has never been another child like you. And look at your body – what a marvel it is! Your legs, your arms, your cunning fingers, the way you move! You may become a Shakespeare, a Michelangelo, or a Beethoven. You have the capacity for anything. Yes, you are a marvel. And when you grow up, can then you harm another who is, like you, a marvel? You must cherish one another. You must work–we all must work–to make this world worthy of its children.*
>
> *When shall we become accustomed to the fact that we are human beings? We are all leaves of a tree, and the tree is humanity. ~Pablo Casals*

An Advanced Organizer

The following represents my experience of a qualitative inquiry of a creative teacher through chronological narrative. This method of description affords the reader a clear perspective of the evolving person and process of creativity.

Each chapter begins with a quote selected from a list that the teacher in this study presented to her students as they studied how to teach diverse learners. These quotes were chosen by the teacher to embody the ethos of her quality teaching and instruction.

In chapter one, I discuss the purpose and conceptual context of this study. I begin with my personal experience and goals that stemmed from my belief of a perceived problem. I continue with existing theory and prior research, and conclude with thought experiments, or my reflective wondering. In chapter two, I describe the evolution of my

research questions, present the data organization and a description of the process of obtaining university ethical approval through the use of ethical standards, and conclude with my initial experience meeting the creative teacher for my study.

Chapter three is a description of the methodology for the study including the participants, the materials and instruments used, and the multiple settings of data collection. Included is a description of my experience conducting personal interviews and collecting field notes as a participant observer along with my initial experience with qualitative data management. I begin with the process of transcription and data organization. I continue with partial or initial coding and describe the ongoing process of data analyses. I close the chapter with a discussion of validity.

Chapter four presents an overview of the interviews with the creative teacher. This overview is intended to act as an advanced organizer for the reader in preparation for the overarching themes presented in chapter five. These overarching themes, or emergent categories, are supported with evidence from the interviews showing a complex creative process.

In chapter six, I include the voices of the students and teacher's husband that emerged from audiotaped interviews. This triangulation is necessary in order to search for alternative explanations of the data and for corroboration of my perception of the process. I also present my voice and perception of the data and close with a summary of perceptions of a creative teacher.

Chapter seven focuses on revisiting the literature on creativity research and connecting it to this inquiry. The literature is organized according to the particular facet of creativity being studied. The research provides a unifying message from this inquiry

for the reader to check for external validity and to acknowledge how research informs

practice.

In chapter eight, I reiterate how this creative teacher uses her personality as a

conductor of creativity. I close by discussing the implications of this case study for

educators and further research.

<u>Pictorial Advanced Organizer</u>

When studying qualitative methodology, I found the following figure especially

useful as a pictorial advanced organizer for planning this research design (Maxwell,

1996).
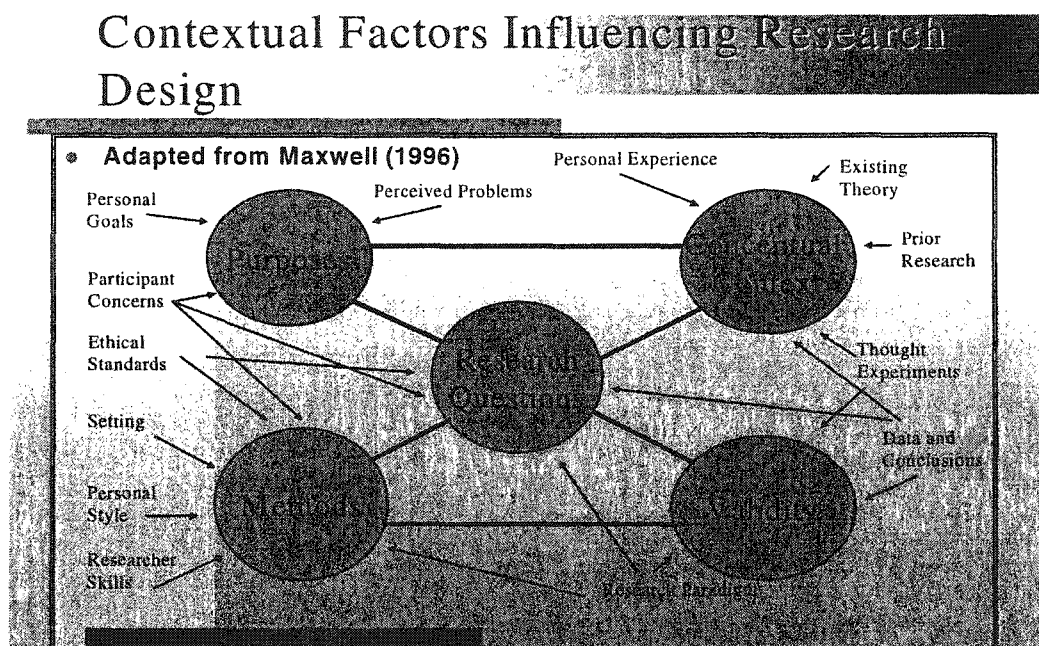
<u>Figure 1.</u> Contextual factors influencing a research design.

PROJECT PURPOSES

Why Study Creativity?

The study of creativity fascinates me. From my perspective, creativity is a concept that embodies hope for humanity. Creativity is a spark, an awareness, or change of perspective making space for difference and knowledge to emerge. Creativity involves adaptation.

As a child with chronic asthma, I struggled daily to adapt to an environment to which I was allergic. I remember many days where my thoughts, hopes, and dreams focused on how I could and would overcome asthma. As many as forty days per school year, I was confined to bed. To avoid focusing on taking my next breath, I would think of all the things I wanted to do when I got better. I read books, planned exciting vacations, designed luxurious homes, imagined friendships with people from all over the world, and recorded ideas through drawings on paper. This process shaped my early development. I reflected on possibilities; I imagined; I wondered.

As a boy growing up in suburban Oklahoma City, introspective behavior was synonymous with femininity. Boys were supposed to rough-and-tumble play in the grass. Attempts with this activity made me wheeze and have allergic reactions. Although my parents and brothers knew it was a medical condition, the dominant culture at the time considered asthma a nervous-mental difficulty. I felt shameful. I knew intuitively that asthma was something I could not change, but in my imagination I could change it. I could create a place where asthma did not matter, a place where I was healthy like my brothers.

Unfortunately, when I returned to school, I felt lost and overwhelmed with the classroom curriculum. I had gaps in my learning. I did not understand how to tell time, or "do" mathematics, or sit still in a desk chair in a row and be quiet. Instead of understanding that I had not had the instruction required to learn these concepts, I questioned why I didn't know the things my classmates did. I assumed I was supposed to have learned them on my own while sick at home. Try solving a division equation while holding your breath!

Regardless, my teachers must have felt overwhelmed about what to do with me, and therefore, did nothing. They often acted exasperated with me. I seemed to be wasting their time. I was behind. There were no tutors, no resource teachers. My teachers were accustomed to forcing children to sit in rows, nod their heads, do their work, and go home.

My affective behavior did not help. I was frustrated and lonely for children to talk to and play with. I was so glad to be breathing and at school that the schoolwork did not matter as much to me as connecting with other students. I usually received comments on report cards saying "talks too much in class," and "doesn't pay attention to instructions." I was probably considered to be a behavior problem. Fortunately for the teachers, because I spent so much time alone, other children did not really know me, and were apprehensive to communicate with me. Children left to their own devices will ostracize those seen as different.

Today it would be clear that both my teachers and I needed to adapt. We needed to experience what Michael White (1989) has referred to as *news of a difference*, or inspiration and education leading to change. Some plan, some changes made to the

regular educational system needed to take place for me to benefit from the educational environment I was required to participate in. These changes did not come from the environment. Because I was resilient, the changes came from within me. I kept telling myself that I could do the work, I could learn, all the while having extreme doubts.

Auspiciously, overcoming many of my childhood obstacles inspired me to study further and develop skills encouraging physical, emotional, and intellectual adaptation in myself and others. My own sense of inspiration and my childhood experience reflecting led me to research and teaching. Initially, I focused on difficulties associated with human behavior, such as learning, human development, and social exchange. In due time, my overarching interest materialized in the form of adaptation and creativity.

My education in applied developmental psychology and special education prepared me to frame learning and instruction differently. For example, taking the developmental needs of individual students into account will require creative teaching and instruction. In addition, my personal experiences teaching children and adults who experience learning, emotional, and behavioral difficulties have taught me to focus on the strengths of each individual and work collaboratively to increase those strengths. Ironically, I recognized a feeling of determination in these students as they discovered strategies to cope and adapt. I also recognized how a reflective teacher could be creative and adapt teaching to the betterment of students through involvement with professional teacher education. The culmination of these experiences inspired me to study the process of creative teaching and instruction.

I am not alone in my interests. Current educational reforms have mandated that teachers be prepared to instruct individuals who have a variety of individual differences,

and to promote the success of all students. These reforms highlight the importance of studying creativity, specifically creative teaching. Meeting policy demands, meeting the needs of the students, and enjoying – even flourishing as a teacher will necessitate creativity.

Educational reform: The Québec education program. The recent implementation of educational reform in Québec public schools focuses on improving the educational environment for all students (Ministère de l' Éducation, 2000). This is to be accomplished by focusing on essential learning, improving the cultural content of the programs of study, introducing more rigorous standards in schools, giving individual attention to students, preparing students for lifelong learning, and placing schools at the service of students. Once the desired educational environment has been established, the content of the curriculum can be enriched, fundamental learning and cross-curricular learning can be identified, and the organization of teaching can be improved.

The goal of the program is to prepare students, who are the citizens of tomorrow, to participate actively in the emergence of a fairer, more democratic and more egalitarian society. The mission of the program is to provide instruction with renewed conviction, to prepare students to live together in harmony, and to provide qualifications through a variety of options. Because the program focuses on the essential aspects of education, it is designed to include a cultural dimension and provide students with strong support and supervision. In addition, the program aims to ensure attention is given to individual students and their educational evolution. Attention to individual students and their educational evolution can be accomplished by adapting school organization to the needs

of the students and by providing information and communications technologies in the teaching and learning process.

The Québec Educational Program (QEP) employs a competency-based approach to learning. This involves a set of behaviors based on the mobilization and effective use of a set of resources. The pedagogical implications are that school learning will be viable and durable, high-level intellectual competencies will be fostered, content will be learned in terms of real and meaningful uses, integrated learning will occur, and students' individual learning styles and paces will be accomodated.

The QEP incorporates cognitivist and constructivist approaches, which view all learning as a personal construction that builds on the learner's cognitive and affective resources and is strongly influenced by the cultural environment and social interaction. Evaluation should reflect competencies and contents identified in the QEP and be learner centered, providing meaningful feedback.

The roles of students and teachers are focused on developing a high degree of self-awareness and autonomy in the learning process. The student must participate in the learning process, while the teacher mediates between student and knowledge. Teachers must reinforce, stimulate, encourage, support, and guide students through the learning process. The role of the parents is to monitor their children's progress and to help with individual work. The student's individual work allows them to consolidate their learning and apply what they learn in everyday life.

The QEP focuses on three major competency areas. First, subject-specific competencies include languages, mathematics, science, technology, social science, art, and personal development. Second, cross-curricular competencies include intellectual,

methodological, personal, and social communication. Third, areas of lifelong learning

involve the development of a world-view, health and well being, personal and career

planning, social relationships, environmental awareness, consumer rights and

responsibilities, media literacy, and citizenship and community life.

The success for all students together plan, according to the QEP requires a

preventative perspective. This means that teachers will need to be aware of student needs

in relationship to attention and concentration. For example, some students need to change

their position or activity to maintain their level of interest, attention or concentration.

Teachers can agree to shorter tasks, or alternate between manual and intellectual tasks.

To understand organization in space and time, teachers need to be aware that some

students have difficulty estimating time; they require signs or signals to help them realize

how much of the allotted time for an activity has elapsed and how much remains.

Teachers need to be aware of differences in the self-esteem of students. For example,

some students have social and family backgrounds that provide little connection with the

culture of the schools. In relating to both the students and their parents, it is important to

show respect and take into consideration their cultural and historical background in order

to help them come to terms with the culture of the school.

Teachers will also need to teach skills of socialization. For example, to develop a

social conscience, some students need to have a chance to associate actions with their

consequences. Staff meetings and cooperative committees can help teachers in this

regard. To assist with communication and verbalization, teachers need to understand that

some students require help in structuring their messages; they can be prompted with

keywords or questions, diagrams, frequently used expressions or a checklist. Concerning

motivation, teachers will need to be able to teach participation and persistence.

Motivation is strongly affected by students' emotional responses to what they perceive as

the causes of their success or failure. In order to be willing to take risks and make an

effort, they must feel that they can influence those causes and their own perceptions.

In addition, teachers will need to prepare students to reformulate information into

their own words, develop self-control, and transfer of learning skills. To make wise

choices, students need to recognize that it is in their interest to use effective strategies,

and that inappropriate strategies can cause problems.

To implement this program effectively, teachers definitely need to understand

how to integrate curriculum demands with student needs. This will take extreme

dedication, training, effort, and creativity. It is paramount that schools, teachers, parents,

and communities are dedicated to creatively preventing students from failing.

What is Creativity?

Is creativity the product of highly intelligent individuals or is everyone capable of

creativity? For those wanting to quantify creativity, decades of experimentation have

resulted in three conclusions. First, creativity is not the same as intelligence. An

individual may be far more creative than intelligent, or far more intelligent than creative.

Psychometric creativity is independent of psychometric intelligence once a threshold of

IQ of 120 has been reached. Second, creativity tests are reliable. Correlations in a

person's measured creativity score are robust across creativity tests. Third, although

creativity tests are reliable, it has not been demonstrated that creativity tests are valid

(Gardner, 1993a).

The history of research on creativity shows that during the first half of the last century few scientists were even interested in studying creativity. Nevertheless, during the past fifty years interest in creativity research has grown exponentially (Albert & Runco, 1999; Barron, 1969, 1999; Guilford, 1959, 1975; Gruber & Wallace, 1989, 1999; Mayer, 1999; Montuori & Purser, 1999; Runco, 1996; Sternberg & Lubart, 1999; Taylor, 1975a).

Out of this resurgence of interest in creativity research evolved a consensual definition of creativity as the development of "something unique" (Albert & Runco, 1999; Barron, 1969, 1999; Taylor, 1975a). Added to this definition were the conditions of whether or not the product had external value, whether the creative act was a result of purposeful behavior, and whether the creative act was a result of sustained duration (Csikszentmihalyi, 1996; Gardner, 1993a; Gruber & Wallace, 1989, 1999).

Where is Creativity?

Developmental and experiential accounts of creative artists and scientists document a diversity of fields and domains of creativity (Csikszentmihalyi, 1996; Gardner, 1993a; Gruber & Wallace, 1989). For example, Gardner's (1993a) developmental account of seven creative thinkers was an attempt to illuminate the intellectual capacities, personality characteristics, social arrangements, creative agendas, struggles, and accomplishments carried out by seven unique individuals. Each individual represented one form of intelligence within Gardner's model of multiple intelligences suggesting that creativity exists across domain. This point was extended through the work of Csikszentmihalyi (1996) and his staff after interviewing 91 famous people. These interviews included actors, writers, engineers, physicists, business people, and politicians.

Creativity was apparent across domains. However, a major theme that emerged from these interviews illuminated the concept of creativity being inextricably situated within the field of endeavor. For example, the creative process and person are filtered by the domain and by the field. Some domains have very broad fields, whereas some have narrow fields. The width of the field permits, or constrains creative expression. Further, some domains are proactive and invite or stimulate creativity, where reactive domains do not. A field can also encourage or restrict novelty depending on how well connected it is to the rest of the social system. Therefore, the shape and function of creative products and processes depend in part on the gatekeepers of the field and in part on how a particular society supports or rejects the creativity in question.

What are the Characteristics of a Creative Person?

Starko (1995) summarized research on the cognitive characteristics of a creative person as involving metaphoric thinking, flexibility and skill in decision making, independence in judgement, coping well with novelty, logical thinking skills, visualization, escaping entrenchment, problem-finding, and finding order in chaos. She listed personality characteristics as involving the willingness to take risks, perseverance, drive, commitment to task, curiosity, openness to experience, tolerance for ambiguity, broad interests, valuing originality, intuition and deep emotions, and being internally occupied.

Gardner (1993a) stated that what may distinguish creative individuals is their way of productively using the insights, feelings, and experiences of childhood. Further, he stated "the creative individual is a person who regularly solves problems, fashions

products, or defines new questions in a domain in a way that is initially considered novel

but that ultimately becomes accepted in a particular cultural setting" (p. 35).

What are the Characteristics of the Creative Process?

How might a creator over time, purposefully develop something unique with

external value? Characteristics of the creative process include preparation, incubation,

illumination, and verification (Wallas, 1926). This part of the process hinges on a

creator's imagination, inspiration, association, and problem solving (Taylor, 1975a). The

person's process then, hinges on the acceptance, or recognition by the field perhaps as

verification of novelty and importance (Csikszentmihalyi, 1996).

Taylor (1975a, 1975b) explained that to understand the perceptual and

motivational hypotheses underlying creative acts we must consider the person-creating-

in-the-environment, emphasizing the importance of the creator's disposition style and

goodness-of-fit with the domain and field. Therefore, new and unique products emerge

from the interaction of the organism and its environment, involving the dimensions of

level, field, and type (Csikszentmihalyi, 1996, 1999; Gardner, 1993a, 1993b; Taylor,

1975a, 1975b).

What Theoretical Perspectives Have Been Used to Study Creativity?

The varying perspectives studying creativity employ equally varying designs and

methodologies (Albert & Runco, 1999; Mayer, 1999; Sternberg & Lubart, 1999; Taylor,

1975a). For example, associationists consider creativity to result from the ability to think

about a variety of associations and recombine them into novel products. Through creative

associations, the number of ideas brought into contiguity account for individual

differences in the degree of creativity. This is a quantitative approach reminiscent of

classical conditioning. Associationism is one precursor to the cognitive approaches that now include analyses of retrieval, synthesis, transformation, analogical transfer, and categorical reduction of mental processes (Sternberg & Lubart, 1999).

Historically a proponent for an innate predisposition to be creative, the trait-factorial perspective correlates creativity with intelligence. Guilford's (1975) structure of intellect model includes traits related to creativity such as fluency, flexibility, originality, and elaboration. These factors are considered inherent in all persons, and therefore, focus is placed on quantifying creativity norms.

Freud's psychoanalytic view of creativity views creativity as the result of unconscious conflicts and drives and needs sublimated through the ego's effort into outcomes useful to both the creator and society. However, a Jungian perspective describes creativity as the artist's attempt to compensate for the inadequacy of the present (Anderson, 1959a).

Holistic researchers of a Gestaltist position consider creativity to be a process that takes shape through insight. As an individual focuses on a field, changes occur in the functional meaning, grouping, and organization of that field. Closure allows balance and harmony to be restored to the field, the self, and whole world (Anderson, 1959a; Taylor, 1975a).

Humanists promote the cultivation of creativity in all humans. For example, Maslow (1959) described a talent-type of creativity expressed by geniuses, and a self-actualized creativity not unlike that of the small child. Fromm (1959) described creativity as being an attitude that every human being should and can achieve. According to May (1959), creativity results from an encounter or interrelation with the world, a doing. To

Anderson (1959a), creativity culminates from personality development in cognition, social learning, optimum growth and propitious environment. And Rogers (1959) promoted creativity as a person's tendency to self-actualize and realize their potentialities. The urge to expand, extend, develop, and mature includes openness to experience, an internal locus of evaluation, and the ability to engage elements and concepts. This process is viewed to be contingent on the individual's psychological safety and psychological freedom.

Psychological safety relies on an individual feeling unconditional acceptance, empathetic understanding, and a climate free of external evaluation. Psychological freedom of symbolic expression involves openness, playfulness to think, feel, be oneself, the spontaneous juggling of percepts, concepts, meanings and is largely facilitated by teachers, parents, and therapists (Rogers, 1959) within the cultural context (Mead, 1959).

A more confluent approach (Sternberg & Lubart, 1999) hypothesizes that multiple components must converge for creativity to occur (Amabile, 1996; Barron, 1999; Csikszentmihalyi, 1996, 1999; Gardner, 1993a; Gruber & Wallace, 1999). Five important contexts of creativity research include the person, the problem, the process, the product, and the climate or press (Keller-Mathers & Murdock, 1999; Taylor, 1975b).

Still, much of the creativity research focuses on creative individuals who have achieved considerable acclaim (Barron, 1999; Csikszentmihalyi, 1990, 1996; Gardner, 1993a, 1993b; Gruber & Wallace, 1999). For example, Barron's (1999) holistic method of personality assessment features intensive interviews centered on the creation of specific works, as well as interviews as to one's personal history and one's philosophy of life of over 300 outstanding creative individuals. A common core of personality

characteristics appear consistently across fields: independence of judgment, a preference

for complexity, a strong desire to create, a deep motivation or drive, extensive personal

troubles, a strongly intuitive nature, and patience.

Csikszentmihalyi (1996) utilized a systemic model that includes the domain (e.g.,

fine art), the field (e.g., the individuals who decide what art deserves to be recognized),

and the individual person (e.g., one who uses the tools of a domain and is recognized by

the field). Csikszentmihalyi and his students videotaped 91 interviews with exceptional

individuals. These interviews illustrate what creative people are like, how the creative

process works, and what conditions encourage or hinder original ideas. Profiles emerging

out of this research suggest creative individuals possess somewhat contradictory

characteristics. For example, many exhibit a great deal of physical energy, but are often

quiet and at rest. They tend to be smart, yet naïve, playful, but disciplined, imaginative,

yet rooted in reality. They appear to be extroverted and introverted, humble and proud;

they possess both masculine and feminine character traits, are conservative and

rebellious, passionate, yet objective about their work and tend to experience great pain

and joy from their sensitivity and openness.

Csikszentmihalyi describes this phenomenon as complexity of personality. The

contradictory extremes represent qualities that are in all of us, but he believes we are

trained to develop only one pole of the dialectic. Creative people know both extremes and

experience both with equal intensity and without inner conflict, or perhaps learn to accept

both.

Csikszentmihalyi contended that it is the "flow state," or ability to maintain an

optimal experience that fosters creativity. Nine main elements emerge that describe this

enjoyable experience: (a) clear goals for every step of the way, (b) immediate feedback to one's actions, (c) a balance between challenges and skills, (d) action and awareness merge, (e) distractions are excluded from consciousness, (f) there is no worry of failure, (g) self-consciousness disappears, (h) the sense of time becomes distorted, and (i) the activity becomes autotelic, that is doing the activity for its own sake. He suggested that those who are prepared to privately defend and cultivate their own creativity, and thus learn to control inner experience will be able to determine the quality of their lives which is as close to happiness as any of us can come (Csikszentmihalyi, 1990; 1997).

Instead of focusing on multiple case studies or comparative case studies to amass similarities between creative individuals, Gruber and Wallace (1989, 1999, 2001) propose an evolving systems approach to the case study method of creativity research. This method not only views the creative individual as unique, but views developmental changes as multidirectional. Evolving systems involve interactive relationships among the internal elements of the system that are multicausal and reciprocal. Because the creative individual and the external milieu are inextricably part of the evolving system, developmental changes are unpredictable. This method involves detailed analytic and sometimes narrative descriptions of each case whereby effort is placed on understanding each case as a unique functioning system.

A case study methodology as outlined by Gruber and Wallace (1999) focuses on what the creative individual does when being creative and how available resources are deployed. Observations include the beginning, the middle, and the end of the creative process. The researcher notes whether the creative products are novel, have external

value, involve purposeful behavior, happen over a period of time, are difficult to do, and involve wild ideas that become familiar.

Usually the creative individual is isolated for periods of time, making this process difficult to observe. Yet, once a record has been established of the beginning, middle, and end of the creative process, the evolving system emerges.

One facet of this emerging system involves something the creator did, or said that contains properties that are similar and dissimilar to others. Another facet involves how a specific creative product compares to contemporaries working in the same area. Other important facets include a sequential record of the individual's thinking, beliefs, and thought modalities, a record of how these have evolved over time, and how each product is purposeful.

What is Everyday Creativity?

Creativity has also been defined as self-expression inherent in all, and predicated on the ability to access and express a unique personal and cultural perspective (Marks, 1989). This definition maintains that creativity has personal and cultural dimensions that help link creativity with self-esteem, cultural pride, and affective education. A major challenge for researchers would be to observe and record everyday creativity, or creativity that often goes unrecognized (Baer, 1997; Collins & Amabile, 1999; Gardner, 1988; Hickey, 1999; Kiely, 1998; Lasswell, 1959; Rejskind, 2000; Rejskind, McBride, & Halliday, in press; Starko, 1995).

For example, studying and promoting everyday creativity within the classroom often involves designing curriculum including adaptations of Guilford's divergent thinking strategies. Curriculum might also include de Bono's cues for effective thinking

and lateral thinking, use of metaphors and analogies, and visualization (Baer, 1997; Starko, 1995).

The study of creativity within the social context of classrooms initially suggested that students' creativity was contingent upon internal motivation whereas external motivation reduced creativity. However, follow-up studies suggested that if strategies were used to increase internal motivation, external motivation did not decrease creativity. Although students' creativity was found to suffer from the traditional teaching practices of evaluation, reward, competition, and lack of student choice, educational environments encouraging autonomy and self-directed learning could actually foster creativity (Amabile, 1996, 2001; Collins & Amabile, 1999).

Unfortunately, research studying everyday creativity in teachers is sparse. According to Bateson (1999), everyday creativity plays an essential role in education because learning and adaptation in adult life depend on discovery and new construction. Creative teachers help students to discover, and reconstruct by rediscovery making them capable of production and creativity and not simply repetition (Piaget, 1973). Creative teachers also stimulate their students' creativity by asking questions, rewarding students' creativity, teaching problem solving, and modeling their own creativity (Rejskind, 2000).

Taylor (1975b) argued for five levels of creativity: expressive, technical, inventive, innovative, and emergent. Rejskind (2000) suggested these levels could be used as a framework to explore daily teaching. Teachers render a good example of domestic, or everyday creativity. For example, teachers demonstrate expressive creativity when involving students in a successful lesson. Teachers demonstrate technical creativity when their students achieve surprisingly elevated test scores, and demonstrate inventive

creativity when they are exceptionally good at finding ways to interest students. Teachers could demonstrate both innovative and emergent creativity, and therefore modify the basic principles or schools of thought or bring a new paradigm to a field, but this is quite rare (Rejskind, 2000).

The observation of teachers in creative action provides evidence of personality characteristics similar to those of the creative giants: curiosity, originality, independence, risk taking, energetic, sense of humor, complexity seeking, artistic, open-minded, privacy seeking, intuitive. For example, using a multiple case-study design, Hickey (1999) observed seven creative teachers and gathered field notes and interviews documenting teachers' work habits and perceptions. The emergent themes highlight the teachers' high energy, motivation, and commitment to their careers. These teachers encouraged students' creative abilities such as individuality and independence, and provided safe climates wherein the students could take risks and push boundaries. Further, these teachers provided regular positive feedback, encouraged an environment of curiosity, modeled flexibility, and viewed fostering their own creativity as a precursor to fostering the creativity in their students.

These creative characteristics prove to be especially helpful to teachers who introduce the inquiry methods of research and discovery learning into their classrooms, who strive to improve their practice, and acquire new teaching strategies on their own initiative. For example, Rejskind (2000) conducted interviews with groups of inventive teachers-as-researchers in order to make the products of creative teachers more visible. Two major themes that emerged from these interviews were a focus on student learning and the need for educational change. Student learning was central. The teachers believed

that inquiry methods benefited student learning. Educational change was also seen as highly important, albeit difficult and requiring sustained motivation.

The portrait of teachers that emerged from these interviews is consistent with that of other creators, such as having a desire to create above all, possessing a love for invention, and pursuing novelty. The recognition of the need for educational change in response to societal change reflects the teachers' sensitivity to the environment and openness to experience. Teachers expressed that they had to learn to let students have more control over their learning and viewed this teacher-student relationship as partly responsible for improvements in student learning. Teachers emphasized learning to persevere against the barriers to change. For example, teachers recognized their own difficulties with the risk of opening themselves up for change. They expressed anxiety and fear over thoughts concerning how much time it would take to prepare. What if they made mistakes? Would they be viewed negatively by colleagues?

