

MOVING TOWARD INTUITIVE KNOWLEDGE:
HOW DO PRACTICING TEACHERS MAKE USE OF INTUITIVE KNOWLEDGE
IN THE CLASSROOM?

by
Darlene McLeod Maxwell

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As members of the Final Examination Committee, we certify that we have read the dissertation prepared by Darlene McLeod Maxwell entitled MOVING TOWARD INTUITIVE KNOWLEDGE:
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INTUITIVE KNOWLEDGE IN THE CLASSROOM?

and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Education

<u>Donald C. Clark</u>	<u>3/25/96</u>
Date	Date
<u>Dana L. Fox</u>	<u>3/25/96</u>
Date	Date
<u>Sally N. Clark</u>	<u>3/25/96</u>
Date	Date
<u>Alvin S. Paul</u>	<u>3-25-96</u>
Date	Date
_____	_____
	Date

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copy of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

<u>Donald C. Clark</u>	<u>3/25/96</u>
Dissertation Director	Date
<u>Dana L. Fox</u>	<u>3/25/96</u>
Dissertation Co-Director	Date

STATEMENT BY AUTHOR

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SIGNED: Darlene McLeod Maxwell

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ABSTRACT

The two case studies presented in this research develop an understanding of how practicing teachers in the classroom think about intuition and intuitive knowledge, of how intuitive knowledge is used in the classroom, of the observable nature of intuitive knowledge, and the feasibility of transferring this use of intuitive knowledge to preservice teachers in elementary education.

As a participant observer, the researcher used extensive field notes from classroom observations, open-ended, in-depth interviews, and a collection of artifacts, such as drawings by the students, to examine the usage of intuitive knowledge and its impact on the day to day functioning of the classroom. Two elementary teachers, one, a male with eight years of teaching experience, and one, a female with twenty years of teaching experience, chosen through purposeful sampling, are observed over a period of four months and interviewed three times. Seven of the second grade students from each classroom were interviewed.

Through ongoing data analysis, units of information emerged allowing the use of the constant comparative method in determining themes and categories inductively. Both participants make equal use of intuition in order to enhance their practice of teaching. Both hold children in high

regard and have the utmost respect for them. They both enjoy children, teaching and learning themselves. Both are open to the future and new ideas, but cautious in implementing programs that do not strengthen learning for children. They attribute part of their expertise to intuition and note that it is observable in their practice of teaching.

CHAPTER 1
INTRODUCTION

We play guessing games with life. Those who guess well are called intuitive; those who are intuitive, however, don't think they are guessing. (Goldberg, 1983,p.58)

This paper is a hermeneutic study of intuition in which I as the researcher interpret the meaning that others, practicing teachers, make of the concept. It is a constantly changing investigation as new research continues to lend insight into the nature of intuition. In order to clarify and explain the concept of intuition, it is advantageous to examine intuition in relationship to rational thinking. The path of this exploration, therefore, will move from definitions of intuition and rational thinking, to a discussion of characteristics relevant to their natures, to the relationship between the two and the significance of the research problem, to a personal construct of intuition and the rationale for this study, to the connection between education, knowledge, and intuition; and finally, to the statement of the problem, implications, and limitations of this topic.

The very mention of the word intuition usually stimulates a diversity of reactions from people running the

gamut from mysticism or ESP to feminist theory to "poppycock." In this rational world of reason and the observable, the recognition of intuition as an important potential to be developed in each person has been not only squelched, but mocked. These reactions appear to be the result of not having a clear definition of what intuition is, how it functions, the conditions necessary for its functioning, and how it is applicable in one's attempts to solve life's daily problems.

Intuition Defined

It may be helpful at this point to examine the etymology of the word intuition. "Intuitive" originated from Latin, the verb "intueri" which meant "to look upon" (Noddings, 1984). From its origin and throughout time philosophers, beginning with Plato and Aristotle to Bertrand Russell and John Dewey, as well as psychologists such as Carl Jung and Jerome Bruner, have all searched futilely for a definition of intuition. All have indicated ways of recognizing its characteristics and even fostering it in others, but none can clearly say what intuition is (Noddings, 1984). Perhaps then the best place to begin is with the known - intuition's characteristics - and progress from that point.

Noddings's (1984) conception of intuition is as follows:

...understanding always involves the activation of intuition in seeing what-is-there. This seeing involves a representation from one of the domains into the range we labeled "Will," that central self of being that manifests itself as motive, desire, feeling, and the like. (pp.66-67)

It is this "will" that Noddings (1984) says stands as the director allowing the intuition process to occur.

Often, according to Goldberg (1983), intuition is trivialized by limiting it to one realm - creativity, mysticism, or problem solving. "Intuition applies to anything knowable, including vague hunches and feelings about mundane matters, significant discoveries of concepts and facts, and divine revelation (p.31)." It means different things to different people such as educators, psychologists, or philosophers. The word itself suggests that it is an act that happens spontaneously and immediately and one cannot explain how one comes to know what one knows. Goldberg (1983) continues - "... intuitive knowing is not mediated by a conscious or deliberate rational process (p.32)." In contrast to rational, formal, analytic, and organized thinking, it is informal and unstructured.

Clark (1986) discusses intuition as "... a different way of knowing or insight" and states that every individual

possesses and uses it in one degree or another; however, when someone tries to explain how they have come to know something, they cannot. Intuition allows a person to come to understand a concept in an immediate and holistic fashion due to "... a high level of synthesis of all the brain functions (p.28)." In the Western world of rational thinking, people tend not to use this ability and repress it. This repression (Clark, 1986) is regrettable since "... intuition is a part of planning, future thinking, and insight necessary to the intelligent person (p.31)."

Concentration and focused clarity on tasks of a complex nature are functions of intuition and necessary to our ability as humans to solve our problems.

Gang (1992) discusses various "ways of knowing" that are naturally evolved human attributes. Some of these are creativity, curiosity, observation, communication, imagination, collaboration, exploration, self perfection, integrated responsiveness - physically, spiritually, emotionally, mentally, and lastly intuition. Gang (1992) defines intuition as "... the extra-conscious part of ourselves, making its presence felt through illumination, understanding, and instant knowing (pp.xii-xiii)."

Imagination is the path through which intuition is reached outside of the mental. This intuitive knowing is not confined by time, which Gang (1992) describes as a "brain

event," and is separate from feeling. He stresses the importance of the intuitive attribute in education because "... it demonstrates that we have answers within ourselves, as well as a means of accessing that knowing (p.xiii)." Education, according to Gang (1992), focuses on life's meanings and the interdependent and interconnectedness of all things.

Bruner (1960) discusses intuitive thinking and says that it involves "... an implicit perception of the total problem." The intuitive thinker is not aware of how the information was gained that was used in answering the problem. Intuitive thinking is based on the thinker's knowledge, and familiarity of a particular structure whereby he/she can skip around within this structure and reach conclusions. Analytic thinkers demand a sequential rechecking of the steps leading to these conclusions. Bruner (1960) interprets intuitive thinking as an "intellectual technique of arriving at plausible but tentative formulations without going through the analytic steps by which such formulations would be found to be valid or invalid conclusions (p.13)."

Jung (1923) seems to have the most complete and well synthesized definition of intuition:

It is that psychological function which transmits

perceptions in an unconscious way ... it is neither sensation, nor feeling, nor intellectual conclusion, although it may appear in any of these forms. Through intuition any one content is presented as a complete whole, without our being able to explain or discover in what way this content has been arrived at... Its contents, like those of sensation, have the character of being given, in contrast to the 'derived' or 'deduced' character of feeling and thinking contents... Intuition maintains a compensatory function to sensation, and, like sensation, it is the maternal soil from which thinking and feeling are developed in the form of rational functions. Intuition is an irrational function, notwithstanding the fact that many intuitions may subsequently be split up into their component elements, whereby, their origin and appearance can also be made to harmonize with the laws of reason. (pp.567-569)

While this was an extremely lengthy definition, it was necessary to quote it because it lays the foundation for the rest of the study.

People (Jung, 1923) described as "intuitive types" can be both extroverts and introverts just like rational

thinkers; however, they are generally unable to explain their experiences like the rational thinker. They do adapt to the rational world by bringing their "unconscious indications" to bear on this life. "How such a function appears is naturally hard to describe, on account of its irrational, and so to speak, unconscious character (Jung, 1923, p.181)." In the more advanced civilizations where thinking, feeling, and sensing are differentiated, there are many people who have developed and employ intuition as an essential function. Being an unconscious process, to consciously grasp its nature causes great difficulty.

Clark (1986) expands upon the works of Goldberg (1983), Jung (1923), and Bruner (1960) and defines intuition by the level at which it occurs. The first level is that of rational intuition. This is not a contradiction in terms. Rational intuition develops from the synthetic characteristic of intuitive thinkers. It begins with known information and synthesizes this with intuitive knowledge in solving problems. The conscious, rational information is processed alongside of the past information hidden in the subconscious and together new solutions emerge.

Clark (1986) then discusses predictive intuition which builds and expands upon rational intuition by gaining new insights unavailable within the obvious information.

Here unconscious impressions or information of unknown sources becomes an important part of the ... insights or the profound conclusions. An individual may arrive at a solution to a problem while remaining unaware of the process involved.
(p.161)

The process of predictive intuition is an euphoric experience often embracing discovery and appears in an holistic, gestalt manner utilizing "...thinking, feeling, sensing, and intuiting (p.162)." Predictive intuition often appears as the "forecasting of trends" in science, economics, business, diplomacy, and personal decisions.

Transformational intuition (Clark, 1986) is that level at which "... a person seems to be using a different kind of sensing...(p.162)" unexplainable through science. Some define this as a level of transcendence explained in some religions as enlightenment and illumination. Goldberg (1983) describes a story about Churchill to illustrate this level.

The story is told of Churchill that, when London was under siege in the fall of 1941, as he was preparing to enter his car by the customary door being held open by his driver he instead stopped

and walked around the car and let himself in the far door. Moments later a bomb exploded near the side where he would have been sitting. He would have been injured had he not changed his position. When asked later how he had known to sit where he did he replied, "Something said to me, 'Stop!' before I reached the car door held open for me. It then appeared to me that I was told I was meant to open the door on the other side and get in and sit there, and that's what I did." (p.54)

By examining this example, information comes unsolicited and suddenly from a source outside of the individual who is receptive to it at this level.

For the purposes of this study, intuition is an unsolicited, spontaneous, unconscious event that lends insight to a situation where the recipient is aware of and receptive to the process.

Rational Thinking Defined

Rational thinking, at this point in the discussion, appears to be the antithesis of intuition and must be investigated .

Thinking (Clark, 1986) is defined as a cognitive process involving the sequential, analytical, evaluative,

problem solving functions primarily found in the brain's left hemisphere. These abilities are developed into the higher level capacities of abstract reasoning, generalizations, and conceptualizations through stimulating environments.

This analytic thinking (Bruner, 1960) progresses explicit step by explicit step and can be conveyed to another person clearly. The analytic thinker is fully aware of the information to be conveyed. It may incorporate inductive or deductive reasoning.

Jung (1923) defines rational thinking as "directed thinking" where concepts are sequentially arranged in keeping with the "conscious rational norm." He states that "thinking is that psychological function which, in accordance with its own laws, brings given presentations into conceptual connection(p.611)." It involves two categories, one which is active and is "an act of will" , similar to Nodding's (1984) definition, and one which is passive and is "an occurrence." Jung (1960) then terms passive thinking as intuitive thinking.

Healy (1994) explains rational thinking from a brain research background. She terms it scientific thinking or problem solving and sees it as careful observation, formation of hypotheses, and development of a sequential and ordered problem-solving approach. Many of these skills are

fostered through mathematics - arithmetic, geometry, algebra, etc. - the abstract reasoning and the comprehension of relationships. The right brain person sees the whole, global observations belonging to an understanding, visually and spatially, of relationships. The left brain person obeys the rules of thinking - analyzing sequential ordered bits of information. Healy (1994) asserts that both "...must learn to work together." Our schools, however, continue to stress the analytic and sequential, ruling out the fact that a certain amount of formal knowledge must be gained at a prime time. Healy (1994) asks if it must be done at the exclusion of the intuitive.

The Nature of Intuition

The educational community is becoming more informed by brain research, specifically the holistic, inventive and integrative functions of the right brain necessary to providing a balanced education (Clark, 1986). In the learning process intuition is stimulated when "probability guessing" is involved. For example, what would happen if all the libraries were closed and locked to mankind except for a certain class of people? This kind of futuristic thinking needs a trusting and safe environment where intuitive thinking is valued and it can become a better working tool for learning about the world and all it

incorporates (Clark, 1986).

According to Clark (1986), prominent figures are more openly claiming that their expertise relies upon the intuitive processes. Barbara Streisand is an example of this. She is a perfectionist and in explaining why she states that "she just sees things differently...." She can visualize the things completely and in their entirety.

Clark (1986) continues with some common characteristics of the intuitive process. It is spontaneous and "complementary to analytical thinking." It is a holistic and gestalt knowing. There exists a limited vocabulary for expressing the intuitive process. All have this potential to be developed. There exists a tendency to synthesize, unify, and merge dichotomies. The intuitive process becomes inhibited by anxiety and can usually be accessed when stress is absent and relaxation is present. The intuitive process integrates functions of the brain producing creative solutions and affective actions.

Intuition is once again supported through brain research as discussed by Healy (1994). She advances the theory of hemispheric differences and asserts that each side of the brain functions through its own unique style, while she continues to support the importance of developing both hemispheres. Figure 1.1 (Healy, 1994, pp. 125-126) on the next page outlines characteristics of each hemisphere.

LEFT:THE "SPLITTER"	RIGHT:THE "LUMPER"
Analytic-sequential	Wholistic-simultaneous- "hands-on"
Provides details	Sees wholes
Listens, talks	Looks, does
Reasons logically	Reasons intuitively
Analyzes, understands time	Designs, understands three dimensional space
Language: speech, sound, grammar, verbal concepts	Language: single word meanings, pitch, gesture, social interaction
Rapidly changing motor patterns...	...changing environment with hands
Likes automatic routines	Likes novelty
Verbal short-term memory	Memory for sensory images
Processing rapidly changing auditory patterns...	Generating mental maps, conceptualizing mentally
Putting things in order	Understanding intuitively
Emotion: approach	Emotion:withdraw

Figure 1.1, How the hemispheres share the load

Not only do hemispheric preference influence one's thinking, but it is suggested that one's temperament is also affected. Extroverts demonstrate activity in the left hemisphere while introverts do so in the right hemisphere (Healy, 1994).

Healy (1994) suggests when adolescence begins is the time when the analytic processes of the brain begin to integrate with intuitive, holistic thinking. If we are to have creative thinkers, then this integrated, creative brain must be developed. Healy (1994) defines creative thinking as a process concerned with making connections between "inspiration and evaluation." She emphasizes the need for balance between the hemispheres of the brain resulting in a balancing of "... the knowledge-imagination equation."

"Many highly creative adults prefer wholistic and intuitive rather than verbal modes of processing (Healy, 1994, p.323)." Picasso demonstrates this preference through his art and Isadora Duncan through her dance. Following along the lines of the hemispheric divisions, the right brain involves itself in a great deal of artistic expression and has a closer relationship with the "emotional feeling centers." Brain waves emitted from the right hemisphere are referred to as alpha rhythms and are generated more slowly than the beta waves coming from the very active, analytical, verbal left hemisphere. Because of this high, frequent activity level of the beta waves, inspiration is not given a

chance to infiltrate or integrate. Often this can occur through reflection, relaxation, and imagery. Healy (1994) states and it is confirmed by the futurist, Carl Sagan, that "some of science's greatest discoveries demonstrate that intuition requires incubation time (p.325)." This "incubation time" (Jung, 1923) is a very active time for the creative process to occur.

Bruner (1960) states that the characteristics of intuitive thinking are difficult to recognize through observable behaviors. "Intuition implies the act of grasping the meaning, significance, or structure of a problem or situation without explicit reliance on the analytic apparatus of one's craft (p.59)." Some "intuitions" are considered good and some bad, depending upon the analytic thinker who checks them. Are there variables that predispose a person to be an intuitive thinker all the time or only in certain areas? If teachers model intuitive thinking, will their students be more likely to develop a sense of confidence in intuitive thinking?

Bruner (1960) says that perhaps the use of heuristic procedures will facilitate the use of intuition by students. The major advantage of heuristic procedures is their availability for thinking when analytic, sequential, problem-solving methods are unavailable or too involved, lengthy, and detailed. The analytic technique; however,

assures one of a solution, if one is to be found, in x amount of steps, whereas the intuitive approach may or may not yield a solution in a timely manner. Bruner (1960) urges the teaching of some heuristic rules that he believes can only support the intuitive thinker - "the use of analogy, the appeal to symmetry, the examination of limiting conditions, the visualization of the solution- (p.63)."

Conditions must be supportive of intuitive thinkers who are willing to express themselves and risk rejection. Bruner (1960) suggests that self-confidence, that part of one's personality and that part emerging from knowing one's subject, is a necessary ingredient for intuitive thinkers. An intuitive thinker often is rejected or proven wrong by his analytic counterparts; therefore, intuitive thinking requires a self-confident, willing, risk-taker to attempt to solve problems through this approach (Bruner, 1960).

The Relationship Between Intuition and Rational Thinking

Goldberg (1983) asserts that the rational and intuitive relationships are extremely complex and intertwined. The immediate dichotomy that everyone wishes to believe is not as diverse as it appears. He supports the two processes of rationality and intuition as complementary functions.

Goldberg (1983) purports that rationality comes before and after intuition because we gather facts and reason; then,

intuitive insight is given and followed with reasoning and analysis. He states that "intuition is a part of rational thinking" "...like two separate pipes feeding into the same faucet (p.33)," constantly leaping back and forth from reasoning to intuition and vice versa.