Studying teachers' lives through interviews and observations offers incredible insight into the process of creative teaching. Teachers are adult learners, and Goodson (1992) suggested that researchers be encouraged to retrieve and represent the voices of their participants by listening and sponsoring the unique individual and the collective voice.

What is this Study's Original Contribution to Knowledge?

The intent of this case study is to chronicle a creative teacher in a range of exploratory and contextual procedures and processes for her full life experience. Through multiple interviews and classroom observations, an evolving systems approach is used to keep an account of the process. Asking questions and observing in-class teaching should

reflect the culmination of a creative teacher's personal knowledge, emotional

management, and creative fulfillment. Therefore, the praxis of creative teaching is the

substance and process of how knowledge is held, formed, and how it can be understood.

The information gleaned from multiple interviews, participant observations, and course

materials will extend research that focuses on one-time retrospective interviews.

Observing a creative teacher during course preparation, incubation, illumination,

and verification within the classroom will advance scientific knowledge. Emphasis will

be placed on how a creative teacher designs, organizes, plans, conducts, and evaluates the

teaching experience. In addition, specific attention will focus on how a teacher's life

history influences her problem identification and method of instruction (Kiely, 1998;

Rejskind, 2000).

CHAPTER TWO

METHODOLOGICAL PREPARATION

"Observation -- of the very small, the highly energetic, and the very far away – is the only way to truth" ~Chet Raymo

What are the Research Questions?

My search through the professional literature on creativity, classrooms, and teachers revealed articles on fostering creativity in the classroom, but little research focused on the characteristics of a creative teacher. Therefore, my primary research goal has been to provide a comprehensive case study of a creative teacher.

Many of my initial research questions have evolved throughout the process of the study. For example, I was initially interested in how the creative works or products of a teacher and the process of creative teaching are similar to, and different from the creative works and processes of famous individuals. I specifically wanted to understand whether the process of everyday creativity would be different from studies of the process of famous creative people, such as Stravinsky. For example, would the characteristics of a creative teacher and the process of creative teaching be altogether different from the process of composing or conducting a symphony?

I was also initially interested in observing how the process of creative teaching evolved as a course progressed. For example, how might a creative teacher solve problems encountered during a course involving teaching diverse learners? How might a teacher's goals for such a course change during the year, or semester, and how might a teacher adapt to accomplish new goals?

As I became more immersed in the research process, I began to focus more on the personality of the teacher. I became fascinated with how a teacher's feelings, beliefs, intentions, and behaviors become transmitted into the culture of a classroom. I wondered how a teacher's life history and personal philosophy would translate into and contribute to teaching and instruction.

I talked with colleagues about my ideas. I knew I was interested in studying a creative teacher, but where would I find one and how would I assess whether or not he or she was creative? Serendipitously, my colleague Tina Newman, suggested that I meet Grace. Tina had previously worked with Grace teaching pre-service teachers to understand how to approach including and teaching students with special needs and was convinced she was a creative teacher.

The university course Tina and Grace taught is the sequel to a course about understanding exceptional children. Therefore, it focuses on teaching practical methods and strategies of instruction to include children with special needs and diverse learning styles within the classroom. It is often a difficult course to teach because these soon-to-be teachers fear they will not be able to manage classrooms with diverse learners. Consequently, after hearing about Grace's ease and talent teaching the content of this course and because I trusted my colleague's opinion, I quickly arranged to meet with Grace to discuss the possibility of studying her.

What is the Research Design?

The design for this study is informed by prior work in humanistic development and psychotherapy (Anderson, 1959; Rogers, 1959, 1961) and by case studies of highly acclaimed individuals (Barron, 1969, 1999; Csikszentmihalyi, 1990, 1996; Gardner,

1993a). The design applies an evolving systems approach to the case-study method

(Gruber & Wallace, 1989, 1999, 2001), and is influenced by literature on creative

teachers (Hickey, 1999; Rejskind, 2000) and the creative process (Keller-Mathers &

Murdock, 1999).

Further, although this study is a single-case design (Yin, 1994) with a holistic unit

of analysis, the process of creative teaching and instruction by one teacher, it is intended

to provide insight into and therefore can be classified as an instrumental case-study

design (Stake, 1998).

My intent has been to continually address the five following components of

design detailed in Maxwell (1996) throughout this inquiry: (a) the purposes, (b) the

conceptual context, (c) the research questions, (d) methods, and (e) validity (please refer

back to Figure 1). This process is housed within the evolving ecological systems that

surround this study of a creative teacher.

My goals are to conceptualize the object of study or creativity, and then select

phenomena, themes, or research questions to emphasize. Next, my goals are to seek

patterns of data to develop the issues, triangulate key observations and foundations for

interpretation, select alternative interpretations to pursue, and develop assertions or

generalizations about the case (Stake, 1994, 1998).

Who is the Creative Teacher?

At the time of this study, Grace was a 47 year-old female with 20 years

experience teaching in both private and public schools in primary, secondary, college,

and university settings in and around the Montréal area. Originally from Montréal, Grace

lived in Europe for seven years, returned, and has lived in Montréal since. She is married

with two grown children, a son and a daughter. In addition to teaching college and

university, she gives continuing education workshops for teachers, works as a freelance

editor for academic projects, reads avidly, and is an accomplished artist.

As previously stated, I originally believed Grace would be a suitable candidate for

this study because an individual with advanced training in educational psychology and

experience working with gifted individuals had nominated her. I decided to meet with

Grace and get to know her before making a final decision about her participation in my

inquiry. My decision would be informed by whether or not I recognized in her

characteristics reminiscent of creative individuals.

First Contact

On a summer Montréal morning in 1999, I met with Grace in her home. As she

saw me approach, she waved her arms from the upstairs balcony and welcomed me in.

Although we had never met, she said she recognized me.

I came upstairs and we exchanged greetings, she introduced me to her daughter,

then offered me some tea. We sat down and began talking generally about life, education,

art, relationships, and research. As we talked, I noticed the house was filled with

decorative objects, plants, colorful furniture, and paintings and drawings, some finished

works and some not. Grace spoke with me about her life as a teacher, about her family

and interests, and I told her about myself. For example, she mentioned she grew up in a

suburb of Montréal that reflected an Anglo-Saxon majority. Her father was a respected

businessman and her mother stayed home to care for Grace and her younger sister.

Time seemed to pass quickly. I did not have difficulty deciding to study Grace:

My intuition was that she was a creative teacher. My deductions were based on research

describing the characteristics of creative people (Barron, 1999; Csikszentmihalyi, 1996; Gardner, 1993a; Gruber & Wallace, 1989) and on the characteristics of creative teachers (Hickey, 1999; Rejskind, 2000). For example, Grace exhibited high levels of physical energy, she appeared to be of above average intelligence, had a playful sense of humor, and was passionate about her interests. In addition, she appeared curious, independent, complex, artistic and open-minded with a deep motivation or drive to teach and a strong intuitive nature. I found Grace to be genuine, kind, exciting, warm, clever, and sincerely engaging.

I felt a sense of immediacy, as if a wonderful opportunity might slip through my fingers. I asked Grace informally to participate in a case study of a creative teacher. I informed her we would need to receive ethical approval before we could continue. I proceeded to explain what the study would entail and if she felt it necessary to withdraw, she was free to do so at any time and for any reason without penalty. She responded to my proposal with surprise and excitement, saying she would be honored. We then established times to conduct initial interviews.

I'm embarrassed and taken aback. I do what every good teacher does, I work hard to connect with my students, to be with them and take them on a little bit of a ride with me and sometimes the ride is bigger than we think it's going to be. And Frank, I'm not sure what you mean by creative, but I suspect it will be really neat to create something with you somehow (First Contact. June, 1999).

My assessments of Grace as a creative teacher were confirmed. Following the course, Grace was one of nine instructors nominated during the Education Undergraduate Gala of 1999 for their Faculty Appreciation Award, which she subsequently won. This

award is based on nominations made by education undergraduate students and signifies

excellence and appreciation.

Ethical Approval

I knew I wanted to study creativity. I knew I wanted to study a creative teacher. I was

not, however, initially clear whether I wanted to focus my study on the person or the

process. My review of the research literature informed me about the systems surrounding

creativity. I seemed to gravitate toward theories and methodologies of studying creativity

involving an interactive perspective (Csikszentmihalyi, 1996; Dey, 1999; Gruber &

Wallace, 1989; Maxwell, 1996). With plenty of supervision, I decided to conduct a case-

study of a creative teacher focusing on understanding the characteristics of the person and

how her process of creative teaching evolves (see Appendix A).

Teacher Informed Consent

Before we began the interviews, I gave Grace a copy of the teacher informed

consent form (see Appendix B). We read it together. She laughed because she said it

seemed so formal and pedantic. She said she understood the conditions of the research,

signed the form and said, "I feel informed."

Teacher Interviews

I found much of the research concerning interviewing techniques helpful (Fontana

& Frey, 1998). I wanted to ensure I could put the interviewee at ease and ask clear open-

ended questions. Feedback from colleagues working with advanced qualitative methods

helped me to improve my technique. In addition, I was able to apply my prior teaching

experience and clinical work with individuals with special needs to develop the necessary

rapport for an interview to be successful. Fortunately, I simply enjoy getting to know

people and became aware that my skills as an interviewer improved throughout this project.

Idiographic Self-Perception Imaging (I←Spi). In order to learn about Grace's familial relationships and life experiences, I chose to have Grace complete the Idiographic Self-Perception Imaging or I←Spi (Knight, Doan, & Hamlin, 1994). I←Spi is a computerized psychometric instrument developed and field-tested at the University of Central Oklahoma.

I chose to use I←Spi because it is a computerized version of factor analysis that is user-friendly, fun, and easy to program. The most intriguing aspect of this program is how a participant narrates meaning to correlations resulting from the conditions presented to the program. For this case, I specifically wanted Grace to narrate her family history and her philosophy of life. I could have simply asked her to tell me a story about her family history, or tell me about her philosophy of life. However, this program breaks the information down, separates it out by condition of instruction, and then recombines it in such a way as to usually surprise and enlighten the participant about aspects of their life. As the participants go over each correlation or "island of meaning," they often learn new things about themselves, or perceive them in a new way.

If I were interested in interviewing a large number of participants about a select number of issues, or if I were interested in receiving a minimum of information in a brief period of time, I might use a standardized questionnaire. Criticisms of I←Spi might be that the program takes too long to complete if you have a large number of conditions of instruction, and is time consuming if the researcher is interested in multiple participants. But because I am interested in one person and her perceptions, the amount of information

available from this imaging technique is worth the time. For the purposes of this study,

the I←Spi is a better tool to use.

I←Spi is grounded in Q-methodology using a Q-sort technique developed by

William Stephenson in 1953, and given specific emphasis by Carl Rogers. Rogers

suggested that measuring the degree of congruence between an individual's perception of

self, and ideal or preferred self would, provide relevant information concerning

adjustment (Knight & Doan, 1994).

A Q-sort is a forced choice procedure that asks an individual to sort adjectives

describing perceptions of oneself, others, or constructs. Stephenson labeled these types of

sorts as conditions of instruction. Carl Rogers used two primary conditions of instruction:

self and ideal or preferred-self (Knight & Doan, 1994). Correlations emerge between

conditions of instruction resulting from assigning ranks from similar to dissimilar to each

of the adjectives for each condition of instruction.

To begin, Grace met me in an office of McGill's Education building to complete

her I←Spi. We sat down together and initialized the program. The computer program

provides an individual with 15 randomly selected adjectives or allows the participant to

construct a list. The participant uses the adjectives to describe the condition of

instruction. Not surprisingly, Grace decided to compile her own adjectives and we co-

constructed her conditions of instruction. She chose the adjectives: kind, decisive,

scolding, patient, obedient, perfectionistic, unethical, cowardly, complaining, forgiving,

truthful, purposeful, comical, responsible, strong-minded, cooperative, helpless, and

perceptive. I asked Grace why she chose these adjectives over the randomly generated

lists. She responded that some of the lists were almost worth choosing, but she preferred

her selection.

For the conditions of instruction we chose: Grace presently, Grace at age 30,

Grace at age 20, Grace at age 8, Ideal Grace, Grace's husband, daughter, son, mother,

father, Grace's ideal partner, her favorite teacher, an ideal teacher, an ideal colleague, an

ideal student, trust, passion, future, creativity, and nemesis. These conditions were chosen

to obtain a profile of Grace's perception of her developmental history, and familial

relationships along with how creative constructs correlated with the chosen individuals.

The first screen of the program I←Spi asks the participant to choose the adjective

most like the condition of instruction, for example, passion. Next, the participant is

prompted to select the adjective least like the condition of instruction. This process is

repeated by prompts to select two adjectives most like the condition, then least like the

condition. Next, prompts instruct participants to select three adjectives most and least like

the condition, respectively. The program attaches weights to the adjectives corresponding

to the order of selection within each iteration and for each condition of instruction. For

Grace, I←Spi took approximately two hours to complete.

Grace's I←Spi produced 19 interesting correlations for Grace to provide a

narrative of meaning. We met at Grace's home to discuss these correlations and conduct

our initial interview. This interview lasted two hours, was audiotaped and then

transcribed. Verbatim transcriptions were coded for major themes and ideas that are

discussed in chapter four.

Personal History and Philosophy of Life Interview (PHPLI). Grace was feeling

energized after her I←Spi. Seizing the moment, we proceeded with our second interview.

The Personal History and Philosophy of Life Interview (PHPLI) was modified from an interview developed by Csikszentmihalyi (1996). Please refer to Appendix E. Interview questions focused on the creative process, the individual's life, and the domain of creativity. These open-ended questions were broken into sections emphasizing career and life priorities, relationships, working habits and insights, and attentional structures and dynamics.

I began with introductory questions specifically focused on Grace's career and life priorities and on the significance of peers and colleagues with regard to her creativity. Grace easily discussed her family relationships beginning with early childhood and ending with her current home life. She also voiced her perceptions of her working habits and insights, and her philosophy toward education and life in general. We ended this interview by discussing Grace's health. Grace explained she has experienced symptoms that mirror mild Multiple Sclerosis for the past fifteen years. She described her bouts with dizziness, numbness, and fatigue as obstacles, and an annoyance. This interview lasted for three hours, and the responses to these questions were audiotaped, and transcribed. Verbatim transcriptions were coded for major themes and ideas.

Course Preparation Interview (CPI). Grace and I conducted our third interview in her home. The Course Preparation Interview (CPI) consisted of open-ended questions concerning what Grace hoped to accomplish during the semester, and how she prepared and organized her course and materials. The CPI gave Grace an opportunity to express in a think-aloud protocol how she designed the curriculum and instruction strategies to meet her objectives for the course. The interview lasted two hours, was audiotaped and transcribed. Verbatim transcriptions were coded for major themes and ideas.

Mid-Term Teacher Interview. My fourth interview with Grace took place in October 1999, and consisted of open-ended questions that focused on the teacher's perceptions of whether, or not the course objectives had been achieved to date. It was the fourth week of classes when we met outside in a flower garden on McGill's campus following class.

It had been an unusually exciting class because the 146 students were receiving their field-placement assignments. Grace had anticipated this and prepared two alternate lesson plans. We discussed her goals and objectives for the course, and her perceptions of whether or not they were being met. We also discussed how the size of the class was a great challenge to her usual teaching style. This interview lasted approximately one hour. The responses were audiotaped and transcribed verbatim. Overarching themes that emerged from this interview were used to construct questions for my final interview with Grace.

Final Interview. The final interview with Grace took place in January 2000. Grace and I met in McGill's Education building. She was energetic and excited to discuss her views toward the class. I asked open-ended questions based on concerns about what Grace had expressed in prior interviews. Additional questions focused on probing Grace's self-assessment of her goals, values, and creativity. This interview lasted two hours and was audiotaped and transcribed verbatim. Verbatim transcriptions were coded for major themes and ideas. A description of how the interviews were coded follows in chapter three.

Student Participants

As a source of data triangulation, I wanted to interview students from Grace's course on teaching diverse learners. During the second week of classes, after students had adjusted to the classroom surroundings, I made an announcement to the class wherein I introduced myself and mentioned I would be observing the instructor throughout the course. I explained that I was conducting research on teaching and not evaluating the teacher or students, and that, although I would be observing all of the classes and taking notes about classroom processes, I would not be recording specific student information.

I asked if any students would be interested in allowing me to interview them before and after their student-teaching assignments. I explained that I would be asking them questions about their teaching, and about teaching in general. After class, six students approached me and volunteered. These students planned to graduate with a Bachelor of Education (Kindergarten and Elementary) in December 1999.

Four females and two males volunteered. Four of the six students were young adults ranging in age from 20 to 24 years in age. The other two students, one female and one male, were returning students aged 36 and 27 respectively. Although all considered themselves Canadian, the students belonged to a variety of cultures including Asian and Islamic. The students also varied in experience with teaching, levels of social support, and socio-economic status. For example, two returning students were older, more reserved, less talkative, and were less optimistic about the future of education than the other four younger students. Three of the students had participated in volunteer programs and teacher training in addition to their university training, and therefore came to the interviews with more experience. Four of the students were very socially active and

outgoing. Half of the students had received prior instruction from Grace. The other three

said they had heard wonderful things about Grace, but had no prior experience with her.

The students were scheduled for interviews and told that their identities would

remain confidential and there would be no compensation for being a participant. All of

these volunteers stated that they understood the conditions of participation.

Student informed consent. At the beginning of each initial interview, the

participant and I read the informed consent form together (see Appendix C). Following

this, I asked if any part of the form was unclear, or asked if I could answer any questions

they might have. All participants signed the form stating that it was clear and they

understood their rights.

Student interviews. A variety of settings were used to interview the students. For

example, two students felt more comfortable being interviewed in one of the libraries on

campus. Four interviews were conducted outside in a flower garden with the remainder

conducted in an office in the McGill Education building.

For the initial interview, student participants completed the Student Inventory (see

Appendix E). This is a modified version of the PHPLI that focused on how and why the

student came to be involved in teaching, what positive and negative influences they

experienced as students and intern teachers, and what expectations they had of the teacher

and the course.

A second interview was conducted after students finished their student-teaching

assignments. Questions for the second interview evolved from concerns and themes that

presented from the initial interviews. Each student participant was interviewed

individually. Responses were audiotaped and transcribed verbatim.

Four of the initial interviews lasted approximately one hour, and two lasted

almost two hours each. Five of the second interviews lasted one hour, with the remaining

interview lasting almost two hours. I felt it was important to allow the participants the

freedom to take as much time as they needed to answer the questions. Resulting themes

provided an opportunity to search for discrepant evidence and alternative explanations of

the data from interviews with Grace and her husband Charles.

Informed Consent and Interview with Charles

This interview was used as another source of data for triangulation:

trustworthiness, credibility, and ecological validity. In order to acquire a different

perspective of Grace, Charles agreed to be interviewed. He was chosen because he knows

Grace both personally and professionally, and is a veteran teacher as well. He has

considerable experience teaching elementary age children within the Montreal French

School system. More recently, Charles has been teaching English as a second language to

college level students.

This interview took place in January 2000 in the basement of McGill's Education

building. We read the informed consent form together (see Appendix D) and I asked if he

had any questions. He did not, but said he would ask when he did. He then signed the

document and we proceeded. I began with open-ended questions addressing his

philosophy of education, Grace's teaching, her creativity, and her philosophy of

education. This interview lasted two hours, was audiotaped and transcribed verbatim.

The Course: Teaching Diverse Learners

Grace was hired to teach pre-service elementary teachers how to adapt teaching

and instruction to accommodate individuals with a variety of learning styles. The course

is designed to augment students' final "stage" or internship and prepare them to enter the workforce. Students not only receive strategies of instruction and evaluation and classroom management techniques, they receive methods of inclusion that include individual education plans, awareness of multiple intelligences and alternative learning styles, multi-level instruction, cooperative learning techniques, and strategies for implementing authentic assessment. This is a capstone course that follows educational awareness of exceptional children, and children with special needs.

Participant observations and memos. Due to the sensitive nature of this course, I felt it was an ideal class to observe. I could identify how a creative teacher might approach difficulties toward implementing the philosophy of inclusion. I thought that watching a teacher model these strategies and techniques to a large class of students who are uncomfortable because they are unsure how to adapt the curriculum to meet the needs of each individual student would be fascinating.

> *I want to conduct this study because it is important to me to study creativity within the everyday person. I believe that we need to use the research that has been conducted on eminent people to inform us as to how each of us can enhance our own creative potential, thus bridging the gap between the creatively gifted and the creative layperson. It is also important to me to understand how a creative teacher works because the classroom environments of today demand creativity if all children are going to be active and independent learners (September, 1999: Memo to self).*

I began observing and taking field notes during the second week of this eight-week course. I recorded my perceptions of the conditions within and surrounding the

classroom, Grace, and the students. I tried to capture the flavor of the classroom culture by collecting course materials, attending to how Grace presented the materials, and the students' responses to her presentation.

My notes included descriptions of the classroom setting, when material was introduced, and my impressions on how the material was being transmitted, received and processed.

> *(11:33am) It's very hot and humid. Students are wandering in to this ancient auditorium. The semi-circular seating resembles church pews. Students are gathering in groups on the floor and in the halls building props for their examples of how they see an ideal classroom. Grace is directing, smiling, appears proud of the work that will be displayed this class. Students are admiring each other's work. Approximately 140 students today, with some still coming in. Some ask Grace for clarification of materials. Students are fanning themselves. Their energy seems to be a combination of smiles and seriousness. Students are checking each other's work, but don't seem competitive.*

> *(11:39am) Grace puts her hand in the air and class falls silent. She greets them. She gives them clarification of their options for presenting their work, allowing student voices, it's like she's speaking to colleagues instead of students. Students are listening and responding with nodding and smiles.*

> *(11:47am) Grace asks for discussion from students concerning presentations. Students decide to meet in five groups at once, and rotate between groups to view each other's work. They choose to meet outside the auditorium on the grass, in this room, on the front steps, in the hallway, in the Shatner Café, and on the*

Leacock steps. What follows is a problem solving debate session that is guided

and controlled. Chaos ensues, yet it only appears chaotic. Students know what

they are doing; it's a free flow.

(11: 55am) Students head out to their stations around campus and begin setting

up their work. Some are gingerly carrying out their shadow boxes of models of

ideal classrooms; some are setting up the overhead projector. Grace is directing;

students are the actors.

(12:00 noon) Students hover around each presentation. Groups begin by giving

disclaimers, but once into the presentation they beam about their work

(September 10, 1999: Field Notes).

When it was impossible for me to take field notes of classes I wrote memos (Maxwell,

1996). For example, on the last day of classes Grace had students come to her home to

discuss their field placements. I was able to attend to how the students interacted with

Grace and each other, and later wrote about my perceptions regarding the emotional and

intellectual tone between Grace and her students.

The last day of class was on a Wednesday and was held at Grace's house in

NDG. She had given students a map on the Monday prior. I took the metro and

hoped to be there in time to see most of the students in a different atmosphere. It

was cloudy when I started.

When I arrived at noon, I thought few students had come because I didn't see

many cars lining the streets. I wondered if the students had decided to use the

time to prepare for their internships. But when I entered, I saw pairs of shoes

lining the stairs that led up to the apartment. The sun shone over the banister and

students were grouped together in the kitchen, dining room, and living room.

I wasn't sure how the students would respond to me in this environment. I said

hello to a few students and saw Grace talking and laughing with a group in the

living room. She saw me and rushed over to give me a hug. She asked me "isn't

this great, look how many students came!" She sent me to the kitchen to get

something to drink and eat. There were snacks everywhere.

I struck up a conversation with two students asking about their placements (where

they would do their internships). One was quite anxious, the other was excited

and happily told me about what she hoped to do in a grade five classroom.

I had a chance to watch Grace as she talked with the students and she was more

like a friend or a sister in that she didn't appear to give advice, but she did try to

make the students at ease. She listened a lot, laughed a lot, and used humor to

deescalate the students' anxiousness (October, 1999: Memo of last class).

Course materials. Grace chose to use a course pack of readings and handouts

rather than a text. I collected all materials, studied them, and used them as evidence of

consistency between what and how Grace provided instruction. I attended all lectures,

viewed videotapes and listened to guest lecturers with the class. In addition, I took

detailed field notes that recorded my observations of Grace, the conditions in the

classroom, and student behaviors and interactions. These course materials made it

possible for me to obtain a textured understanding of the activities and classroom

exercises I observed and to make assumptions as to whether the students were learning

and excited or frustrated. These materials were used to search for discrepant evidence

contradicting my perception of the emerging themes and ideas.

Subjective Frame

Student interviews, the interview with Charles, participant observations and

personal memos, course materials and frequent member checks were methods I used to

verify my perspective of Grace, her personality, and her creative process. I wanted to

ensure against imposing my perspective onto Grace. My observations of Grace's process

of creative teaching reoccur throughout these sources and will be discussed in detail later.

However, what was most important to me was to make certain that both Grace and

Charles read every draft of this document in order to certify that I had not misinterpreted

events, ideas and processes.

CHAPTER THREE

DATA ORGANIZATION AND PRELIMINARY ANALYSES

"The questions which one asks oneself begin, at last, to illuminate the world, and become one's key to the experience of others. One can only face in others what one can face in oneself. On this confrontation depends the measure of our wisdom and our compassion. This energy is the only hope for our civilization." ~James Baldwin

<u>Data Organization</u>

Miles and Huberman (1994, 1998) outlined a model of how qualitative researchers might proceed with data collection, data management, data analysis, data reduction, and data display. Data management involves the systematic and coherent process of data collection, storage, and retrieval. Whereas data analysis contains three linked sub-processes: reduction, display, and conclusion drawing or verification. Management and analysis are both processes that need to occur before data collection during study design and planning, during data collection as interim and early analyses are carried out, and after data collection as final products are approached and completed. However, the authors suggested that if the terrain is unfamiliar or complex, a single case is involved, or the intent is exploratory and descriptive, a loose design would be more appropriate.

This study meets all of the conditions above and therefore warrants an emergent flexible design. My intent was to balance flexibility and rigor with the processes of management and analysis. As I collected the data I allowed myself to wonder what themes might emerge.

I began transcribing my first three interviews with Grace, alternating between typing and rewinding the audiocassette. Next, I listened to each interview again to make certain I did not make a mistake. This process of transcription allowed me to acquire a general impression of the data or what was being said, and how it was being said. I felt I was developing an insight into the process of Grace's creativity because I felt excited and impassioned by her responses. Nevertheless, I refrained from formal analysis until I finished transcribing the first three interviews.

Next, I coded the first three interviews with Grace by hand, described in detail in the following sections. As a result, I found myself becoming very close to the data. I discovered I could moderate my process of closeness and distance to the data by alternating further data collection with data transcription and coding. I tacked back and forth, or alternated between data management and data analysis. I began noting patterns and themes, then clustering patterns and themes by conceptual grouping. Next, I made figurative groupings of the data using metaphors. I counted the occurrence of codes, and made contrasts and comparisons to sharpen my understanding of the observations. I partitioned, then unbundled variables and factored or simplified codes into relationships until finally building a logical chain of evidence and making conceptual and theoretical coherence through comparisons with the referent constructs in the literature (Miles & Huberman, 1998).

Data transcription. Researchers have others complete their data transcriptions due to time constraints and priorities. I chose to transcribe my own tapes because I wanted to understand the process; I believed it would bring me very close to my data.

I began the transcribing process with Grace's I←Spi interview. Using a micro-cassette recorder, I sat at my desktop computer and listened to segments of speech. I typed in what I believed I heard. I could focus intently for 30 minutes to an hour before I had to rest. With practice, I became more efficient. I augmented my performance with earphones and learned to listen more effectively. I discovered if I verbally repeated what I was hearing I could retain an auditory trace in short-term memory, thus lengthening the segment of speech.

Coding. I read each transcribed interview once to obtain an general impression or a holistic sensibility of the concepts and potential categories of the creative person and process (Dey, 1999). I read through each interview a second time highlighting phrases critical to understanding the evolving system. These were phrases that seemed to leap off the page at me. For example, the first two phrases that leapt out were

Understanding that I was a teacher was understanding who I was (I ←Spi,

September, 1999)

And

I don't think I'm an ideal teacher, but I'm a teacher who has ideals (I ←Spi,

September, 1999).

The third time I read through each interview, I reformatted the pages of text in order to be able to leave space on the right margin to make comments relating to the highlighted text. These were the comments I made out to the side of the highlighted text mentioned above:

She made a conscious decision at age 20 to be self-aware. Alone, she decided

what she wanted to be, then made a plan to achieve her goals. She has high

expectations, a teacher who has ideals! Use this quote (I ←Spi, September, 1999).

After making comments, I went through the interviews and began coding the comments to place in a data matrix (Miles & Huberman, 1994). The first phase of the coding process involved open coding. I broke each interview into segments, examined and compared segments, and specifically named and categorized phenomena after close examination of the data (Dey, 1999; Strauss & Corbin, 1990).

Instead of a word-by-word or a line-by-line level of analysis, coding patterns emerged from sentences and paragraphs containing rich examples of categories. For example, I read through and coded ideas that were embedded in phrases. The first three interviews with Grace were complex and I began to feel overwhelmed. I wanted to feel more confident I was proceeding appropriately. Constructing a data matrix helped me to organize and manage the data.

Table 1

Sample of Open Coding Data Matrix for I←Spi, PHPLI, and CPI

I←Spi: Self-aware, goal-directed, high expectations, generous, forbearing,

tolerant, supportive, social nature of learning, humanism, independence, courage,

normal human kindness, struggle, ideals, dreams, perfection, confidence, hope,

trust, honor, relationship, happy, creativity, learning to risk, motivation to excel,

natural teacher, passion, choices, ownership, reality, connection

PHPLI: proud of her life, responsibility, MS., confidence, challenging

society, teaching is a practical approach to a human centered problem, difference

in learning styles, humor, just surviving with decency takes creativity,

interpersonal intelligence, unconditional positive regard, colleagues, support,

family, vulnerability

CPI: frustration, thoughts swirl and are explored, allowed to incubate,

when the fog clears the story begins, student-teacher interactive process, the Zone,

flexibility, pacing oneself, high energy, vision of teaching = values as a teacher,

planning is a circular spiraling process that becomes richer with each iteration,

group work, collaboration, honesty, trust, theory and practice, metacognition, peer

support, problem solving, IEPs, portfolios, classroom management, activities that

model instructional strategies, risk, process not product, confidence

---

I focused to remain systematic, yet holistic as I moved from open coding to axiel

coding. I reassembled the data by making connections between categories.

Table 2

Sample of Axiel Coding Data Matrix for I←Spi, PHPLI, and CPI

Personality Characteristics: Honest, tolerant, eccentric, trusting,

iconoclastic, generous, caring, eclectic, confident, flexible, artistic, supportive,

demanding, happy, imaginative, enthusiastic, independent, honorable, passionate,

forbearing, courageous, hopeful, grateful

Process Characteristics: Self-awareness, values, rational, intuitive,

insight, goal-directed, inspiring, critical friends, the Zone, feedback, expectations,

encouraging, choices, ambiguity, perfection, resilience

Instruction Strategies: Brainstorming, portfolios, IEPs, modeling,

mentoring, collaborative and cooperative learning, peer and colleague support,

authentic assessment, multilevel instruction, inquiry, holistic, intimacy,

relationships

After grouping or collapsing similar categories, I began connecting and building a

theoretical understanding of the emergent category strings. I became more selective in

my coding categories. I selected a core category and attempted to systematically relate it

to other categories.

My task was to construct categories, connect them, and finally organize them around an integrating theme (Strauss & Corbin, 1990). Albeit simple to describe, the process contained more movement between the categories than I had expected. I kept asking "what is this data a study of?" and "what is the importance of the data – how does it shed light on the basic social process under study?" (Glaser, 1992).

I repeated this coding process with the initial student interviews. I read through the transcripts, highlighted interesting responses, made comments about the responses, then assigned descriptive labels to the responses. This prepared me to focus on questions and concerns for the students' final interviews.

After all interviews had been conducted, I analyzed, synthesized, prioritized, and integrated the emergent themes from the data. However, I still had doubts that my coding process was as rigorous as it could be. My supervisor advised me that I could use a computer program that might help me capitalize on further rigor. I researched different programs and decided to learn and use a program called The Ethnograph v5.0.

The Ethnograph v5.0. Qualis Research Associates along with Scolari, Sage Publications Software, Inc. (1998), developed the Ethnograph v5.0. This program was designed for the analysis of text based data and has been relatively uncomplicated to learn and use.

Before I could use Ethnograph, I had to reformat my transcripts, add lines of identifying text, and then upload the transcripts into data files. Once the data files were intact, I re-coded the data. I went through each of the five interviews with Grace chronologically and coded segments of narrative. In Ethnograph, segments can be assigned multiple codes. Text may contain embedded codes within segments and

overlapping codes. This process can be loosely structured or very tightly structured. I found the text dictated how loose, tight, embedded, or overlapping my coding was. I quickly became adept with the process, less redundant in coding, and my thinking about the data became more clear and organized. This may be a result of the number of times I had been through the data set. The major advantage of this program has been to increase coding precision. By coding my data firsthand on my own, I was more prepared to re-code my data set with Ethnograph.

For example, In Table 3, a segment of text from the PHPLI has been coded with one label, self-aware. Due to the formatting of the file, I could print out segments and write comments to the side to help me construct category strings and themes.

Table 3

Sample of a Segment of Data from Ethnograph

#12 of 42   PHPLI   Comments:

Search code: Self-aware

The first day I was there, as the teacher,

I worked with a little boy who had severe

reading problems. And I sat beside him and

he sweat blood to get through his work.

My heart and my mind just turned over

and I said I want to be here!

I want to be here with this kid.

My comment to the side focused on her self-awareness of what made her happy. This segment was number 12 out of 42. Ethnograph allows the researcher to search data files for multiple instances of codes. This has been another amazing advantage over hand coding because the process is quick and efficient.

I began by searching what I believed to be the largest category, **connect**. The program searched through the data files and gave me a list of all segments coded for that label. There were 103 in five interviews. I read through all of the segments and made notes of other labels that appeared in conjunction with the primary search. Refer to Table 4 below.

I marked segments that were especially powerful in describing the concept and saved them in a separate file. Next, I proceeded through each construct I had assigned a label to, making notes about the construct, marking explicit examples, and saving the examples into specific files. As a result of this process, my impressions, intuitions, and direct understandings of the categories began to take shape. I began to see where certain categories fit into the grander scheme of things. Some categories were partially consumed or subsumed by other stronger constructs. For example, **acceptance** and **kindness** became subcategories of **values**, and **colleague** and **collaborate** united under **connect**. Grouping categories into what Dey (1999) has described as category sets and category strings allowed me to reduce the redundancies by grouping categories with similar meanings into wider conceptual aims. Category strings allowed me to see how certain categories link with each other to form a conceptual string, web, net, path, or pattern.

Table 4

Sample of a Multiple Coded Segment of Data from Ethnograph

#25 of 103   PHPLI

Search Code: Connect   Comments:

#Connect   #Acceptance

Every one of you will have kids with a disability

in your class. Every one of you will have a kid

that's disengaged and disenchanted in your class,

at least one if not more. Every one of you will have a kid

$Goodstudent $Highexpectations $Qualityteaching

with a hyperactivity thing going on and if you're

not prepared, first of all it's not fair to you

 and it's not fair to your student. So, I always tell

them that these courses I'm teaching are helpful

to you. They will make you a better teacher

because they will make you more aware and alert

to individual differences.

By conceptualizing these sets, strings, and patterns I realized I had made my way

through open coding and into axiel coding. Therefore, my next step was selective coding.

Here my goal was to select a core category. A core category accounts for most of the

variation in a pattern of behavior, although there may be more than one core category. By selecting a core category or categories, the development of a descriptive narrative of the central phenomenon of the study had begun (Dey, 1999). The core categories I selected will be discussed in detail in chapter five.

Summary of Data Organization and Data Management

All interviews with Grace, the students, and Charles were transcribed soon after they were audiotaped. Transcriptions were checked to guard against errors in transcription. Interviews were read through and specific segments were highlighted due to the salience of content.

Interviews were then reformatted to allow for space to make comments and observations at the right of the text. Comments and observations were then organized into data matrices by interview, then by category string.

The use of a data management program, Ethnograph, was used to increase the level of precision with the coding process. Data files were reformatted and uploaded into Ethnograph where interviews were broken into segments and labeled based on the meaning from a sentence or paragraph. Single and multiple instances of labels were searched and organized into category strings defining overarching categories.

Field notes and memos provided an alternative data source and were used to provide useful background information.

CHAPTER FOUR

INTERVIEWING A CREATIVE TEACHER

"What we have loved, others will love and we will teach them how."

~*William Wordsworth*

Introduction

In this chapter I describe my perceptions of the content and quality of each

interview with Grace. I have deconstructed, and reconstructed them in order to grasp a

holistic impression of the content and process emerging from the interviews.

The I←Spi

As previously mentioned, I←Spi is a Q-sort procedure that produces correlations

between conditions of instruction. Grace attributed adjectives to rank or describe the

conditions of instruction. Once completed, a factor analysis groups the data into factors

or islands of meaning (Knight et al., 1994). The factors or islands are constructed from

the degree of congruence between the conditions. Factors or islands with a high degree of

congruence are then narrated into meaning by the individual participating in I←Spi. The

island with the highest degree of congruence between conditions for Grace involved the

conditions **Grace,** and **Ideal Teacher** ($r = .95$).

Grace
$r = .95$
Ideal
Teacher
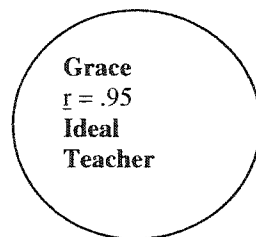
Figure 2. First island of meaning and the highest loading correlation.

Grace stated that after having a conversation with herself in her early twenties, she understood that she was both a mother and a teacher. These two constructs are almost synonymous, or have a lot of shared meaning. Both being a mother and an ideal teacher to Grace mean being someone who protects, guides, and nurtures her students.

The Grace as I understand myself and what I think of as an ideal teacher is such a high correlation. It makes sense. Actually, I would have predicted a high correlation, but I would've been surprised if I would've chosen very different words to describe myself and an ideal teacher. I don't think I'm an ideal teacher, but I'm a teacher who has ideals and I think it works like that (I ←Spi, September, 1999).

A larger island was formed when the condition **Ideal Colleague** joined the former island ($r = .94$). When asked to narrate this into meaning, Grace said:

I believe that means I have the attributes of what an ideal colleague should be, as well as what an ideal teacher is (I ←Spi, September, 1999).

Probed further, Grace said:

I'm an incredibly generous person and that transfers into my teaching, and I can't remember if generosity was one of the words [adjectives used to sort the conditions of instruction], but I do think that someone you work with in the teaching profession, um, needs to be generous towards you and that means forbearing and tolerant, and [who] gives you time and space by being supportive, and humanistic (I ←Spi, September, 1999).

To be an ideal teacher and colleague then, one must consider "the other." An ability to understand another person's perspective describes a collectivist, collaborative, and constructivist perspective towards education.

Later joining this island are the conditions **Favorite Teacher, Daughter**, and **Nemesis** (r = -.80). To begin, Grace became giddy when she saw that her perception of her favorite teacher was associated with her daughter. Her daughter wants to be--and will be, Grace says--a marvelous teacher because "she's a natural." The negative aspect of this correlation is associated with her understanding of a nemesis in life. To be a really good teacher means to be consistently confronted with obstacles. How one maneuvers around these obstacles is by maintaining a positive attitude, connecting with colleagues, and receiving support from friends and family. She said:

> *Oh, it's an inverse correlation. I would associate that with the struggle to be me,*
>
> *to be as good a teacher as I want to be, the struggle to be as good a colleague,*
>
> *and to find as good a colleague as I'd like to have (I ←Spi, September, 1999).*

Another island of significance included the conditions of **Grace at age 30, Creativity**, and **Ideal Student** (r = .86). Grace described this island to mean that at the age of 30, she felt confident and happy, but deeply anxious about upcoming challenges. Challenge and creativity would have been positively associated. Grace was a graduate student at the time. She felt motivated, challenged, absorbed in her work and was drinking it all in. This describes a developmental life cycle change whereby cognitive and affective changes in Grace merge with the systems of family, community, and society. Grace was pushing the envelope of what a teacher characteristically did by going back to

school. She found herself surrounded by supportive and inspiring educators and family. She described it this way:

> *I was, at the time, an ideal student of life as well as at school. My professors, I remember said it was a privilege having me in their classes and they were so keen that I would stay and do my masters and become a teacher. I was at an ideal moment to be the best kind of student, to be motivated, creative, happy, totally absorbed in the work, I was just drinking it all in (I ←Spi, September, 1999).*

This island joins another including **Passion, Ideal Mate, Trust, Ideal Grace, Future, Son,** and **Husband** ($r = .78$). Grace was excited by this merger and stated that it was her future coming together, where creativity came into her future. All of the work, all of the struggle, the anxiousness, the personal growth crystallized with her ideals. Her hopes and dreams of family, her understanding of the importance of trust in all relationships, and her plans for later life all seemed to unite to construct a stronger, more holistic form.

> *All of the stuff I wanted has come true. Everything and so much more than I could've imagined. So much more richness, more deep feeling, so much more love. The future is coming together (I ←Spi, September, 1999).*

Personal History and Philosophy of Life Interview: Teacher Version

Grace initially described what she was most proud of in her life as her progress or positive adaptive development. She continued by describing the process of her hard work to become more self-aware, confident, happy, and successful. This process took place over years and was a result of therapy, illness, and challenging experiences with others. She felt these events transformed her into becoming and being a stronger woman. With

happiness and the awareness of it comes a responsibility of creating and maintaining one's own pathways to happiness. She said "a motto might be enjoy and be generous with your enjoyment." Positive energy, hope and gratitude are what maintain her and what she is proudest of about her life.

> *What do I take pride in? I don't use that word. What do I feel best about? Where I am right now (PHPLI, September, 1999).*

One obstacle Grace has had to overcome has been the acceptance of reality. Here, acceptance of reality refers to the people, things, and systems that present barriers to her growth. For example, Grace experienced health problems in her late thirties and forties that she initially had difficulty accepting. These acted as constraints on the amount of time, energy and passion she could invest in her work. Grace had been working to include individuals with special needs for some years before her diagnosis of possible MS.

> *I hear my husband and my children say "No! There isn't anything she hasn't overcome!" but with the MS, I became sedentary and I want to be stronger (PHPLI, September, 1999).*

Although, on reflection, she realized she always felt like a teacher, she was raised in a dominant culture that tends to devalue teachers in comparison to other professionals. Here, dominant culture refers to the majority culture. Only through questioning this assumption was Grace able to achieve the self-confidence and self-awareness to recognize that she was a teacher.

Her own experiences as a student in elementary and secondary school led her to question the accepted traditional structure and assumptions of those public school

settings. Her desire to work with disenfranchised populations was clarified when she met others interested in empowering individuals with difference; she found these mentors gentle, smart, and inspiring. One in particular ignited a more focused interest in issues of inclusion and changed the face of education for Grace forever.

> *I read an essay by James Hillman talking about Aristotle's theory of the acorn. That we are, when we're in the womb, that acorn little place, we are fully formed as to who we are. We don't always recognize it. I was a fully formed teacher when I was five years old. Then later, after working with some wonderful teachers, I realized that if I can learn to be a great teacher for people with learning problems, I could be a really great teacher (PHPLI, September, 1999).*

What keeps Grace involved and passionate as a teacher has been the intimate connection with other teachers and students and her decent human ideals of an inclusive educational philosophy. Grace admitted that she also likes to challenge society by doing her part to make the world a better place for all to live. Grace believes that teaching is a very practical approach to a very human-centered problem. Because difference exists, it must be addressed. This includes differences in learning styles and differences in strengths and weaknesses. To be a good teacher for Grace means to stay abreast of the research literature and be aware of your own teaching.

Inspiration in Grace's life has come from people who are interested and aware enough to lead, guide, and suggest material that might lead to more stimulation. Inspiration also comes from individuals who are iconoclastic, who push limits and shake things up. An inspiring teacher exudes unconditional positive regard, freedom, permission, passion, kindness, intelligence, patience, humor, and decency. Inspirational

teachers also recognize "a kindred" and do their best to see the beauty in all students and colleagues. The ability to communicate with and see the best in others describes interpersonal intelligence, someone able to send and respond to information and ideas. Grace views an inspiring teacher as one who is eccentric, eclectic, intimate, challenging, and demanding.

When asked if she can predict who might become a successful or creative teacher, Grace explains that it is a real surprise who is successful in the classroom. There are so many ways to be creative. She referred back to multiple intelligences (Gardner, 1993b) and individual strengths and weaknesses. Because people start from different places, there are different demands placed on them. She stresses that just surviving with decency takes a lot of creativity.

> *I can assess for the moment whether they're taking in information, whether they're excited by it, whether they're confused by it, whether they're working with the stuff I'm giving them. I can assess whether they're smart or not, a general kind of g-smart, but I think it's a real surprise as to who's successful in the classroom (PHPLI, September, 1999).*

When asked about peer or colleague support in the classroom, Grace explains that although there are many teachers who help and support each other, and there are some administrators who support the development of their staff, this has not been her experience. She has characteristically worked alone because her perception is that others have found her to be threatening, confusing, or too different. She is much more inspired and motivated by the students whom she teaches. Grace described situations in her elementary teaching career whereby other teachers tried to have her fired. She said these

teachers were angry, bitter, burnt out people who often responded negatively to happiness and freshness. On the other hand, Grace stated that fairly well adjusted people often respond well to creative differences and are not threatened by them. Grace proposed that teachers with new ideas must remain resilient and protect themselves from attacks.

When asked about leisure time, family, and insights, Grace suggested that a teacher's life outside the classroom highly influences life inside the classroom. Grace loves to read, draw, paint, and make friendships. People, connections and relationships are her goals in life. She explained that people are at the center of her life and by learning life's lessons we become better teachers.

> *I read alone. I draw alone, but I have and have always had vivid friendships, and my husband and my children are my goals, they are the center of my life (PHPLI, September, 1999).*

When asked where her ideas for her work usually come from, she stated

> *My head [laughs]. They come from everywhere, but it's always from my own head though. I can't say that there's something outside my own head that inspires me. I have intense, prolonged, hilarious conversations with myself about anything that happens to pop up. I work it through. I make notes. I have learned to be really vigilant about taking notes because I've lost a lot of good things. I'll be reading a book or a magazine and there will be a sentence or a word, or phrase that will spark ten different things in my head (PHPLI, September, 1999).*

The synthesis sparks new ideas and forges cognitive maps that lead to products that she uses, or discards. The ideas are always tied to goals, and the goals reflect those ideas.

Grace described this process as a spiraling motion, like a cornucopia in motion. The direction a teacher takes depends on her goals and confidence.

When asked if she thought her style was rational or intuitive, Grace responded: *What an interesting question, I'm a very intuitive worker, intuitive thinker. I'm extremely practical. I'm not sure what rational means, but I think it's rational to be intuitive. So, I don't think there's a dichotomy there. I'm instinctive. I'm intuitive. I'm extremely grounded. My feet are on the planet. I like things to work. I like things to be practical. I think it's practical to be romantic, invisionary, and impassioned (PHPLI, September, 1999).*

She described her teaching style as practical, rational, grounded, and instinctive. She believes that a teacher must use these attributes when planning classroom goals and objectives, then use her passion and imagination to construct the magic connection between teacher and student in order for ideas, products, and processes to evolve.

Grace says she connects work and leisure. Both include fun. Both involve bursts of energy, rest, recharging, then more bursts of energy. She goes about developing an idea by thinking global, then specifically. She then works backward to establish what it will take to arrive at the final product. Her ideas are described as blueprints. These blueprints are followed, explored, tested and adopted or discarded. Everything she reads and discusses with colleagues or students is saved in a cognitive file marked "possible strategies, possible activities" to be tested. These ideas are first tested on fictitious students, then in the classroom. She emphasized that her main idea was to ask herself "What do I want the students to take away?"

My priorities are what do I want the kids to take away. What do I want them to

have short term and long term. Then my priority is how do I get there. So, I start

from what the intended result is, or the ends, then I figure out the means. I

absolutely, fanatically do not believe the ends are separate from the means. As a

matter of fact, I think the reason I start with the end is it gives me the clue as to

what the means should be (PHPLI, September, 1999).

When asked how her philosophy of education has changed over the years, she

seemed perplexed and stated frankly that it had not changed. She did offer that she had

changed. She is more confident, has a richer happiness, and more experience. Her life is

wrapped around her teaching. She now feels more of an urgency to reach as many

students as possible and share her experiences. She has a mission. This is not a paradigm

shift for her. She contends she has always been holistic, person-centered, engaged, and

process oriented. She humorously says "I'm just more!"

Grace's present focus or task appears to be as a natural action researcher;

constantly improving her practice. She explained that teacher education is so important

because it passes on to another generation what needs to be done in classrooms. It brings

an end to the cycle of traditional teaching. She does this through her attempt to make her

teaching more effective for more people. This very much describes how a parent passes

on helpful information to their children, or a doctor to a patient, or a therapist to a client.

It is a professional relationship founded on caring for another.

Course Preparation Interview

Grace struggled through this interview with feelings of fatigue and what has been

diagnosed by some doctors as symptoms of possible multiple sclerosis. However, she was

mostly frustrated because she didn't have the energy to explode in her usual preparatory style. She said she felt her thoughts were considerably diffuse. She assured me that this was all part of the process, and has learned to accept a period of ambiguity, to let her thoughts swirl, explore them, drop them, adopt them and allow them to incubate. "When the fog clears, the story begins" meaning she runs the course content, the possible student population, the strategies and activities through her head and then leaves it. When her thoughts settle she can then truly begin to plan the course.

She referred to these diffuse thoughts as part of a student-teacher process, describing a sense of cognitive and socio-emotional flexibility. She thinks of the students, she thinks of how a good teacher would teach, then she feels "the buzz" and goes into "the zone." These terms were used interchangeably to describe her creative process. She often has to try to slow herself down, or pace herself. Otherwise she has found herself charging full speed ahead. She starts with a clean workspace and then goes through all her materials pertaining to the course. She spreads them out everywhere, adding and subtracting from the collection. She uses prior feedback from similar courses, her energy and vision of teaching, and her values as a teacher to guide her selection process.

> *So, I could tell that the bells were starting to go off in my lobes. I knew that by the time you got here I'd be going Hummmmmm. This is the way I am. I knew I'd get up early this morning, and say, I'm just going to rest until Frank gets here. Then I immediately went to the computer [laughs] and made myself a plan, and started to collect materials. I have stacks of the kids' stuff, and they tend to write me notes that remind me of what they got out of the course. As one of them said, "You taught me that I'm supposed to have a vision and my vision is as valid as anyone*

else's and so when I go into teaching, I'm going to carry that vision with me like

you did" (PHPLI, September, 1999).

Grace explained that planning and teaching describe a horizontal spiral motion

whereby learning becomes richer with each iteration. She merges imagination with

practicality as she envisions ideas, then assesses them for cost and temporal practicality.

Collaborative teaching methods are used to teach collaboration and to meet the

constraints on materials and time. Her global plan and overarching structure represents

the grand goals of teaching and her specific plan represents methods to implement the

grand goals. These values are modeled through authentic assessment, multiple

intelligences, individual learning styles, and classroom management strategies.

Grace described course preparation as progressing from global to specific, then

pulsating back to global. For example, she maintains two plans, one global, the other a

daily plan. The daily plan is broken down into twenty-minute blocks. Each block is given

a theme. Grace described this as if the course were a train going through many stations

stopping for breaks, yet heading toward a final destination. Each theme is assigned

lectures, handouts, filmstrips, and activities to stamp in the content and values. Here she

makes reference to Ivan Illich and agrees with the importance he placed on understanding

the social context of the classroom by understanding the larger family, community, and

societal systems. Grace believes that teachers must make classroom learning relevant.

Grace's daily plan drives the lesson. She repeatedly stresses the importance of

stimulating an interaction from the students in the form of written and oral, individual

and group responses. These responses are metacognitive reactions to activities. These

metacognitions encourage reflective thinking. Reflective thinking assists in the students'

ability to perform group work. The group work is intended as a precursor to collaborative teaching.

> *I have my introduction for that first lesson. I have my video. I have a response*
>
> *[students give a written response to their perception of the video]. I'm thinking*
>
> *about that. I think I'll give them 15 minutes. Then I'll have them break into*
>
> *groups for a collaborative activity (PHPLI, September, 1999).*

Using a think-pair-share activity, Grace sets the stage by discussing that labels can work to our advantage. First, we discuss that each of us has strengths and weaknesses. Second, we ask students to think about a topic. Third, we have students pair up with another student and share their thoughts about that topic. In this way, we model freedom of learning and co-constructed or social thinking. We teach independence, and trust in order to make necessary connections with other students. Students learn to think for themselves and to value their own thinking. This is Grace's overarching objective. She strives to ease student anxiety by designing activities that make it safe to risk and learn, and to have fun at the same time. Grace does this by imagining the links between multiple intelligences and authentic classrooms. These links include strengths and weaknesses, honesty, openness, confidence in personal values, and choices.

As Grace is preparing, she often experiences moments of indecision. To her, this means it's time for incubation. She steps back to allow the ideas to coalesce. This method allows her to integrate readings and videos with activities. She works for a balance between theory and practice. Her main ideas focus on metacognition, peer support, collaborative teaching, cooperative teaching and learning, problem solving, individual and group action-education plans, portfolios and other authentic assessments, behavior

and discipline with classroom management, developing a philosophy of teaching-education, awareness of student differences, instruction strategies and activities. When Grace is stuck about what to do, she follows ideas to fruition, she steps outside the box to see "what if," and then steps back inside the box in order to implement a strategy.

Grace stated that when planning a course she likes to model the joy of teaching. She risks and plays while instructing how to apply learning theories and techniques. Her preparation for a course models the creative process. For example, Grace begins with a global idea and plan, spins off on a tangent, follows the tangent through to see if it can work in the classroom, then explodes out again to the global view. This process repeats, overlaps, and spirals forward and backward and eventually evolves into a unique and organized whole.

As we ended this interview, Grace stressed that this teaching process is all about asking the students to ask themselves what kind of teacher they want to be. Two additionally important questions we must ask are "what kinds of schools do we want to create?" and "how do we want students' lives to be better from attending our schools?" These questions focus on process, not product. And although ever changing, Grace suggests we start generally, build a scaffold, hang ideas on the scaffold and watch our confidence as teachers and students grow.

Mid-Term Interview

The mid-term interview with Grace was conducted following class in a flower garden on campus. We sat and discussed how the class was progressing. I asked questions that focused on whether or not Grace felt her goals and values for the course were being met. I sensed that Grace was emotionally, intellectually, and physically

drained, therefore this interview did not last as long as the prior interviews; yet many important themes bubbled to the forefront.

Grace believed that the course was going as planned. She believed students were learning to risk, make connections with her and each other, and build confidence. She felt she had learned a new level of flexibility in her teaching strategies due to the unusually large number of students. She said she often came prepared with alternative lesson plans. She would "read the students," sensing whether they were calm and focused enough for films and lectures, or whether they were in need of moving around and working in groups.

Grace's self-awareness of her ability to read her students can be attributed to her strength in interpersonal and intrapersonal awareness. She stated that she finds it of paramount importance when trying to model and teach metacognitive skills, honesty, integrity, accessibility, caring, respect, and independent and interdependent learning skills. Grace stated that through her self-monitoring, she could model this and self-regulation strategies to students through a connection built on trust. She hoped that what the students were learning was that learning was natural and honest, and that teaching could be seen as a medium for improving our relationships. She stated that the students had given her feedback on her ability to maintain a positive energy, and she felt strongly that intimacy should be the goal rather than anonymity. One of Grace's major strengths resides in her ability to mentor healthy relationships with students.

Grace believed she has been able to achieve this thus far through her focus on ability rather than disability, humanistic approach rather than adopting a medical model, and by keeping holistic rather than linear perspective on teaching teachers about diverse

learners. These concepts emerged from her understandings of inclusion. Her passion for

inclusion is clearly exposed and transmitted through challenging students to dare to have

a purpose, dare to problem solve, dare to be genuine, dare to honor each other's strengths

and weaknesses, dare to use intuition and reason. Grace believes we can put the prestige

back in teaching by giving ourselves permission to risk, to learn, to fail, and to have our

own style. Grace sees her part as simply connecting the future teacher with resources so

they will know where to find support when they begin teaching.