Goldberg (1983) asserts that embedded in formal rationalized thinking is intuition. Even with the classic syllogism, philosophers from a rationalistic background understand that the initial premise must be self-evident. Goldberg (1983) argues that intuition may provide this self-evidence. Pure reason is capable of formulating a conclusion but it may prove to be of a shallow nature if the intuitive is not involved. "Intuition can elevate rational knowledge to a higher level of both appreciation and conviction through some ineffable combination of feeling and experience (p.39)." Intuition is often a vague sense of something, just an inkling of direction. To evaluate intuition is difficult. It is not meant to be measured as right or wrong. It just is (Goldberg, 1983).

Gang (1992) addresses the intuitive and rational relationship by examining certain cosmic laws. One of these laws involves going beyond the input of the five senses (which supply data for the rational, empirical, quantifiable science) to intuition or "inner knowing." Gang (1992) states that it is necessary to move into a multi-sensory

approach because the education of the future will address the needs of the "true learner" who resides within one's inner self. He continues emphasizing the importance of looking deeper into that part of the universe which is not as immediately visible as the physical realities explored through the five senses.

Gang (1992) favors holistic learning which integrates "imagination, intuition, and intellect." The implication here is that the true learner combines body, mind, and spirit in the process of learning to an awareness of the purposes of life. Spirituality is defined by Gang (1992) as "... gaining a sense of meaning and purpose in daily life (p.114)." He explains that this purpose can be gleaned and expressed through each person's unique "...talents, abilities, intuition, and intelligence." He forewarns that the absence of this spiritual development is what is leading to the afflictions of our time - crime, drugs, alcoholism, AIDS,

Bruner (1960) reiterates that analytic and intuitive thinking are complementary in nature. The solutions to problems are often reached through intuitive thinking, instead of the slow, methodical analytic process. Many times it is the intuitive thinker that is the inventor of the hypotheses and the analytic thinker who checks them thoroughly.

Carl Sagan (1977), one of today's eminent scientist, has this to say about the relationship between intuition and rational thinking:

There is no way to tell whether the patterns extracted by the right hemisphere are real or imagined without subjecting them to left-hemisphere scrutiny. On the other hand, mere critical thinking, without creative and intuitive insights, without the search for new patterns, is sterile and doomed. To solve complex problems in changing circumstance requires the activity of both cerebral hemispheres: the path to the future lies through the corpus callosum. (p.181)

Sagan (1977) reaffirms and validates the necessity for both intuitive and rational thinking. He states that in approaching new situations, they are equally effective.

Alvin Toffler (1990), a present day futurist, refers to the importance of intuition and rationality in relationship to the economic, business, and political leadership of the 21st century. He says that economic development will depend on the "... application of the human mind" and that knowledge gained from this will consist of the formal technical skills as well as unconventional forms such as

imagination, images, and intuition.

Toffler's (1990) and Sagan's statements are not truly new. As this paper has shown, Jung (1923), Bruner (1960), and Taba (1962), all psychologists and/or educators, have stressed the importance of developing both the intuitive and rational attributes that each person possesses at birth. Gang (1992) states that "they are the vehicle for human interaction...." Taba (1962) in her study of curriculum development in the schools says:

A curriculum which alternates intuitive and analytical thinking, experience and verbal learning, also needs to be a spiraling curriculum. The matters treated on an intuitive and experiential level should be revisited on the level of greater abstraction and conceptualization. (p.156)

All of these writers stress the importance of a balance between intuitive and rational thinking. It is interesting that the earliest of these, Jung (1923), to the latest, Sagan (1977), Toffler (1992) and Gang (1992), all continue to call for this balance that is so overtly missing in our society and all of its structures.

The Connection Between Education, Knowledge, and Intuition

Agyakwa (1988) delineates intuition into separate senses. First he describes it from its Latin meaning as "a process of seeing." Second he defines it as a human capacity enabling one to immediately become aware of reality. He (1988) further explains that this intuitive process is unable to find support within the cognitive processes and that its immediacy defines intuition as an unplanned act or process. Its sense of awareness places intuition in a category with sensation and sensation, by definition, allows for a lack of factual explanations (Agyakwa, 1988). Thus, it is possible to suggest the following simplistic working definition at this point: intuition is a human ability that when accessed offers an awareness of life outside of the cognitive domain.

Agyakwa (1988) attempts to link "intuition, knowledge and education." Since the concept of intuition has been briefly explored, it seems appropriate at this time to define knowledge (knowing) and education. According to The American Heritage Dictionary, knowledge and education are defined in this manner:

*knowledge-the state or fact of knowing;
familiarity, awareness, or understanding gained
through experience or study; the sum or range of

what has been perceived, discovered, or learned.

*education-the knowledge or skill obtained or developed by a learning process; the field of study that is concerned with teaching and learning pedagogy.

By analyzing these definitions, it is readily apparent that education requires knowledge, thereby clearly connecting the two concepts. Both knowledge and education are acquired through a process of learning or experiences. Here one can suggest that process can be of an intuitive nature. If during that process one perceives, discovers, or learns, the sum of this information becomes knowledge and the process has come full circle; thus, limiting the concept of intuition to these espoused definitions and creating a viable knowledge base.

The Purpose of the Study

The purpose of this study is to validate the existence of intuition and intuitive knowledge in teaching and to recognize its usage and trustworthiness as a valuable source of information for the classroom teacher with which to enhance the practice of teaching.

In order to understand my compelling interest in this

topic, I think it will be helpful to review this quote from Jung (1923):

The intuitive is never to be found among the generally recognized reality values, but [she] is always present where possibilities exist. [She] has a keen nose for things in the bud pregnant with future promise. [She] can never exist in stable, long-established conditions of generally acknowledged though limited value: because [her] eye is constantly ranging for new possibilities, stable conditions have an air of impending suffocation. (p.464)

The above paragraph describes ME! I am an intuitive person who bases my decisions on feelings and intuitions and allows them to guide my life. There are times that I can intuit the feelings and beliefs of others before they ever appear obvious. My driving urges force me to explore the future, having little patience for the past and the status quo. While I could have chosen a very practical and easily defined and organized research topic, I chose to stay with this topic because I am obliged by my intuitive nature to finally examine a part of my being that I have now come to recognize, after forty-three years, as intuition. I have

always known that there was something driving me to behave as I do and informing me, especially in my teaching experiences, with information that seemed to just come out of the blue. I believe that this intuition is innate in many people but has definitely been repressed in this Western world of rationality. In summation, my working definition of intuition might read: intuition is a human ability that when accessed offers a unique awareness of life merging itself with rational thinking in an effort to enhance or elevate life's possibilities.

Based on my personal convictions and research thus far, I can only build a construct of intuition which incorporates rational thinking and vice versa. One cannot exist independently of the other, as this Western world has tried to do, without developing human beings who are deficient in some way. As Clark (1986) pointed out, the intuitive person tends to be a holistic thinker who synthesizes thoughts and ideals. Again that describes me and leads me to my next statement. It is the whole person, physically, intellectually, socially, and spiritually, who must be educated. We can no longer afford to settle for less.

The Problem Statement

This paper explores the use of intuition and intuitive

knowledge by practicing classroom teachers. It seeks to investigate how teachers think about intuition. It seeks to validate the existence and usage of this intuitive knowledge in the day to day functioning of the classroom. It seeks to explore the notion that part of the expertise of classroom teachers is attributable to intuition. If this assumption is true, then it seeks to examine the observable ways in which these intuitive teachers use this expertise within the classroom. This exploration is guided by the parameters of the following questions:

- * What is involved in the expertise of teachers? To what do they attribute this expertise? Might it be attributable to intuition?

- * What is intuition? What is intuitive knowledge?

- * How is intuitive knowledge used by practicing teachers?

- * How is this intuitive knowledge observable to others in a classroom setting?

- * How is it attained and maintained by these practicing teachers?

- * Can it be identified to the degree that it can be developed in preservice and inservice teachers? If so, how might it change our teacher education programs?

This research is also predicated upon some specific criteria applicable to intuitive teachers and intuitive teaching as discovered in previous pilot studies. (Maxwell, Spring/Fall, 1994)

- * Intuition is an internalized, automatic process.
- * Intuitive knowledge is a kind of knowing.
- * Intuitive teachers are involved in the personal experiences of the students, valuing student-teacher interaction and fostering two-way communication.
- * Intuitive teachers learn from their students and vice-versa, nurturing respect for teacher and student alike.
- * Intuitive teachers are aware of the moment when a child is ready to learn and appreciate that

moment whenever it occurs.

- * Intuitive teachers can be observed "capturing the pleasures of teaching." They value and promote humor in a classroom where children are actively engaged in learning both collaboratively and individually.
- * Intuitive teachers prepare a classroom environment conducive to the needs of children - quiet places, daydreaming spaces, group and individual areas, and a community of learners.
- * Intuitive teachers often need time alone, involve themselves in community activities, value "self maintenance," and are generally very flexible.
- * The students of intuitive teachers recognize them positively as teaching differently from other teachers.

There are some common themes and threads from the literature that help to provide a framework for this research. Miller (1981) refers to intuitive knowledge as

perceptive insights into the internal realities of the world as well as the external. He makes reference to intuition's source residing in the right hemisphere of the brain, physiologically speaking.

Richardson (1994) emphasizes that observable classroom practices are indications of teachers' beliefs. It is logical, therefore, to conclude that if teachers believe in intuition, then it will be apparent in some form in the classroom.

Several types of knowledge are combined under the term teacher knowledge to impact on intuitive knowledge:

- * Elbaz's (1981) practical knowledge or the highly complex set of achievable perceptions which teachers use as a framework for their teaching;
- * Lampert's (1985) personal knowledge or the recognition of just who they (the teachers) are and what they hold in high regard as well as an understanding of their students gleaned equally from the cognitive, social, emotional, and physical areas;
- * Clandinin & Connelly's (1987) personal practical knowledge, a combination of the above expressed

through the holistic workings of the classroom to establish a classroom rhythm with a caring person.

Implications

This study strives to interpret and explain intuition and intuitive knowledge as the teachers participating in this research understand these terms. It is a difficult task because the topic is very abstract and the qualities intangible. It is a topic that has not been researched in the traditional educational community in relationship to teaching and the training of teachers. And yet, these qualities may have the most profound affect upon the personal growth and development of not only our preservice teachers, but our teacher educators and our children. As Jung (1923) expressed in his definition of intuition, "... it is the maternal soil from which thinking and feeling are developed in the form of rational thinking (p.569)."

Americans have embraced rational thinking to such a degree in the last fifty years that they have cut themselves off from their "maternal soil," intuition. This divorce has left them with a void that many are now struggling to fill, often unsuccessfully with drugs, crime, and alcohol. A recognition of the nature of intuition and the expertise that it can lend to education could, in some small way, help

to fill that missing void.

It is hoped that a new perspective on the art of teaching may emerge from this investigation and that practitioners will view it as an additional classroom strategy used to gather more information about the student in order to better engage him/her in learning.

There is one final hope and that is that this research will add to and extend the teacher knowledge base presently being taught in preservice and inservice education. It will allow the teachers to use an avenue of data gathering not readily acknowledged in the educational fields today.

Limitations of the Study

The study is naturally limited by its very nature, qualitative research, to acceptance of the fact that the findings cannot be generalized to the population. The findings are only relevant to the participants and the settings in which the study is conducted.

The study also looks in-depth for a relatively short period of time at two people's sense of intuition and intuitive knowledge. Any findings may apply to a discussion in rhetoric or practice about intuition and its appropriateness to teacher knowledge, but that is as far as it goes.

It is also limited by the fact that the term,

intuition, has been denigrated in the past and that the term itself may offend my readers and lessen the credibility of this study.

CHAPTER 2
REVIEW OF RELEVANT LITERATURE

This chapter reviews literature from several categories that may lend support to this investigation. I have found no studies thus far that draw a connection between intuition and the use of it by practicing teachers in the classroom.

The first section presents a review of teachers' personal practical knowledge and suggests that intuitive knowledge might be a part of this body of teacher knowledge.

The second section recognizes the difficulty of defining intuition and further delves into its complex nature.

The third section discusses teacher beliefs and might offer some insight into why some teachers believe in intuition usage and others do not.

Teacher Knowledge

For many of us it [personal practical knowledge] was an acknowledgement that had been missing as we lived out our lives in the prescriptive environments of schools where our stories as teachers had not been valued and the kind of knowledge we possessed had not been given voice.

(Clandinin, 1993, p. 1)

In the process of reviewing and synthesizing the relevant literature for this study, I discovered that the term intuition is sometimes used in discussion by such researchers as Clandinin (1993), Clandinin & Connelly (1986, 1987), Connelly & Clandinin (1984), Elbaz (1981), Lampert (1985), and Noddings (1984, 1986, 1992); however, it does seem to be a pervasive strand weaving itself in and out of the literature written by these researchers.

In order to pursue a discussion of intuitive knowledge, it is necessary to define the following terms found in the literature encompassing this idea and that their relevance to effective teachers be examined:

"personal knowledge" (Clandinin & Connelly, 1987; Lampert, 1985), "practical knowledge" (Elbaz, 1981), and "personal practical knowledge" (Connelly & Clandinin, 1984, 1986, 1987; Skau, 1990).

Personal knowledge (Lampert, 1985; Clandinin & Connelly, 1987) is the recognition of who and what teachers are and what they hold in high regard as well as an understanding of students gleaned not only from written tests, but also from social/emotional areas. All of this information, along with the requirements of the curriculum, are taken under consideration in the teachers' quest for what they espouse.

In this case (Lampert, 1985) teachers become "dilemma

managers." They become the main resource in first recognizing their own personal working identities; second, in being aware of themselves as negotiators; and third, in understanding that choices must be made amid dichotomous alternatives such as fostering students' critical thinking or maintaining acceptance and agreement of thought as a priority. In accepting this "dilemma manager" role teachers admit that conflict is inevitable in teaching and even conducive to learning. Lampert (1985) argues that inherent in education and teaching are human problems; therefore, human elements must be used—personal judgement, personal decision-making, personal knowledge - in resolving the conflicts and challenges of developing and recognizing effective teachers.

Practical knowledge (Elbaz, 1981; Clandinin & Connelly, 1987) is a highly complex set of achievable perceptions which teachers use as a framework for their teaching. Elbaz (1981) suggests that practical knowledge is rooted in the teacher's personal and professional experiences. It is identifiable and can be formulated as information within a framework to be studied and practiced by pre-service and in-service teachers alike. Elbaz (1981) discusses the importance of enabling teachers to apply their knowledge positively in everyday practice. In order to do this images are conceived reflecting the values and beliefs of teachers

about teaching. Elbaz (1981) elaborates: "Images serve to guide the teacher's thinking and to organize knowledge in the relevant area. The image is generally imbued with a judgement of value and constitutes a guide to the intuitive realization of the teacher's purpose" (p. 61). Practical knowledge is in a constant state of change according to Elbaz (1981).

Personal practical knowledge (Connelly & Clandinin, 1987) is based on the past and present experiences in the life of teachers. It embodies personal, emotional, professional, and moral knowledge in an all encompassing image of the "classroom as community" (Skau, 1990). According to Skau (1990), this image functions very emphatically and differently within each individual classroom. This image of community expresses itself through such observable traits as classroom organization, discipline measures, student to student interactions, student to teacher interactions, and the values emphasized by the teacher (Skau, 1990).

Connelly & Clandinin (1986) use a narrative form of study to explore the holistic workings of classrooms where one experienced and one novice teacher make use of their personal practical knowledge to establish the "unities, continuities, and rhythms" of classrooms over time, in this study of six years. Time, they insist, is an essential element in gaining a sense of the rhythm. All of this is

intertwined in a web of complexity dealing with personal practical knowledge and how it is developed in the stories and lives of these teachers.

Connelly & Clandinin (1984) explore the influences of the personal practical knowledge of teachers on changes in school policies. They also define this knowledge in a particularly clear cut fashion:

...practitioners (teachers) imbue action with knowledge, and knowledge with passion, as people who care about what they do. Action and knowledge are united in the practitioner...as a person who acts -- hence (the) term , personal practical knowledge. (p. 12)

Certain words are repeated throughout the reviewed literature in this paper: passion, emotions, morals, feelings, attitudes, community, caring, values, meaning, intuition, etc. All of these words are definitely characteristic of the human element in education. "Knowledge with passion" (Connelly & Clandinin, 1984), however, implies in three short words how overridingly important it is to address this human element, as expressed through personal practical knowledge.

Questions still remain. Are personal practical knowledge and intuitive knowledge synonymous? Is intuitive knowledge a subcategory of personal practical knowledge or a unique and distinct entity in and of itself?

These inquiries can only be investigated as the study emerges and the participants continue to respond to the first of my guiding questions: What is intuitive knowledge?

Intuition Explored

Intuition is a way of knowing whereby we process information simultaneously; in other words, there is an immediate grasp of the gestalt, or the whole. Intuition differs from logical thought, which proceeds from one element to another in a sequential manner. (Miller, 1981, p. 23)

Intuition is exemplified in many ways: extrasensory perception, becoming aware of "vibes," the perceiving of hunches without the use of the rational mind: creative problem solving, the perceiving of patterns and alternate possibilities, artistic inspiration, insight into reality, scientific discovery, telepathy, and feelings of reluctance or enticement (Clark, 1973). Intuition happens when our minds are passive, such as during daydreams, imagining or

meditation. Intuition is more involved with internal feelings and thoughts than external realities. It perceives the world differently from the linear, logical, sequential thought. Children often times comprehend the world in this manner (Miller, 1981).