> *Is this class turning out the way I'd like it to? Yes it is. I'm really excited about all*
>
> *the stuff that's happening. I'm not in touch with some of the students the way I'd*
>
> *like to be, and I feel it. I don't know if they feel it, but this is the reality of how*
>
> *things are. This is how much I can give and this is what I can create and work*
>
> *towards and then it's up to them (Mid-term, October, 1999).*

Final Interview

During the final interview with Grace, I wanted to focus on whether or not Grace

felt the course goals were accomplished. In addition, I wanted to focus on Grace's

perceptions of how she felt she adapted to various difficulties with course constraints. At

this time the course had finished, allowing Grace time to reflect. I began by asking Grace

about her performance. Had she met her goals for the course? Did she believe she

accomplished what she set out to do? Grace responded that performance implied that

teaching was a solitary act. She wanted to emphasize that teaching was a cooperative

effort. Were her goals met? She believed they had been. She elaborated that even with the

large number of students she felt she was able to establish a warm, close, intense

connection with most of them. Although it obviously pained her that she was not able to

connect with all 146 students the way she could have with 30, or 50, or even 80, she

accepted that she had done her best. Through the connection she felt trust, integrity, and

honesty surrounded by humor and caring. This described an atmosphere of intimacy and

challenge.

Furthermore, Grace felt the students exhibited a great deal of gratitude for being

treated with respect, dignity, and acceptance. This gratitude led many of the students to

express how they felt inspired by Grace's teaching style. This person-centered style

allowed Grace to safely and gently provoke, question, and stimulate authentic and

genuine responses from students. Grace hoped to inspire each student to develop an

individual learning and teaching style and believes that for most students, this was the

case.

Grace explained that a connection could not have been maintained without the

awareness and feedback of what she referred to as critical friends. Critical friends are co-

workers or colleagues who share experiences and offer alternative perspective to a given

situation (Villaume & Brandt, 1999). This collaboration between the researched and the

researcher extends beyond the process of determining the focus of the research to

creating a mutuality and interdependence between teacher and researcher in all phases of

the research project (Ulichny & Schoener, 1996).

I had been that critical friend in Grace's classroom. The process of my being in

her classroom observing her teach, acknowledging her perspective, questioning various

strategies, and wondering about alternatives provided valuable feedback. Consequently,

she felt more empowered to fine-tune her skills and more fully reach her goals. Grace felt

my presence as a critical friend was especially helpful due to the large number of students

in the classroom because I was able to observe the students in their natural environment

from the audience, how they responded and how they worked in groups.

Grace focused next on her abilities to transmit her goals and obtain her course

objectives. She emphasized how important it was for her to be organized and prepared.

She reiterated how she planned and organized going from global to specific and from the

end product back to the beginning. Being prepared not only helped the class content to

flow more smoothly, but it modeled this strategy to the students. The students respected

this, and felt more comfortable expressing themselves and working together with their

peers.

In addition to being prepared, Grace jokingly, yet honestly, said that her goals

were accomplished because she was smart. She believes she is cognitively and socio-

emotionally self-aware. Being self-aware forces her to take stock of her strengths and

weaknesses and acknowledge her values. Her values are then modeled authentically in

the classroom. For example, Grace's passion and joy for teaching and her belief in herself

and others is undoubtedly transmitted to the students by the feedback she receives. Her

tenacity and perseverance in the face of challenge are embedded in the curriculum, then

modeled. Grace gave an example of how a school system often hinders children from

succeeding by not believing in the students and not listening to their needs. She believes

that to change this, teachers must be willing to rock the boat a little.

Grace intentionally transmits the impression that her work is pleasurable and that

responsibility and social awareness are simply part of the equation. She discussed how

teaching was something that we do with all our heart and soul, or we shouldn't do at all.

Grace noted that the process of teaching is very much like the artistic process of

developing ideas. There is a great deal of creative planning involved when engendering creativity in others. She stated that teachers do engender creativity in others by making the ordinary extraordinary.

We finished this interview by discussing how the extraordinary takes shape through engagement, commitment, personality, personal styles, inspiration, energy and enthusiasm. What Grace considers ordinary, is in actuality extraordinary for most teachers. This is the fundamental point. It is extraordinary for a teacher to be willing to become engaged with her students and committed and invested in her students' success. It is extraordinary for a teacher to use her personality to connect and maintain a connection, an understanding, and a trusting relationship with students. It is extraordinary for a teacher to encourage her students to develop their own style of teaching, and to inspire passion for teaching in the minds of her students. It is also extraordinary for a teacher to maintain a high level of positive energy and enthusiasm toward her content, her profession, and her students.

> *I learned this term that [my teaching] is much more emotional teaching than I*
>
> *had realized. I learned that it's much more eccentric than I realized. It was more*
>
> *demanding on me than I realized, taking away the class size. I learned that I have*
>
> *to set limits for myself and I didn't set any this term. I learned that my teaching*
>
> *has an effect on students that I have to let go of. I have to trust my work and their*
>
> *work. I'm very grateful when students take the effort to keep in touch with me, but*
>
> *I'm conscious that my teaching is a wild ride. I might even tell the next class to*
>
> *hold on (Final, January, 2000).*

Teachers who do these extraordinary things are creative. Grace's point is that her understanding of the job description of a teacher includes these things. They should be considered ordinary conditions of the job. If more teachers thought this way, behaved this way, maybe students would become more enchanted with learning. Maybe teachers would come to respect themselves more and in turn be respected.

CHAPTER FIVE

EMERGENT THEMES

"Nothing should be overlooked in fighting for better education. Be

persistent and ornery; this will be good for the lethargic education establishment

and will aid the whole cause of public education." ~Roy Wilkins

After examining each interview with Grace, I began to focus on possible over-

arching themes common to all interviews. The emergent themes presented in this chapter

represent creative teaching outside of the box because creative teaching explodes the box.

This model is constructed from categories that capture creative and gender-typed

personality characteristics and creative personal-process factors that address how a

creative product is conceptualized. In addition, contextual factors emerged framing

Grace's identity and philosophy, along with content variables describing domain specific

philosophies, and strategic variables signifying domain-specific heuristics.

Grace's creative teaching evolved from her ability to transmit her values, beliefs,

and cognitive and affective strategies for conceptualization of the product, along a

conduit constructed from her philosophies of life and education, and embedded within

instructional strategies used to accomplish her goals. This ever-evolving recursive

process incorporated course content, class size, student make-up, and context.

The Dynamics of Creativity

A core category is meant to describe the conceptual base or framework from

where an analysis begins: a starting place, or jumping-off point. Three important

category-strings or sets emerged describing the overall process of creative teaching. These were preparation, connection, and reflective teaching.

Preparation of a course involves structuring the content, strategies of instruction, and assessment and evaluation techniques with a pragmatic awareness of temporal, social, and economic constraints. This process involves consistent restructuring and adapting to task constraints and demands. It involves visualizing potential students and selecting strategies and techniques that are best suited to reach the desired goals of the students and the course. Preparation demands a metacognitive energy to choreograph anticipated classroom schemas to fit into current task demands.

Connection describes a process whereby a teacher's personality characteristics and self-awareness build and maintain the communication necessary for collaboration, feedback, rapport, and understanding with students and other teachers. This process requires an alert cognitive and socio-emotional understanding of interpersonal relationships and situations. Connection manifests a physical and emotional energy that integrates preparation with reflective teaching.

Reflective teaching describes the process a teacher goes through as she dynamically evolves into a more effective teacher. This process involves maintaining records of past and present teaching methods and strategies, and selecting areas targeted for self-development. Reflective teaching involves feedback from students, teachers, parents, and research. It involves an awareness of best practices, implementation strategies and task constraints of time and resources. It is a daily exercise of checks and balances in and out of the classroom. This category describes quality teaching and the strategies used to model this to students.

These categories necessarily overlap and within each category, subcategories emerge that further describe how each contributes to the process of creative teaching. One sub-category common to preparation, connection, and reflective teaching acts as a nexus or vortex for creative teaching. This subcategory, values and goals, acts as a filter. Cognitive and affective energy from the macrocategories and from the teacher's life history and educational philosophy are fed into the filter and then propelled into action via the connection Grace makes with her students. Importantly, it is through the maintenance of this connection that Grace transmits her creativity to her students. As if along a conduit of electric wire, she uses her dynamic personality to establish a connection, then builds rapport of multidirectional communicative receptiveness. Along this energy stream, Grace's values and goals, ideas, philosophies, and strategies are transmitted to students.

Therefore, the connection between teacher and students acts as a conduit whereby creativity is transmitted. Grace's personality is the frequency of the current that transmits the message. The content of the artistic message is expressed through the lens of Grace's values and philosophies of life and education. These values and philosophies are embedded within instructional strategies and tactics that Grace models authentically.

With this connection in mind, Grace prepares each course she teaches. She modifies her strategies and tactics during and following the course in order to come closer to accomplishing what she considers to be ideal and quality teaching. She consistently records her progress and uses it to prepare future classes. She solicits feedback from her students and thus stays tuned into what students need. This process describes the dynamics of Grace's creativity.

The Dynamics of Creative Teaching

- A=Preparation
- B=Connection
- C=Reflective Teaching
- D=Constraints
- E=Self-Students
- F=Feedback
- G=Values and Goals
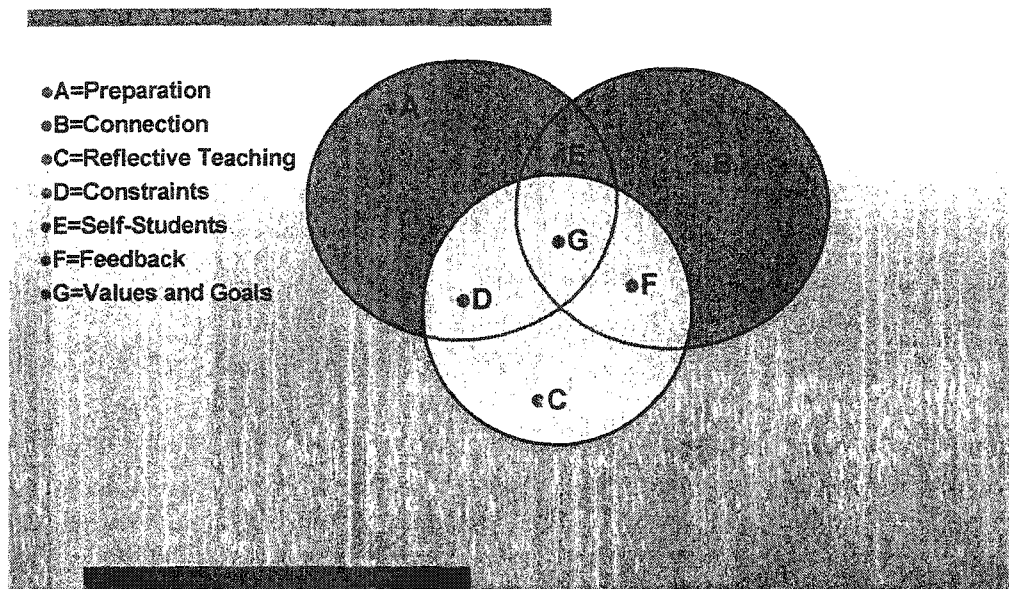
Figure 3. The physics of creative teaching involves the multiple macroprocesses of a) preparation, b) connection, c) reflective teaching, and the microprocesses of d) content and temporal constraints, e) awareness of self and students within the process, f) feedback from students and colleagues, and g) values and goals.

Preparation

As seen in Figure 3, the first of three main themes that emerged from interviews was preparation: the planning involved in designing and organizing a course. This category string partitioned into four subthemes: the process of preparation, an awareness of self and students within the preparation process, the constraints of time and appropriateness of instructional strategy, and values and goals.

The preparation process. The process of preparation is rhythmic, speeding up to accommodate ideas and slowing down to allow the ideas to take form. This aspect of preparation describes how Grace goes about planning before the course, and from class-to-class.

Grace prepares for the course initially by thinking globally. She lists her course goals, then partitions the course into specific segments. Each segment is then partitioned into smaller segments until the course goals have been accounted for.

I go from a very general sense, choose an area and then get something very

concrete. Then I start with a scaffold, and start hanging things in different places

and as soon as I get a sense that now it can be more specific, I start to be that

much more concrete and linear, right? I have my little boxes to fill in (CPI,

September, 1999).

As Grace moves back and forth from global to specific, she constructs a sense of what the course content should be and how she wants to impart it. She entertains many ideas, puts them down on paper, then later evaluates whether she will use them for the course.

There are little fireworks in my head all the time. I used to take that for granted,

but now I don't. So when I have those fireworks going off I make note of them

(CPI, September, 1999).

Ideas come flooding in at the beginning of the preparation process. Grace enjoys the feeling of tension mounting; it energizes her. She bounds into action moving ideas around. She returns to her stockpile of materials from former classes, sifting through and pulling out what she believes important for this particular course.

So, I forced myself to relax [takes deep breaths] and then ate a power bar

[health-energy snack] and I'm ready [laughs]. So the background to what I'm

about to do now is--yesterday, I cleaned up. I cleared the deck. This is what I

always do when I'm starting a new project. I go back to my worktable, my desk,

and my computer files, and I'm really tactile, I tend to prefer to work with paper,

lots of the stuff. And I start making sure that my organization from before is okay

[prior experience teaching similar courses] (CPI, September, 1999).

Throughout the process, Grace arranges and rearranges topics, exercises, and

activities and periodically becomes wrapped up in the swirl of ideas. When this happens,

she uses an incubation strategy that allows her to accept ambiguity for the present time.

She is patient with the process and has learned to give herself time for her ideas to settle

into a more manageable form.

That's why I have to give myself a lot of time to prepare a course. I need to let it

lie fallow. Sometimes things sprout, and sometimes they don't (CPI, September,

1999).

Here, Grace emphasizes that she has learned not to stress, or punish herself when the

ideas are not readily manageable. She refuses to force the process. She stands back, waits

until a few of the ideas have settled, then dives back into her pool of materials from prior

classes.

And I've learned this about myself, because I used to really panic during that

turgid time. And whatever, I can go for--I can go for a long period of time without

feeling like I'm doing stuff I want to do, but actually I finally learned that it's

called lying fallow. That there is work [being done], that the seeds are there, and

they're, you know, sprouting, or they're about to sprout. And I just have to trust. I

just have to trust that the work is being done, and that I'll get on with my life, and

I'll know when it's time to sit down and start organizing. I've learned that from

being a teacher (CPI, September, 1999).

As the ideas settle, Grace reviews them and selects the most appropriate ones. She uses

the ideas comprising activities and exercises that allow students to practice strategies for

instruction and methods of working with diverse learners as illustrated in the following

excerpt.

You know, when I usually go back to something I've written, it's really good. It's

really rare for me to go back to an idea that I've articulated on paper and say,

"What the hell was I thinking?" Usually I see that it's a really great idea and this

or that needs to change. But usually the ideas that come into my head are good

ideas. It doesn't mean that I use them all (CPI, September, 1999).

Once the overall structure of the course has sufficiently taken shape, Grace begins

planning the opening and closing lectures. She works from outward to the center. This

educational strategy helps to organize the course in such a way that she does not exclude

the most important points she wants to convey and provides flexible boundaries to work

within

When I'm looking at my very first day, I have an introductory 20 to 30 minutes for

them I've taken from my lecture notes. And for each week, of each day actually, I

try to have again, an overall thought that is going to drive what I'm working on

with them. And I don't always know what the overall thought is until I plan the

day. [Laughs] Then I realize oh, that's what I'm getting at. And I started off just

looking at the paper, the blank paper, and writing down, okay, I have my

introduction. I know what I'm going for there (CPI, September, 1999).

The constraints of preparation. The constraints on the preparation of this course

include time, energy, resources, and content. This is a thirteen-week course in which

students are in class for seven weeks, and spend the remaining six with a cooperative

teacher in a classroom. Therefore, Grace's focus remains fixed on organizing a great deal

of information into a short period of time in order for students to absorb rather than reject

or become anxious. Her organization of the material requires careful consideration,

flexibility, and patience to fit as much as possible into a brief period of time. In the next

excerpt, Grace describes the evolution of her overall planning process.

I've gone back and forth with a number of things trying to fit pieces in different

places. Really packing it in. But really, the basic structure has stayed the same.

Think of large, medium, and small okay? The large has stayed the same. The

medium structure has been pretty much the same. It's just the details, the smaller

details--I've changed some activities and the focus of some activities. I shouldn't

say I've changed it 50 times. Really what I think that I'm saying is that I have

gone back and forth with everything 50 times. At least a few times a day (CPI,

September, 1999).

Grace is also constrained by how much energy she is able to channel into the

preparation process at any given time. The mental energy to manipulate concepts and to

organize materials is very draining. Fortunately, Grace's passion for teachers to learn

how to successfully teach a diversity of students in the same classroom is both exhausting

and energizing. She does not really envision her work as purely work. For example, she explains:

> *I've always tinkered. I wake up in the middle of the night thinking about how I'm*
>
> *going to make it happen. I don't divide my time into leisure and work, work or*
>
> *leisure. It's fun (CPI, September, 1999).*

She maintains a high energy level in her preparation by picturing her students and the classroom. Grace wants the structure to be in place in advance in order for her to focus her energy on teaching once the course has begun. She describes how her energy allocation changes from preparing the course to teaching the course.

> *And once I get into the classroom, I think one of the reasons I become so*
>
> *exhausted through my teaching, and teaching isn't physically exhausting, not the*
>
> *way I teach, I don't run around the classroom like I did as an elementary teacher,*
>
> *I sit, stand, whatever. I don't think of that as part of my creative process anymore.*
>
> *What I realize after speaking with [Charles] is that what I'm trying to engender in*
>
> *my students is their creative process. So, I feel I've done all the work to plan, to*
>
> *organize, to set up a certain thing and I want them to enter this thing with me*
>
> *(CPI, September, 1999).*

Constraints on resources for the course are also important. First, Grace believes that students must have access to the most current information. This information often comes from journal articles, videos, and individuals (guest lecturers). Second, Grace believes that textbooks are extraordinarily expensive and that many students can not afford them. Therefore, she compiles a coursepack that is current, inexpensive and

focuses on how students can apply methods of teaching diverse learners. In this excerpt she explains how the coursepack she gives her students combines theory with practice.

Everything I give them, every single piece of reading I give them gives them an example of how to do this in the classroom. I'm sure that's why they enjoyed the reading so much last year. They get a little bit of theory and lots of practice; they are starved for that. They've often said to me, all we get is theory, theory, theory, but no one tells us how to do it. I'll show them how to do it (CPI, September, 1999).

Constraints on content revolve around the fears many students have about difference. Most individuals shy away from what is foreign to them. Teachers have characteristically taught to the average student. They are often unprepared to work with diverse learners. Lack of preparation often leads to feelings of inadequacy that can express themselves through anger, frustration, fear, and anxiousness. Sometimes this is a fear of inadequacy, but sometimes the fear becomes an ideological stubbornness as a result of which students balk at the idea of inclusion. Many students do not want to have to teach diverse learners because they know it will be challenging for them. They may resist learning how to teach diverse learners because they fear that an inclusive classroom creates chaos and poor achievement for all students. However, many are conscientiously aware of the complexity of teaching diverse learners.

Ultimately, students are concerned about being able to meet the needs of each child within an inclusive classroom. Students desperately want to know how they are going to manage. Therefore, Grace models specifically how they can introduce activities

that allow for multiple learning styles. She describes how she does this in the next

excerpt.

> *This I'll use as a collaborative activity because there are questions built into the*
>
> *notes. Then a response, then a break. Now, the third one [written response] is*
>
> *much more specific. I've been all touchy-feely before, but now I'm modeling*
>
> *another strategy called 3-2-1. It's a cognitive click kind of strategy where you*
>
> *give the kid some information either directly or through a video, and then you say*
>
> *quickly, [to the imaginary students] write down the three most interesting things*
>
> *you learned. Then write down the two things that you'd like to learn more about*
>
> *and then write down the one thing that you're pretty sure you're going to be*
>
> *thinking about tonight. You can be much more specific, but it's always 3, 2, 1.*
>
> *Then they'll have a break and get into base groups for a large collaborative*
>
> *activity. Whenever I do this kind of large collaborative activity, I give them*
>
> *background, quotes, a thinking frame of reference, and then I give them very*
>
> *specific directions (CPI, September, 1999).*

Because of the emotionally charged content, Grace plans industriously to prepare

students to work with children who vary in culture, learning style, learning ability and

emotional and behavioral maturity. This content must include children coded as at-risk

students with intellectual, emotional and physical disabilities, but also include regular

functioning and gifted children. If the content is prepared well, Grace feels she can focus

on reducing the students' anxiety once class has begun. Here she explains how she will

scaffold the course material.

Ok, this is just tentative. So, if they did this [pause] plus with my lecturing and

being intrusive [observing] over the week, then we could go into this [next] week

looking at um [pause], we'd be looking at metacognition and peer support and

problem solving. We could look at IEPs [individual education plans], that all

adds up to IEPs. I have a different approach to IEPs than other teachers. And I've

made them a little list of advocacy things to keep in mind, which that reminds me,

[making notes to herself] include in my course reader, okay, no, I don't think I did

(CPI, September, 1999).

Self and student awareness within the preparation process. An important

component of the preparation process involves Grace envisioning herself and her students

within the educational process. She is very self-aware. She understands the metacognitive

strategies that help her to plan most effectively. In this next excerpt, Grace describes her

learning style.

I've noticed that I am a very visual learner. It helps me to put a lot of my ideas on

the floor and stare at them, remember what it is, and make notes of what the

connections are, and kind of--make a map in my mind or on a piece of paper

about planning a course (CPI, September, 1999).

Grace also expresses a keen emotional self-awareness of her abilities as a teacher

and a confidence in her preparation style. She has to feel comfortable with what she's

planning to do.

So, it's a very personal style. I trust my instincts, obnoxiously. I'm very

methodical instinctively and intuitively rigorous. I am mentally rigorous. I go

over and over and over what I'm planning to do. I have had to learn not to obsess

on it, to let go of it (CPI, September, 1999).

Many creative individuals use analogy to describe processes. Grace is no exception. She delights in figure drawing. In this next excerpt, Grace uses drawing to describe how course preparation evolves.

An analogy is like when I draw. It's always the opposite process. I hone in on

things, gradually push them out, even when I do a very large rough drawing, and

then work on it. What it feels like is I'm looking steadily at a face, cause I like to

do portraits--that I see the face as an entity. And then working on it goes like this

[makes spreading motion with her hands], whereas when I'm planning a lesson, I

have a large, large vision of how I want it to look and feel and sound for my

students and for me. And then I have these diffuse visions, diffuse, but specific

because I really do see what I want it to be. And finally, I literally have it down to

five-minute sections. I don't start by saying five-minute break here, ten-minute

break here, that comes after I've worked through all the pieces. So with the lesson

planning, it's a deluge that has a spike--you know, those kites that are really big

and then go down to really small, that's what it's like. But with drawing it's

something deep inside of me that comes out from a small point to larger. With

teaching, it's this huge larger umbrella down to the handle. It's the same feeling,

the same rush--just a different shape (CPI, September, 1999).

More than once Grace referred to her planning an activity, or exercise as a process of envisioning the students in front of her. Running possible teacher-student scenarios through to fruition allow her to consider if the plan will be feasible or not.

And I usually have five or six or seven different ideas that come into my head--

they're just there. Little blueprints appear and I explore them, or I just sit there

and imagine [pretends she is imagining] let's see if that holds together, well let's

try this. So I'll think about them, and I'll talk to myself and walk up and down, I'll

act out for example, if I have an idea how I can begin to approach a topic with my

students, I'll start to talk as if they're there. I'll envision my students in front of

me and I'll just kind of see what happens (CPI, September, 1999).

This scenario-building process is very effective for Grace. She anticipates students

working with the concepts and activities because class time together is limited, because

she doesn't want students to do anything she wouldn't want to do herself, and wants to

model this strategy of preparation to her students.

So, I hated doing exercises as an education student when I was told to make a

lesson plan, but I had no idea who my kids were. I found that really frustrating

and unreal. So, I'm going to ask them, they've all had their third year stage now--

which they all found very powerful. And I'm going to ask them to either think back

to that stage or another teaching situation they've been in. But I'm hoping it'll be

their stage, and I want them to imagine that class. Imagine that whole situation

and then, and I'm working this through now, I want them to come up with some

stuff I want them to do using what they know of multiple intelligences and

learning styles, using what they know about classroom environment. They have

articles to read about that, and learning to work with other teachers. Um, I'm

betting, and I'm gonna tell them this, I'm betting they could on their own come up

with a good lesson plan using multiple intelligences (CPI, September, 1999).

Values and goals guiding preparation. Grace's course preparation springs forth from her values and goals of teacher education. Co-constructed classroom values and goals provide the opportunity for all students to be successful. In the next excerpt, Grace described her experience of how having goals motivates students to learn.

[In a class of elementary students where many were considered to be at-risk, Grace enlisted the class in compacting the curriculum into the first three days of the week. During these days, along with the traditional work, students had large blocks of time devoted to composing songs, writing stories, poems, and reports that were taped on Thursday for a community radio show.] So we did that for one week or two weeks and it was magical, 'cause we were so--the focus of having a goal, right. Everything we did, we'd talk about our math, you know, it was just incredible the learning that took place. All through the week they were incredibly well behaved. There were no behavior problems because they wanted to do the radio show. And then on Friday we'd do art and stories and songs all day long, which is all learning, but they felt it was a huge reward (CPI, September, 1999).

Grace models to preservice teachers how to prepare classroom values and goals by using the analogy of an umbrella. The canopy represents a teacher's overarching themes and values for the course, whereas the spokes of the umbrella are the subthemes or goals supporting the overarching structure. Once a teacher has the umbrella in place and open, she can begin to assign time and space for the activities that will help students to develop the spokes or support structure of the umbrella. In the next excerpt, she explains how the umbrella scaffolds the course information for the teacher and the student.

So that's what I was thinking through yesterday. And because I was stuck with

what I wanted to give them to read, and had to re-think it, that cued me to what I

always think of as my umbrella for the course. And I'm going to bring an

umbrella into the classroom I decided, a big colorful golf umbrella. And I'm

going to open it and hold it and um, I'm going to talk about the importance of

having a big sense of what you want to bring into your class. And um, each spoke

of that umbrella, or chunk of–or however you want to look at it is a way of–you

can divide it up like that, you can compartmentalize, but you've got to open the

umbrella and have it there. It protects you; it marks your space. It's clear. It's

mobile. It folds away if you need it to, but it's there. And that's what I want them

to start visualizing in terms of their own brain, having all this stuff that's

available to them (CPI, September, 1999).

Plans without overarching values and goals are meaningless and empty. They

don't convey the activity, exercise, or message to the students. For example, Grace

designed the content and materials for this course to help teachers understand methods of

teaching in multicultural classrooms with students who have a variety of exceptionalities.

Specific subjects such as reading comprehension and science were used to model for

students how multilevel instruction could be implemented. The thrust of the course,

however, remained on the value of inclusive education and the importance of mutual

respect and understanding. In the next excerpt, Grace formalizes her plan for the course.

So, the first week I'm talking about relationships, values, and choices, second

week building trust and taking risks, third week, acknowledging obligations,

caring about assessment and behavior, valuing our relationships, real lives. This

is where I bring in speakers (CPI, September, 1999).

Grace's preparation process is reenacted in the classroom. The value of

authenticity in the classroom is modeled as Grace describes what she does when

preparing her courses as something she wants her students to be able to do. For example,

Grace models to her students how a teacher plans and adjusts her course by showing that

the planning process involves the funneling of ideas into an organized manageable form,

trusting the process, belief in oneself, and experience with plans coming together. In this

excerpt, Grace is telling me what she will say to her students.

As you'll see in the next few weeks, and then [you'll] start filling in the missing

pieces. What are my priorities? What do I really want to have happen, and then

what does that mean? If I want this to happen, then what does that imply about

my teaching and for the exercises and everything? I love the process–about

thinking about something that I love. The happy circle, I can think about that for

hours (CPI, September, 1999).

Therefore, the preparation process involves an overarching intellectual

organization of materials and activities. It involves an awareness of the constraints

operating on time, energy, resources, and content. It involves an awareness of the

inextricable nature of how oneself and one's students are part of the process. Finally,

one's values and goals act as filters for the preparation process.

For example, Grace begins by thinking of an overall structure for the course. She

plans course content with temporal and strategic constraints in mind. Next, she enacts the

course as if it were happening, envisioning herself in the course with a group of students.

She tries to take into account the variety of students she will have based on prior experience with the course. Next she thinks of what information she wants them to leave the course with. The goals are then organized into themes that will guide each week. The themes are structured and then scheduled loosely for each day. Finally, each day is scheduled loosely with an activity or an exercise, a film, a lecture, or guest speaker. Once the entire class schedule is loosely planned, Grace tightens up the structure by filling in the detail.

Creative preparation. Creative preparation involves experience, confidence, persistence and flexibility. Creative preparation requires teachers to utilize all available resources and to continually build on their experience. Grace describes the process as circular:

So, it's a circular thing [the planning process]. And in a way you end up doing the same thing all the time, but it's better, richer, deeper, and I want to reassure them of that (CPI, September, 1999).

Grace believes in her abilities, her method, and her goals. She finds it interesting when teachers construct obstacles for themselves.

And it's kind of like they had a piece of meat and a piece of bread. And they're telling me I can't make a sandwich with a piece of meat and a piece of bread. And I say, "if we cut the piece of bread in half, and fold the meat over, we have half a sandwich". This is not hard to figure out. But I am constantly being told "you are such a creative thinker." [Laughs] Some people think that a sandwich has to be the whole piece of meat and two pieces of bread, and then you cut it. You can't have half a sandwich without having a whole sandwich. Whereas I think if you

have the ingredients, you can make a sandwich. [Laughs] So if that's creativity,

I'll take credit [Laughs]. Obstacles don't really bother me. I laugh at myself when

someone puts a rock in my way (CPI, September, 1999).

Grace refuses to allow a lack of resources or colleagues' attitudes to hinder her progress. She doesn't think inside the box when preparing a course. She is often perplexed when others call her creative. In the next excerpt, she describes the feelings she has when she is planning a course.

And so he [Charles] and I were talking about creativity. What we think is

creativity and when do I feel creative. And I feel creative when I'm drawing, when

I'm painting, when I'm writing, when I'm thinking. When I'm planning a course I

feel incredibly creative. It's like sculpture, I'm pulling stuff out of the air, out of

my head, I'm running around, I'm making phone calls and going to different

people. I'm sitting at my desk. I'm jumping up from my desk and pacing

throughout the house. I'm talking to myself and everything is flying and I pull in

the things that I want and toy with ideas (Final, January, 1999).

Because Grace plans so well, the class appears very spontaneous. Planning well, Grace says, allows her to relax into the outline of the course and to be spontaneous.

The preparation is just there. The play just starts, I do my stuff, I walk off stage,

all the other stuff happens, I walk in and do it. It's magic, it's magic. Otherwise, if

I kept this burning--if I kept doing this [intense planning] the whole time I'm

teaching I would really, you know, cardiac arrest. I couldn't maintain it (CPI,

September, 1999).

Although the planning is there and Grace can allow herself to relax into the course outline, she has to remain flexible in order to detect necessary and sometimes subtle changes in curriculum and instruction. This flexibility in planning and adapting to the needs of the class culture creates space for exploration. Grace wants to model that teachers need to be willing to change if their plan isn't working. In this next excerpt, Grace emphasizes students' fascination with her flexibility with the outline of the course. Her flexibility results from her preparation with alternative lesson plans.

> *So, I'm learning from my students that partly how I structure what I ask from*
>
> *them strikes them as creative. To me it's very straightforward and ordinary, but*
>
> *they go crazy (CPI, September, 1999).*

Connection

The second major theme to emerge from the interviews with Grace was connection, that is, the relationship between a teacher and her students. This category string also partitioned into four subthemes: the process of connection, awareness of self and students within the connection, maintaining reciprocity through feedback, and using values and goals to guide and maintain connections.

The connection process. Connection is a process wherein teacher and student learn together. Connecting with students involves an attitude and ability to be embracing, trusting, and allowing oneself to be vulnerable. Grace describes how the connection is cultivated in the next excerpt.

> *I'm realizing more and more that something happens to a lot of students in my*
>
> *classes that I took for granted when I was an elementary and high school teacher.*
>
> *In elementary and high school, I had very warm, close, funky kind of connections*

with a lot of jokes, a lot of intensity, a lot of moving boundaries, which I was very

careful of as a responsible adult. With these adults I'm teaching, I've been

increasingly overwhelmed by their response to my work. The connection seems to

be one of real intimacy and challenge. To me, it's very emotional. It's

increasingly deep (Final, January, 2000).

The connection process involves intuition, intimacy and challenge; it's emotional and

real.

The process begins with the teacher and her willingness and ability to devote a

great deal of physical, emotional, intellectual, and psychological energy. In order to

connect to, inspire, and form a bond and relationship with each student, a teacher must

maintain a high level of commitment and dedication. In this next excerpt, Grace describes

her philosophy behind connecting to her students.

Because of the social nature of learning and the social nature of creativity when it

comes to education–and I'm not going to comment on creativity in any other field,

but as far as learning and teaching goes, you need to be able to connect to human

beings in a really positive way. If you can't, you shouldn't be there (I ←Spi,

September, 1999).

Self and student awareness within the connection process. The process of

connection is maintained by monitoring oneself and one's students. Monitoring the

connection is important because as it becomes increasingly deeper, maintaining a healthy

connection requires a lot of self-other awareness and reality checks. Grace says that

connecting is risky for some students and they back away or resist. Students who retreat

from connection are respected and are not forced to connect. However, many are able to

relax into the connection and trust the process. The next excerpt describes a strategy

Graces uses that allows students to build trust and risk opening up and making a

connection.

[After] my first [university] course, I didn't feel I was successful at getting them

to speak collectively, collaboratively, and I realized that they might not feel safe.

So, the next time I taught a course I had them do written responses throughout

and it established an incredible bond. And they just shared like crazy [laughs].

Once they realized it was ok, boy, I couldn't shut them up. So, that was good

(CPI, September, 1999).

The connection process also demands that teachers understand themselves and the

way they want to communicate information to their students. Grace describes her

communication style in the next excerpt.

And I'm a very, I'm a people person. And this is the most intense people activity

you can do. Well, close. It really is, it's just so eccentric, it's so eclectic and

intimate, intimate, intimate. I need that. I need that wild, wild, intense personal

intimacy with people. It's demanding and challenging, and in your face. I need

that. I wither away without it (PHPLI, September, 1999).

Grace is very aware of how she wants to interact with her students. She explains her

perspective this way:

My perspective is always person to person, very holistic, very active. Very active,

holistic and very engaged. Very engaged teaching, my classrooms have always

been the busy ones in the school, the noisy, busy ones that produce strange

looking things, the oddest chocolate chip cookies anyone has ever seen [laughs]

(PHPLI, September, 1999).

She establishes and maintains this intimate connection through her personality

characteristics. These characteristics include a nurturing kindness, self respect and respect

for others, self-acceptance, and unconditional acceptance of others. She explains in the

next excerpt how the connection allows her to communicate a great deal of content in a

kind and nurturing way.

I love that time with my students, every second because every second is so

important to me. And I just pack it. I warn them at the beginning of the course

that this is gonna be a lot of stuff. I'm not one of those teachers that say this

subject is so large that we can only do this much and you can never know as much

as you're supposed to. I say you can learn everything. Everything I'm gonna give

you, you can learn. It's not that hard, it's just a lot, so buckle up [laughs]

(PHPLI, September, 1999).

Grace stressed the importance of making certain she was connected to the sources

of support that feed and nurture her so that she would be able to maintain a healthy

connection with her students. She explains the importance of knowing when to recharge

her energy in the next excerpt.

Because another thing I learned about my teaching was that I have to be careful

to keep feeding me independently of--my students give me a lot, I give them a lot--

it kind of balances itself out (Midterm, October, 1999).

Maintaining reciprocity through feedback. The connection is developed and

maintained in part through the cybernetic process of insight and questioning that

provide feedback to both student and teacher, stimulating self-other awareness. Grace asks questions of students and monitors verbal and nonverbal communication in class, but also monitors understanding of the content through exercises and activities requiring students to provide written responses. Many of the exercises designed to teach collaboration allow Grace to observe if students are learning to provide steady feedback. Therefore, once again the process is modeled as a strategy within the classroom. She states that:

The exercises are to help focus our thinking, and to help us be more metacognitive. I'm thinking this, tell someone else what I think, and they tell me what they think of my thinking, and I tell them what I think of their thinking. I think differently because of that response. Maybe we write separate answers, again, we collaborate (CPI, September, 1999).

There is a great deal of flexibility for students during activities and many express a personal freedom from the diffuse structure of the exercise. A diffuse structure allows space for some students to share feedback openly with each other and Grace. She explains:

Diffuse does not mean distant. Within the diffusion that I deliberately have forced on them, um, the most common comment is they have never felt so connected to a teacher. They never felt they had a teacher that was so involved in their lives, that cared about their learning, um, that's what they tell me, God knows what they tell you (Midterm, October, 1999).

Grace requires students to be willing participants in their own learning and to co-construct the course content within the classroom experiences. This means that students

are involved in cooperative learning exercises that evolve through responses from fellow

students and Grace. Student responses maintain the connection with Grace, and with

fellow students.

Grace models giving responses to students on their assignments in an affirming

way and then has students respond to each other's work in affirming way. The following

excerpt describes her joy with students asking meaningful questions of their classmates.

> *[Referring to a question about making group activities] And I felt such real*
>
> *energy and engagement and involvement and that was what I wanted to feel;*
>
> *that's what I wanted to see. I saw from the questions, the range of questions,*
>
> *there's a range of kids in the class right? And the questions ranged from very ON*
>
> *and philosophical to very detailed and concrete so I thought-- that's the range*
>
> *and they're showing it to me and each other--which is always harder right? And I*
>
> *felt really good. I thought this is right where I want to be right now [lesson plans,*
>
> *goals for reaching objectives]. Absolutely where I wanted to be that they're*
>
> *engaged and this involved and this serious about their work (Midterm, October,*
>
> *1999).*

Values and goals guiding connection. The connection is designed to teach

students to become their own best, dynamic, fun, and different kind of teacher. The goal

of the connection is to model, provoke, question, and stimulate the student into finding

their style of teaching. Grace's theory is that the connection creates a freedom, a space to

be oneself. It allows the student to know they can relax and learn. It is through this

connection that trust is established and independent learning, independence, and

confidence are developed. Further, the connection carries the passion of teaching and the

ability to inspire students intellectually and emotionally, thus engendering the student's creative process.

> *And I say the same thing to any human being, we affect people stunningly, powerfully, and we're supposed to be decent, we're not supposed to be shits. It's really basic to me. I call it the NHK philosophy, normal human kindness, we need more of it, and I'm very emotional with my students when I discuss that (I ←Spi, September, 1999).*

Again, Grace's values and goals for the course provide her with the ability to emotionally and mentally nurture the connection with her students. She says *"Most of them are so starving to be treated like a human being that they just blossom" (I ←Spi, September, 1999).*

Grace begins by establishing a safe environment for students to express themselves within the classroom culture. She describes this as building a community, a resource network. Next, she encourages, nurtures, and inspires her students to be willing to risk, and to transcend the traditional roles of student and teacher by modeling collaboration authentically. Speaking to an imaginary classroom, she says:

> *I'm going to tell you who I am. I'm going to be really clear about my biases, my goals for us. You can agree or disagree. There is going to be a dialogue going on the whole time we're together (CPI, September, 1999).*

One of Grace's main goals is to provide the students with an environment that encourages them to find their own voice, their own way of expressing their own goals and values. The next excerpt describes how she helps students to find their voice.

And one of my students this term said, you take away all of the educational

overhead. You just clear all the space around us and I can just sit in your class

and know that I can learn anything I want and I'm not going to be judged or

compared (CPI, September, 1999).

The connection is often very powerful for students. They remember why they

wanted to be a teacher. They find their passion. Connection sends the energy they need to

risk, experiment, and be vulnerable too. Here she talks about what the connection means

to some of her students.

But the connection seems to be one of real intimacy and challenge. And the

challenge can be affirming so that I have men and women come to me and say

"Thank God" and I'm quoting, "Thank God I've finally had a teacher like you. I

was ready to quit the program. I was thinking that I'm not supposed to be a

teacher because nothing was making sense to me in this system. I don't want to be

one of those teachers who teaches a subject and doesn't actually teach a child,

teach a person" (Final, January, 2000).

However, not all students feel comfortable with making an intense connection. Grace

understands this. She doesn't want clones of herself leaving her class; she wants students

to connect with their own classrooms in whatever way they feel comfortable. She

elaborates how direct instruction is necessary in the next excerpt.

I see some of them (the students) liking me because I'm the opposite, right? So

they enjoy this stuff. They're not going to do that when they go out there, and

that's fine. I've started to say that as well because I've picked up in my last few

classes that it needs to be said. Now, for example, this term I'll say "this is my

way of connecting to you. You find your own way to connect to your students, but

the connection has to be made," and no one disagrees about that. They all agree

on that (Final, January, 2000).

Grace wants students to know who they are so they can develop healthy

connections with others. This is accomplished by listening to others and making

decisions about their own values and goals. In addition, Grace believes students learn

who they are through self-awareness of one's cumulative life experience, past experience

with teachers, loved ones, peers, and life challenges. She hopes students will risk

discovering important information that helps them form responsible quality relationships

with their students and in their lives. The following quote describes her educational

values.

> *"students want work that will enhance their relationships with people they care*
>
> *about" and if there is a message that I would want them to get from our work*
>
> *together it's to keep that in mind. I think that's an incredibly deep thought about*
>
> *what work means to us and to enhance the relationships with the people we care*
>
> *about, why not! (CPI, September, 1999).*

Problem solving when forming connections. Grace believes one of the greater

difficulties interfering with the connection process involves the number of students in the

class. With a large class size, teachers have less time to respond to individual questions

and less time to model the kind of provocative teaching methods that promote

cooperative and constructivist learning.

Grace focused a great deal of energy on maintaining a connection with 146

students. The large number of students certainly jeopardizes a teacher's ability to

maintain the connection. However, Grace found that electronic mail aided her in the

maintenance of the connection with her students. This tool proved to be an adaptive

strategy, it helped her to attain her goals of staying connected to her students. Grace

remarked that she had never had so much contact with students before.

> *I'm concerned about a few individual students whom I don't feel I've connected*
>
> *with; I won't even say connected well with. I'm concerned. I want to check with*
>
> *them. So I did that last week. There were a couple of students that even though I*
>
> *had received their responses I just wasn't sure [if they were all right]. And I did*
>
> *get in touch with them and they both wrote back and said "Oh Grace, thank you*
>
> *so much, but I'm fine, it was just a bad day, you pay so much attention to us"*
>
> *(Midterm, October, 1999).*

Grace suggested another adaptive strategy for maintaining the connection with

large classrooms and for quality teaching in general would be to have a co-teacher to

instruct such a large class. When a teacher has a collaborator they trust, admire, and

respect in the class who can help push the envelope of that teacher's creativity, it can be

inspiring, motivating and rejuvenating. This shared experience between colleagues

mirrors the connection between teacher and students. Grace explained how having a

colleague in the classroom helped to reflect back some of the positive energy she was

giving to students.

> *Well, having Frank in the class, having an adult that was really tuned in to what I*
>
> *was trying to do [made the teaching experience very enjoyable]. Having an adult,*
>
> *and I stress the word adult, having an adult who asked really provocative*
>
> *questions and in those provocative questions gave me the sense, first of all I'll*

speak of you, that you um, were really cheering on the stuff, stuff, whatever stuff I

was giving you. Your poor ears must be worn out. But you really "yeah, yeah,

let's do it!" affirming, and really [were] critically aware [observant and able to

offer feedback] which I think is a dynamite combination in any partnership. To be

affirming and to say, ok, wait a minute and then what is the implication of that, or

what do you think is happening there. I haven't had that in years in a class. And I

really loved it. I just loved it. It was one of the things that fed me independent of

my teaching to the kids (Final, January, 2000).

Providing additional support, feedback and affirmation for Grace's values and

goals for classroom teachers helped to supply her with the extra energy necessary to

maintain a quality connection with students.

I needed to have a colleague um, who would be there. And you were there. It

made a huge difference in my strength and my fun. I really had fun. You know, I

could really say things about the students to you that would just come up quickly

that I wouldn't remember to say to Charles, or my kids, and I just share a lot at

home or to friends. And you were right there and we could just share something

that happened in class that we caught that made us laugh, that was really

important. And I know from what other teachers have told me, that other teachers

also have found having another adult in class who is sharing the experience. It

opens up things. That was one of my favorite experiences (Final, January, 2000).

Reflective Teaching

The third main theme that emerged from the interviews with Grace was reflective

teaching: the ability to conduct action research on one's practice. This category string

partitioned into four subthemes: problem selection, course constraints, verbal and

performance feedback, and values and goals.

Problem selection. Problem selection refers to the process a teacher goes through

as she decides which area of her practice she would like to improve. For this course,

Grace's decision was based upon the course constraints, verbal and performance

feedback from students, her overarching values and goals for the course and her

experience as a teacher.

Before selecting a specific area of her teaching to improve upon, Grace focused

on making her teaching more effective, authentic, inclusive, and fun. For example, she

included a variety of recent articles addressing diverse learners in the classroom for her

coursepack. These articles reflected best practices, could be applied to a variety of

classroom situations, and represented current knowledge of the domain general and

domain specific characteristics of the course.

Grace also included a variety of films showing teachers and administrators

collaborating in order to create ideal learning environments for diverse learners. These

films stimulated a great deal of dialog concerning whether ideal learning environments

could in actuality be accomplished. Students were presented with working models of

creative education that could be incorporated into their teaching and asked to practice

creating ideal learning environment of their own design.

After the first week of the course, Grace targeted an area for improvement. She

decided to focus most of her action research energies on the interaction between course

constraints (class time, number of students, strategies of instruction) and monitoring

student learning styles through assessment and evaluation. More specifically, Grace

wanted to concentrate on insuring a quality connection and relationship with her students

could be formed regardless of the large number of students enrolled. Therefore, her

action research decision was to improve her ability to make connections with such a large

number of students. The following excerpt describes how she would usually connect with

students and how she made adjustments to make the connection with this class.

> *I think it's an honest classroom. I've never taught such a large group in such a*
>
> *rigid setting where I am really distanced from them [sigh] and I find that difficult.*
>
> *Normally I set my classes of 45 students up in a huge circle. We take up the full*
>
> *classroom. I walk in the center and spin around. I'm physically much more goofy*
>
> *and then I sit in the circle with them and we talk. And I miss that [with this class].*
>
> *It's more intimate and I find the basic things like the physical projection of my*
>
> *body and my feelings really tiring [with the present situation]. You've noticed I*
>
> *give very short lectures? Normally I do, I give 20 minute or half an hour talks*
>
> *where I bring in other things partly because I don't want to model lecturing. I*
>
> *want to model doing things. But I found that I'm really exhausted after I've*
>
> *spoken to the class for 20 minutes. I realized my body is tired because the energy*
>
> *it takes to push out, to push out warmth and intimacy right up to the top levels and*
>
> *back to the lowest [auditorium seats], I've never had that experience before and I*
>
> *find it more challenging (Midterm, October, 1999).*

One method of maintaining the connection with her students Grace used was to

allow an opportunity for students to express themselves through personal responses. The

first written assignment was to write a biography of themselves and why they wanted to

become teachers. Students were to include a personal history and a philosophy of

education. They were also encouraged to include a small photograph of themselves in order for Grace to connect name, face, and ideals. Each of these biographies was read and responded to with personal feedback from Grace.

Another personal response written and handed in for feedback addressed the quotes that introduce each chapter of this thesis. Students were to select a quote and write about why they felt it was important, or unimportant. Grace read and responded to each of these assignments, making mental notes concerning whether students were feeling comfortable enough to really express themselves.

I give them recipe cards and they don't put their name on them. It's totally

private. I give them 10 to 15 minutes [to respond to a quote or film] and it's not

marked. It's a dialogue, kind of like a journal, right? But it's different – and I tell

them I'm giving you a recipe card because it shows you don't have to write a lot,

but if you want a second card you can have it. And they shared like crazy (CPI,

September, 1999).

Another way Grace monitored her connection with students was to arrive early for class and casually speak with students. She made herself available before and after class and encouraged students to electronically mail her if they needed to make an appointment to talk. Students neglecting to hand in assignments and students expressing difficulty were targeted for appointments to problem solve with Grace.

In addition, Grace asked me for feedback as to whether I thought students understood her message of teaching diverse learners and whether they were having fun. If she was unclear whether a student was involved, she asked them directly in a non-threatening and genuinely nurturing way about how they felt they were doing.

Therefore, the area of her teaching she wanted to improve upon was to teach

effectively and authentically with a large number of students. Interestingly, Grace has

consistently been dedicated to improving her practice. First she decides what she will

improve, and then she improves it. When asked if she ever experienced difficulty

deciding what to do next she said:

> *No. No, [laughs] I always know what to do next. Always, [laughs] it's called*
>
> *confidence Frank [Laughs] (PHPLI, September, 1999).*

That confidence propels her forward into change then the change is monitored by

feedback and her own values and experience. The following three quotes represent

Grace's confidence with changing her practice and also exhibit an excitement, joy and

passion for improving her profession.

> *If I can learn to be a great teacher for people with learning problems, I could be a*
>
> *really great teacher (I ←Spi, September, 1999).*
>
> *My sense of my own teaching has deepened, but the sense of the larger task of*
>
> *making the work, work better for more people, it's wonderful. It's a wonderful*
>
> *feeling and it's a generation feeling. I'm older. They're younger (PHPLI,*
>
> *September, 1999).*
>
> *Yeah, the task is to do it and then do it better. Do the stuff I did in grade one*
>
> *twenty years ago, but do it larger and better. I'm loving this, it's just so much fun*
>
> *(CPI, September, 1999).*

Course constraints. The subthemes emerging from interviews overlap, however it

is important to emphasize how the course constraints played a significant role in the

process of Grace's reflective teaching. One example of how course constraints stimulated

creative teaching methods resulted from attempting to connect with such a large class. The class size was problematic because the course content dealt with sensitive issues. Specifically, students were concerned that they would not be prepared to teach students with diverse learning needs and styles. This legitimate concern could be dealt with in a smaller class by creating an intimacy between teacher and student, and course content designed to promote confidence and effective strategies of teaching diverse learners. An example of the combination of creating intimacy and designing course content would be to have students brainstorm ideas and then role-play difficult classroom situations.

One solution to the constraint a large class size has on intimacy was for Grace to create groups of students, subsets of the class. Grace established thirty small groups of four to five members called base groups. These base groups functioned as a unit for two weeks, after which they became part of a new base group. Developing base groups became a multi-purpose solution to a large class size. Not only could students work collaboratively with a few other students, they learned to work with different kinds of students and thus be exposed to the concept of diverse learning as they were learning how to implement it within the classroom.

> *As far as the strategies go, and how to work with an IEP (Individual Education*
>
> *Program), Um, again, they would work in different base groups with a different*
>
> *student in their head. I'd give them a very, quite a strict guideline to follow, but*
>
> *again they're writing and taking notes, they're coming up, they're sharing. I*
>
> *realize the more I teach them the more I feel it's absolutely crucial that they learn*
>
> *to work together better than teachers notoriously work together and I'm going to*
>
> *stress that (CPI, September, 1999).*

Another course constraint that threatened Grace's ability to connect with her students was the length of the course. The content had to be compacted into the first half of the semester to allow students to conduct their internships. This time constraint translated into an urgency to transmit all the necessary information in order for students to feel confident and prepared to teach.

A solution to this temporal constraint was to embed course content within activities. For example, when teaching about multiple intelligences and learning styles, students practiced including each other's ideas into their class projects. They negotiated responsibility for group tasks, gave each other feedback, and cooperated to achieve a more ideal learning environment. Grace limited the amount of time for lecture format in order for students to receive hands-on practice.

Verbal and performance feedback. Once the class had begun, Grace consistently monitored students for signs that they were understanding the content and learning strategies they could redesign to make their own. Grace encouraged regular feedback by walking around students as they were working, asking them questions, listening to their ideas, and providing alternative suggestions and strategies. Again, electronic mail was very helpful for students needing to ask questions or receive clarification privately.

Grace also considered student's individual and group work on activities as an indicator of understanding how to work with diverse learners. Grace used this indicator to adjust her teaching style, introduce additional strategies, and suggest individuals in the field to speak with. Performance criteria suggested to Grace that the connection and transmission of information was either stable or faulty. Instead of the responsibility for learning the information residing completely with the student, Grace worked with the

student to accomplish understanding. Grace describes in the next excerpt how feedback

from students affirms and helps her adjust her teaching methods.

> *I really believe in the way I approach teaching. I believe in it passionately. It's*
>
> *not just partly my instincts but I see it in the research. So much of what I do is*
>
> *affirmed in the data that this is the way to connect to people to get them motivated*
>
> *to, whatever. It's a better way to teach.*
>
> *My students say, "You're always smiling, you're always laughing, you're*
>
> *always having fun." That's why teaching is the extra. I think it's very contagious.*
>
> *It's charismatic in a way that I'm only just learning. That was one of my*
>
> *reservations when we started to talk about what I've learned about my teaching--*
>
> *in that--the depth of the connection [pause] it's a very fine line between*
>
> *provoking my students intellectually, emotionally, affectively, intellectually, so*
>
> *that they go "Oh Wow! Let me think about that. Let me work with that. All right,*
>
> *this is interesting" (PHPLI, September, 1999).*

<u>Values and goals guiding reflective teaching.</u> The process of reflective teaching is

dependent upon the area in which a teacher chooses to focus her action research, the

strategies she uses to address this area, and the feedback she receives as to whether or not

the strategies are effective. These choices are based on the teacher's values and goals for

her teaching and for education in general. For example, effective teachers practice self-

awareness in order to adapt to feedback cues. This allows the teacher to make corrections

in style and strategy in order to deliver the content.

Grace's values and goals as a reflective teacher embody a pride in her profession.

Her pride of teaching is modeled to her students along with a determination toward

improving oneself. Grace believes that dedication to consistent self-improvement should lead to reflective teachers who are often confident and happy, enjoy living life, and feel successful. To Grace, these reflective teachers are admirable and inspirational role models who can afford to be generous with their happiness. Furthermore, Grace believes that reflective teachers are aware of their happiness and of the responsibility that goes with creating one's own pathways to happiness. They are quality teachers who express positive energy and welcome students into their classrooms. They motivate students to learn. They are self-aware, complex, iconoclastic and experienced in a variety of areas. They have passion, hope, and trust for their students and a desire to share that passion. They have an evolving sense of their own teaching as becoming richer, deeper, improving and enlarging through responsibility and adaptation. Grace says that for many,

> *being a teacher is a life choice. Being a reflective teacher is a higher-order life*
>
> *choice. I was an apprentice teacher when I was in kindergarten and I didn't even*
>
> *know it until two years ago. I didn't understand that not everyone sits in class*
>
> *every day from the time they're five years old and thinks no, this isn't what's*
>
> *supposed to happen, no. No one gets disappointed and disillusioned at grade one*
>
> *and starts skipping school. [Because] I was a fully formed teacher when I was*
>
> *five years old. And it wasn't until my early twenties that I could articulate it. It*
>
> *was so important to me before then that I couldn't speak of it to anyone, because*
>
> *to be a teacher was to be a loser. You know, those who can do, and those who*
>
> *can't teach. It took a lot of courage to say no to the things other people were*
>
> *telling me I should do. People told me I should go to art school. Um, people told*
>
> *me I should be a psychologist. These were all much regarded as high-end*

professions, to be an artist, to be an actress, to be a psychologist. And I thought

no, I can be all those things as a teacher (I ←Spi, September, 1999).

Reflective teachers are devoted to improving their own practice. They consistently choose some aspect of their teaching that needs improving based on their experience, knowledge acquisition, research, or on feedback from students, colleagues, or administration. Ideally, reflective teachers develop supportive relationships with their colleagues.

Grace states that being a good teacher is synonymous with being a good human being and connecting to the seriousness of teaching and the effects it can have on students and society as a whole. Reflective teachers ask a lot of questions, make use of current research, and give students permission to be themselves. They provide resources and connections, and ask students to become independent thinkers. They make connections with parents, are open with their philosophies of education, and utilize peer tutoring, cooperative learning, mastery learning, and provide authentic assessment. The following excerpt describes how Grace explains to students to be their own best teacher.