Intuition operates on various levels: the physical, the feeling, the mental, and the spiritual. The physical relates to such things as a person's muscles tensing when an ominous situation exists. The feelings are the first impressions or "vibes" received from another person. The mental is equated with intellectual "hunches" about problem solving. And the spiritual is characterized by empathetic understanding of the true inner nature of another person. (Clark, 1973)

If as teachers we can gather this type of intuitive knowledge in addition to rational, realistic knowledge about our students, then we can more effectively relate to the student as a whole person allaying feelings of entrapment in the physical, logical, rational, material world (Miller, 1981).

According to Miller (1981), creativity is enhanced through intuitive knowledge because the perceptive insights of intuition focus on the similarities among phenomena as opposed to the differences that dominate when only intellectual thinking occurs. In relating this to teaching,

it allows teacher the ability to accept students' extremes, passivity or assertiveness for example more easily, knowing intuitively that everything is interconnected. It also recognizes that intellect and intuition connect and depend on each other, thus freeing the teacher from external phenomena exclusively. It allows one an awareness and acceptance of life's polarities and an understanding that the external phenomena and internal imagery are correlated with our behavior (Miller, 1981) and that a "oneness" exists with all phenomena. Teilhard de Chardin (1959) further defines this "oneness:"

The farther and more deeply we penetrate into matter, by means of increasingly powerful methods, the more we are confounded by the interdependence of its parts. Each element of the cosmos is positively woven from all the others... It is impossible to cut into this network, to isolate a portion without it becoming frayed and unravelled at all its edges. All around us, as far as the eye can see, the universe holds together, and only one way of considering it is really possible, that is, to take it as a whole, in one piece. (p. 44)

A person cannot force intuition to occur. A person can

open up to an awareness of intuition that will allow it to take place by disconnecting logical reasoning and accepting transient intuitive flashes in a spontaneously derived state of consciousness (Weil, 1972). Weil (1972) states that some of the greatest gains in human understanding have occurred due to intuition and not intellectual reasoning; and yet, the educational systems of today still reject the options of intuitive development in favor of the intellect. Intuition lends insight into realities that no other means can possibly do (Clark, 1973).

Intuitive knowledge is defined by Clark (1973) in the following manner:

When the self is no longer identified with the body, perception of time and space may also be altered. Activating intuitive awareness thereby leads into a new awareness of the fourth dimension and even further into realms of being which transcend experience as currently conceptualized. When the barriers between self and others dissolve, knowledge shifts from the rational mode of knowing-about, to the intuitive mode of knowing-by-direct experience. Intuitive knowledge tends to be general rather than specific, subjective rather than objective, and is

characteristically experienced as subjectively meaningful. (p.165)

This intuitive knowledge can lead to a deeper understanding of one another.

Howard Gardner (1983) identifies seven intelligences in his book Frames of Mind. One of these is intrapersonal. Clark (1973) says that it is through this intrapersonal development that intuition will manifest itself. The ability to identify and differentiate clues specific to the mind, body, and feelings is the first step towards transcending those clues and cultivating intuition.

Schon (1983) equates intuition and creativity with the problem solving of engineers. The ability of these managers to respond quickly to unique and stressful situations on the basis of intuition not calculated analysis, with a testing of those "intuitive understandings of experienced phenomena (p.241)" through "reflective conversation with the situation (p.269)." Schon situates this reflective conversation within a "model of technical rationality" whereby the practitioner comes to know about the world through an objective distancing of himself/herself from the situation. This technical rationality model is embedded in a professional knowledge base having the essential principles of standardization, specialization, scientific and clearly

defined boundaries (Schon, 1983).

According to Miller (1981) "the physiological source of intuition is the brain's right hemisphere (p. 29)." The right brain is responsible for kinesthetic, auditory, musical, spatial orientation, and artistic abilities. The left hemisphere is primarily specialized in linear, linguistic, logical, analytical, and verbal thinking. Affect is found in both hemispheres. The major difference between the left and right hemispheres, according to Bogen (cited in Miller, 1981) is the manner in which information is processed. Data is processed sequentially in the left and simultaneously in the right. According to individual differences, learning manifests itself more effectively through either the left or right hemisphere. Unfortunately when the possible potential of the left or right hemisphere is not developed, it remains dormant (Sonnier & Kemp, 1980) and insight into a different conceptual approach to learning is left to stagnate. There is data to indicate that stimulation of the right hemisphere may activate both left and right, while stimulation of the left only makes it extremely difficult to stimulate the right (Sonnier & Kemp, 1980). Sonnier & Kemp (1980) express it more simply: "Teach the left brain and only the left brain learns - teach the right brain and both brains learn (p. 68)." This is applicable only when a person displays dominance neither in

the right or left hemisphere. In order to meet these needs a holistic strategy centering on activity oriented curriculum is necessary.

According to Miller (1981), education must employ pedagogy and curriculum that accommodate both left and right brain learning. He also states that when only the needs of the left brain are met, then there is a great possibility that the intuitive and imaginative needs that are not being met will express themselves in asocial forms of behavior such as the use of drugs, alcohol, violence, gangs, or delinquency. These expressions seem to compensate and provide an avenue for release of these pent up emotions (Miller, 1981).

Teachers' Beliefs

To understand the world and workplace of teachers, it is important to examine their world of beliefs and their workplace - the classroom. This literature review is intended to be a brief overview defining teacher beliefs and belief systems and how they work; differentiating between beliefs and knowledge; exploring the learning and cultivating of beliefs in preservice and inservice teachers alike; determining how beliefs guide teachers' thinking, feelings, and behavior; identifying the conditions under which beliefs and/or belief systems of teachers may be

changed; and finally, lending insight into the impact of teacher beliefs on their classroom practices.

Pajares (1992) argues that teachers' beliefs, when clearly conceptualized, should become a topic at the forefront of educational research. He defines beliefs, explains the differences between beliefs and knowledge, examines belief structures, and synthesizes his findings concerning beliefs and their nature. In order, he continues, to better understand teachers' behaviors, we should examine their beliefs. This is an assumption based on very basic philosophical contemplations.

Pajares (1992) defends the legitimacy for educational inquiry by associating it with belief inquiry in law, medicine, psychology, business, anthropology, sociology, and political science. He acknowledges the problematic issues of clear definitions, straightforward belief constructs, and problems with empirical investigation.

Lortie (1973) states that the educational community is too familiar with teaching and perhaps it is this fact that has stifled our curiosity. This may explain why so few studies exist "...which explore the subjective world of teachers in terms of their conceptions of what is salient (p. 490)."

Feiman-Nemser & Floden (1986) discuss the methodological problems created when we attempt to describe

the unseen aspects of teaching such as attitudes and beliefs. They state that the central problem is how to get teachers to report what they know and if they do understand the information being sought, it is still difficult to express it with clarity. For example, with practical knowledge, teachers can do something; and yet, they can not know what they did or why they did it. One of the problems is that of vocabulary, a lack of appropriate vocabulary associated with various types of subjective knowledge with which to express this knowledge or beliefs.

According to Feiman-Nemser & Floden (1986), many researchers continue to question whether or not the knowledge held by teachers is of a specialized nature and "does every reasonably intelligent adult know as much about teaching as most teachers (p. 508)?" They also relate the challenges to methodological issues used in the research appropriate to belief issues. Feiman-Nemser & Floden (1986) assert that accuracy is never achieved no matter how many multiple techniques - interviews, classroom observations, videotapes, document reviews - are used; and that "ultimately, the researcher forms the concepts that guide analysis (p.507)." Lortie (1975), himself, states that teachers have no knowledge base, possibly due to poor teacher education which probably has not established a knowledge base.

The lack of recognition that teachers possess a specialized body of knowledge is only one problem associated with this area of educational research involving classroom teachers. There exists an even more basic obstacle, that of teachers being respected as persons without always feeling compelled to endorse their understandings as valid for change (Feiman-Nemser & Floden, 1986). As professionals, teachers can make changes and should not have to prove their validity with every step.

The ongoing questioning of teachers' knowledge may emanate from educational researchers valuing scientific knowledge more than subjective knowledge, and being unable to accept the fact that teachers solve problems specific to their situations. And these solutions, though, not generalizable in the scientific sense to the whole population are nonetheless equally valuable to learning about teacher knowledge (Feiman-Nemser & Floden, 1986). Feiman-Nemser & Floden (1986) summarize: "the close connection to practical situations where teachers' knowledge is shaped and used does not necessarily make it less valuable, just different from scientific knowledge (p. 513)."

Beliefs and Belief Systems Defined

Richardson (1994) states: "beliefs are an individual's

understandings of the world and the way it works or should work, may be consciously or unconsciously held, and guide one's actions (p.91)." She also redefines beliefs "... as psychologically-held understandings, premises or propositions about the world that are felt to be true (Richardson,1995, p.4)." I, personally, believe from my research with teachers that they are comfortable talking about their beliefs but it is the scholars who are not. Richardson (1994) supports this belief when she says that many researchers feel that teachers' knowledge equals scientific knowledge, which some consider more appropriate to the teaching profession, rather than the investigation of teachers' beliefs.

Rokeach (1968) asserts: "...beliefs are inferences made by an observer about underlying states of expectancy (p.2)." He also defines a system of beliefs:

A belief system may be defined as having represented within it, in some organized psychological but not necessarily logical form, each and every one of a person's countless beliefs about physical and social reality. (p. 2)

Beliefs encompass several components : a cognitive aspect

depicting knowledge, an affective aspect arousing emotions, and a behavioral aspect exemplified through actions. It is through these components that Rokeach (1968) finds evidence of teachers' beliefs. Rokeach (1968) defines beliefs in relationship to "connectedness" and gives several assumptions to explain and support this "connectedness:" beliefs that directly concern an individual's identity in relationship to himself and others; beliefs learned directly from engagement with a particular phenomenon, underived beliefs, as opposed to those learned through others, derived beliefs; the underived beliefs having greater impact than the derived; and finally, personal beliefs of "taste."

Three types of beliefs are identified (Rokeach, 1968): descriptive - I believe the earth is round; evaluative - I believe this lobster is delicious; and prescriptive - I believe that teachers should stimulate childrens' creativity. All of these beliefs are incorporated into a system of beliefs representing "...the total universe of a person's beliefs about the physical world, the social world, and the self (Rokeach, 1968, p. 123)."

Teachers' educational beliefs (Pajares, 1992), are a subset of their broader, more general belief system. Even examining teachers' educational beliefs is too broad; so in order to operationalize we must refer to their educational beliefs about - how children learn, feelings of self-worth,

teachers' performances and how that impacts students, or about specific subjects.

Because beliefs are so difficult to operationalize, they have been relegated as only approachable through mysticism or philosophy (Pajares, 1992). However, it is an absolute necessity that researchers in all disciplines attempt to explore this concept because beliefs lend personal meaning to individuals, help identify an individual's relationship to other people and social groups, provide a cultural and social framework for a person, clarify and direct one's perspectives about all of life, defining who they are. These belief systems may be inconsistent and are expressed behaviorally, are emotionally charged, and resistant to change (Pajares, 1992).

Relationship Between Beliefs and Knowledge

Richardson (1995) finds that in the literature on teaching and teacher education, knowledge and beliefs are generally viewed as synonymous. However, she makes the following statement: "propositional knowledge has epistemic standing; that is, there is some evidence to back up the claim. Beliefs, on the other hand, do not require a truth condition (p. 5)."

While knowledge systems, according to Pajares (1992), are scrutinized for validity and group consensus, beliefs

are not. Internal consistency of beliefs within one individual is not demanded. Implied here is the fact that the very nature of beliefs is disputable and unchanging. Whereas knowledge is dynamic, open to scrutiny, reasoning, evidence for critical examination. Beliefs are only influenced through a "conversion or gestalt shift." Even with its unusual nature, beliefs have a greater impact than knowledge in determining individual behaviors (Pajares, 1992).

Dewey (1933) stated that beliefs are crucial: [They cover] all the matters of which we have no sure knowledge and yet which we are sufficiently confident of to act upon and also the matters that we now accept as certainly true, as knowledge, but which nevertheless may be questioned in the future. (p. 6)

Pajares (1992) puts it very simply: "belief is based on evaluation and judgement; knowledge is based on objective fact." He explains further that knowledge rests in the cognitive domain and beliefs rest in the affective domain with beliefs underlying knowledge.

Nespor and Barylske (1991) emphasize that educational

research involving teacher knowledge "... constitutes and expresses relations of power." Tumposky (1989) refers to the "reconceptualized knowledge base" as being tentative in nature and demanding ongoing and recursive inquiry. Feiman-Nemser & Floden (1986) elaborate on this by saying that it is imperative that educational researchers build on the beliefs that teachers already have about their work. They go on to say that everything that teachers' believe or do should not be considered knowledge. To be knowledge (Feiman-Nemser & Floden, 1986), it must be justified to colleagues and the curriculum open to revision.

Nespor (1987) distinguishes between knowledge and beliefs saying "... beliefs serve as means of defining goals and tasks, whereas knowledge systems come into play where goals and the paths to their attainment are well-defined (p. 319)." Why can we not just rely on research - based knowledge to frame teaching and teacher education? Nespor (1987) asserts that it is due to the contextual environments where teachers work and the "ill-defined and deeply entangled" problems arising there. The nature of beliefs make them better suited to understanding these situations.

Richardson (1994) differentiates between beliefs and knowledge when she states that philosophically, a proposition becomes knowledge when evidence exists:

... for the premise, and the procedures for developing the argument as well as the conclusions are agreed on by a community of scholars, scientists, or other professionals. By contrast, when a proposition is held psychologically, by an individual, and drives his or her actions, it is a belief. Beliefs do not require a truth condition.... If the belief is derived from knowledge, it is an evidential belief. (pp. 92-93)

Assumptions about conceptual frameworks for knowledge are (Alexander, Schallert, & Hare, 1991): the knowledge of the individual learner must be represented; recognition that knowledge is fluid and dynamic as well as interactive, for example, recognition of one type of knowledge can influence another; terms focused on meaning and their relationship to each other but not "how they operate"; when, where, how to use factual knowledge. This type of framework is necessary in order to clarify teacher knowledge terms.

Nespor (1987) relates four aspects distinguishing beliefs from knowledge: first, assumptions are generally made about existing or nonexisting entities such as God or ESP; second, "alternativity" or the idea of establishing ideal environments within a setting that are in direct

contrast to the reality present such as a utopian society adhering completely to Christian ideals; third, belief systems are greatly dependent upon affective as well as evaluative elements. Knowledge systems are not, for example, often the feelings, emotions, and subjectivity of an individual function independently of the usual cognitive systems linked with knowledge; fourth, the organization and storage of beliefs and knowledge differ. Beliefs are stored according to the personal experiences in which they were developed.

Nespor (1987) goes on to explain two important characteristics of belief systems. The first is "non-consensuality." It refers to the aspect of beliefs whereby the concepts or arguments are recognized as generally remaining in a state of dispute although not very fluid or malleable. Knowledge is dynamic in the sense that upon logic and reasoning it changes accordingly. The second is "unboundedness." It refers to loose organization and illogical rules used to determine if beliefs are relevant to real world situations. Knowledge, however, begins to be clearly defined and can be expanded through strict assessment. In other words people relying on beliefs and people relying on knowledge see a situation and apply either beliefs or knowledge to it are often times unable to see the other's relevance.

Assessing and Changing Teachers' Beliefs

Based on Pajares' work (1992), it is very unlikely that someone's beliefs will be changed. In order for this to occur something monumental must occur to challenge them. The beliefs must then prove unsatisfactory and there is a possibility for change, but it is still very unlikely. The following are several conditions that must be present for even the slightest change to occur in a person's beliefs: their recognition that conflicting information is present; their presumption that new and past beliefs must be reconciled; their need to bring consistency to their belief system; and their testing of new beliefs must be effective.

Any significant changes that teachers make can happen only if those very same teachers are already involved in investigative discoveries (Richardson, 1995). "Beliefs are thought to drive actions; however, experiences and reflection on action may lead to changes in and/or additions to beliefs (p. 6)," according to Richardson.

Pajares (1992) goes on to explain that preservice teachers make educational belief changes during preservice education but these beliefs fade quickly after student teaching although a few survive strenuous careers. From this statement one can see how influential preservice teacher education beliefs are in their knowledge and behavioral development in teaching. It is the unexplored

beliefs of these teachers that "... may be responsible for the perpetuation of antiquated and ineffectual teaching practices (p. 328)."

Richardson (1994) says that change is a fluid process and it should incorporate teachers' beliefs into "alternative classroom practices." These beliefs which Fenstermacher (1979) refers to as fairly reasonable beliefs could be changed upon recognition by pointing out how unreasonable they are. He elaborates that "... if evidence is to have a transforming effect on a teacher, it must in some way be related to, or bear upon, the subjectively reasonable beliefs of the teachers to whom it is presented (Fenstermacher, 1979, p. 171)."

Green (1976) attempts to transform an individual's "subjectively reasonable beliefs to objectively reasonable beliefs" through reasoning in the form of a practical argument. A practical argument is simply a syllogism where an intention to act or an action itself is the final conclusion. Green (1976) continues by stating that teachers have the ability, through practical argument, to defend their actions. Taylor's study (1990) of facilitation of a constructivist pedagogy by a mathematics teacher in his school concludes that teacher beliefs moderate and restrict teachers from making changes conceptually and practically in their classrooms.

Teachers' beliefs may be assessed purely for personal reflection by the individual teacher or for educational research to compare and contrast the beliefs of preservice and inservice teachers (Kagan, 1990). Fenstermacher (1979) asserts that one goal is to suggest avenues for "rethinking what is now done" in classrooms and to show that educational researchers can find remedies for problems of conceptual and ethical natures. He also expounds on this to say that the "... knowledge of what makes teachers effective constitutes knowledge of how to make teachers effective (p.180)."