> *[I tell my students] We're the adults. We have to have the information. It makes it*
>
> *easier for our kids to learn. I don't care what anyone else says about what they*
>
> *can do. You're the classroom teacher. You figure it out, and here's some*
>
> *information that can help you. I totally de-emphasize "Let's be special, let's be*
>
> *charitable, or whatever." Let's [simply] be really good teachers and work with*
>
> *kids the best way we can. So that's a way of trying to motivate them to pay*
>
> *attention to the strategies and the philosophies that I'm giving them (PHPLI,*
>
> *September, 1999).*

The following selections reflect how seriously Grace takes the teaching profession and how important it is for her to continually improve her practice.

I really take my life seriously. I take my skills seriously, I take other people's lives seriously and I take their skills seriously. And I'm always telling my student's "if you choose to be a teacher, it's the work of a lifetime. You will never know the effect you have on your students, don't ever underestimate, for better or for worse, what you do in that classroom" (CPI, September, 1999).

To Grace, it is important to be the kind of teacher who allows students to find and embrace their own style of teaching and learning.

What do I hope to accomplish? I think, I hope to accomplish what I'm trying to accomplish now. It's nothing that's going to change–that students leave this course with the feeling of permission to be who they are. Permission to have their own style [of teaching] in the classroom. Permission to try things and not do as well as they'd like to, but that's the way it goes. Permission to have fun with their students. Permission to like themselves and to know they have limits and they have strengths and they can play with that. I'd like them to know that.

I think teaching and learning are essentially about magic happening and you can't predict (when or if someone will be a creative teacher). But when teaching is really good, my God the sparks just fly [Laughs] (Midterm, October, 1999).

Grace's attitude about teaching diverse learners focuses on being willing to take risks, be flexible, and embrace difference in the classroom.

The way I'm teaching it (course: Teaching Diverse Learners) now is very different from the way it's been taught. Why? [Because] People have taught it

before from a medical, diagnostic, disability perspective with a list of the

attributes of every disability and checklists of what you can do to identify and

meet the needs of these very disabled people (CPI, September, 1999).

The underlying message Grace wants to convey is to focus on identifying and affirming each student's gifts and talents. Grace does not consider emphasizing difficulties or disabilities as helpful, but as limiting. By labeling students, teachers inadvertently form expectations of ability for targeted students. This boxes up disabled students and becomes a self-fulfilling prophecy for the student and limiting for the teacher.

Teacher confidence. One of the most important factors to emerge from the interviews with Grace that both transcends and overlaps planning, connection, and reflective teaching is her belief in a teacher's ability to be confident in her own abilities. Without confidence, a teacher has self-doubt. With self-doubt, a teacher is reticent to risk, or step outside the box or norm. However, the ability to keep self-doubt in check, or through self-awareness acknowledge how to remediate a teaching deficit allows a teacher to circumvent their anxiety about whether a plan will come to fruition.

Grace's experience is that many teachers are afraid to try new things, read research journals, revise their teaching styles, or revise their lesson plans. Her belief is that responsible teachers are consistently revising and updating their materials and teaching methods. Responsible teachers model self-confidence through taking risks, having faith in themselves and their students, accepting difference and diversity, being flexible, and being a passionate and joyful eternal learner. When teachers are capable of modeling these qualities, their students learn that it is acceptable to risk and make a

mistake because we learn from this. Through making decisions, students learn to have faith in themselves as learners. Furthermore, Grace stresses that understanding difference, being open and flexible to alternative positions and perspectives will allow students and teachers to be more prepared to adapt to their ever-changing environment. She believes that developing a multi-textured experience and modeling this knowledge makes teaching and learning exciting and fun. Thus, creative teaching opens the door for students to be creative as well.

Grace's experience exposed a resistance within some schools to take risks, to fail, or to appear happy and confident. The following excerpt describes her experience with resistance from teachers and administrators who are not comfortable with happy confident people.

I spent considerable time in elementary and high school knowing I was all right,
knowing I was okay, but also thinking I'm really glad I have such a strong,
stubborn personality. Because not a lot of people seem to think it's okay to be this
happy and this positive (I ←Spi, September, 1999).

In this self-reflection, Grace expressed that she remembers being aware of her positive sense of self and confidence from a young age.

[Laughs] I was really born, God bless me, I was born with this feeling that I'm
invincible, that I could do anything I wanted to do when I wanted to do it. That
got me in trouble as a kid because I really lived that belief (I ←Spi, September,
1999).

Time and experience have helped Grace to solidify her philosophy of education into a confident, complex, multi-level educational commitment.

I've always worked like this. I'm just more [Laughs]. Twenty years thicker

[Laughs]. I'm more intense, more confident, a deeper happiness, a deeper

sureness, and a deeper richness (PHPLI, September, 1999).

To Grace, being a confident reflective quality teacher means having strong

philosophical beliefs and values. It means being a good human being. It means being able

to transmit these positive values and beliefs about being a good human being to students.

Grace wants students to be aware of their own philosophy of life and education

and be able to communicate this to others. Communicating their ideals with others builds

confidence through self-awareness. Student confidence is also enriched through

scaffolding support. The next excerpt explains how Grace supports the students until they

build their own resource network.

I'd like them to know that there are resources for them. That I'm a resource that

doesn't stop once the class has ended. Some of the people I'll have come in to

speak are resources [and former students]. I'm going to give them a list of other

resources that they can access, have access to. I want them to feel a little stronger

and a little more confident and just really eager to get out there, knowing that

there's some good stuff that they've had some exposure to and practice with. And

that they're ready to take the next step. The next step is only the next step, it's not

the whole smorgasbord, but it's the next step (CPI, September, 1999).

With support and resources, the students will be more willing to risk and find their own

pace or rhythm with their teaching.

I find the students in education tend to be a bit passive and goody-goody. I would

like them to feel a little more active and baddy-baddy. [Have the students be able

to say] "Let me take a chance, let me stand up for what I believe in. Let me take

on the principal in three years when I feel more confident." You know, I want

them to have that, just a nudge in a more active or proactive awareness and

direction (CPI, September, 1999).

Grace wants students to exit her course being capable of modeling and nurturing a

belief in themselves. She feels strongly about this because many students are highly

impressionable. Uninspiring, bitter, disinterested, and burnt out teachers have a negative

effect on students. For example, good teaching is like good parenting; bad teaching is like

bad parenting. Family messages are passed on from one generation to the next, or in this

case, from one classroom to the next.

I don't have any illusions that all 146 students are going to walk out of my class

and try to be another version of me. I would be ill if I wanted that. I don't mean

that at all. But I do want them to have in them already and affirmed or think about

having a real positive energy for what they do, trust in themselves, and trust in

kids. I think a lot of that tends to get beaten out of them in the school system and I

don't want them to keep beating it out of other kids (CPI, September, 1999).

For Grace, it is very simple. People need to work. Why shouldn't people work in

jobs they enjoy? Why shouldn't people work in jobs they are successful in, and have

passion for? If someone isn't happy in their job, they need to do something to change that

because it will come across in their work. Certainly there are ups and downs in any job.

However, how one traverses the ups and downs makes the job fun and exciting, or a

nightmare. If a teacher isn't satisfied with the job, then change jobs. Why not be happy?

I think I'll do very well [this semester with this course]. As a matter of fact,

[laughs] I wouldn't do it if I didn't think I would do very well. When I started

teaching I was a very confident first year teacher. And people commented on it

and I was taken aback by that. And what I said very naively the first few times

without realizing how offensive it was to teachers who'd been working twenty

years and still felt insecure and anxious – I said, "But why would I teach if I

didn't think I could do a really good job?" So I stopped saying that. Because a lot

of people teach and don't have any idea of how to assess themselves. They don't

trust their instincts, they don't trust what their kids do, they don't trust what they

do, they don't trust the system, and it's a mess. Awful, it's just terrible that they do

that, and that the system allows that to happen. But I never ever thought that I

wouldn't be a good teacher. I did think I would find it difficult working in the

system, and I have (PHPLI, September, 1999).

<u>Summary of Emergent Themes</u>

The physics of Grace's creative teaching emerges from her thorough course

preparation, her intimate teacher-students connection, and her dedication to reflective

teaching. She considers course constraints, such as time, class size, and content, envisions

herself and her students in an imaginary dialog throughout the preparation process, and

uses her values and goals to guide her preparation. Grace's connection with students is

developed and maintained by her ability to intuitively assess the rapprochement between

her and her students, through verbal and performance feedback from students and

colleagues, and supervised by her values and goals for teaching. Grace's commitment to

reflective teaching for this course is dependent on the constraints of the course, the verbal

and performance feedback she receives from students and colleagues, and by her goals

and values of what she believes needs to be improved upon in her teaching.

CHAPTER SIX

DISCUSSION

"We must always go the second mile. When we go the first mile, we simply do what is required of us. It is when we go the second mile that excellence is achieved and minor miracles happen." ~Deborah McGriff

Triangulation

In a qualitative research project, the aim of the researcher is to narrate the story of the other as accurately as possible. It is important to gain insight from other sources in order to listen for contradictory or alternative perceptions. Therefore, by analyzing interviews with students from this class and with Grace's husband, Charles, and by studying course materials and memos of my observations, I was able to further understand the process of Grace's creative teaching.

Student voices. Two interviews with each of six student participants conducted at the beginning and end of the course provided a wealth of information about teaching and learning. Of the students interviewed, four were female and two were male. Of the two returning students, one was female and one was male. Both the returning students were at least five years older than the other four. For additional information about the students, please refer to chapter two.

Initial interviews with students revealed expectations and perceptions of Grace as a teacher who is respectful of her students, is collegial, generous, open, and sincere.

She's very inspirational, I find. She's probably one of the best instructors I've had in university. Great energy, like, just everything rubs off on you. She's just very positive (Kim, September, 1999).

Another student said, *"She is receptive of students' ideas. She's enthusiastic"* (*Joan,*

September, 1999). Whereas, another stated,

> *She's very practical, I find. Like, she has been an elementary school teacher and*
>
> *she tells us some of the stuff she gives in class, so it's like, oh, I can see myself*
>
> *doing that. I think she's on the ball. I find her teaching is not teaching, like you*
>
> *know? Some teachers that teach have their notes and you have their notes and*
>
> *they're kind of just talking about it. But her, like you talk and you're like oh yeah,*
>
> *it makes sense and kind of sticks in your head (Sara, September, 1999).*

From these students' perceptions, Grace's style of teaching incorporated a balance

between play and discipline. There was almost an implicit understanding that the students

would have access to resources and supplies and that they would be encouraged to be

innovative, creative, and develop a good sense of humor.

One student made the distinction between former university instructors in

Education and Grace. She stated,

> *Everything is so theoretical here. I don't know how to put this, but let's take*
>
> *language arts. We had to take teaching in language arts two years ago. And there*
>
> *is always that section on–[speaking in an authoritative voice] It will be important*
>
> *to modify your plans for children with learning difficulties--and that's about as*
>
> *far as it would go in some instances. Oh great. You know you have to do it, but*
>
> *how? I don't know. No one ever, ever told us, taught us. So it was more of a*
>
> *learning experience and that I'm firm on. It was definitely experience that*
>
> *allowed me anyway to, to make that adaptation. And I went into it blind basically.*
>
> *That's it, besides last year's course with Grace. It was helpful. I like working*

with—I like being given the freedom to go off with my peers and discuss problems

like this. I think she calls it teacher-assisted training, whatever. I'd never done

that and I find it so much more comfortable speaking with people that are at my

own level. They know the problems that I've faced and that I can understand the

problems they've faced. I just mean it's been a good experience learning how to

solve problems and to discuss problems with fellow teachers (Sue, September,

1999).

Not all students were always comfortable with the level of freedom and inquiry. For example, this next excerpt describes one student's need for more structure.

I think she's great. I think she's a good teacher. Um, sometimes, sometimes I'd

even like a little more. I know she doesn't like lecturing or speaking to us, but

sometimes I need more. Like I know she brings us in for maybe ten minutes at a

time and then lets us go off by ourselves. And maybe it's because I'm not as

comfortable that we're going to do it by ourselves, but I wish she'd give us a bit

more to go on. But I guess she wants us to learn it for ourselves (Ron, September,

1999).

Final interviews with students reflected their internships within the schools and how their experiences were colored by Grace's approach to teaching. For example, one student recounted that she was not nearly as cynical toward students who were unable to finish assignments on time. She was able to relax her need for authority and be more understanding of the individual student. She was also very aware of her own learning and teaching strategies and energy stores. She felt more efficient, organized and capable of classroom management as a result.

Another student felt Grace put herself out on a limb, became vulnerable and this modeled being a more caring teacher. It also modeled an understanding that individual differences in learning require adjustments and if the teachers don't know how to work with a specific learning need; they should acknowledge that and find someone who does know how. Another student found that he was able to make a very positive link with his students' parents and these links really helped him in his teaching.

Similarly, another student mentioned that she had never seen an instructor in university able to be so calm and collected in front of such a large class.

She was so relaxed up in front of the class. The students would be all coughing and moving around and stuff and she was trying to teach, but she was so calm and stuff. I'm usually like that, but I've never seen a teacher act like that and ahhh. She trusted us a lot. She would say okay, go wherever you want to do this group activity and it would be so easy. I mean, she wouldn't follow us and it would be so easy not to do it. She trusted us enough and the students saw that. There were a couple of times where we wanted to just leave, but we would say no, no, let's do it. And I think it was because she gave us that trust and everything that it motivated us to do it. And I kind of gave my students that too. If you trust them, they will do it. I think with Grace, it's just her attitude (Sue, December, 1999).

However, another student expressed difficulty with being able to teach diverse learners in the classroom.

I'll be very honest with you. A lot of the stuff in her class will never ever work in real, reality. For example, using different strategies to reach different kids in

class. I had a hard enough time going home at night coming up with one general

lesson for that class. Where am I gonna, you know? I didn't know how, I don't

know how that would work. You know what I mean? Like, just try to reach

different kids, how do you, how do you find the time to do that in class?(Joan,

December, 1999).

When asked about whether group work was used in class, this student said,

Yes it worked with my grade sixes. [With] my grade fives and grade fours; forget

it. There were too many kids for the classroom to begin with, so to save space we

had to put them into groups. They just weren't able to handle it. It sounds great in

theory, to do group work, but there's too much chatting among them (Joan,

December, 1999).

This student was able to incorporate mastery learning with a grade six class and

alternative evaluation for a student with cerebral palsy in another class. Both of these

educational concepts came out of Grace's class.

When asked if she was able to use anything from Grace's class in a grade six

class, this student said,

I did try the think, pair, and share when we were reading and I don't remember in

elementary being quite so eager to share everything that I did. But from the

weakest, I don't really like to say weakest, but to the strongest student, they loved

getting in front of the class and reading whatever it was that they had produced. I

was amazed. I can't think of anyone that didn't enjoy sharing his or her work like

that. Sharing work in Grace's class was a very important theme, I found. Oh,

there was this one little girl who was terribly shy. She spent five years, her

elementary years at another school and so for grade six, which is the most

important year of a student's (elementary) life she changed schools. When I first

got there she had just given an oral presentation and had done extremely poorly.

And I found the teacher had been overly hard on her considering her level of

shyness and like that, so I decided to, I was going to improve this girl's oral

speaking abilities and confidence level. She did a presentation shortly after for

me, and although it wasn't the best I thought there were significant improvements.

And I really gave her good marks and a lot of positive feedback on her paper. The

next time she did a presentation she did fantastic. And it was obvious that

someone had really helped her. She was talking with hand gestures and really

expressing herself. She was doing really great so I wrote a letter home telling her

parents how wonderful she had done and she came back the next day thanking me

and I got a letter from her parents thanking me for all the encouragement that I

had given her. She ended up giving a presentation in front of the entire school. I

was really proud of her, not that it had anything directly related to what I did, but

I felt I helped her a little along the way.

From Grace's class, I have learned to have high expectations for everyone. And

what I really learned, what I'm learning to do is judge someone's work on their

previous performance and perhaps with their future performance and not with

what someone else in the class has done (Sara, December, 1999).

Summary of my interviews with students. Students were generally impressed with

Grace's teaching. Two of the students that found it difficult to implement diverse

strategies in the classroom recognized that although Grace could teach with a flexible and

collaborative teaching style, they felt more comfortable with a traditional approach of direct instruction. These two students, Joan and Ron, were both returning students. They seemed more determined to teach the way they had been taught. The other four students expressed excitement and inspiration with regard to Grace's teaching style and strategies. They seemed more willing to risk and try new things, and less anxious about mistakes.

A husband's voice. Grace and her husband Charles have been married for over 20 years. During this time, Charles has experienced many examples of his wife's creative teaching. He stated that *"if I wanted to study innovative people, innovative teaching or innovative teachers, or innovative people who are involved with teaching, she is a good choice" (Charles, December, 1999).*

Charles's perspective on what makes a creative teacher is both interesting and meaningful. He is an experienced teacher and is now pursuing his Ph.D. in Second Language Education. He has taught students in elementary and high school, as well as young adults in college and university students of all ages. He stated that there isn't one answer to what makes a teacher creative. For example, he explains creative teaching in the following excerpt.

[It] depends a lot on the person and it depends a lot on the situation that you find yourself in. You can't work miracles in every situation or you can't even do amazing things in every situation. Sometimes the situation is just constraining and difficult and you end up doing far less than you wish. But I guess creative teachers respond to the people that they're teaching and find stuff within those learners that they can respond to and areas in the learners that they can challenge.

And another thing is that there is no one process that you repeat from year to year

to year. You do it differently every time. And I think that's probably what creative

teachers can do well is that they can have guidelines and goals in their mind and

things they want to achieve in terms of learners and learning (Charles, December,

1999).

He stated that creative teachers adapt themselves and the work to the situation in which

they find themselves and never teach the same course, the same way, twice. They

respond well to students by identifying whether the learner needs ideas to challenge them

or class structures to motivate them. This endless give-and-take describes the antithesis of

uncreative teaching. An uncreative teacher is static and doesn't change easily or doesn't

modify to fit a specific situation.

They don't teach so much to the learner as they teach the curriculum and assume

that the learner will slot in as they are supposed to (Charles, December, 1999).

Charles believes one of the largest barriers or obstacles to creative teaching is the

teacher's own personality and maturity. In the next excerpt, Charles describes how a

creative teacher needs to be comfortable with change and adaptation.

It takes a person who is confident and intelligent to be creative because you're

going to have constantly shifting dimensions or situations. If you're going to be

willing to make modifications in materials or teaching strategies or in classroom

structures, and if you're going to continue to be comfortable with the change you

need to be comfortable with yourself. [The teacher has] to realize that you can

live with the changing situations all the time and realize the change doesn't

necessarily lead to a loss of control, or less learning (Charles, December, 1999).

The teacher is the pivotal key in the creative process because he is able to model flexibility in the classroom and thereby transfer this process of tolerance for flexibility to students. Charles believes that when teachers model flexibility, students become active learners and inquirers. Consequently, teachers who are less flexible may not be able to adapt to the diversity of ideas, cultures, thoughts, nor to the needs students will have in the classroom. Often, non-creative teachers teach the same grade in the same fashion year after year.

> *Creative teachers not only engender interesting things within the classroom; they*
> *engender interesting things within their own lives to maintain the creative edge.*
> *They need more in terms of variety and more in terms of challenge and more in*
> *terms of situational differences and the chance to meet and work with new people*
> *and new situations and new environments. They need more change in their lives*
> *(Charles, December, 1999).*

Charles elaborated that creative teachers often need more change in their lives and are not easily satisfied with their lives and careers remaining stagnant.

> *When you want to encourage people to be creative, you ask them to think outside*
> *the box. I think she's never been in the box. Grace has never viewed things from a*
> *traditional perspective. She's never been a team player in the sense of a company*
> *supporter, or been much for maintaining the status quo. She's never been much*
> *for living with problems or inequities or difficulties, which other people might*
> *accept as being just part of the job, part of the context of teaching. She's avoided,*
> *either consciously or unconsciously, public schools because in this province the*
> *government runs the public schools and it's kind of a monolithic operation. And*

there's a lot of things that are entrenched in the public school system that are just

about impossible to change from the bottom up because they've been present for

so long and are engrained in the system (Charles, December, 1999).

Instead of teaching the same course or classroom with the same institution year after

year, Charles stated that Grace

looks through or around traditional ways of doing things, traditional expectations

and she's very smart. She's very perceptive and able to see really what's going

on, see what really needs to be taught and what needs to be done in terms of

helping kids learn better or more effectively or generating an interest in learning.

So, she's able to pick apart the whole situation pretty quickly and address the

specific needs of the learners and completely dispense with the rest (Charles,

December, 1999).

When Grace read the above passage during a member check, she stated that she had tried

for many years to be hired by the Montreal English School Board but could not get in.

Historically, many teachers applying for work with Montreal school boards at the same

time simply missed a window of opportunity. There were not many jobs available. Grace

had to adapt to survive. She found work in smaller community schools and may have

been challenged to become more creative because of the unsure or limited nature of her

teaching positions.

Charles sees much of what Grace does as an educator as natural and not

extraordinarily spectacular. She has always been the one to organize field trips to

museums for underprivileged students, to have students integrate language arts and

mathematics by getting out into the community and interviewing professionals. Although

many of her strategies have been unconventional, they have not amazed him. What has amazed him are the students with whom Grace has worked and implemented some of these strategies. These students have experienced a history of neglect within school systems because of their disabilities. Many teachers had not taken the time or invested the energy to meet these students' needs.

Charles stated that the most amazing part of what Grace does is based on her philosophy of education.

The minute you view education and learning as an experience that requires an investment on the part of the learner, an investment into their own learning and their own education, the teacher ceases to be the only source of knowledge. Once the teacher is not the only source of knowledge, a source of knowledge, but not the source of knowledge, the need to stay in a class behind a desk, or the need for the teacher to stay at the front of the room, those needs don't exist any longer. And the larger world, which contains now as much or more information as the schools, becomes perfectly viable in terms of being a classroom. Two things here: One, for teachers to decide I'm not the only source of knowledge, there are other sources that know more than I do, that's a big shift in the teacher's perspective. It requires a teacher to say I don't know everything and I'm OK with that. Two, it requires a teacher give up the traditional boundaries of four walls and a desk they have always had, so there's going to be some uncertainty (Charles, December, 1999).

Charles expounded that schools are institutions very much like hospitals or governments and these institutions usually employ individuals who are comfortable in those institutions.

When you are the kind of person who is outside the box to begin with, and you find yourself in a boxy situation, there's usually an awful lot of friction and you have to be a real pusher to take the flack and do what you want to do. And at the same time not fold and say OK, I'm going to do it like everyone else does it.

Grace contends that it is often as difficult to be creative within small institutions as within large institutions. She states that pushing beyond the status quo is always difficult within the field of education, or any field.

Charles said he could count the creative teachers he has encountered on one hand. He admitted his opinions of creative teaching may be somewhat skewed. He offers this explanation:

I've sort of lived with one of the most creative teachers I've ever met, so what I perceive as creative is perhaps far more creative than what others might perceive as creative (Charles, December, 1999).

According to Charles, a creative teacher is able to see the same situation from a different perspective and that difference in perspective allows them to think differently about what they might do with a situation. He explains this circular perspective-taking in the next excerpt.

They don't necessarily see what everybody else sees, and because they don't act on it in the same way they're perceived as creative I guess. It's kind of a circular thing really. If they act on it differently, they get different results. The results

engender the next different situation which they again view differently and it

keeps on going around and around and around. I don't know if that's what

creativity is, but my guess would be that that's a common feature among creative

individuals (Charles, December, 1999).

When asked how someone might work from a position of less to more creativity

in his or her teaching practice, Charles said,

I think it's something within the person and I think it's engendered from a long

way back. And you know what might engender it? I'm taking a guess here. It

might be that having a creative person that you can work with that's challenging

your view of the world enough so that it sort of permanently allows you to

perceive the world in a variety of ways. I think if you could hook up with that

person, you might learn to ask that second question, you might learn another

perspective. And in that sense, I don't think you could teach it, but you might be

able to model it (Charles, December, 1999).

He stated that it might be that it also takes a student who is willing to try to see a different

perspective. Some students are not going to seize the creativity even if it's modeled for

them, yet some will. Charles explains in the next excerpt that some students might get

used to thinking in different ways as a matter of routine and incorporate alternative views

into their daily lives.

Maybe if you could get enough people modeling creativity, you may get enough

students learning it who might go on to be teachers themselves and continue the

process (Charles, December, 1999).

<u>Summary of my interview with Charles.</u> Charles has a great deal of experience with teaching and learning. It is evident to me that he has spent considerable time wondering how he can improve his own teaching. He spoke about innovative teaching styles, such as responding adaptively to the constraints placed on a teacher, and about teachers responding to the students they teach when they are not able to change the constraints. Charles also spoke about creative teachers needing to have confidence, intelligence, flexibility, and support in and out of the classroom. He spoke about creative teachers being able to acknowledge that they are only one source of information, and that the community has many opportunities for students to inquire and apply information.

<u>My personal reflection.</u> My understanding of the course materials, my observations and memos, and my interpretations of all interviews are all colored by my background and perspective based on my personal and educational life histories. Throughout this process, I have come to understand how easy it is for me to identify with the disenfranchised student. Disenfranchised students often experience alternative perspectives toward learning and expressing information. Many experience barriers that keep them from learning effectively. Consequently, I am strongly committed to removing these barriers. Because diversity exists, I believe including diverse learners within a classroom enriches the learning atmosphere and increases the complexity and authenticity of education.

I am strongly committed to championing individuals brave enough to attempt to include a variety of perspectives within a classroom environment. Individuals able to treat others with dignity, respect and kindness have always inspired me. I am strongly moved by teachers who are happily passionate with their work, educating students.

My perspective includes the concept that educating students involves more than an organized and interesting curriculum. Quality teaching, creative teaching is a holistic process that includes the teacher and students, and is embedded within their collective histories. My belief is that creative teaching includes the physical setting, the surrounding community, the course content, and temporal context, but exceeds these dimensions.

I have very high expectations of what education should entail. I believe teachers and administrators are responsible for modeling decency. Decency involves the valuing of and the respect for the diversity of life. Value is communicated through making connections with students. Through connections, many perspectives can be discussed, and education becomes socially constructed, more complex, and deeper. Education becomes authentic and practical. This type of educational philosophy of affirmation of multiple perspectives in the classroom can change the world. My perspective is that teaching people to respect and include others begins with each of us.

Consequently, many of the questions I was interested in asking Grace focused on ideals surrounding diversity in educational curriculum and instruction. I wanted to understand how Grace's developmental history and life transitions might have influenced her thinking and behavior. I wanted to understand the process of her teaching. How would she teach pre-service teachers the content of inclusion of exceptional students? How would she convince them that they could teach in ways that would benefit all students within their classroom? Would she teach them to teach creatively? These questions motivated my queries to Grace. Thus, the patterns that emerged from the interviews, course materials, and my observations expressed the process of how I perceived Grace was able to model creative teaching to her students.

Perceptions of a Creative Teacher. There was a unifying thread of agreement among the students, Charles and me concerning the emergent themes presented in chapter five. What makes Grace an innovative and creative teacher? To begin, the consensus was that her presentation of course content was both practical and inspirational. She provided strategies of problem solving authentically by having students work together to negotiate on assignments. She modeled how to collect and develop plans and strategies from colleagues to use when needed and stressed the importance of building a support network of resources by incorporating guest lecturers and video filmstrips. She used her personality to form relationships with students to foster the security and confidence to risk, trust, and collaborate in order that they might improve the way they teach.

In the next excerpt, a student wanted to tell me what she thought about Grace's teaching by telling me about a very different kind of teacher she experienced during a former internship.

This was a teacher who must have been well into her career. She would take Tylonol at least three times a day, visibly in front of the class. She was so personally stressed out and angered she would shake. She had no control over any of the 20 five year-old children, and no rapport with them. It was a madhouse. It was a madhouse everyday and I would go home with a terrible headache too. Like, it was no wonder the way the class was run. I would leave with headache every time (Sara, September, 1999).

Charles also describes Grace by giving an alternative example in the following excerpt.