Kagan (1990) suggests several methods for assessing teacher beliefs: through both written and spoken comments of self-reflection on the part of preservice and inservice teachers; through the analysis of teachers' language, possibly in the form of metaphors; and through the use of instruments employing the Likert scale. Richardson (1994) employs such methodologies as case studies, classroom observations, open-ended interview techniques "to construct the informant's propositions (p. 98)," and close-ended questions "to establish the interviewer's understanding of the response (p. 98)." With regards to the use of the transcribed interviews, Richardson (1994) justifies her use of this qualitative methodology "... to allow the teachers' theories to emerge from careful and open-minded reading of the transcripts, rather than to impose a set of formal

constructs extracted from the literature...(p. 98)."

Classroom Practices

Classroom practices are driven by teachers' beliefs, influencing the change processes of the teachers (Richardson, 1995). Richardson (1995) insists that "... a complex relationship [exists] between teachers' beliefs and actions (p.6)." This complex relationship is demonstrated and is observable through practice. Dobson & Dobson (1983) stress the importance of teachers identifying what their beliefs are and practicing them in the classroom. They also discuss the factors that prevent teachers from doing this as well as using dialogue to bring about "beliefs-practice" congruency in the classroom setting. Dobson & Dobson (1983) carry on with this idea by claiming that some teachers abdicate their responsibility for beliefs-practice congruency to the school culture or some other outside power thereby placing themselves in the role of technicians. Ignoring beliefs in favor of a valueless scientific method can only perpetuate half-truths concerning teaching (Dobson & Dobson, 1983).

Brousseau, Book, & Byers (1988) conclude that the "teaching culture" impacts greatly on the educational beliefs of teachers just as Dobson & Dobson suggest. They contend that the more experienced the teacher, the more

beliefs they hold common to a larger group of people such as favoring standardized curriculums, students adhering to common standards, and placing more responsibility on students. Yaakobi & Sharan (1985) conclude that different academic disciplines affect teachers' beliefs and behaviors in the classroom, therefore, the particular discipline socializes teachers into identifiable and distinct groups.

In educating future teachers, beliefs shape the existing knowledge presented to preservice teachers as well as the pedagogy used to present it. Beliefs can affect learning to teach in two ways. One is from a constructivist viewpoint that the prior beliefs of teachers-to-be greatly influence the content they learn and the manner in which it is learned. Beliefs can also serve as the hub for change in education (Richardson, 1995). "... the beliefs that practicing teachers hold about subject matter, learning and teaching influence the way they approach staff development, what they learn from it, and how they change (p. 7)."

Instruction can focus on beliefs as well. According to Richardson (1995), many programs for the education of preservice and inservice teachers have focused on the beliefs of its participants with greater success in changing the beliefs of teachers in the inservice programs.

Preservice teachers' beliefs develop through experiences that are personal, experiences in their past

with their own schooling, and experiences with the knowledge presented in a formal manner (Richardson, 1995). Preservice teachers base many of their beliefs on their past experiences in education as students. It is difficult for teacher education to impact on these beliefs that have developed over 12-17 years of experiences with various schools and teachers (Richardson, 1995). The personal experiences of teachers that influence their beliefs include:

aspects of life that go into the formation of world view, intellectual and virtuous dispositions, beliefs about self in relation to others, understandings of the relationship of schooling to society, and other forms of personal, familial, and cultural understandings. Ethnic and socio-economic background, gender, geographic location, religious upbringing, and life decisions may all affect an individual's beliefs that, in turn, affect learning to teach and teaching. (Richardson, 1995, pp. 8-9)

The greatest changes in beliefs have occurred through staff development due to the fact that more experienced teachers are more ready to confront their beliefs after having

already mastered the technical practicalities of teaching.

Conclusion

Having examined teacher knowledge, teacher beliefs, and intuition, it is necessary to suggest how these choices of literature might relate to the use of intuitive knowledge in the classrooms of practicing teachers. It is my contention that classroom teachers must be aware and receptive of intuition as a valuable process for attaining helpful information about their students in the classroom. They must also believe in intuition as they might believe in child-centered classrooms. With these characteristics established, the information gathered through the intuitive process becomes worthwhile knowledge.

Chapter 3

METHODOLOGY

Overview

From the very beginning, I, like Pajares (1992), acknowledge the problematic issues involved in qualitative research focusing on "intuition," issues of clearly defining the term and its constructs, issues of the term intuitive being denigrated in the past, and emotional issues that arise when the term is even mentioned. This was demonstrated in a classroom setting with professionals. When the term intuition was even mentioned, a teacher emphatically said, "Oh, you have to believe in ESP, then!"

My goal through this exploration is simply to validate the existence of intuitive knowledge in teaching and to recognize its usage and, perhaps, reliability as a valuable source of information for the classroom teacher in the practice of teaching. From my research thus far, it is an initial, exploratory step in linking several areas of study together - intuition, rational thinking, education, and teacher knowledge - that have not been viewed as compatible in the past.

It is important to remember that from the view of the literature, intuition involves both the thinking and feeling domains of each individual. Goldberg (1983) makes it very clear in his analogy of two different pipes leading into the

one faucet. The one pipe represents intuition and the other rational thinking. Together they bring vital information to the individual, one complementing the other.

It is within the context of case study research that I am able to examine intuition and rational thinking as complementary abilities. Merriam (1988) defines a "qualitative case study" as an

intensive, holistic description and analysis of a single entity, phenomenon, or social unit. Case studies are particularistic, descriptive, and heuristic and rely heavily on inductive reasoning in handling multiple data sources. (p. 16)

Merriam (1988) emphasizes that the focus is on the "process, understanding, and interpretation ... within a bounded context" (p. 21).

This study and all of its interpretations are applicable only within the context of the setting in which the data was collected and to the readers who may share similar experiences and, they themselves, may generalize some of the interpretations as applicable unto themselves.

Beliefs and Biases: A Short Story

In qualitative research, it is an absolute necessity

that the researcher present his/her beliefs and biases concerning the topic, candidly, to the reader. It demonstrates on the researcher's part a respect for the readers and the level of professionalism with which the researcher operates. As the researcher, I will openly and honestly discuss my beliefs and biases concerning qualitative methodology, in general, and myself, as a participant observer, in particular. I will also reflect upon my own intuitive nature and its impact upon this research and my view of teachers with expertise in early childhood and elementary education.

Even as a child I was different from my friends and other children around me. Oh, I got along very well with everyone but the games and toys they played with never really interested me and they never seemed to talk about anything that excited me or seemed important and stimulating to my thinking. I had friends but to say I had a bosom buddy with whom I shared all my deepest secrets and spent all my time would not be true. I have now come to realize as an adult at the age of forty-three that the one friend with whom I spent the most time was truly very different and we never shared much of anything in common aside from the obvious. Our fathers were both farmers and our farms backed up to one another's. She was my closest neighbor back then being only two and one-half miles down the dirt road. Our

families went to the same country church and she and I were both fifth generation Southerners born on the farm.

Our parents were friends and so it was always assumed that she and I were best of friends. I felt like I was always playing her games just to keep everybody happy. What I now know as an adult is that I preferred to read, observe the natural world around me, and spend time in thought sitting in the middle of a wheat field, a wagon full of freshly picked cotton, under the grapevines, in a bin overflowing with soybeans, jumping from bale to bale of cotton at the cotton gin waiting for my Daddy to finish his wagon load, or sitting in the cool shade of the pine forest on hot summer days.

I was generally surrounded by adults and my older brother and sister. I always wanted to be around them and listened intently when they, mostly the adults, would start "philosophizing" about life. This was fascinating to me.

As a child, I could always 'just tell' when and how people wanted me to behave, to act, to complete chores or schoolwork. I learned very quickly that it would please them and then directly or indirectly would affect me in a positive manner. I somehow picked up on this and used this skill, if you will, all through school, and yes, through college. I had come to accept the fact that I was different somehow from my peers but I never really identified why or

how and since I was always liked and included in groups of friends everything went along well.

As an adult, I started playing around with personality tests such as the Myers-Briggs Personality Inventory and the word intuition and intuitiveness kept coming up. I started reading more and more literature on brain research and, being left handed, the words intuition and intuitiveness kept coming up in relationship to right brained people.

I began to reflect on my life and a pattern started to develop - a pattern of a very intuitive person. While reading Jung (1923) for this dissertation, I felt that he was personally describing me and my pattern in life of being able to "know" certain feelings or thoughts rather instantaneously and then being able to act upon them. I have learned that I can read most people very well.

Having discovered, and now openly acknowledging that I consider myself to be an intuitive person, I became interested in exploring intuition, specifically how it relates to the art of teaching and learning. What I learned in my literature review is that scholars such as Bruner (1960), de Chardin (1959), Jung (1923), Noddings (1984), Sagan (1977), and Taba (1960) all place great faith in intuition and its necessary importance in teaching and learning. Jung (1923) refers to it as the "...maternal soil from which thinking and feeling will develop." Intuition is

in essence a part of each and every individual; however, due to the emphasis on scientific thinking in the United States around the middle of the twentieth century any interest in developing one's intuitive nature was shoved aside. The scientific method could be tested and retested beyond a shadow of a doubt and replicated by others who wished to test it. Intuition was pushed aside as too "touch-feely" and "wishy-washy" if you will.

As researchers, especially ethnographers, began to investigate other cultures and interview the people, they found the quantitative methodology too cold, too scientific, and not open enough to allow for feelings and indecisiveness. From these ethnographic studies, qualitative methodology emerged allowing people to tell the stories of their cultures. Educators then realized how this methodology might be applied to their work with people.

As most trends in America seem to do, the emphasis on scientific thinking swung the pendulum all the way to the right in the 50's and 60's, by the 70's and into the 80's it swung all the way back to the left, relying on the feelings of the day. In the 90's and into the 21st century the pendulum is in the middle, examining the integration of both the scientific method with the feelings and intuitive nature of man. Now is the time to develop the whole of man's abilities and to reap the benefits. If the qualitative and

quantitative communities can respect each other and learn to work together, then the benefits to mankind can be beyond our greatest expectations. The two camps complement each other to make the whole.

The question has been asked of me if I believe that a teacher must make use of intuition to be a teacher of expertise? No, I do not. There are a multitude of excellent, exceptional, and successful teachers out there who do not acknowledge the use of intuition as a characteristic element of their teaching or have never identified it as such or have never been asked to consider whether or not they use it. My belief is that the use of intuition and all the knowledge gleaned through its use can enhance the teacher's potential to become more successful in his/her art of teaching. It is the difference between an A/B+ teacher and an A/A+ teacher but the most important difference is between a teacher who makes use of intuitive knowledge in order to assist his/her students' learning.

Scientific thinking and technology are still the forerunners in our society. Computer technology, virtual reality, interactive video..... are all quickly funded for further research, growth, and expansion while within the very nature of each of us exists a potential for human development that is yet to be explored and identified for its potential contribution to mankind.

Am I biased about this topic? The answer is clearly yes. I am biased towards the future and man's ability to reach within himself and develop the intricacies of his intuitive nature to levels in accordance with advancing scientific knowledge.

As a reader, I ask you to accept these biases and beliefs for what they are and respect the candor and honesty with which they have been acknowledged:

1. My own inherent intuitive nature;
2. The natural biases of qualitative methodology and;
3. My beliefs about teachers' expertise.

The whole process of interpreting and analyzing data is often viewed as an intuitive process (Seidman, 1991).

Selection of Participants

The use of purposeful sampling (Merriam, 1988; Seidman, 1991) to select participants in a local elementary school in town was employed. Merriam (1988) states that "purposive sampling is based on the assumption that one wants to discover, understand, gain insight; therefore one needs to select a sample from which one can learn the most (p.48).

a. TEACHER PARTICIPANTS - In spring of 1994, my

professor, guiding my pilot study, helped me to identify a participant to work with in my hometown. After working with this participant for a semester, she aided me in the identification of two other participants for the research for my dissertation. She gave two reasons for her choices. One was the simple fact that she knew these teachers would allow me in their classrooms and the second was that they felt the same way about children as she does. Parents, other faculty, children, and the principal also made comments identifying these two participants. It is interesting to note that at the time when several of the parents identified these participants we were in social or business settings discussing a myriad of topics when these participants' names were used as being teachers with expertise. In two of these situations, I did not know the parents nor did they know of my research interests. Both the male and female participants are teachers in multiage-first/second grade classrooms. These are follow-through programs which mean, ideally, that the entering first graders will remain with this teacher for two years.

b. STUDENT PARTICIPANTS - After discussion with my committee members and the teacher participants, it was decided to select the students who were returning for the second year with each teacher as their second graders. It

was mutually agreed that they, having known the teacher for a year already, would be better able to describe him/her in more depth and have greater all around knowledge of the teacher's classroom. Of course with children, I sent home consent forms asking for the parent's permission to allow their child to participate in the interview. This was the determining factor in who I actually interviewed. In the female teacher's class, I interviewed two groups of children for 30 minutes to include 4 boys and three girls. In the male teacher's class, I interviewed two groups of children for 30 minutes to include 4 girls and 3 boys.

Case Study Methods for Data Collection

This study attempts to give voice and esteem to the intuitive knowledge of classroom teachers, as well as validating the usage of intuition by these teachers in the classroom through qualitative research methods. In a qualitative design such as this, the research is conducted within the natural setting of the classrooms (Lincoln & Guba, 1985). It is within this context that credibility is given to the meanings derived from the study. From this perspective, the study is designed as an emerging inquiry (Merriam, 1988). It will employ the following data collection techniques:

1. SEMISTRUCTURED OPEN-ENDED INTERVIEWS/TEACHERS - This type of interview was chosen to generate data on teachers' intuitive knowledge because it is my goal to understand these teachers' experiences with intuition and discover if they find intuition meaningful and attributable to their expertise (Seidman, 1991). Through this technique, it is my hope to establish the worthiness of these teachers' stories (Seidman, 1991). The more informal structure, with the open-ended questions, will allow the individual teachers to respond in their own unique styles. Although I will have prepared a list of guiding questions and issues to be examined, this technique allows for flexibility in the ordering and wording of the questions. It also is especially suited to this topic of intuition because as the researcher I am not knowledgeable enough about the subject nor is there sufficient literature on the subject to anticipate all the questions (Hammersley, M. & Atkinson, P., 1983; Merriam, 1988). This data will be collected through the use of audiocassette tapes and then transcribed for data analysis. Hammersley and Atkinson (1983) are mindful of the fact that all of the information gleaned from the interviews "... must be interpreted in terms of the context in which they were produced (p.112)." There will be three interviews, 1-2 hours in length held with each teacher.

2. CLASSROOM OBSERVATIONS - The purpose of these observations is to determine the observable nature of intuitive knowledge by the researcher. These field notes will consist of running anecdotal records of the activities in the classroom centering on classroom organization, curriculum, teacher methodology, student-teacher interaction, student-student interactions, and the physical environment of the classroom and school. An attempt will be made to collect this data as objectively as possible; however, a section will be maintained in the field notes indicating the researcher's biases and personal feelings about the events, many of which I have already described. There will also be a section for theoretical notes, indicating the connection between the data and the literature (Shaw, 1989).

The teacher participants and I decided that these observations would take place over a thirteen week period, commencing August 22, 1995, and concluding November 21, 1995. They would take place twice a week, on Tuesdays and Thursdays, alternating days, and mornings and afternoons between the two classrooms. Tuesdays and Thursdays were chosen because it was felt that those days would have the fewest interruptions, such as holidays or planned special programs. They also allowed the children Mondays to settle in from the weekend. I chose to observe with a day in

between in order that I might analyze my notes in preparation for the next observation and to be able to come into the classroom with a refreshed perspective. All together, each classroom was observed for thirteen full days.

According to Hammersley & Atkinson (1983), Merriam (1988), and Seidman (1991), I, as the researcher, am an observer-participant in this investigation. The group is aware of my observational and informational gathering activities, with my participation and interaction in the classroom playing a secondary role. Merriam (1988) suggests that this role is viewed as:

...a schizophrenic activity in that one usually participates but not to the extent of becoming totally absorbed in the activity. At the same time one is participating, one is trying to stay sufficiently detached to observe and analyze. (p. 94)

Effects of the researcher on the people and events in the observed environment can simply be viewed as a source of bias and accepted as a fact when anyone is observing in any type of audience. Once this is understood, the readers are free to interpret the research for insights into the topic or theory (Hammersley & Atkinson, 1983).

3. ARTIFACTS - These might consist of readily available teacher journals, lesson plans, and students' drawings. Merriam (1988) classifies these as personal documents and considers them "... a reliable source of data concerning a person's attitudes, beliefs, and view of the world (p.112)." As the researcher, I may also request from the participants the creation of a brief paper written as a metaphor for intuitive knowledge or intuition (Munby, 1987). Munby (1987) uses this technique in his research on personal practical knowledge.

4. SEMISTRUCTURED OPEN-ENDED INTERVIEWS/STUDENTS- These semistructured open-ended interviews with students will be used to determine if this knowledge is observable by students. This technique will follow along the same lines as described for the teacher interviews. This data will also be collected by audiocassette tapes since it is not feasible to take written notes while conducting a group interview alone with four seven/eight year olds. Likewise the interview will be transcribed for data analysis. These interviews will be 15-30 minutes in length, dependent on the ages of the children. Two groups of four children from each of the teachers' classrooms will be interviewed. In other words, eight children in each classroom will be interviewed once for approximately 30 minutes.

5. INTERVIEW QUESTIONS - The interview questions for the adults were designed with the intent to help the participants to extend their knowledge about this topic and to step outside of themselves for a short period of time and examine this issue.

While talking about their teacher in a small group, the children's questions were designed and intended to be fun and enjoyable for them.

Case Study Comparisons

Data collection and analysis occur in three phases: selection of participants, conducting of research, and respondent validation (Hammersley & Atkinson, 1983) or member checks (Merriam, 1988). According to Merriam (1988), "the process of data collection and analysis is recursive and dynamic (p.123)." She explains that analysis begins with the collection of the first data as well as the formulating of categories, and theory building. This choice of an emergent design allows for hypotheses to be generated as the research develops. All of the transcribed interviews from both the two teacher participants and the children, together with the recorded hand written classroom observations, and any artifacts were compiled chronologically as collected into an ongoing raw data packet for analysis.

Using Glaser & Strauss' (1967) "constant comparative analysis," I analyzed the data for common themes and patterns that emerged. The constant comparative method is one technique built upon successive stages of analysis. Initially, events are compared and temporary categories outlined. Next the events are compared with the characteristics of the categories. Then like categories are combined, hypotheses projected, and application of the data to these categories is examined. Finally, the coded data is used to write the theory. All of this is accomplished through inductive analysis.

Upon completion of the study, I scheduled a meeting with the participants for respondent validation (Hammersley & Atkinson, 1983) or member checking (Merriam, 1985). Member checking and respondent validation both ask the participants to review the written report, in other words the researcher's interpretations of the data, and possibly lend insight into these interpretations. This is one type of triangulation (Hammersley & Atkinson, 1983; Merriam, 1988; Seidman, 1991). Triangulation is one strategy used by qualitative researchers to secure internal validity. "Internal validity deals with the question of how one's findings match reality" (Merriam, 1985). Validity rests in showing that multiple realities have been represented honestly, reflecting the participants' perspectives

(Merriam, 1985). This internal validity can be achieved through the process of triangulation which requires that the data from one source, in this case an interview from one teacher, be checked with the data from another source, such as the teacher's students or the researcher's field notes. It is also acquired through observations being repeated over a period of time and the researcher's biases being clarified (Merriam, 1985).

According to Hammersley & Atkinson (1983):

"the value of respondent validation lies in the fact that participants involved in the events documented in the data may have access to additional knowledge of the context - of other relevant events, of thoughts they had or decisions they made at the time, for example - that is not available to the [researcher]." (p.196).

Member checks were also conducted (Merriam, 1988). This involves the taking of the researcher's "...interpretations back to the people from whom they were derived and asking them if the results are plausible (p.169)." As you can see from these definitions, both member checking and respondent validation rely upon the participants to review the researcher's inferences and judgements about the collected

data and share any further insights about the study.

Triangulation is also responsible for strengthening the reliability of qualitative research. This reliability is more often equated with sensible and consistent results (Merriam, 1988). Lincoln & Guba (1985) explain it this way: reliability is furthered reinforced by keeping the recording methods for observations and field notes, and the transcription methods for the audiocassettes in as consistent a format as possible.

Triangulation, simply put, approaches data analysis from many varying perspectives as well as theories (Hammersley & Atkinson, 1981). "What it amounts to is checking inferences drawn from one set of data sources by collecting data from others (Hammersley & Atkinson, 1981, p. 198)." All of the different types of data are about the same phenomenon but are derived at various times and from different phases in the work but all lead to the same conclusion.

It is easy to confuse member checking and triangulation. According to Lincoln & Guba (1985), "member checking is directed at a judgement of overall credibility, while triangulation is directed at a judgement of the accuracy of specific data items (p.316)."

Time Line

1. Spring, 1995: I selected two participants for this study and made the initial contacts. They were very interested in this topic and signed the participant's consent forms without hesitation agreeing to the first interview in August, 1995. They were two elementary teachers, one female and one male, both in multiage-first and second grade classrooms. Often intuition is considered a female characteristic, and I wanted to include a male to challenge that assertion.
2. Summer, 1995: I completed my writing of Chapters 1,2,3.
3. Fall, 1995: I conducted interviews and classroom observations in the schools with my participants from September through November. In December I analyzed the collected data using the techniques previously described.
4. Spring, 1996: In December and January I wrote the final chapters of my dissertation. In February and March, I consulted with my committee members and revised and rewrote the dissertation.

The Story of How This Plan Was Enacted

Using my dissertation journal that I have kept since the beginning of this research in August, 1995, I will tell the story of how this research unfolded. It will become apparent to the reader whether there are any changes in the

original plan and the enacted plan and; if so, whether or not the changes had any impact on the data gathering and analysis.

The initial interviews, the first of three, with both the male and female participants were conducted in August, 1995, prior to the beginning of the school year. It was important to begin to establish a rapport and a sense of trust with the teachers before going into their classrooms for observations. In order to build this rapport, the questions from the first interview related primarily to finding out personal and professional information about the participants. At this time we planned for my observations to take place on Tuesdays and Thursdays, beginning August 22, 1995.

My first day of classroom observations went quite smoothly. I sat in the back of the room as a participant observer in each classroom. The male participant acknowledged the fact that he was very nervous about my being in the room since this was the first time he had been involved in a research project. The female participant was very relaxed and stated that she enjoyed being involved in research and had done so several times in the past. The fact that I had conducted two pilot studies in the spring and fall of 1994 utilizing observational field notes made it much easier for me to organize my field notes at this stage

of my research. I was able to make observer comments, at times, as the observation continued.

The observations continued until November 15, 1995. I made a concerted effort to observe in both classrooms in as many different time frames and combinations as possible. At times I observed all day in only one classroom and the next time all day in the other classroom. This was done only when one of the participants was absent or had a special program. On several occasions I observed on a one hour basis, alternating one hour in the male's and female's classroom. This again was beneficial when scheduling of hearing and vision screening were done. Most of the observations were conducted as planned alternating mornings and afternoons as well as Tuesdays and Thursdays. Since I was looking for observable characteristics of intuitive knowledge usage, the particular lesson being taught was not a concern. The use of intuitive knowledge should not be confined to a particular subject matter.

I was fortunate to have enough time after each observation to review my field notes and code "units of information" (Lincoln & Guba, 1985) as I read and reread my notes. I did exactly the same thing with the ten interviews as each was transcribed. Glaser & Strauss (1967) suggest that analysis be ongoing with data collection and that the categories will naturally become integrated and the theory

will emerge. This is exactly what happened. At the conclusion of my data collection, I started immediately analyzing categories and their properties into broader concepts instead of having to start at ground zero with detecting "units of information." On the many trips I made to and from Tucson, an hour and a half drive one way, I listened to the audiotapes of the interviews over and over again. This procedure helped me to integrate smaller categories into larger concepts as well. These larger concepts were divided into parts for a clearer presentation of the data that follows in Chapters 4 & 5.

Seven children were identified in each classroom as returning second graders to be interviewed. It was felt that they would feel more comfortable and less shy working with me since they had already experienced school and the many helpers in the classrooms last year. Permission slips were sent home the first week of September, 1995 to their parents requesting that I be allowed to interview them. In each classroom only six slips were returned. The second week of September I split the six children in each classroom into two groups of three for the actual interview. The children were all comfortable with me and excited about doing something special. Only one child was totally withdrawn and the teacher had explained that this might be the case prior to the interview and that this was not

anything personal, but a social interaction problem the child had. He did voluntarily come with the group to the interview and later he did draw a picture for me. The children enjoyed the interview so much that they asked in both rooms if we could do it again and in one room they wanted to hear the tape again so I brought it in for a second playing. Because the data gathered from the children concerned only one person - their teacher, I decided that the data could be presented as a collective whole from the children instead of individual responses from each child. I was not examining how each child, independently, viewed their teacher but how the class as a whole perceived their teacher. The children were extremely insightful.

A week later I asked each of the children to draw a picture of their classroom. These pictures turned out to be the most important artifacts I collected and are used as a significant part of the data discussion in Chapters 4 & 5. I analyzed these drawings simply by listing the objects that were in the pictures. To be sure I identified these objects correctly, I asked each child to identify them for me. I think this is definitely a form of respondent validation (Hammersley & Atkinson, 1983).

At the end of September and beginning of October, I conducted the second interviews with my participants, focusing on defining intuition and intuitive knowledge.

They both commented on how tough the questions had become and how difficult it is to identify intuition and intuitive knowledge. Later in October, I asked both participants to write a metaphor for intuitive knowledge. The female participant chose to write several brief metaphors, somehow suggesting that she was still looking for the right one, while the male participant wrote one decisive paragraph. These metaphors comprise the rest of my artifacts aside from the substitute's packet that the female teacher handed me.

One of the greatest fears of any researcher is that the data will be lost in some way. This horror came true for me. When I returned home from my second interview with the female participant, I turned on the tape recorder to listen to the interview only to find it completely empty. I naturally panicked and lamented the fact that it had been such a wonderfully in-depth interview. What had I done wrong and what was I to do about it. The female participant was most gracious and rescheduled a time to retape the interview. We both determined that the table where we had recorded the interview the first time was too close to her computer on her desk that she had on and somehow it interfered with the tape recorder.

Near the end of October, 1995, I conducted the third and final interviews with the participants concentrating on the observable nature of intuitive knowledge and the

question of conceivably transferring this type of knowledge to preservice teachers. The female participant commented that she had stayed awake at night trying to clarify this topic for herself and be better prepared to give input to my research. The male participant explained that while he was a firm believer in intuition, he too still found it a difficult concept to define and was curious as to how I was going to put this information all together.

During the data collection process, it seemed appropriate to return to the teacher who had referred me to my participants and ask her reasons for having chosen these teachers. It also seemed appropriate to speak to the principal of the school and have him describe these two teachers. Both of these people gave valuable information that I included in the data presentation. Here again is an example of triangulation involving the checking of data from varying sources.

Even before my final day of classroom observations, I began to experience a sense of loss. The children and I in both classrooms had become friends who looked forward to seeing each other two days a week. I had become involved in their lives and they had started sharing their thoughts and ideas with me. We started running into each other around town and several of them gave me special notes when I left.

As I sit writing at the computer, I am reminded of

their faces and thoughts and especially and most importantly of the reason I am doing this research - to more fully realize the human potential of our children by creating an awareness within our childrens' teachers of the power of intuition and intuitive knowledge to enhance the holistic approach to learning.

I gave both the male and female participants copies of their individual chapters for member checks (Merriam, 1988). They also asked to have a copy of the completed dissertation and seemed extremely interested in reading it in its entirety.

Toward the end of December, I received feedback from Mrs. King on Chapter 5 regarding her presentation of the data. She clarified several points made in her quotes, made several small editing suggestions and stated that she feels "comfortable with the overall picture." Mrs. King commented that I had done a "wonderful job bringing together all the nebulous aspects of this, a very elusive subject."

On January 5, 1996, I met with Mr. Newsome to clarify the language in a few of the quotes and to discuss some new ideas he had on the topic since I had seen him last. At the time he stated that he was very anxious to read the entire dissertation and understand how Chapter 4 fit into the overall research.

In comparing the proposed plan and the enacted plan for

research, only minor changes were made. I had to become more flexible with my observational schedule as discussed above and I also included data from the principal and teacher who recommended the participants. There were a few times during the observations that I became more of a participant than an observer. On one occasion in Mr. Newsome's room I was up to my elbows in paper mache helping to make helmets representative of the Greek and Roman myths they had been studying. Several times in Mrs. King's room the children would seek my help with their sentence or process writing. Otherwise, I followed the plan as proposed and feel that these small changes in no way compromised the purpose of my study.

Reflections

It is necessary to reflect upon my research in regards to my involvement in the research process and the appearance of biases that I never realized I had. Personally, I have always shied away from pursuing a doctorate because I was frightened by that word - research. How could I ever be knowledgeable or skilled enough to conduct research? Not only that, but I was turned off by the idea of isolating people, and especially children, into clinical laboratories like guinea pigs.

During the past five years, I became aware of a

different kind of research called qualitative research. The more I read about it, the more I began to sense that it was more appropriate for me and my beliefs about how we learn new ideas from people. So I began the doctoral program and became more knowledgeable about qualitative methodology, but it was not until I finally took the course on the subject that I realized I could conduct such research and that this type of methodology was consistent with my intuitive nature.

While I have learned much about data collection and analysis in this study, I feel that I have only begun to truly understand the process and hope that in the future I will be more able and skilled at enriching my data. As I write this study, I already see how I could improve my observational field notes with greater details.

Biases I never knew I had crept to the surface on several occasions during this study. These are biases that I have not already elaborated on earlier in this study. One appears to deal with gender stereotypes and the other with professional teaching preferences. I kept finding myself jotting down in my field notes statements that described the male participant as confronting a discipline problem head on, while the female teacher would try to redirect the child or distract the child from inappropriate behavior. For example the male and female teachers might make these statements:

Male - Sue, you are really pouting and that's kindergarten behavior. To stay in first grade, you need to stop now.

Female - Sue, I really need to see a happy face.

It is difficult for me to decide if this is just a biased generalization on my part or did I actually witness this.

Another bias that I would like to bring to the reader's attention concerns teaching styles and methodologies. I often found myself thinking about how I would teach a certain lesson, handle a certain situation, speak to a particular child, or prepare a classroom environment. Either subconsciously or consciously, I was comparing how I would run the class with how my participants were doing it. As a researcher the greatest statement that I can make is that once I became aware of this I was able to catch myself doing this and stop.

I have acknowledged many biases associated with my research, and in doing so, believe that I have strengthened the data that was gathered. Bogdan and Biklen (1992) lend support to this statement:

Qualitative researchers attempt to seek out their own subjective states and their effects on data, but they never think they are completely

successful. All researchers are affected by observers' bias. Questions or questionnaires, for example, reflect the interests of those who construct them, as do experimental studies. Qualitative researchers try to acknowledge and take into account their own biases as a method of dealing with them. (pp. 46-47)

I do look forward to being involved in more research and now have a greater sense of confidence in conducting it with improved skills and abundant knowledge learned through trial and error.

CHAPTER 4

MR. NEWSOME'S STORY - A CASE STUDY

I've always been a global thinker instead of concrete. I've always had to do it that way. When I first started teaching and I tried to do the structure, I couldn't do that. (Mr. Newsome)

This chapter presents the case study of the male participant known as Mr. Newsome. It is divided into three major parts with appropriate subheadings, all in response to the guiding questions of this study. Part I presents Mr. Newsome's definition of intuition and intuitive knowledge. Part II outlines observable characteristics of Mr. Newsome as an intuitive teacher and Part III projects possible methods, as suggested by Mr. Newsome, to be used in teaching preservice teachers to make use of intuitive knowledge. A concerted effort is made to present the data in a format that will allow the reader to feel as though they are the one sitting and talking with Mr. Newsome.

Part I - Intuition and Intuitive Knowledge Defined

Intuition Defined. Mr. Newsome begins by relating his personal experiences in his schooling:

I had a knack for figuring out what the teacher wanted. And, especially college, I remember really well. I would read the textbook like a novel the first week and then never pick it up again. Then, I'd watch the teacher for a week or two and I knew what they wanted. And after that, I could do no wrong because I knew how to change things for them. I think that transfers in [to] teaching, in that I watch [the children] for a week or two and I know how this kid works. Once I know how that kid works and the way [he is], I know which way to push [him] and how to push [him] and what to give [him] and when to back off. I think that's how you define the intuition part.... I say I learn the kids. I read the kids.... That's how I know what to teach them.

Mr. Newsome continues by stating:

...that everyone has [intuition] to a degree.... I think intuition is more a matter of being perceptive. I think that's all it really is I think it's partly an aid. You learn to use it.... A lot of people...never learn to use it.... I think that most of the best teachers

teach intuitively.... I really think that the ones who are really good at reading the kids all the time that way.

Mr. Newsome briefly and succinctly defines intuition as "...knowing when something is going to happen or knowing the right thing to do without really [knowing how you know]."

Intuitive Knowledge Defined. The following metaphor was created by Mr. Newsome to illustrate his conception of intuitive knowledge:

The parking lot at Wal-Mart is crowded. You pull in to buy pet supplies. The shortest way is always the most crowded aisle. When you walk into the store, you go straight instead of left toward the pets. You don't think about it but inside you know that because the lot is crowded today it will be faster to go around electronics than a straight left to pet supplies.

It is important here to listen to Mr. Newsome's explanation of intuitive knowledge. "I think experience lets you recognize situations, ...but intuitive knowledge tells you what to do about [this information you perceived through intuition]."

He says that intuitive knowledge helps him to guide:

"...the children to make them go in the direction they need to go and I don't mind losing a week here and two weeks there with a child if it takes that long to turn this kid in that direction. I don't mind taking a circuitous route to help the child find the right direction on his own because when they find it on their own then they always know how to get back there.

He continues by elaborating on the experience that intuitive knowledge brings to him and how it guides him in

"...[seeing] the point where this kid's light was ready to come on and what I needed to do to push him or where I needed to take him next. Another thing it's done [is] it's changed how I try to affect their learning."

Mr. Newsome cites an example of how intuitive knowledge impacted his teaching style:

Before a kid might have been turning in worksheets and occasional writing...now we do totally child centered writing, so, in reality, it's much easier for me to gauge where the child is and where they're going by following their writing all the

time.... I can take anything that they write, the whole thing, and because they created the whole thing, it tells me loads about them. I... no longer have to figure out... why they [did] this.... There's always a good reason and always a reason that gives you good insight into the child, especially when you see them going out in a bizarre direction.... For example, Oscar wrote

K rs ms

in his story. I was concerned that he didn't have a concept of what a word was. When I asked him what it said, he said it was Christmas. I realized, he didn't see the difference between syllables and words so he tried putting spaces between syllables.

Mr. Newsome makes a point of trying to understand something just as the child understands it. If he can do that, then he feels he can better guide the child in their learning.

Part II - Observable Characteristics of Intuitive Teachers

Intuition and intuitive knowledge are not easily observable attributes. They are best explored through dialogue within the interview process; however, as the pilot studies (Maxwell, 1994, 1995) suggested there are some

physical characteristics that seem to be displayed within a classroom setting by intuitive teachers. These characteristics are observable to the children in the classroom, to the teacher's principal, to myself as the researcher, and by the participant, himself.