Uncreative teachers seem to last forever. They seem to be able to repeat the process, in the sense of well, I don't know now, but I knew a teacher who taught

grade three for, the last school I was in, and I was there for 15 years and she

taught grade three the day I arrived and I assume she's still teaching grade three.

The curriculum starts in September and ends in June and I'm quite sure she'll

teach grade three until she retires (Charles, December, 1999).

The ability to organize, plan, and work within the constraints of the course was
also represented in Grace's teaching. She consistently monitored student and observer
feedback and then self-assessed whether she was capable of working any harder or
providing any more instruction. She came prepared with alternative lesson plans in order
to secure a goodness of fit with students and monitored her style and use of strategies in
order to improve her practice.

Overwhelmingly clear were the values and goals that provided the impetus for
many of Grace's decisions to impart the material the way she did. Her philosophy of
teaching and personal life experience framed her belief in attempting to include the often
excluded and disenfranchised. Her value of teachers as responsible, ethical, imaginative,
compassionate, patient models was behind her attempts to teach with character that
comes from knowing oneself and the pleasure of the craft.

The following excerpt is an example Charles gave of Grace being creative, and
how it made a difference in a community.

She was in her first teaching job (in a Native American Community). She taught

grade two, and one of the things that she wanted them to do was to work on their

reading skills. She wanted to particularly engender, to improve the quality of their

reading and their literacy skills, and so there's a whole variety of ways you can

do that. She picked a way that seemed to be perfectly suited for the situation. She

realized that within the community they had a radio station that was like the local

radio. It's very much like a homegrown radio. She approached the station and

came up with a proposal for a radio show that the children would do and it would

be broadcast within the community. So she got the kids as part of their weekly

reading and writing activities to put together a radio show. They had news and

short plays, poems and short stories, jokes and songs, and they wrote these things.

They practiced all their speaking in the classroom, they did all their own editing,

and they helped each other with the spelling and grammatical construction. They

practiced speaking with partners in the classroom, then when they reached a level

of proficiency, they would go to the radio station and tape. A few days later the

show would air, and it was a huge hit (Charles, December, 1999).

Charles was amazed by observing how Grace's teaching could benefit disenfranchised

students, and help them to accomplish their goals. Charles saw the creative process

extending from Grace and the creative product being student success or advancement.

Although some students were not convinced that embracing all students and

adjusting oneself in order to meet the demands of the current classroom constraints would

work for them, they appeared convinced that these strategies of multiple intelligences and

learning styles, multi-level instruction, authentic assessment, and cooperative learning

worked for Grace.

Perceptions of the definition and process of Grace's creativity from the

individuals I have interviewed is consistent with my analysis of Grace. For example,

despite having taught university courses for the last ten years, I am humbled and amazed

with Grace's technical ability, her experience, enthusiasm, confidence and her

willingness to risk, trust, and be open and vulnerable. I am humbled because I know what

kind of energy it takes to plan well and execute that plan with exuberance and

compassion. I am amazed because I observed how a teacher's planning, personal

characteristics and self-reflection inspire students to excel. The excitement of planning a

new course, or reconstructing a previously taught course along with the thrill of teaching

students to be active learners has been influenced by my values and goals, my philosophy

of education and personal life experience.

Full Circle: Creativity Research Revisited

When Grace wrote to me in an electronic mail message, she commented that the

member checks she made of my writing helped her to reflect once again on her practice,

inspire her to reach for new goals, and pursue a Ph.D. When we exchange our best with

another, creative energy is exchanged; we act as runners in a relay race passing the torch

back and forth–full circle.

> "... *ultimately, teaching is a creative act; it makes something fresh from existing*
>
> *knowledge in spontaneous, improvised efforts of mind and spirit, disciplined by*
>
> *education and experience . . . unlike a technology, in which correct application*
>
> *produces predictable and uniform results, teaching yields infinite surprises–*
>
> *infinite delights–from one moment to the next. What method can supply to*
>
> *teaching we know or can learn; what art can furnish out of our own selves we*
>
> *must imagine–and then practice" (Banner & Cannon, 1997, pp. 3).*

Has this project demonstrated that creative teaching has been accomplished? Has

this project represented something unique with external value resulting from purposeful

behavior evolving over a long period of time? I argue yes. The processes demonstrated

by Grace in the classroom are unique, purposeful, and the result of her life experience and educational philosophy. I use current literature on various models, strategies, theories, and approaches to creativity to support my argument (Amabile, 2001; Gruber & Wallace, 2001; Martindale, 2001; Nakamura & Csikszentmihalyi, 2001; Sternberg, 2001; Stokes, 2001; Ward, 2001).

A componential model of creativity. According to the componential model of creativity proposed by Amabile (2001), creativity consists of much more than talent. Three basic intra-individual components are necessary for the production of a novel and appropriate work. These components are domain-relevant skills, creativity-relevant processes, and intrinsic task motivation.

Domain-relevant skills are competencies and talents applicable to the domain or domains in which the individual is working. This includes knowledge about the domain, technical skills necessary to work with ideas and objects in that domain, and domain-relevant talent. Talent depends on innate cognitive abilities and innate perceptual and motor skills in addition to formal and informal education and experience (Amabile, 2001).

As an experienced teacher, Grace has both formal and informal educational training and domain general as well as domain-specific knowledge. She holds a Bachelor's degree in Education and a Master's degree in Special Education. Her skill in applying knowledge from these domains can be observed by her use of a variety of instructional strategies that encourage independent lifelong learning styles.

If I can learn to be a great teacher for people with learning problems, I could be a really good teacher (I ←Spi, September, 1999).

Grace's competency with domain-relevant skills is evidenced by her ability to establish a method of planning and preparing her courses by incorporating previous materials and feedback from students. What has traditionally worked in her classes to successfully teach course content and her educational philosophy to students is filed away for further use. This knowledge and experience represent her domain-relevant skills.

Creativity-relevant skills encompass cognitive styles that allow for the broad categorization of concepts and a tolerance of ambiguity, an implicit knowledge of heuristics for generating novel ideas, and a complimentary work style. These elements depend upon training, experience in idea generation, and personality characteristics (Amabile, 2001).

Grace spends many hours preparing and revising course materials and instruction strategies, and attending to individual student learning needs and concerns. The distinction between work and leisure has often been blurred for her. She spends an inordinate amount of time planning the overarching themes of the course, then narrows her focus to each topic, day, hour, then twenty-minute segments. Grace is able to play with concepts, juggle them, and rearrange them in order to fit the context, content, and population of her classes. She often reconstructs past activities in order to adjust to present task constraints. She explains:

> *I go from a general sense, choose an area and then get something very concrete. I start with a scaffold, and start hanging things in different places and as soon as I get a sense that now it can be more specific, I start to be that much more concrete and linear, right?(CPI, September, 1999).*

Grace's personality allows her to accomplish so much. Her ability to persevere through fatigue, ambiguity, conflict and resistance toward novel teaching strategies is accomplished by her unending supply of compassion for her students and the holistic picture of what she is trying to achieve. She is committed to working for the "greater good." By investing so much in her students, she hopes to model and thus instill this characteristic such that her students will invest their passion in their students. Grace explains how she can invest so much time and energy:

> *How do I feel about teaching? I love it more. I love it more. I feel a deeper*
>
> *commitment. I feel more serious about it. I feel more obsessed with it. I have to be*
>
> *really careful about that (PHPLI, September, 1999).*

This leads to the next component of Amabile's (2001) model; task motivation. This model views the first two components, domain-relevant skills and creativity-relevant skills, as raw materials. Task motivation, however, is what is perceived to determine what the individual will accomplish and how they will accomplish it. According to the theory of intrinsic motivation, people are most creative when they are involved in a task that is interesting, enjoying, satisfying, and challenging to them, rather than if they are behaving in order to receive inducements or are being pressured externally. External motivators can add to someone's creative process as long as the individual is predominantly motivated by internal characteristics.

Grace was clear about her love for teaching, about the interaction and connection with her students, and how she felt their work challenged her to do her best. She is internally driven to excel and to offer an alternative model of instruction for students to consider.

I need it [teaching] like air and water. It feeds my soul, because, I guess because

I'm a teacher. I can't be a teacher unless I'm working with students. [I tell them]

being a teacher is great. If you don't feel it and live it, then do something else,

because students deserve to have teachers who love what they're doing. You learn

from that love. It's contagious. If you have a teacher who gets really excited by

their work, you're going to get really excited by your work PHPLI, September,

1999).

A Systems Perspective of Creativity. From a systems perspective (Nakamura &

Csikszentmihalyi, 2001), a creative contribution results from the interaction of three

components: the innovating person; the symbolic domain that the individual absorbs,

works with, and contributes to; and the social field of gatekeepers and practitioners who

solicit, discourage, respond to, judge, and reward contributions.

Although both the person and domain contribute fundamental roles to creativity,

often the contribution of the social field receives little attention in the literature. The

social field profoundly influences the future of the domain by deciding the fate of

contributions and by determining what is learned by newcomers. For example, students

internalize a particular version of the domain and field that will be recapitulated in the

work they will do. The domain encompasses a body of knowledge, skills, and practices.

The field encompasses criteria of evaluation and opinions about worth including a sense

of what constitutes an important and interesting problem, where the frontier is, what

comprises a good versus bad idea, and when a solution is complete. Therefore, a person

could influence the domain by shaping the field (Nakamura & Csikszentmihalyi, 2001).

Grace's attempts to modify both domain and field are exemplified in her ability to model constructivist and cooperative teaching and learning strategies, theories of multiple intelligences and learning styles, multi-level instruction, tolerance and understanding of cultural diversity, and alternative assessment techniques to her students. This domain information is embedded within the genuine emotional and psychological connection she makes with her students. Her educational philosophy is transmitted along the conduit of this connection. The students learn the domain authentically. The social field of teaching becomes more psychologically safe. This safety and freedom creates space to modify the domain with strategies of learning and instruction that are necessary within inclusive educational environments.

Grace's focus is to reconstruct the face of education by reaching students individually. Her position is clearly to reorient teachers from direct instruction within streamed classrooms to more inquiry driven and co-constructive instruction within inclusive classrooms. Clearly, her goal is to emphasize the social nature of the field of education and adjust the domain knowledge of instruction accordingly.

The following passage refers to two children who participated in the production of a radio show mentioned previously. This example describes how an educational environment can help to reconstruct people's perceptions of ability.

> *Anyway, he couldn't read or write, actually he could write if he copied, but he couldn't free write. What happened was I didn't know what to do with him and for our first radio show, he had chosen a poem that he loved. "I'm a wild dog, a mad dog, a free dog, roaming through the plains"—beautiful poem. He loved it. I read it to him [and he said] "mine, mine"—loved the poem.*

So he hooked up [partner for practicing] with the smartest reader in the class. I

saw them working together and I thought wow! I hope that whatever they're

doing it helps Lane read because I haven t been able to do anything to help so

far. Then when it was Lane's turn to read into the microphone to make the tape, I

was really nervous because I thought, I've never heard him say over five words.

His friend, Jamison said, "It's okay Ms. Grace, I'm going to stand beside him. I

taught him to read."

Well, Lane got the microphone up close to his mouth and Jamison stood beside

him and they had the poem in from of them. They had been practicing all week,

right? Lane had kind of auditorially memorized the poem. Jamison whispered in

his ear the whole poem, slowly, a word-at-a-time, and Lane repeated it after him

into the microphone. It was so beautiful, I choked. Not one person in the class

said anything. It was fine. That's Lane reading. He had the paper. The fact that

Jamison was saying every word in his ear made no difference. Lane was reading.

If you listen to the tape, you hear Lane say every word and you can't hear

Jamison (Midterm, October, 1999).

Grace stated that the parents of the boys were so very proud. It was the first time

anyone had taken the time to try anything differently. Grace admitted not knowing what

to do, but she created the space for change to occur.

The Evolving Systems Approach to the Study of Creativity. A final perspective

toward studying creativity, the evolving systems approach (ESA) developed by Gruber

and Wallace (1989, 1999, 2001), describes how a creative individual is studied over time,

primarily through the creator's work. The approach is systemic in that it sees the

developing work in terms of interacting, related elements. The system of the individual interacts with other private and public systems such as the person's family, relevant professional milieus, and existing sociocultural-political systems.

ESA is based on the unfolding creative work itself and what the creator actually does when he or she creates. It requires that the investigator understand the creator's work and know something about the domain in which the work takes place. It requires that there be ample material to permit tracing and reconstructing the actual course of the creative work rather than taking undocumented speculative leaps.

ESA makes use of studying part processes, such as problem solving, metaphor making, and imagery and how these part processes fit into the case as a whole. It abstains from attempts to arrive at a fixed list of traits that can be measured that intend to explain creativity. Conversely, it derives the unique characteristics of the creator from careful analysis of the activities of the person himself or herself.

Finally, ESA takes a systemic view of the case but does not treat the system in question as stable and fixed. The case is conceived as an evolving system. Deviations from individual or societal norms are not treated as errors, but as descriptions of growth and change. The system is a deviation-amplifying system or a positive feedback system.

ESA has been a useful heuristic for studying Grace. Rather than using psychometric approaches to study Grace's creative teaching, observing the process unfold in the classroom and outside of it has been enlightening. I have been able to be both researcher and colleague to Grace because my background in educational psychology has prepared me to understand her work and even offer what she has considered to be helpful feedback.

I have relied on multiple interviews with Grace, her husband Charles, and her students along with classroom observations to verify her teaching strategies, and to trace and reconstruct her teaching process rather than relying on speculation. I have recorded a paper trail of this evidence. I have been able to study part processes such as her course preparation and actual instruction, but have also paid careful attention to how these part processes fit together holistically. For example, I used I←Spi, PHPLI, and CPI interviews as a background to plug part processes into.

I have analyzed unique character traits that emerged from interviews and activities with Grace that suggests creative teaching and instruction. Both Grace and I have modified our actions with information from colleagues, students and supervisors along with temporal and physical constraints that have provided useful and adaptive assistance with this project.

Full circle summary. These three models of creativity have provided heuristics that I have used to establish Grace's creativity. Amabile's (2001) componential model suggests that Grace has the domain-relevant skills and the creativity-relevant skills comprising the raw materials of creativity. In addition, Grace has clearly demonstrated the third component of creativity: task motivation.

From a systems perspective (Nakamura & Csikszentmihalyi, 2001), Grace has clearly demonstrated components of an innovative person. She has also demonstrated a knowledge and dedication to the contribution of education. She has also been acknowledged by the social field of education, first through the receipt of a Faculty Appreciation Award, and second by this researcher. She has also attempted to change the face of the educational gatekeepers by being the change she wants to see in the world.

From an evolving systems approach (Gruber & Wallace, 2001), Grace has been studied over a period of two years through accounts of her work. During this time, I have been able to experience how Grace interacts with public and private systems. I have been able to understand her creative work unfold because I am familiar with the domain of education. I have studied ample material that has allowed me to trace and reconstruct the actual course of the creative work. I have taken the materials apart, and used these parts to reconstruct an evolving and creative process.

PersonalityAs A Conduit of Creativity: A Narrative Account

I have observed creativity being expressed through an individual's personality. In this case, teaching creatively has involved the process of using educational philosophies and humanistic values to plan and organize activities and exercises. In addition to the overarching values and plans, the curriculum has been presented in a way that empowers and encourages connection and community.

To illustrate, on the first day of class I arrived early to take field notes as Grace began her process of creative teaching. Grace greeted students in the hallway outside of the auditorium. She listened intently to requests students had. She made affirming comments and seemed to naturally make students feel welcome. Prior students of Grace's were received with gleeful exclamations and hugs. As more and more students arrived, Grace invited students to pick up syllabi and enter the auditorium.

Once inside the auditorium, students sat amongst friends in the wood-backed semi-circular bench seating. Grace simply raised the fingers on her right hand and counted down from five. By one, the huge group of students became silent. There was no air conditioning and it was hot and humid outside and inside. There was an outdoor café

with amplified music playing directly outside the auditorium. Rather than ignore the uncomfortable classroom conditions, Grace acknowledged them with humor.

Grace explained the course calendar and then asked students to bring in a short biography and photo of themselves for the next class so that she could match names and histories with faces. She explained that this was important information because it allowed her to get to know her students individually, and in this way could attempt to tailor her instruction to meet the learning styles of students. She continued by stressing the significance of each student teacher to create and nurture an environment where each child is treated as a relative, surrounded by love and affection. She focused on the importance of making good choices, reflecting on those choices, taking on challenge and risk, and becoming a "second mile teacher" or one who goes beyond what is required. On the first day, she skillfully and rapidly established an atmosphere of belonging and community.

This group of students was getting ready to start their final internship in the schools. Because the provincial educational system now required teachers be prepared to instruct multicultural students with varying abilities, Grace quickly introduced strategies to help student teachers act courageously and knowledgeably in the classroom. These strategies were modeled after Native American child-care philosophies that depict a circle of courage (Brendtro & Van Bockern, 1994). The circle is divided into four parts that include belonging, mastery, independence, and generosity.

"Be related, somehow, to everyone you know," said Ella Deloria, a Native American educator (Brendtro & Van Bockern, 1994). By treating others as kin, powerful social communities are forged. Grace not only wanted to let the students know that she

valued them, she wanted them to understand that they belonged. Belongingness was accomplished by having students build connections with each other through group work. Students were immediately familiarized with the concept of "base pair" groups. Each base pair group was chosen at random by Grace and consisted of four or five students who worked on activities and exercises together for two weeks. New base pairs were introduced every two weeks in order for students to learn to problem solve with different personalities. They would need to be able to do this within the school community, thus modeling differential acceptance and authentic instruction and applied learning.

Activities were evaluated by Grace and other students. Grace responded to all of the 146 students' written assignments with individual letters and electronic correspondence. She commented with affirmation and encouragement. Students were asked to make constructive suggestions concerning other students' work. If the work needed major improvements, the students would resubmit the work and receive additional feedback. This process of mastery learning allowed students to learn and be evaluated in nonthreatening, active, social settings. In addition, mastery learning encouraged student creativity and self-expression, and shaped students' courage and confidence.

Through community and competence, Grace gently challenged students to be independent learners. She encouraged question asking, but never told students what to do. She wanted them to make decisions within their base groups, then receive feedback from peers. She had students consciously build democracy in education. She abhors the obedience model and kept saying during interviews that she wanted students who will be future teachers to go from being so "goody-goody" to being more "baddy-baddy". She encouraged students to think for themselves, to negotiate with their group members and

find workable solutions. In this way, Grace was trying to model responsibility rather than obedience. If students were able to compromise and negotiate with each other, they might be more apt to accomplish this within their classrooms.

One quarter of the circle of courage involves generosity. This was one of the descriptors used for Grace that emerged from interviews with students, Charles, and Grace herself. Grace's behavior both in and out of the classroom exemplified unselfishness. She put in countless hours responding to students' work, making appointments with students that were having difficulties with course material or with their lives in general. She was available. I believe her intent was to model her love of teaching and her love of humanity by modeling the values of altruism and empathy. In addition to Grace's modeling of generosity in the classroom, she tried to foster generosity in her students. She tried to make caring "cool" or fashionable. She often stressed the importance of developing a repertoire of colleagues for sharing support and resources.

Grace used her personality to establish a circle of courage in this classroom. Her personality was the physical energy that conducted the creativity evolving from her philosophies and planning. Her primary goal was to model the character of quality teaching. This character embraced the notion that caring extends beyond the classroom to communities of parents, colleague teachers, administrators, and support staff. Each community should be invested in creating a positive moral culture in the school. To illustrate how this is accomplished, Grace incorporated into her personality the following nine strategies from Lickona (1991) to emulate a positive moral culture.

First, Grace acted as a caregiver, model, and ethical mentor and treated students with love and respect, encouraged appropriate behavior, and suggested alternative

solutions. Second, a caring classroom community evolved from Grace teaching students

to respect and care about each other. Third, moral discipline developed from co-

constructing rules and consequences to develop moral reasoning, self-regulation, and a

generalized respect for others. Fourth, a democratic environment emerged from Grace

engaging students in shared decision making and in taking responsibility for making the

classroom the best it could be. Fifth, teaching values through the curriculum naturally

occurred using the ethically rich content of the course in teaching diverse learners. Sixth,

cooperative learning transpired through fostering students' ability to work with and

appreciate others. Seventh, by developing students' sense of academic responsibility and

the habit of doing their work well, Grace's students gained a conscience of their craft.

Eighth, Grace indoctrinated ethical reflection by developing the cognitive side of

character through reading, writing, research, and discussion. Finally, conflict resolution

was embedded within cooperative learning activities and through student evaluation

feedback.

Grace integrated these character strategies with strategies of multiple intelligences

and learning styles to instruct how to effectively teach diverse learners (Emig, 1997;

McCarthy, 1997; Silver, Strong, & Perini, 1997). She desperately wanted students to feel

prepared with strategies and tactics in order to liberate them from their fears of not being

able to manage in the classroom. She wanted to instill the confidence, pride, passion,

integrity, and risk effective teachers must have in order to adapt to a variety of students.

Her method of accomplishing this was to model these traits and to provide the equipment.

Conclusions

How does this example of creative teaching generalize to other teachers and researchers? Has this been the study of one teacher's ability to be creative in the classroom, or are there methods of teaching herein that could be adapted by other teachers or teacher researchers? Do other creative teachers use similar approaches or demonstrate similar patterns? Could comparisons be made to creative individuals in other fields?

Creativity is multifaceted by nature. When research results consider vital interactions within a context or situation, they have the potential to be more realistic and useful to practitioners. To date, significant progress has been made toward identifying characteristics of creative people and delineating steps, stages, and processes for creativity, as well as examining aspects of creative products and creative environments.

Keller-Mathers and Murdock (1999) articulated the multifaceted construct of creativity clearly stating creativity is best observed from an integrated ecological approach. Behavior, intellect, temperament, and traits act as parameters for understanding the creative person. Observing characteristics of learning, thinking, and communicating delineate the creative process. Analyzing products embody ideas into tangible form. Identifying attributes of the relation between human beings and their environment describe the environmental press.

This approach to research design can be seen as useful when targeting two or more areas within the complex interaction of variables for study to illustrate how linkages can be made. For example, the process of creative teaching can be linked to Grace's personality or cognitive styles, or with environmental constraints, or with a product such

as student satisfaction or academic achievement. The focus of the design may emphasize one area over another. Including person, process, product, and press in the conceptual framework provides opportunities to examine creativity from a variety of perspectives.

This multifaceted study of creative teaching has been unique because the process has demonstrated how Grace uses her personality to foster a connection with students. This connection involves creative exchange and models cooperative and constructivist mechanisms for teaching and learning. The creative energy behind this system perpetually revitalizes Grace. She uses her knowledge to create ideas and then listens to students and adapts the appropriate strategy or activity to the content, context, and population.

Comparisons with other creative teachers. Comparisons with teachers of the gifted and talented (TAG) suggest that there are ample similarities with Grace's teaching (Rejskind, 2000). Teachers of the gifted need to be creative to develop students' creativity, to plan for teaching, and to enact their teaching plans.

TAG teachers develop students' creativity by asking stimulating questions, rewarding creativity, modeling creativity, teaching creative problem solving, and teaching affective measures where students learn to express their feelings, attitudes and values.

TAG teachers engage in yearlong, unit level, and daily planning as they prepare to teach the assigned curriculum to their classes. They also engage in more varied and extensive planning and engage in extensive curricular modifications including social, aesthetic, affective, and cognitive components.

TAG teachers enact their teaching plans in a more improvisational manner. Instead of focusing on the content, the teacher makes the interests of the students the focal point. Planning the teaching becomes less focused on content and more on the processes they will use.

Grace stimulated students' creativity by asking them to evaluate ideas expressed through famous quotes and filmstrips of methods of including diverse learners. She rewarded students' creativity by responding to each of their responses with a positive comment, not a grade. In addition, having the students work in groups on projects allowed students more responsibility and ownership.

Grace modeled creativity in the classroom by presenting alternative strategies to teach, by presenting students with interest based activities, and by authentically evaluating students. She also modeled creative problem solving by having students collaborate in groups to accomplish a task. Further, the affective components were stressed and modeled. Grace told students her values for planning the activities and asked students to get to know themselves in order that they would know why they planned the way they did.

As previously stated, Grace's planning was extensive, elaborate, and took into account students' interests and feedback. She tinkered with the plan until she felt satisfied with the product. In addition, Grace often came to class with alternative lesson plans. She wanted to make sure and connect with the students instead of forcing her plan on students. Her instruction appeared improvisational, however she was so prepared and knew what she wanted to impart that her teaching seemed to flow.

Other parallels surface between Grace and teachers who introduce inquiry

teaching methods to their students (Rejskind, McBride, & Halliday, in prep). Both

include a constructivist vision of learning, respect diversity, validate multiple sources of

knowledge, and emphasize collaboration rather than competition. Further, both belong to

a group of teachers who believe strongly in action research or reflective teaching.

Furthermore, many of the components of the Lawndale Creativity Program

(Marks, 1989) are present in Grace's teaching. For example, this program capitalizes on

the intrinsic motivation of both teachers and students, includes elements of playfulness

and fun, and utilizes multiple intelligences.

Some of the personality characteristics listed by Hickey (1999) describing a

multiple case study of creative teachers are also characteristic of Grace. For example,

Grace values creativity and originality and values her own. She is imaginative,

independent, self-confident, risk taking, energetic, curious, has a sense of humor, is

attracted to complexity, is artistic, open-minded, and intuitive and needs some time alone.

Comparisons to creative individuals in other fields. Creative individuals are

remarkable for their ability to adapt to almost any situation and to make do with whatever

is at hand to reach their goals (Csikszentmihalyi, 1996). With regard to personality type

or style, there appears to be no consistency. However, an early interest in a domain would

help an individual develop their skills quickly and wonder, curiosity, openness to

experience, and a fluid attention for processing events in the environment would be a

great advantage for recognizing potential novelty.

Although a concrete personality type for creative individuals has not been

consistent, the ten dimensions of complexity referred to in chapter one (Csikszentmihalyi,

1996) are usually present in some degree for highly successful creative people regardless of domain. For example, Grace demonstrated her intense physical energy as she responded to 146 students with written responses; however, she did need to be quiet and rest to recharge. She illustrated convergent and divergent thinking as she planned her course. She was playful with assignments and seriously responsible with her values and goals. She traversed back and forth between ideal learning situations and authentic problem solving sessions. She modeled responsibly rebellious and independent thinking. She showed passion for her work, but wanted objective feedback as well. Finally, openness and sensitivity exposed Grace to a great range of feelings from exhaustion to joy.

Implications for Educators

According to Grace, it is very difficult to predict who will be creative because the students really can change once they have their own classroom. She mentioned that she often believes she has a pretty good idea who might become a creative teacher, but many students will blossom when they take ownership and responsibility for teaching.

Grace believes in planning a course well, with students' interests in mind. She believes in developing personal relationships that model innovative strategies of including diverse learners. She believes in consistently improving her practice and enjoying her teaching. She believes in monitoring feedback from students, colleagues and herself in order to assess whether or not her values and goals have been effectively communicated.

Many of the beliefs Grace holds towards teaching are expressed by the following quote:

Teaching is also the gift of one person to another. It is a compassionate extension

of self in acknowledgment of the needs and aspirations of someone else, usually

but not always younger than we are and always, for a time at least, dependent on

us for some kind of knowledge. In that gift of self consists teaching's greatest

satisfaction – the giving not so much of knowledge, which each person must

acquire, as of habits of mind and heart and powers of thought (Banner & Cannon,

1997, p. 135).

Implications of course preparation. Teacher education has stressed the importance

of course preparation for many years. However, the course preparation that emerged from

this study takes into account three major factors. The first obstacle to creative preparation

occurs when teachers overlook the specific course constraints of time, content, and class

size. Lessons must be balanced between too little and too much time available. The time

available is dependent on the content, class size, and student variability. Therefore, all

must be balanced. When teachers are able to balance these constraints during their course

preparation, they can be more flexible in the classroom.

The second obstacle to creative preparation occurs when teachers are not able to

place themselves in a teacher-student dialog during their preparation to determine

whether the method of instruction will be successful. By being aware of difficulties some

students have learning information, teachers can be more prepared to exchange a strategy

that is not working.

The third obstacle to creative preparation occurs when teachers are not aware of

their values and goals for education. It is useful for teachers to maintain a self-aware

stance in order to remind themselves why they became teachers. Teachers who are aware

of their values and goals for education can embed instruction within a caring and responsible environment.

Implications of teacher-students connections. As classrooms have become more student-centered, teachers have been able to increase their knowledge and awareness of strategies to improve their interactions with students. However, teachers have historically avoided becoming close to their students because it implies to some that authority does not exist. Authority develops as a result of one's expertise with a subject and as a result of healthy teacher-students connections. Developing healthy teacher-students connections depends on three factors. The first obstacle to creative connections rests once again on the teacher's values and goals. To be able to be open and interested in students' learning, teachers must be aware of why they want to be teachers. The connection is then formed out of mutual respect, trust, and risk.

The second obstacle to creative connections hinges on the ability to be aware of what students need and the teacher's ability to detect when to give more or detach more as teachers teach students to be independent thinkers with confidence.

The third obstacle to creative connections revolves around not adapting to student verbal and performance feedback. It is always best to record all methods of instruction that work. These methods will probably not work for all students, but the more a teacher has in her repertoire, the better.

Implications of reflective teaching. This is possibly the most important implication for teachers. When teachers are capable and dedicated to self-improvement, they will become better teachers, experienced teachers, quality teachers, and probably creative teachers. Therefore, the three obstacles to creative reflective teaching first

depend upon the teacher being able to select an area of their practice that they want to improve. Even if a teacher believes they are highly skilled in all areas of their practice, they can assuredly come up with a weaker area. Once this is selected, the teacher can take into account the three obstacles to reflective teaching.

The first obstacle to reflective teaching revolves around the teacher's values and goals. Again, self-reflection and self-awareness are key when deciding what is important to improve and what is not. What a teacher believes is important will guide her decision for improvement.

The second obstacle to reflective teaching involves student verbal and performance feedback. Many teachers begin here because students' performance is a clear indicator where a teacher can improve his practice. Through traditional or alternative assessments, teachers can discover and plan methods of self-improvement.

The third obstacle to reflective teaching concerns whether or not a teacher has taken into account the course constraints. How can they more effectively operate within time limits, course loads, diverse learners, and multilevel lesson plans? Often teachers feel trapped by constraints instead of working with the areas they can change.

What is most important for teachers to remember is that teaching is a skill, and an art. Both require a great deal of practice and perseverance. When a craftsman and an artist begin to see their improvement, excitement ensues and drives the process onward.

References

Albert, R. S., & Runco, M. A. (1999). A history of research on creativity. In R. J. Sternberg (Ed.), Handbook of creativity (pp. 16-34). New York: Cambridge University Press.

Amabile, T. M. (1996). Creativity in context: Update to "The social psychology of creativity". Denver, CO: Westview Press.

Amabile, T. M. (2001). Beyond Talent: John Irving and the passionate craft of creativity. American Psychologist, 56(4), 333-336.

Anderson, H. H. (1959a). Creativity as personality development. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 119-141). New York: Harper & Row.

Anderson, H. H. (1959b). Creativity in perspective. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 236-267). New York: Harper & Row.

Baer, J. (1997). Creative teachers, creative students. Needham Heights, MA: Allyn & Bacon.

Banner, J. M., Jr., & Cannon, H. C. (1997). The elements of teaching. Binghamton, NY: Vail-Ballou Press.

Barron, F. (1963). Creative processes in personality. In R. W. White (Ed.), The study of lives: Essays on personality in honor of Henry A. Murry (pp. 230-248). New York: Atherton Press.

Barron, F. (1969). Creative person and creative process. New York: Holt, Rinehart, & Winston.

Barron, F. (1999). All creativity is a collaboration. In A. Montuori & R. E. Purser (Eds.), Social creativity: Volume I (pp. 49-59). Cresskill, NJ: Hampton Press.

Bateson, M. C. (1999). Ordinary creativity. In A. Montuori & R. E. Purser (Eds.), Social creativity: Volume I (pp. 153-171). Cresskill, NJ: Hampton Press.

Becker, G. M. (1994). Making it or finding it. In M. P. Shaw & M. A. Runco (Eds.), Creativity and affect (pp. 168-181). Norwood, NJ: Ablex.

Brendtro, L. K., & Van Bockern, S. (1994, April). Courage for the discouraged: A psychoeducational approach to troubled and troubling children. Focus on Exceptional Children, 26(8), 1-14.

Collins, M. A., & Amabile, T. M. (1999). Motivation and creativity. In R. J. Sternberg (Ed.), Handbook of creativity (pp. 297-312). New York: Cambridge University Press.

Cropley, A. J. (2000). Defining and measuring creativity: Are creativity tests worth using? Roeper Review, 23(2), 72-79.

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: HarperCollins.

Csikszentmihalyi, M. (1996). Creativity: Flow and the psychology of discovery and invention. New York: HarperCollins.

Csikszentmihalyi, M. (1999). Implications of a systems perspective for the study of creativity. In R. J. Sternberg (Ed.), Handbook of creativity (pp. 313-338). New York: Cambridge University Press.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1998). Collecting and interpreting qualitative materials. Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). Handbook of qualitative research. Thousand Oaks, CA: Sage.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1998). Strategies of qualitative inquiry. Thousand Oaks, CA: Sage.

Dey, I. (1999). Grounding grounded theory: Guidelines for qualitative inquiry. San Diego, CA: Academic Press.

Emig, V. B. (1997, September). A multiple intelligences inventory. Educational Leadership, 55, 47-50.

Ewing, M. T., Napoli, J., & West, D. C. (2000-2001). Creative personalities, processes, and agency philosophies: Implications for global advertisers. Creativity Research Journal, 13, 161-170.

Fasko, D. (2000). An analysis of multiple intelligences theory and its use with the gifted and talented. Roeper Review, 23, 126-130.

Fromm, E. (1959). The creative attitude. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 44-54). New York: Harper & Row.

Gardner, H. (1993a). Creating minds: An anatomy of creativity seen through the lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi. New York: BasicBooks.

Gardner, H. (1993b). Multiple intelligences: The theory in practice. New York: BasicBooks.

Geertz, R. (1975). The interpretation of cultures: Selected essays by C. Geertz. London: Hutchinson.

Gill, V. (1998). The ten commandments of good teaching. Thousand Oaks, CA: Sage.

Goodson, I. F. (1992a). Studying teacher's lives: An emergent field of inquiry. In

I. F. Goodson (Ed.), <u>Studying teachers' lives</u> (pp. 1-17). New York: Teachers College

Press.

Goodson, I. F. (1992b). Studying teacher's lives: Problems and possibilities. In I.

F. Goodson (Ed.), <u>Studying teachers' lives</u> (pp. 234-249). New York: Teachers College

Press.

Gouvernement du Québec Ministè de l'Éducation (2000). <u>The Québec education

program: New directions for success together</u> (MEQ Publication No. 00-0053).

Biliothèque nationale du Québec.

Gruber, H. E. (1989a). The evolving systems approach to creative work. In D. B.

Wallace & H. E. Gruber (Eds.), <u>Creative people at work</u> (pp. 1-24). New York: Oxford

University Press.

Gruber, H. E. (1989b). Creativity and human survival. In D. B. Wallace & H. E.

Gruber (Eds.), <u>Creative people at work</u> (pp. 278-287). New York: Oxford University

Press.

Gruber, H. E., & Wallace, D. B. (1999). The case study method and evolving

systems approach for understanding unique creative people at work. In R. J. Sternberg

(Ed.), <u>Handbook of creativity</u> (pp. 93-115). New York: Cambridge University Press.

Gruber, H. E., & Wallace, D. B. (2001). Creative work: The case of Charles

Darwin. <u>American Psychologist, 56</u>(4), 346-349.

Guilford, J. P. (1959). Traits of creativity. In H. H. Anderson (Ed.), <u>Creativity and

its cultivation</u> (pp. 142-161). New York: Harper & Row.

Guilford, J. P. (1975). Creativity: A quarter century of progress. In I. A. Taylor & J. W. Getzels (Eds.), Perspectives in creativity (pp. 37-59). Chicago: Aldine.

Hickey, M. G. (1999, April). Creativity goes to school: Observing creative teachers in action. Paper presented at the annual meeting of the American Educational Research Association, Montréal, Canada.

Hilgard, E. R. (1959). Creativity and problem-solving. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 162-180). New York: Harper & Row.

James, K., & Asmus, C. (2000-2001). Personality, cognitive skills, and creativity in different life domains. Creativity Research Journal, 13, 149-159.

Keller-Mathers, S., & Murdock, M. C. (1999). Research support for a conceptual organization of creativity. In A. S. Fishkin, B. Cramond, & P. Olszewski-Kubilius (Eds.), Investigating creativity in youth: Research and methods (pp. 49-71). Cresskill, NJ: Hampton Press.

Kiely, M. (1998). "A piece of good news": Teaching as a creative process. Canadian Psychology-Psychologie canadienne, 40, 30-38.

Knight, M., Doan, R., & Hamlin, M. (1994). Computerized software accompanying The stories we tell ourselves I←SPI: A technique for narrative assessment. Forth Worth, TX: Harcourt Brace.

Knight, M., & Doan, R. (1994). Psyching mental life. University of Central Oklahoma Press.

Lasswell, H. D. (1959). The social setting of creativity. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 203-221). New York: Harper & Row.

Lickona, T. (1991). Educating for character: How our schools can teach respect and responsibility. New York: Bantam Books.

Lipka, R. P., & Brinthaupt, T. M. (Eds.) (1999). The role of self in teacher development. Albany: SUNY Press.

Martindale, C. (2001). Oscillations and analogies: Thomas Young, MD, FRS, Genius. American Psychologist, 56, 342-345.

Maslow, A. H. (1959). Creativity in self-actualizing people. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 83-95). New York: Harper & Row.

May, R. (1959). The nature of creativity. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 55-68). New York: Harper & Row.

Mayer, R. E. (1999). Fifty years of creativity research. In R. J. Sternberg (Ed.), Handbook of creativity (pp. 449-460). New York: Cambridge University Press.

Maxwell, J. A. (1996). Qualitative research design: An interactive approach. Thousand Oaks, CA: Sage.

McCarthy, B. (1997, March). A tale of four learners: 4MAT's learning styles. Educational Leadership, 54(6), 46-51.

Mead, M. (1959). Creativity in cross-cultural perspective. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 222-235). New York: Harper & Row.

Miles, M. B., & Huberman, A. M. (1994). An expanded sourcebook: Qualitative data analysis (2nd ed.). Thousand Oaks, CA: Sage.

Montuori, A., & Purser, R. E. (1999). Social creativity: Introduction. In A. Montuori & R. E. Purser (Eds.), Social creativity: Volume I (pp. 1-45). Cresskill, NJ: Hampton Press.

Nakamura, J., & Csikszentmihalyi, M. (2001). Catalytic creativity: The case of Linus Pauling. American Psychologist, 56, 337-341.

Olszewski-Kubilius, P. (2000). The transition from childhood giftedness to adult creative productiveness: Psychological characteristics and social supports. Roeper Review, 23, 65-71.

Piaget, J. (1973). To understand is to invent: The future of education. New York: Grossman.

Policastro, E., & Gardner, H. (1999). From case studies to robust generalizations: An approach to the study of creativity. In R. J. Sternberg (Ed.), Handbook of creativity (pp. 213-225). New York: Cambridge University Press.

Publication manual of the American Psychological Association (4th ed.). Washington, DC: American Psychological Association.

Rejskind, F. G. (2000). TAG teachers: Only the creative need apply. Roeper Review

Rejskind, F. G., McBride, J., & Halliday, F. (in preparation). Creating change: Teachers' reflections on introducing inquiry teaching strategies.

Richards, R. (1996). Beyond Piaget: Accepting divergent, chaotic, and creative thought. In M. A. Runco (Ed.), Creativity from childhood through adulthood (pp. 67-86). Norwood, NJ: Ablex.

Rogers, C. R. (1959). Toward a theory of creativity. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 69-82). New York: Harper & Row.

Rogers, C. R. (1961). On becoming a person: A therapist's view of psychotherapy. New York: Houghton Mifflin.

Runco, M. A. (1994). Creativity and its discontents. In M. P. Shaw & M. A. Runco (Eds.), Creativity and affect (pp. 103-123). Norwood, NJ: Ablex.

Runco, M. A. (1996). Personal creativity: Definition and developmental issues. In M. A. Runco (Ed.), Creativity from childhood through adulthood (pp. 3-29). San Francisco: Jossey-Bass.

Russ, S. W. (1996). Development of creative processes in children. In M. A. Runco (Ed.), Creativity from childhood through adulthood (pp. 31-42). San Francisco: Jossey-Bass.

Shaw, M. P. (1994). Affective components of scientific creativity. In M. P. Shaw & M. A. Runco (Eds.), Creativity and affect (pp. 3-43). Norwood, NJ: Ablex.

Silver, H., Strong, R., & Perini, M. (1997, September). Integrating learning styles and multiple intelligences. Educational Leadership, 55, 22-27.

Starko, A. J. (1995). Creativity in the classroom: Schools of curious delight. White Plains, NY: Longman.

Sternberg, R. J. (2000). Creativity and giftedness: Identifying and developing creative giftedness. Roeper Review, 23, 60-64.

Sternberg, R. J. (2001). What is the common thread of creativity? Its dialectical relation to intelligence and wisdom. American Psychologist, 56, 36-352.

Sternberg, R. J. & Lubart, T. I. (1999). The concept of creativity: Prospects and paradigms. In R. J. Sternberg (Ed.), Handbook of creativity (pp. 3-15). New York: Cambridge University Press.

Stoddard, G. D. (1959). Creativity in education. In H. H. Anderson (Ed.), Creativity and its cultivation (pp. 181-202). New York: Harper & Row.

Stokes, P. D. (2001). Variability, constraints, and creativity: Shedding light on Claude Monet. American Psychologist, 56, 355-359.

Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.

Taylor, I. A. (1975a). A retrospective view of creativity investigation. In I. A. Taylor & J. W. Getzels (Eds.), Perspectives in creativity (pp. 1-36). Chicago: Aldine.

Taylor, I. A. (1975b). An emergent view of creative actions. In I. A. Taylor & J. W. Getzels (Eds.), Perspectives in creativity (pp. 297-325). Chicago: Aldine.

Therivel, W. (1993). The challenged personality as a precondition for sustained creativity. Creativity Research Journal, 6, 413-424.

Tileston, D. W. (2000). Ten best teaching practices: How brain research, learning styles, and standards define teaching competencies. Thousand Oaks, CA: Sage.

Ulichny, P., & Schoener, W. (1996). Teacher-researcher collaboration from two-perspectives. Harvard Educational Review, 66(3), 496-524.

Villaume, S., & Brandt, S. (1996). Extending our beliefs about effective learning environments: A tale of two learners. The Reading Teacher, 53(4), 322-330.

Wallace, D. B. (1989). Studying the individual: The case study method and other genres. In D. B. Wallace & H. E. Gruber (Eds.), Creative people at work (pp. 24-43). New York: Oxford University Press.

Wallas, G. (1926). The art of thought. New York: Harcourt Brace.

Ward, T. B. (2001). Creative cognition, conceptual combination, and the creative writing of Stephen R. Donaldson. American Psychologist, 56, 350-354.

Yin, R. K. (1994). <u>Case study research: Design and methods.</u> Thousand Oaks,

CA: Sage.

Appendix B

Teacher Consent Form

Teaching Outside of the Box: Studying a Creative Teacher

My name is Frank Lilly and I am a doctoral student in the department of

Educational and Counselling Psychology, Faculty of Education. I would like to invite you

to participate in a research project that is designed to observe the process of creative

teaching. This research is important because as more and more classrooms become

inclusive school settings, teachers must be able to be innovative in their abilities to plan,

organize, and implement adaptive and creative techniques within the classroom. The

results of this study will help to provide knowledge of the development of the creative

process and its potential usefulness to teachers and students.

Data collection for this project will begin in September, 1999 and continue until

December, 1999. Data collection will consist of open-ended interviews, field notes, and

audiotapes that will be transcribed, coded, and analyzed for emergent themes. The

emergent themes will provide information regarding the creative teaching process.

Your participation will consist of four audiotaped interviews lasting approximately one

hour each in length. You will only be expected to describe your experience of teaching

during the interviews in as much detail as you feel comfortable with. Through field notes

and audiotapes, observations will be collected during course planning and instruction, yet

will not interfere with your teaching process. During planning and teaching, you will not

be expected to do anything in addition to your teaching.

Appendix B (continued)

As a participant in this project, you have the right to confidentiality and privacy. Every attempt will be made to guarantee that all data will remain confidential. Pseudonyms will be used instead of actual names that present from the personal interviews. Due to the individual case study design of this project, it may be impossible to assure that the case can be reported in such a way that others (i.e., students) would not be able to recognize who that individual is. However, I can assure that all data will be used for educational purposes and will not be of an evaluative nature.

You may withdraw from the project at any time without penalty or prejudice to pre-existing entitlements, and you will be given continuing and meaningful opportunities for deciding whether or not to continue to participate.

You are invited to ask questions and expect to receive full and frank answers about the research from me at any time. In addition, my supervisor Dr. Gillian Rejskind can be contacted to answer questions as well. You are also be invited to participate in dissemination of the results via articles, posters, and presentations at professional conferences.

Sincerely,

Frank R. Lilly

Doctoral Candidate

Appendix B (continued)

Teacher Consent Form

Teaching Outside of the Box: Studying a Creative Teacher

As a participant in this project, I understand the following:

- I am participating in a project of research studying creative teachers.

- I will not be compensated for my participation.

- I will be asked to participate in four approximately one-hour interviews.

- The interviews will be audiotaped.

- My course preparation and instruction will be observed and recorded via field notes and audiotapes.

- Pseudonyms will be used to protect my anonymity.

- Due to the individual case study design of this project, I can not be completely assured that it will be possible to report the case in such a way that others (i.e., students) would not be able to recognize my identity.

- The data will be used for educational purposes and not be evaluative in nature.

- I can withdraw from this research at any time and for any reason without prejudice.

- The data collected during this experiment may be disseminated in any of the following forms: dissertation, journal article, presentation, or workshop. I have been invited to participate in this dissemination process.

- I have been invited to ask questions and receive answers from Frank Lilly or Dr. Rejskind about the research at any time.

Appendix B (continued)

I agree to participate in this research project.

Participant signature: _____

Researcher signature: _____

Appendix C

Student Consent Form

Teaching Outside of the Box: Studying a Creative Teacher

My name is Frank Lilly and I am a doctoral student in the department of

Educational and Counselling Psychology, Faculty of Education. I would like to invite you

to participate in a research project that is designed to observe the process of creative

teaching. This research is important because as more and more classrooms become

inclusive school settings, teachers must be able to be innovative in their abilities to plan,

organize, and implement adaptive and creative techniques within the classroom. The

results of this study will help to provide knowledge of the development of the creative

process and its potential usefulness to teachers and students.

Your participation in this project will consist of three audiotaped interviews

lasting approximately thirty minutes each in length. Through field notes and audiotapes,

observations will be collected during course instruction, yet will not interfere with your

learning process. You will only be expected to describe your expectations and experience

of the course during the interviews in as much detail as you feel comfortable with.

As a participant in this project, you have the right to confidentiality and privacy.

All data will remain confidential. A pseudonym will be used instead of your actual name.

The instructor of the course will not be aware of who participates in this project. All data

will be used for educational purposes and will not be of an evaluative nature.

Appendix C (continued)

You may withdraw from the project at any time without penalty or prejudice to pre-existing entitlements, and you will be given continuing and meaningful opportunities for deciding whether or not to continue to participate.

You are invited to ask questions and expect to receive full and frank answers about the research from me. And although you will not earn a better mark in the course by participating, you will have the opportunity to contribute to the research process. The data from this research project will be disseminated in any of the following forms: dissertation, journal article, presentation, or workshop.

Sincerely,

Frank R. Lilly

Doctoral Candidate

Appendix C (continued)

Student Consent Form

Teaching Outside of the Box: Studying a Creative Teacher

As a participant in this research project, I understand the following:

- I am participating in a research project studying creative teachers.

- I will be asked to participate in three approximately thirty minute interviews.

- The interviews will be audiotaped.

- A pseudonym will be used to protect my anonymity.

- The instructor will not be aware of who participates in this project.

- I will not be compensated for my participation by receiving a better mark.

- I can withdraw from this research at any time and for any reason without prejudice.

- The data will be used for educational purposes and not be of an evaluative nature.

- I understand that I have been invited to ask questions and receive answers from Frank Lilly about the research at any time.

- The data collected during this experiment may be disseminated in any of the following forms: dissertation, journal article, presentation, or workshop.

Appendix C (continued)

I agree to participate in this research project.

Participant signature: _____

Researcher signature: _____

Appendix D

Personal History and Philosophy of Life Interview

(modified from Csikszentmihalyi (1996))

Part A: Career and Life Priorities

1.   Of the things you have done in life, of what are you most proud?

   a.   To what do you attribute your success in this endeavor? Any personal
           qualities?

2.   Of all the obstacles you have encountered in your life, which was the hardest to
        overcome?

   a.   How did you do it?

   b.   Any that you did not overcome?

1.   How did you initially become involved or interested in teaching (field) in the area
        of special needs (domain)? What has kept you involved?

2.   Has there been a particular project or event that has significantly influenced the
        direction of your career? If so, could you talk a little about it?

   a.   How did it stimulate your interest?

   b.   How did it develop over time?

   c.   How important was this project-event to your creative accomplishments?

   d.   Do you still have interesting, stimulating experiences like this?

Appendix D (continued)

3.   How would you advise a student on why it's important to get involved in teaching

with an awareness of special needs?

    a.   Is that why it is important for you? If not, how is your current perspective

       different?

6.   What advice would you give a student in this area that is just starting out?

    a.   Is that how you did it? If not, how is your current perspective different

       from the way you started?

Part B: Relationships

7.   If there has been a significant person (or persons) in your life who has influenced

or stimulated your thinking and attitudes about your work . . .

    a.   When did you know them?

    b.   How did you become interested in them (e.g., did you actively pursue

       them)?

    c.   How did they influence your work and-or attitudes (e.g., motivation,

       personal or professional values)?

    d.   In what ways was he-she a good and-or bad teacher?

    e.   What kinds of things did you talk to this person about (e.g., personal,

       general career-related, specific problems)?

    f.   What did you learn from them? How to choose what problems to pursue?

       Field politics and marketing yourself?

Appendix D (continued)

8. Is it important for you to teach and work with young people?

   a. Why?

   b. What are you interested in trying to convey to them? Why?

   c. How do you do this?

   d. When you interact or work with a student, can you assess whether the will be likely to be successful in the field?

   a. Do you recognize people who are likely to be creative in their future work? How? What characteristics do they have?

9. Do you notice differences between men and women students and colleagues in the field? If so,

   a. In interests?

   b. In ability? Creativity?

   c. In the way they approach learning?

   d. In the way they interact with other people-colleagues?

   e. In how they define success and achievement?

   f. In their personal goals and values?

   g. In their professional goals and values?

Peers and Colleagues

10. At any time in your life, have your peers been particularly influential in shaping your personal and professional identity?

11. In what way(s) have your colleagues been important for your personal and professional identity and success?

Appendix D (continued)

Family

12.   In what way(s) do you think your family background was special in helping you

to become the person you are?

13.   How did you spend most of your free time as a child? What kinds of activities did

you like to do? With peers? With parents? With siblings? Alone?

14.   In what way(s) have your spouse and children influenced your goals and career?

Part C: Working Habits-Insights

15.   Where do the ideas for your work usually come from?

    a.   Reading?

    b.   Others?

    c.   Your previous work?

    d.   Life experiences?

16.   Have there been times when it's been difficult to decide what to do next? What do

you do?

17.   How important is rationality versus intuition in your work? Describe.

    a.   Are there different styles in your work (e.g., rational vs. intuitive)?

    b.   Do you trust your instincts or are these usually wrong-misleading?

    c.   Do you have better success with a methodical, rigorous approach to your

        work?

    d.   Do you think about work during leisure time?

    e.   How many hours of sleep do you usually get? Do you tend to do your best

        work early in the morning or late at night?

Appendix D (continued)

    f.   Have your ever had a useful idea while lying in bed, or in a dream?

18.   How do you go about developing an idea-project?

    a.   Do you write rough drafts? Outlines? How often do you rewrite?

19.   Can you describe your working methods?

    a.   How do you decide your priorities?

    b.   Do you prefer to work alone or in a team?

20.   Overall, how is the way you go about your work different now from the way you worked twenty years ago?

    a.   What if any changes have occurred over the years in the intensity of your involvement in teaching?

    b.   What about the ways you think and feel about it?

21.   Have you experienced a paradigm change in your work? Describe.

Part D: Attentional Structures and Dynamics

22.   At present, what task or challenge do you see as the most important for you?

    a.   Is that what takes up most of your time and energy? If not, what does?

23.   What do you do about this? [Probe for field-domain-reflection]

24.   Do you do this primarily because of a sense of responsibility, or because you enjoy doing this? Describe.

    a.   How has this changed over the years?

25.   If I had spoken to you thirty years ago, what different views of the world and yourself would you have had?

Appendix D (continued)

26.   Have there been some personal goals that have been especially meaningful to you

over your career? If yes, could we talk about some of the most significant?

    a.   How did your interest in this goal begin?

    b.   How did it develop over time? (Now?)

    c.   How important was this goal to your creative accomplishments?

27.   Are there any questions you believe have been omitted that you would like to

address?

Appendix E

Personal History and Philosophy of Life Interview: Student Version

(modified from Csikszentmihalyi (1996))

Part A: Career and Life Priorities

1.   How did you initially become involved or interested in teaching? What has kept

you involved?

2.   Has there been a particular project or event that has significantly influenced the

direction of your career? If so, could you talk a little about it?

     a.   How did it stimulate your interest?

     b.   How did it develop over time?

     c.   How important was this project-event to your creative accomplishments?

     d.   Do you still have interesting, stimulating experiences like this?

Part B: Relationships

3.   If there has been a significant person (or persons) in your life who has influenced

or stimulated your thinking and attitudes about teaching . . .

     a.   When did you know them?

     b.   How did you become interested in them (e.g., did you actively pursue them)?

     c.   How did they influence your work and-or attitudes (e.g., motivation, personal

or professional values)?

     d.   In what ways was he-she a good and-or bad teacher?

     e.   What kinds of things did you talk to this person about (e.g., personal, general

career-related, specific problems)?

     f.   What did you learn from them? How to choose what problems to pursue?

Field politics and marketing yourself?

Appendix E (continued)

4. Is it important for you to teach and work with young people?

    a. Why?

    b. What are you interested in trying to convey to them? Why?

    c. How do you do this?

Part C: Course Expectations

5. Can you describe the way(s) you learn information best?

    a. What study habits have been most successful for you?

    b. What study habits have been least successful for you?

    c. What teaching methods work best on you?

    d. What teaching methods don't work for you?

6. What is your favorite area of study? Least favorite? Why?

7. Describe your experience with teaching. What grade(s)? What course(s)?

8. What qualities do you think a good teacher should have?

9. What conditions must be present for learning to thrive in the classroom?

10. Do you have prior content knowledge of this course?

11. What do you think about inclusive schooling for the student with special needs?

12. What are your expectations for this course?

13. What are your expectations of this instructor?

14. Although the semester has just begun, what do you think and how do you feel about the instructor?

15. Are there any questions that I have neglected to ask that you would like to respond to? Do you have any comments you would like to make?

Appendix E (continued)

4.   Is it important for you to teach and work with young people?

    a.   Why?

    b.   What are you interested in trying to convey to them? Why?

    c.   How do you do this?

Part C: Course Expectations

5.   Can you describe the way(s) you learn information best?

    a.   What study habits have been most successful for you?

    b.   What study habits have been least successful for you?

    c.   What teaching methods work best on you?

    d.   What teaching methods don't work for you?

6.   What is your favorite area of study? Least favorite? Why?

7.   Describe your experience with teaching. What grade(s)? What course(s)?

8.   What qualities do you think a good teacher should have?

9.   What conditions must be present for learning to thrive in the classroom?

10.   Do you have prior content knowledge of this course?

11.   What do you think about inclusive schooling for the student with special needs?

12.   What are your expectations for this course?

13.   What are your expectations of this instructor?

14.   Although the semester has just begun, what do you think and how do you feel

      about the instructor?

15.   Are there any questions that I have neglected to ask that you would like to

      respond to? Do you have any comments you would like to make?