As Seen By the Children. Mr. Newsome is described by seven of his children as being nice, as making learning fun, as letting them make choices and as helping them. In the childrens' own words:

a. Being Nice. "He's a nice teacher because he goofs around a lot and sometimes he makes lots of jokes...like the voices that he does on Bob Munch stories."

b. Helping Us. "He makes stuff easy if you're having trouble."

c. Making Learning Fun. "Last year we made a spaceship in our room. We got toilet paper rolls and stuff like that.... We wrapped [them] up in Saran [Wrap] and we put them all together. And we [hung] them up from the ceiling.... We made it like a spaceship thing.... We also made pictures

on the wall and we put [them] up and they looked like windows in space.... When we blasted off to the moon..., we put our seats down backwards. And we [went] like this and we [sat] like that [backs on the floor and seats with legs up].... Oh, just like the astronauts do when they're getting ready to blast off. It was fun. Yeah... he says buckle your seat belts.... And then he says, 'Blast off.' We had this journal... and you had to write some things about space.... And he'd give us stamps every time you got to go to a space place.... He made the stamps out of erasers.... He got this knife and carved it... and then he [drew] a planet.... We also pretended we were floating in space and he picked us up and floated us around the room.

As Seen by the Principal. Mr. Newsome is also described by his principal as being a teacher leader who is intelligent, humorous, creative, caring, cooperative, playful and happy. The principal defines a teacher leader as a person who has ideas and influences staff.

As Seen by the Researcher:

a. Respect for the Child. Prior to the realization

that he wanted to teach, Mr. Newsome recounts how he came to this awareness. He has a degree in political science and had worked for the Senate as an aide at one time. He has also worked at various jobs around the country to include bartending, waiting tables, and working in factories. While working as a custodian in one of the elementary schools, he states:

I realized that I liked [children] and I think the thing that [influenced me] the most was that there were several teachers who kept telling me how good I was with them. How [I] had a natural way of telling them what to do and what not to do and I found I enjoyed being around them.... I started teaching little bits in classes.

Mr. Newsome reiterates that "[he] found out that [he] liked the kids... and what [he's] really concerned with [is] teaching children to appreciate their own abilities." He continues by saying that "... [he doesn't] mind changing something so that it will work for this kid.... I like the kids. I look forward to seeing them. I just play with them."

b. The Physical Environment of the Classroom. Mr. Newsome's classroom has two long tables seating eight.

children each and two small tables seating four each. A knight in shining armor stands tall and erect as a sentry in the middle of the room. One bulletin board is Mr. Newsome's where a papier-mache Trojan horse alerts the visitor to the ongoing thematic unit on Greek, Roman, and Viking myths as well as stimulating the childrens' imagination about the topic. A working calendar incorporating the math concepts of counting and place value is evident. The rest of the board and wall space is covered with the childrens' work. A corner with a comfortable easy chair and a standing lamp creates a warm and cozy space for the children to gather and listen to stories read by Mr. Newsome. Computers are available in the room as well as shelves for books, community supplies, and students' individual boxes containing journals and personal supplies.

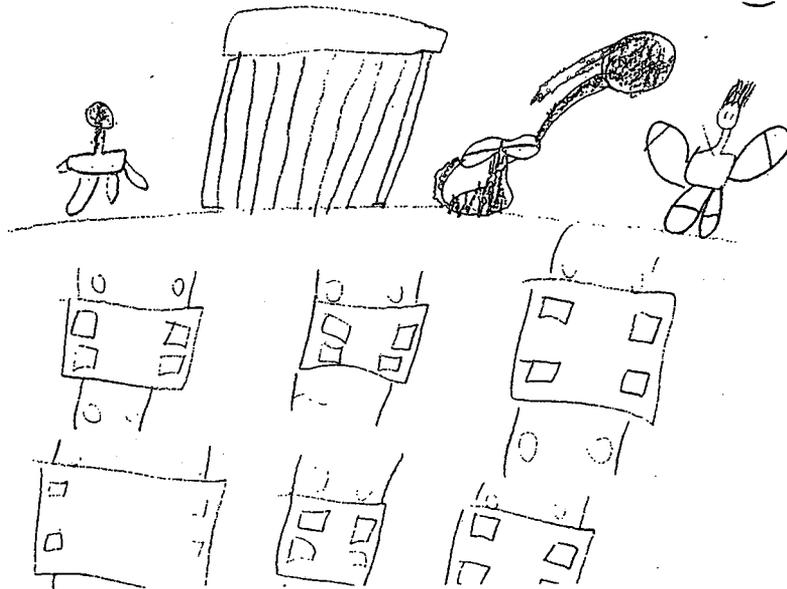


Figure 4.1, Mythological Scene

It is interesting to note that the physical environment is depicted in the childrens' drawings (see Appendix C). In Drawing 5 (Figure 4.1), it's a scene at the top of the page from one of the myths read and in Drawing 6 in the center of the picture is a mosaic of a mythological god. In Drawings 5 and 6 (see Appendix C), the student created bulletin boards take the primary focus of the room.

d. The Classroom Climate. Not only is the physical environment of the classroom depicted in the students' drawings, but also the social climate is emphasized. In Drawings 1-4 (see Appendix C), the students are a focal point in each and in Drawing 4 (Figure 4.2) Mr. Newsome is at his desk with two girls watching him. Here he is accurately drawn with his brown hair pulled back in a ponytail. Drawing 1 portrays the daily scene in Mr. Newsome's classroom. The children are working at their tables interacting and helping one another with spelling, editing or reading. Drawing 2 illustrates a student's imagination as she and her friends are dressed in costumes from Ancient Greece and Rome. Drawing 3 finds two boys making faces through the window of the outside door leading to the playground.

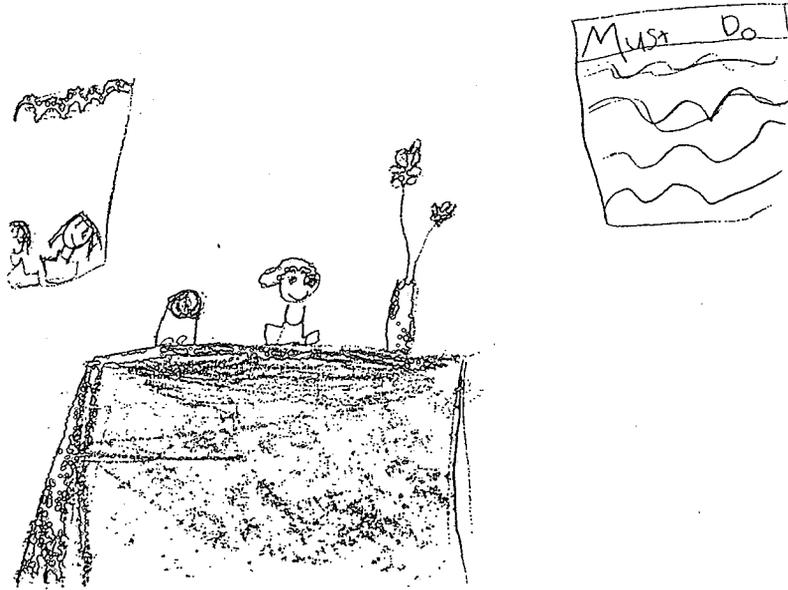


Figure 4.2, Mr. Newsome

e. Older Student Tutors. Often times you can observe former students coming back into Mr. Newsome's class to help work with his first and second graders. They assist them with writing, spelling or modeling of oral book reports. For example, Mr. Newsome has the children choose a book they have read and present it to the class orally imitating the format used on the TV show "Reading Rainbow." One report went like this:

Hi, my name is Susie. And this book is called Angela's Airplane. It's about this girl who got lost in the airport. This is my favorite part [shows the class an illustration] because the plane crashes. So if you like books about

airplanes, this is the book for you. Hurry on down to the nearest library and get this book.

A third grader began the "Reading Rainbow" session by choosing a book herself and modeling the activity for the other children.

f. Parental/Community Involvement. Parents are constantly involved in the classroom assisting children one on one with letter recognition and sounds, handwriting, and reading. They also do the usual party preparations as well as helping with such large projects as the making of papier mache Greek and Roman helmets and paper bag armor. One of the most valuable jobs the parents do is in the publishing of the childrens' writings where they use a book binding machine and put the pages to the stories together to create a unified story that is then placed on the shelves to be read by the children just like any other book.

Mr. Newsome encourages peer interaction and support. At one point they were assigned partners to create a mythological scene for the bulletin board. They were encouraged to plan and talk with their partners in order to complete their drawings.

Mr. Newsome also stimulates creativity and imagination. After having read a story entitled Atlantis, Mr. Newsome tells the class how he sees something new on every page and

that he likes the story because you have to use your imagination. A little girl whose imagination was stimulated by this comment responds, "You know when you have a person in your dreams, it feels like they're walking on your brain."

g. Classroom Organization. Independence, responsibility for learning, ownership of the classroom, and leadership and decision making skills are all stressed in Mr. Newsome's classroom. On a daily basis the students come into the room in the morning turn over their attendance card; place a clothespin in the can if they are buying lunch; hang up their coats and bookbags; take out their morning journals and pencils; choose a place to sit ; and begin to write journal entries. After the entries are complete Mr. Newsome may invite them to say the pledge; do the calendar; and/or read a story on the thematic unit where a special writing project may be assigned after its completion.

On the chalkboard are written two columns (Figure 4.3). *The children explained this to me: "You have to read the things that are on the walls and stuff.... You can read it to, like, your best friend and you also can have people help you out." Here, again, they are reading things around the room that they have written or have said along with the storybooks they have composed as a class and individually.

MUST DOS	CHOICES
Write a letter to a mythological friend.	Read
Write in journal.	Write
Practice handwriting.	Work on computer.
Write vocabulary words in personal dictionaries.	Do a book report.
	Do math facts.
	*Read the room.

Figure 4.3, Directions.

They have also created their own "Big Books" which Mr. Newsome and they read together. The children like reading their "Big Book" because "it's big and it's fun and we all did it!" Mr. Newsome schedules large blocks of time for the students to work.

Mr. Newsome uses positive reinforcement to address discipline. The children illustrate:

I like it when he gives us candy.... If we have 5 points at the end of the day, we get a piece of

candy.... I like it when at the end of the month he gives us toys, if you have enough points.

Mr. Newsome uses humor a great deal on a daily basis to motivate and discipline the children. When he introduced me to the class on the first day of my classroom observations, he told the children I was there to learn about them, especially about their "brains [because I] already [knew] about, knees and elbows." Laughter filled the classroom!

Another time one little girl was complaining that her eye was hurting. Mr. Newsome asked if she wanted to go to the nurse and she said yes. As she got up to leave, he said, "Don't forget to return someday." She smiled a big smile and said, "I'll come back when I'm finished."

Mr. Newsome appoints leaders for writing groups and encourages the children to go to them first if they need help. One young boy gives direct instruction to another boy - "Put your n closer to the l and erase all of that." Mr. Newsome over hears this and states, "Hey, Michael, thanks for your help. I appreciate it. You go ahead and get your work done."

h. Involved Outside of the Classroom. Mr. Newsome thinks that it is extremely important for teachers to be involved in life outside of the immediate classroom. He states that those teachers who have "... never done anything

but teach... don't know what's going on out there."

Mr. Newsome has been involved with school-wide committees such as the report card committee, a Spanish committee and a language committee. He also served on a district wide reading council as well as being a member of TAWL (Teachers Applying Whole Language) and a presenter at the TAWL conferences. He sometimes helps out with the high school band, the kids at the 4-H horse shows, and continues to take classes to stay current. He personally enjoys horseback riding, writing children's books, although yet to be published, and drawing mostly cartoons and caricatures.

i. Philosophy of Education. Mr. Newsome's philosophy of education guides his teaching. He expresses it in this way:

... It doesn't matter what I teach them as long as I teach them how to learn.... I try to teach my kids to learn intuitively, the same way that I'm teaching.... Teaching, I mean getting them to learn is what matters.... I remember that they're kids and kids can't hurt you... but you can hurt them.... I ... don't waste a second of their time.... It may not be fun, fun, fun but it can be interesting and it should be interesting. And I know because this had been my motto. I never do anything that bores me.... If I'm bored, I'm

going to bore them; plus, I've got to be here all day and it's my room. Why in the world should I bore myself?

In order for Mr. Newsome to implement this philosophy in his classroom, he establishes the following goals for himself:

I try to create a very visual classroom.... It shouldn't have that sterile feel to it.... I like to teach the way people learn.... You don't learn to talk by taking a test.... You can set up a lesson and work in a workbook and do the work sheet. It does work. I think you waste a lot of time and you hold people back. They can go farther.... For the most part I look at whole language as teaching the way people learn. And that's how I do it, so I think that I do change as I learn more.... I think maybe if I get them started well enough that it doesn't change and no one can take that away from them later. I don't know if it's true or not, but that's what I hope.... It has to be interactive.... For someone to really learn, they have to be able to talk to you, to ask you a question.

As Seen by the Participant:

Differences Between Intuitive Teachers and Other Excellent Teachers. Mr. Newsome comments very emphatically:

I don't think that you can be a good teacher and not be intuitive. I think their perceptions color how things work. And I think it's how willing they are to allow... that intuition to lead them.... We all know... the story of the teachers who have got their handouts ready for the next year and the year after that. They know what page they're going to be on, on what day. They're not teaching intuitively. And I don't think they're any good.... That's the way I feel. I've gotten in trouble for saying that before.... I really do feel that way.

Mr. Newsome says that intuitive teaching and planning occur "...when [teachers] are following their perceptions and it's leading them somewhere." Intuitive teachers have "...this immediate rapport with the children." He cites a new teacher in the school and says that "she had an immediate confidence with them."

Mr. Newsome states:

"that 75% of teaching is learning how to deal with the children... that's the intuitive part. How do I deal with these kids?.... If you're working with each kid at each kid's level..., as you're seeing a need, you're able to leave a planned direction to take an alternate path to support their need. If you are not intuitive, you never learn to see the need.

Mr. Newsome gives an example of intuitive knowledge at work:

I'm sitting with Bobby. Bobby's going to dictate to me, but I've got to play a little game with Bobby to get him to tell me exactly what I want. While I'm doing that, I know as Anita and Suzanne come up I could be [flippant] to the girls, "Get on with your life here for a minute." But if Melanie comes up to me I can't.... And at the same time, I'm spelling for Alice. I won't let her dictate to me because she's having trouble with letter forms and doesn't recognize them so I want that going on back and forth with her. I can let Robbie fly because when he comes flying to me with this wonderful thing, I know grammar is going to be missing. I know that I can say, "You're

missing this, this and this. Wonderful! Fix it!
See you in a while."

Mr. Newsome identifies another of his intuitive characteristics:

When I think of myself as teaching intuitively, the biggest thing that I think is that I don't know in the morning what I'm going to do the next day. I know at the end of the day what I'm going to do. And I'm always waiting for the little light. Talk about the kids' lights clicking on around October, my light clicks on every few days with a kid. Every few days I go, ching, ah-ha! This is what's wrong. This is what will work.

He continues saying that intuitive teachers -

... know when the child is ready for the next step and which direction they're ready to go.... I tend to wallow around with the kids until I see it's the day the light's going to come on. When I find that day, oh, I recognize [it] in their writing. This one's ready to go.... I can take anything that they write, the whole thing, and

because they created the whole thing, it tells me loads about them.

When asked what comes to mind immediately in describing intuitive teachers, Mr. Newsome describes these characteristics:

I think of people who keep up with how things are. Keep up with changes. Keep up with new learning... new research on the brain and how people learn... who keep themselves involved in outside things so... they continue to grow but balance it against jumping on every bandwagon that comes along and just slinging it in there today.... They understand what it is before they come in and make that change.

Mr. Newsome also paints a visual image of the difference between an intuitive and non-intuitive classroom:

[The Intuitive Classroom]

Physically, there's lots of print, lots of visuals... evidence that people live here... it's also messy.... Everything that's up is made for the children to interact with eventually, for them

to turn into [or] to make it theirs.... I think for someone walking in the door, it generally looks chaotic. They generally see me sitting down with two or three kids huddled around me and the rest of the kids buzzing.... They see several activities going on at the same time. Children switching as they finish. Me moving around to help, to settle things, to tag the teachable moment with this kid, with that kid.

[The Non-Intuitive Classroom]

...You will see them all sitting focused on one thing.... A non-intuitive teacher could very well just not have a handle on anything that was happening in the room.

Part III - The Transfer of Intuitive Knowledge to Preservice Teachers

Is intuitive knowledge an entity that can be taught to preservice teachers? This is the "so what" of this study. "So what" if the participants in the study believe in intuition. What can this add to teacher education and how can it make learning for children more valuable? Mr. Newsome tackles this difficult concept.

Through Classroom Involvement. Mr. Newsome insists

over and over again that preservice teachers need more time involved in the classroom. He emphasizes that he would

... like to see them with some kind of kid with some kind of problem like learning problem... Let them work on developing their intuitive abilities... work on reading their way through. Work on developing rapport with a child.

Mr. Newsome states that he would want "... to maybe observe interaction with them several times, unobserved...."

Through the Discovery Method. Mr. Newsome says, "I think I'm still not sure exactly how I would teach [preservice teachers] to do it except maybe that exploration, discovery method." He elaborates that they should be given assignments to work with students and then

have them figure out why did the child do it this way. Not focus on [the fact that] the child did it wrong, [but] why. What changed here?.... Well, he wasn't listening. Okay. He wasn't listening.... There was a reason that he tried it and what was his thinking? In fact, a lot of times, that's where I get some of my best ideas for dealing with a kid.

Mr. Newsome cites an example of discovery he made with a child named Johnny.

I've got Johnny kind of hooked over there because he's given all his secrets away cause he never pays attention, but by watching what he tries to figure out to do from it, I know about how intelligent he is and about how good he is at inferring things.... He's going to just have to learn to read now. He has no choice.

Through University Supervisor and Cooperating Teacher.

Mr. Newsome says that

...you could set up a... situation [where] you could both work on a kid and compare notes.... Let them start working with [John] for a while until they... see what kind of insights they come up with [and] which direction they [would take] him.

I will address this concept again in detail in my analysis in Chapter 6 and in the implications in Chapter 7.

CHAPTER 5

MRS. KING'S STORY - A CASE STUDY

I would want you to value the integrity of the child and never lose sight of the child's value as a person ... the value of their humanity. That's probably more important than anything else that you're going to do academically. (Mrs. King)

The female participant in this study, Mrs. King, was extremely comfortable, excited, and anxious to assist me in my research. From the first day I met her, she became truly involved in my study and spent a great deal of time in thought about this topic of intuition and intuitive knowledge. The data is presented here in three parts. Part I presents Mrs. King's definition of intuition, intuitive knowledge, and identifies the source from which they come. Part II examines the intuitive characteristics of Mrs. King that are observable in the classroom setting by an outside researcher: involvement outside of the classroom, respect for the child, classroom organization and management, classroom climate, physical environment of the classroom, seeking and accepting help from other professionals, looking deep within the child, hunches and feelings, and differences

between intuitive and other excellent teachers. Part III strives to take this topic of intuitive knowledge into a practical application setting with preservice teachers, as suggested by Mrs. King. It is the participant's voice that I hope the reader will hear coming through the writing.

Part I - Intuition and Intuitive Knowledge Defined

Intuition Defined. Mrs. King begins:

I think my definition of it would be that not everything has to be on paper or in a book somewhere. If you look at some child sitting over there... intuitively you know that what you just taught them didn't have one single bearing on anything they've known,... therefore, they didn't transfer or absorb anything.

She continues, "it's knowing what to and when to do it even if you don't know that you know." Mrs. King explains that intuition is used when you "... reach beyond the surface of the child... into the child... into your own teaching." It is "... a feeling you have."

Intuition's Source. This source of intuition is derived from both the cognitive and affective domains. Mrs. King

supports this statement when she says, "I suppose it has to have some basis and some beginning in all those areas." She also comments in reference to a teacher being right-brained or left-brained "... that if someone is too much one way or the other that it may be difficult for them to ... be a good teacher, intuitive or not."

Intuitive Knowledge Defined. Mrs. King describes intuitive knowledge as the ability "... to pull anything from [her] past... without thinking about it and being able to apply what [she's] garnered from other places ... to give to [the] child what they need." She substantiates this statement with the example of a beginning teacher who had been her colleague up until this year. Mrs. King describes her as being:

a very intuitive teacher. There was nothing that she got from [her university] that was anything different than the next [student].... And yet, when she walked into the classroom, she pretty much knew how to apply what she had learned or assimilated She knew when there was some problem. She knew she had to fix it, and she knew how to apply what ... experiences she had to accomplish what needed to be done.

"Although [intuitive knowledge] could be a unit of its own, it really infringes upon a lot of other areas or a lot of other areas infringe upon intuitive knowledge," according to Mrs. King. "When you separate it into a distinctive category, you must be careful not to lose its pervasive essence," she states. The use of intuitive knowledge allows the teacher "to meet the children's needs in every way, not just the academic way, but as many other ways as you can to make the academic outcome more positive," says Mrs. King.

Mrs. King encompasses intuitive knowledge in the following metaphors:

- a mosaic changing with the earth's movement;
- moisture being absorbed from the earth's surface;
- sunlight focused to a pinpoint;
- kaleidoscope pieces forming an ever changing picture.

It appears that all of the metaphors depict a dynamic concept of connecting parts from different sources to the whole, a whole that is constantly changing and evolving.

Part II - Observable Characteristics of Intuitive Teachers

Since this research makes use of a purposeful sampling,

I can authentically state that Mrs. King is an intuitive teacher according to her principal, colleagues, and parents who referred her. Her colleagues described her as "having a natural feeling for teaching" as well as having a "certain feeling for children." She is also viewed by her principal as compassionate, sensitive, caring, and intelligent. Mrs. King is very emphatic when she states: "I love to be in the classroom.... I love being with kids."

As illusive as this topic is, I find it amazing that certain observable characteristics emerged out of the research data: involvement outside of the classroom, respect for the child, classroom management, classroom climate, physical environment of the classroom, help from colleagues, looking deep within a child, hunches and feelings, and differences between intuitive and other excellent teachers. In Chapter 6, I will discuss how these characteristics compare with the male participant and the two other participants in the pilot studies that I conducted.

Involvement Outside of the Classroom. Intuitive teachers have a need, a desire, and a willingness to reach beyond the parameters of their immediate classroom. Mrs. King comments, "I just don't think I could stay in the classroom for a long time without becoming stagnant." It is important to note that she has 25 years of teaching experience and involves herself in a myriad of outside

activities. She and her husband presently have two foster children. She has coordinated clinics for Easter Seals in the community. Mrs. King is in charge of the computer program for her elementary school and freely gives her time to assist newer teachers in a mentoring relationship. She personally continues with her music for her own enjoyment which involves her in teaching flute to a number of students and assisting in the fine arts and theater productions at the high school. Mrs. King enjoys assisting others doing current research and is presently working with a physician at the University of Arizona (U of A) and the University Medical Center (UMC) studying comatose patients and their state of consciousness.

Respect for the Child. Listed in all capital letters in Mrs. King's general lesson plans and procedures for substitute teachers are these words: "We try to run the day in a positive atmosphere and in a positive way. This is more important than any work accomplished."

In her description of her ideal school, Mrs. King stresses the fact that -

...there would be no personnel in the school that [would] be allowed to be demeaning to a child regardless of what that child had done. There had to be some positive thing in the way that the

child was handled.

She reiterates and explains that the ultimate goal of education is respect for the child:

...I feel that the value of the child, the basic integrity of the child as a little teeny human whether you're in high school... and they're nothing more than children in adult packages... or you're here at this end where they're teeny little adults inside of these teeny tiny packages that the most important part of anything that you do is to allow that child to feel good about themselves, good about what they have done, even it's not your expectation.... To me what we're lacking most in education, from pre-school all the way through the cycle, is the need to realize that we are not here to implant or teach just knowledge but instead, we're here for the little teeny tiny person or the big giant person... we're here to educate and encompass the whole person (child).

Mrs. King's beliefs are exemplified in the drawings of seven of her students that I interviewed. In Drawing 1 (Figure 5.1), two children are in the forefront obviously

talking and interacting with one another, honoring children as social people. In Drawing 2 (see Appendix D), Mrs. King is pictured greeting one of her students first thing in the morning, acknowledging each one as a special individual. In Drawing 3 (see Appendix D), the children's art work finds a prominent position at the top of the drawing - hanging spiders and haunted house scenes as well as Mrs. King with a smile on her face, demonstrating a sense of ownership in the classroom. In Drawing 4 (Figure 5.2), great effort is taken to place a child in each chair at a table, valuing each child's need to have a place. Drawing 5 (see Appendix D) once again depicts the children's art work prominently at the top of the paper. While not as obvious in Drawing 6 (see Appendix D), the child identified the smaller, darker rectangles as their house scenes and the two, larger rectangles as their computers. And Drawing 7 (see Appendix D) confused and surprised me at first until the child described his work and I realized how knowledgeable and precise he was about everything in the room, a real sign of feeling comfortable and again a sense of ownership within his classroom just like Drawings 5 and 6.

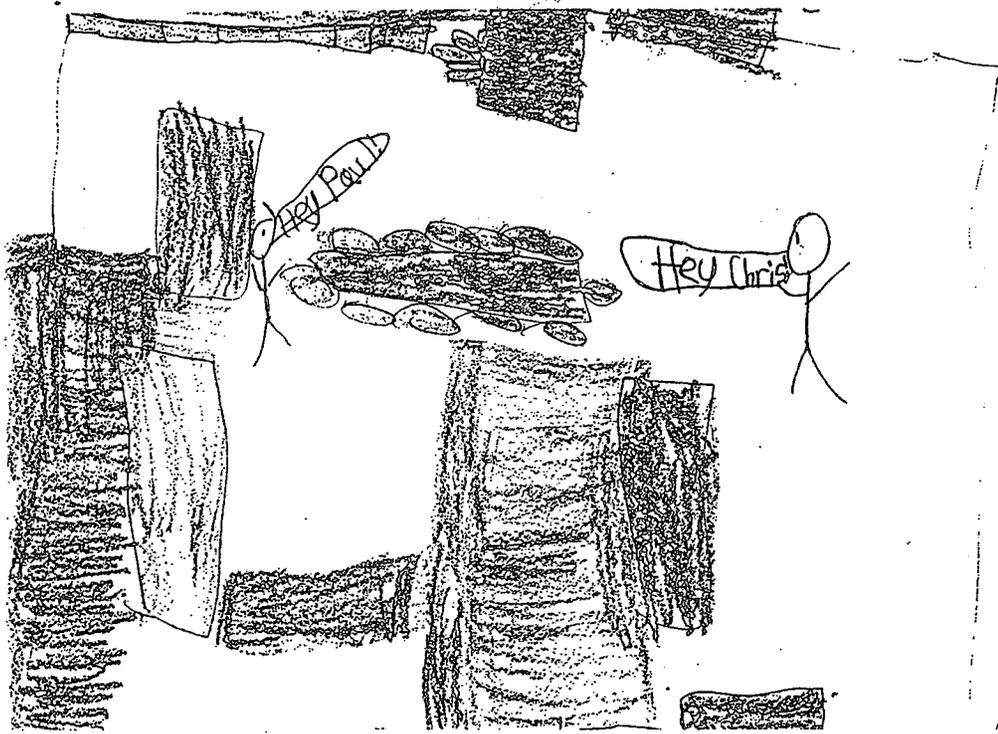


Figure 5.1, Social interaction

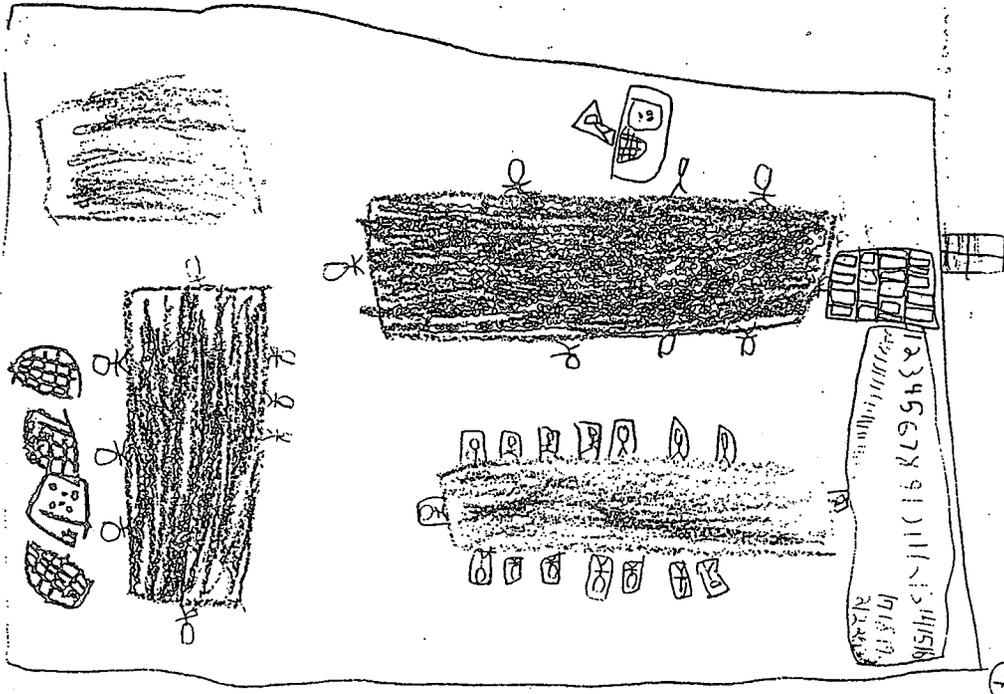


Figure 5.2, Children at tables

The children state in their interviews that Mrs. King is "... a good teacher. She's a lot nicer than the others. She doesn't teach mean like the others." They cite such examples as being allowed to make choices in the classroom as to where to sit, what to write during process writing, which programs on the computers to do, of course, receiving candy treats and free playtime, of bringing in special story books just because two boys were interested in detective stories, which books to read, which friends to sit by during SSR [Sustained Silent Reading] and group meetings.

The children relate stories about Mrs. King in such a manner that the reader can tell that the children know she respects them, encourages them and builds their self-esteem and spends time with them. One student, in describing sentence writing in his morning journal states:

... we do our sentences. When I do like eight, she likes that and I really feel like we're all good at it and I just do more and more and she always gives me a hint of what to do.... She gives me help.... We always get to do stuff with her.... Every time we say goodbye, she always kiss[es] me on the head.

When asked what the most special time was that they had ever

had with her, one child replied, "Oh, just hugging her." Mrs. King reaffirms the importance of "valuing the integrity of the child as a human" when she states that "... the more positive we are here; the more they think they can learn; the more they're going to learn." That valuing of individualism stimulates growth according to Mrs. King.

Classroom Organization and Management. Having spent an estimated minimum of 46 hours observing in Mrs. King's classroom, many characteristics of classroom management become apparent. Mrs. King herself states that her classroom as well as other classrooms of teachers she considers to be intuitive "... tend to have a little bit more freedom... [the teachers are a] little bit more comfortable with the students and what they're doing and with what goes on for themselves educationally." She emphasizes:

that there's about ten different ways to do every single thing with every single child.... If something doesn't work the first day or there's some kind of problem, there's always another way to work it out.... It doesn't cause any kind of calamity or catastrophe.... It doesn't really interfere with the flow of learning because you can monitor and adjust....

Mrs. King inadvertently describes herself in her own classroom when asked what types of criteria would identify an intuitive teacher in an intuitive classroom.

And it would probably be by the way their classroom functions, the level of comfort that the children have in their classroom, the way that they deal with the very perverse kind of problems that you sometimes get, whether they can incorporate that and try to fix it or how many times they throw up their hands and don't feel that they can, by the way that they bring other things from outside the classroom into the classroom and their general overall feeling about the outcome of their children.

She views intuitive teachers as those who are constantly looking for what will work and are "... attracted to anything that's new and they're not afraid of it." Mrs. King states that intuitive teachers have a broader perspective about education and tend to be able to view the whole process placing their age group appropriately along the continuum with the final goal being to assist the children in reaching their full potential as productive members of society. These teachers are future oriented

thinkers. In that regard, intuitive teachers are not upset over such mundane problems as killer bees on the playground, bells that ring at the wrong times, clocks and phones that don't work, or toilets that are clogged.

To understand this more clearly, I think it would be beneficial to describe a typical observation session in Mrs. King's classroom. The children arrive at the classroom door to be greeted by Mrs. King followed by hanging up their coats and book bags, getting their journals and their box of supplies. They then choose where they will sit and begin their work without any directions from Mrs. King. After a brief classroom meeting where Mrs. King discusses plans for the day, the students complete their sentence writing in their journals while Mrs. King conferences with each one individually. The students then share "Daily News " and a "Big Book" reading lesson followed by an independent activity. By then, it is time for lunch.

When the students come in from lunch recess, They choose their books, friends, and a place in the room to read quietly for SSR. Process writing (story writing) follows with students helping each other with ideas and editing. The students all have their own personal dictionaries to write in the words they can't spell as well as access to dictionaries on the shelf and hanging on the wall. Recess and special activity time [art, music, PE, library] follow

with the last activity time of the day involving math, social studies, science, etc. Of course, these areas are all integrated into an overall thematic unit. Independence, responsibility for learning, social relationships are all being fostered in this type of a classroom.

Mrs. King can be observed at almost any given moment of the day hugging, holding, patting or administering "tender loving care" to the students. She can be heard encouraging students with such statements as "Matt, if you're not good at drawing these animals, maybe you will be at drawing some other animals" or guiding the students towards decision making about appropriate behavior with the following statements: "You made a bad choice. When you play a game and are out you must stay out."

Mrs. King has many varied activities going on simultaneously on any given day. For example, she is conferencing one-on-one with a student while one or two moms are assisting a child with reading, two students are working on the computers and a third grade tutor is helping a student. Mrs. King is not only managing all of this, but is also facilitating the overall classroom climate.

Classroom Climate. The physical setting of the room allows for freedom of movement and encourages social interaction. There exists a "buzzing hum" in the classroom with student-teacher, student-student, and parent-student

interaction. The classroom has an open door policy and quite often teachers come in to visit and ask opinions. Parents are in the classroom daily assisting the students with reading, writing or whatever is necessary. A senior citizen, commonly referred to as "Grandpa Gary," comes in to help with reading. One mom came in and discussed nursing with the class. One dad came in to discuss the job of an airport fireman. The principal, the band director, and a parent came in and played songs for the class. Mrs. King comments on parents:

... Whether they're annoying to us as educators, sometimes or not, they want what's best for the child. If I set up what I want and I'm reasonable in my expectations, and they have something that they want me to do because it's important to them [and] I incorporate the way that child had learned from the parent with the way that I teach and we have a comfortable, open relationship back and forth... that child learns and... I'm much more comfortable with what they do... it's the flexibility of... allowing the parent to be comfortable with myself. If they are, then they're comfortable with everything that I do with the child.

In her ideal school, Mrs. King would emphasize community involvement and "parents would have to be involved with the school." The students' faces appear happy with many smiles seen around the classroom.

Many of the students have a clear understanding about the multi-age classroom they are in and how learning occurs. It is explained by one student this way...

You write sentences. You write stories and sometimes you can make it like a real book. They publish it.... It's all looking like computer words.... I already got My Little Red Cat still at home, but it's really cool because we got to write and write and learn more and more and more.... It's real nice because we can keep on learning and learning and when we're in third grade we can just go on up. We know that.... It's just circulating in our hearts.... [Mrs. King] always teaches kids... when they don't know something.... And when you have kids, then they can learn because of you.

Another child explains it this way talking about what it was like to be a first grader last year:

I really didn't like the beginning of school because we had to do all this work. I thought the ABC's were hard. But this year, I can put them down in about a minute.... We have to do some stuff with the 1st graders because [they have got] to learn what we learned.

Physical Environment of the Classroom. The classroom has four long tables with six children at each. The students are allowed to choose where they sit to work and often can be working on the floor with friends as well as at smaller tables around the room. Two computers are available to the children on a rotating basis. The student's art work is prominently displayed on the walls and hanging from the ceiling. There are shelves with community supplies and many, many books for self-selection by the students. Stuffed animals and bean bag chairs add a touch of softness and warmth to the classroom. Plants, seeds, and an aquarium bring living creatures into the classroom. The students have places for personal supplies located in their individual boxes, their coats, and book bags in the coat hooks, their selected reading material in another individual box, and their personal journals on shelves, while their stories for process writing are in individual folders for their own ready access. The sink, built for older students

had a stool for the students to step on to reach it. The teacher's desk holds her computer and printer and a tall bar stool sits beside it. Here the students sit when they are dictating stories to Mrs. King or she is publishing their work. The calendar as well as a pocket holder outlining the daily routine cover most of the chalkboard and a dry erase board is mounted next to it. On this board is recorded the "Daily News" containing the day's plans, facts learned about the on-going thematic unit and personal statements from 5 different children a day about anything they want to share. The carpet allows the students to sit comfortably in a group in the corner of the room where Mrs. King can talk with them or read to them.

Seeking and Accepting Help from other Professionals.

Intuitive teachers reach outside of their classrooms for professional assistance with a child. Mrs. King states that...

... here's this little kid and... something just isn't right and I call in [Joan] or... somebody else, and I say, "What do you think?".... She'll look at [the child] and say, "I don't know." And so the next day, I'll send him down with a book or a note or something for [whomever] and allow them another chance so that they can give me some

feedback.... So you use their knowledge and their background and maybe their intuitive abilities to be able to help you figure out what's going on with the child. You put the two kinds of things together. And I do that a fair amount.

Looking Deep With a Child. Intuitive teachers know that "it's not what's on the surface with [a] child" that counts. In relationship to behavior, Mrs. King relates an incident about Johnny to illustrate this point:

I guess when you see through to [his] little soul, you know for that moment when [he] honestly looks at you.... You know what a little terror he's been sometimes. You have got to just love the kid. And he honestly looks at you and all you have to do is just look at him and he shakes his head and goes back to doing what he's suppose to be doing. Those kind of moments... however many thousand times those happen a day that we don't notice them [or in regards to building a relationship with a child] or when a child trusts you with his... deepest secret, something that he really assumes that you can handle because you've gotten to that point of trust, or his favorite

rock, because he's pretty sure that you won't lose it and, you know, it really is one of his littlest angel treasures that go in the box under his bed [those are the kind of moments that truly count].

These are the true connections that insightful intuitive teachers craft with their students.

Hunches and Feelings. Intuitive teachers value their feelings about a child and follow up on those feelings. Mrs. King relates the story of a child in her classroom who is struggling, but initially appeared to be doing just fine.

The teacher last year, who was a very competent teacher, felt that he was doing okay in reading, transferred [him] out of that multi-age classroom into this classroom only because there seemed to be a personality conflict.... All year long there's been something about the kid that just didn't fit.... He appeared to be reading chapter books.... He doesn't have the skills. He's got all kinds of things that are very sketchy up and down the line. He's in a situation that has involved serious abuse to himself at one time and to his natural mother who is [in the hospital] right now... with a ruptured spleen. She's living

with grandma. [She's] been incarcerated on and off [in] the past. The child has turned out to be a fetal alcohol effect child.... It was so multi-faceted that it actually made me feel unwell for a few minutes during the conference because it was unbelievable what the kid had dealt with. But yet, on the surface, outside of being up and around the classroom, he doesn't demonstrate [this].... Grandma has raised him since he was a tiny baby along with his sister.... I knew from the second day I had him that there was more than the foster child, unbonded, living with grandma kind of thing. And it turns out he's got big gaps in learning and all kinds of neurological things that are coming into focus.... I felt like there was something intuitive about knowing....

Mrs. King asserts that it was that intuition nagging at her that made her keep searching for more and more information about this child. As she gathered more knowledge, Mrs. King called on other professional colleagues to assist her in better meeting the needs of the child.

Differences Between Intuitive and Other Excellent Teachers. Mrs. King speculates about what these differences may be:

I really feel a lot of the excellent teachers are teachers that, no matter what it takes, are going to do what they have to do for the child.... I think intuition plays a large part in ... what we innately do, but I also feel that some people really, in their heart, feel a responsibility for that whole individual beyond their classroom door.

The slight differences denoted here by Mrs. King portray the excellent teachers as meeting the needs of a child out of a sense of duty and as part of a job description, whereas the intuitive teachers call upon their innate senses to do the same. Is one better than the other if the child benefits?

Mrs. King continues:

I think there are many teachers that aren't intuitive that are very successful as far as reaching the majority of their students.... If they're going to be the teacher that stands out, they're going to be past just being successful. They're going to be able to reach all the students. They're going to make the difference in more students' lives than someone who's just ... an excellent teacher and really knows how to get it across. That teacher will be able to reach all

those students and isn't going to be satisfied with any kind of ... failure within their classroom. They're going to want them all to succeed.

The differences between intuitive teachers and other excellent teachers as explained by Mrs. King are extremely subtle. Intuitive teachers want and strive for all children to be successful, while excellent teachers may settle for losing a few.

Part III - The Transfer of Intuitive Knowledge to Preservice Teachers

Mrs. King addresses the implementation of this concept in the education of new teachers. She is adamant that it can be done, but hesitant that the educational community will provide the personnel and resources with which to accomplish this endeavor.

Through Modeling. Mrs. King again refers to her previous colleague, a beginning teacher who got married and moved away last summer:

I think that [Corrine], if she worked with another teacher, would automatically be able to transfer a lot of the things that she did to the next teacher

she worked with through modeling and the fact that she's very successful. That she's not at all pushy with what she does... I think the next teacher, if they could keep... the jealousy kind of thing and territorial thing from being involved, could very easily do what [Corrine] does.... I do think you could teach... people that were receptive to it.... Someone who really wanted to do well at their job... without having their own personal agenda.

Mrs. King shares not only a personal modeling situation she was involved in when being trained successfully in another program but also a bit of direct instruction. In this training leaders in the development of the program observed her in her classroom on a regular basis.

Whenever I made a mistake, they very nicely said, "That's not acceptable. You have to do it this way." And they would sit down and model what they wanted done with that... program to make sure I was teaching the program.... They did it over and over and over.... [And after they modeled it, they gave me] a chance to do it right then.

Mrs. King thinks this technique could be applied to the student teaching experience allowing the preservice teacher to try it in a classroom, be observed by a supervisor who models what is expected, and then allow the preservice teacher to practice it again.

Through Videotaping. Again Mrs. King says that during student teaching the student teachers could videotape their teaching and share it regularly with the supervising teacher. The supervisor would "...pinpoint some of the things that they had done that you felt were intuitive. By taking that positive thing... that happened and building on it that would give them the core base."

Mrs. King places a great deal of responsibility on supervising and cooperating teachers in transferring intuitive knowledge to preservice teachers. The feasibility of this will be analyzed in the following chapter.

CHAPTER 6
COMPARISON OF THE CASES

Overview

The purpose of this study is to validate the existence of intuition and intuitive knowledge in teaching and to recognize its usage and trustworthiness as a valuable source of information for the classroom teacher with which to enhance the practice of teaching.

The data presented in Chapters 4 & 5 focused on defining intuition and intuitive knowledge; describing the observable characteristics of intuitive teachers; and suggesting ways in which this knowledge might be transferred to preservice teachers.

This chapter compares and contrasts the data from the two individual case studies in relationship to intuition and intuitive knowledge and its usage in the classroom. It is necessary to organize this analysis in a clear and concise manner so that a distinct picture about this topic can be drawn. Although generalizations can not be made from these case studies, they can explain (Merriam, 1985) the importance of this topic and its appropriateness for inclusion in the preservice education of teachers. Thus, the framework for this comparative analysis will be divided into three parts. Part I addresses the male and female participants' evolving definitions of intuition and

intuitive knowledge as related to teaching. Part II concentrates on identifying the observable traits of intuitive teachers and intuitive classrooms. This section builds a profile of an intuitive teacher. It also seeks to examine the classrooms of intuitive teachers and to assert that these classrooms operate differently from those teachers who do not make use of intuitive knowledge. Part III outlines several suggested pedagogical strategies to be used with preservice education teachers in conveying the usage of intuitive knowledge in the classroom. In conclusion, Part IV will discuss the relationships and connections between and among (1) developing definitions of intuition and intuitive knowledge, (2) identification of observable characteristics of intuitive teachers and their classrooms, and (3) preservice teacher education strategies.

Part I - What are intuition and intuitive knowledge?

According to Emery (1994), intuition, common sense, and past experience are often confused with each other. She states that common sense and past experience are derived from logical, rational thinking and together with intuition can assist one in their decision making; however, intuition is very different from these two processes. Figure 6.1 clearly delineates what intuition is and what intuition is not.

Intuition is:	Intuition is not:
Nonrational	Logical
Nonlinear	Rational
Insightful	Common sensical
Non-databased	An emotional state
An extension of the five basic senses	Based on experience

Figure 6.1, Intuition delineated (Emery, 1994, p. 12)

Mrs. King describes intuition as "... a feeling you have." Emery (1994) uses the terms non-databased, nonrational, and a senses extension. All of these describe a feeling. Mr. Newsome thinks intuition is "... more a matter of being perceptive." It is interesting to note that insightful, used by Emery (1994), and perceptive, used by Mr. Newsome, are synonomous terms that support each other. Mrs. King delves even deeper when she states that intuition derives its source from left and right brained thinkers as well as cognitive and affective domains. Emery (1994) reaffirms this when reference is made to intuition being nonlinear. Taken as a whole, both Mrs. King's and Mr.

Newsome's definition of intuition are supported by Emery's (1994).

Intuitive knowledge as defined by Mr. Newsome uses experience to guide you in using the information gleaned through intuition to better meet the needs of the child. This is similar to Emery's (1994) discussion of intuition, common sense, and past experience coming together for decision making purposes. Mrs. King's definition of intuitive knowledge as the ability "... to pull anything from [her] past ... without thinking about it and being able to apply what [she's] garnered from other places... to give to [the] child what they need" also finds strength in Emery's (1994) statement.

Part II - What are the observable traits of an intuitive teacher and an intuitive classroom?

In order to give a clear and concise picture of intuitive teachers and their classrooms, it is helpful to create a profile. This profile is a direct result of the analysis of the data from both Mr. Newsome and Mrs. King in the form of interviews and observational field notes. These intuitive teachers' values and beliefs are reflected in their personal teaching strategies and their classrooms and can be described using these adjectives and adjective phrases. Intuitive teachers and intuitive classrooms are

characterized by:

- having a connectedness to the students on a social and personal level;

- encouraging student responsibility, choice and decision making about their own learning;

- establishing a positive classroom climate of respect for all, especially for the child as a unique and complete person;

- promoting parental and community involvement;

- having an ability to be flexible and incorporate anything and anyone into a plan for a student's growth and development;

- building a student's self esteem and confidence;

- planning and individualizing the program to meet the students' needs;

- encouraging peer interaction and support as a community of learners;

- being holistic and futuristic thinkers who see how life now will affect the students as adults;

- looking beyond the immediate and obvious and into the "soul of the child";

- planning a curriculum appropriate to meet all of the needs of the child.

Part III - What pedagogical strategies might be effective in conveying to preservice education teachers this concept of intuitive knowledge usage in the classroom?

Both Mr. Newsome and Mrs. King suggest that preservice teachers become involved sooner and more often in the classroom not only for observation purposes, but also to interact with the students to the degree of taking responsibility for tutoring a student or teaching a group lesson. They both suggest that this authentic involvement in the classroom would afford the preservice teacher an opportunity to observe the modeling of an intuitive teacher in their classroom.

Mrs. King goes on to recommend that student teachers be videotaped in their cooperating teacher's classrooms and together with the cooperating and supervising teachers they would review the tape and discuss characteristics relevant to intuitive knowledge. She also suggests that the intuitive cooperating and/or supervising teacher observe the student teacher in the classroom and if they see an area to improve upon, they would model, right then and there, what is expected and have the student teacher try it again.

Mr. Newsome advises that university supervisors be involved in a different manner. Together with the preservice teacher, they would both actually work with a child and conference and compare notes on that child and the

strategies most effective to use with that child.

Part IV - Conclusion: What is the interrelationship ?

In addressing the connections between and among (1) developing definitions of intuition and intuitive knowledge, (2) identification of observable characteristics of intuitive teachers and their classrooms, and (3) preservice teacher education strategies, Figures 6.2-6.5 present the relationship woven among these categories. They also reveal that the only major difference between the two participants in this study remains the most obvious. One is female and the other is male. In this specific study, it appears that both participants make equal use of intuition in order to enhance their practice of teaching. Gender does not appear to impact intuitive knowledge. It is fascinating to note how closely both participants' responses and actions are to each other. They both advocate authentic involvement of the preservice teacher as early in their career as possible. They both involve the student teacher, the cooperating teacher, and the supervising teacher in real and active roles during the preservice teacher's education. Both participants are in child-centered, multi-age, active classrooms. Both hold children in high regard and have the utmost respect for them and; they especially, ENJOY children, teaching and learning themselves. They are open to the future and new ideas, but cautious in implementing

programs that do not strengthen learning for the children.

Male	Female
Intuition is a perception.	Intuition is a feeling.
Intuitive knowledge is a melding of past experience, common sense, and intuitively perceived information to be used in addressing the needs of the child. It helps him to teach the child better if he can understand things just as the child does.	Intuitive knowledge is the ability "... to pull anything from [her] past ... without thinking about it and being able to apply what [she's] garnered from other places... to give to [the] child what they need." (p.114) It helps her to meet the child's needs in many ways not just the academic; therefore, positively enhancing the academic.

Figure 6.2, Intuition & intuitive knowledge defined

Both Mr. Newsome, the male, and Ms. King, the female, seem to suggest that the act of intuition occurs in the present moment accessing feelings and perceptions. With intuitive knowledge, however, a synthesizing process occurs involving past experiences, knowledge, and present

perceptions in the pursuit of appropriate curriculum for students.

Observable traits of an intuitive classroom-male	Observable traits of an intuitive classroom-female
<ul style="list-style-type: none"> -ownership of room belongs with the children -social interaction allowed and encouraged -teacher found amongst the children -children given responsibilities and allowed choices 	<ul style="list-style-type: none"> -more freedom, choices, and classroom ownership -open door policy -teachers 'attracted to anything that's new and they're not afraid of it" (p.122) -teachers "...more comfortable with the students and what they're doing and with what goes on for themselves educationally (p.121) -students understand their "student role" in the classroom and how learning occurs

Figure 6.3, Observable traits of intuitive classrooms

In both classrooms the students are responsible and active in their own learning and the teachers view

themselves as learning participants alongside of their students. Students and teachers are comfortable together.

Observable traits of intuitive teachers-male	Observable traits of intuitive teachers-female
<ul style="list-style-type: none"> -stay abreast of new practices and integrate what's appropriate -enjoy teaching and learning -value and follow up on intuitive perceptions -use humor and positive discipline -teach the children "...to appreciate their own abilities" -creative, intelligent, caring, happy, playful, fun 	<ul style="list-style-type: none"> -intelligent, caring, compassionate, sensitive -loves being with children in the classroom -values and respects the feelings about a child and follows them -respects the child -reaches beyond the immediate parameters -"values the integrity of the child as a human" (p.116) -looks below the surface of a child -hugs them

Figure 6.4, Observable traits of intuitive teachers

Mr. Newsome and Mrs. King both respect and value children as unique people. They are comfortable with them and relish the time they spend with their students. Their

relationship with them is one of two-way communication, always valuing their thoughts, feelings, and opinions.

Transfer of intuitive knowledge to preservice teachers-male	Transfer of intuitive knowledge to preservice teachers-female
<ul style="list-style-type: none"> -authentic involvement in the classroom from the start of training -trained observing of intuitive teachers -all three-cooperating teacher, student teacher, and supervising teacher - work with the same child and compare observations and techniques 	<ul style="list-style-type: none"> -trained observing of intuitive teachers -authentic involvement in the classroom from the start of training -videotape student teacher and cooperating teacher and together with supervising teacher review and critique -cooperating teacher and/or supervising teacher observe student teacher and have them redo or practice points that need improving immediately in the classroom

Figure 6.5, Transfer of intuitive knowledge

Trained observational skills, early authentic involvement in the classroom, and collaborative teams

working within real contexts are major points that these teachers consider necessary in preservice education if a true transfer of intuitive knowledge is to occur.

How do practicing teachers make use of intuitive knowledge in the classroom?

Using a synthesis of the data gleaned in both the case studies, it is possible to now address the initial research question. Mr. Newsome and Mrs. King make use of intuitive knowledge in their long range planning for curriculum, for the physical environment, and the social climate in their classrooms. Both teachers establish a physical setting in the class that is child-centered, child-sized, child-owned, and child-responsible and independent. The social climate is one of mutual respect, collaboration, cooperation, and interaction between and among student - teacher, student - student, younger student - older student, and students - community members. The curriculum is focused on the needs of the total child not just the academics.

Intuition, on the other hand, assists the teachers on a daily basis with their decisions and interactions with the students. It provides them with another source of information about their students which can direct whatever they do with a child.

CHAPTER 7

CONCLUSIONS AND IMPLICATIONS

What conclusions can be drawn from an analysis of the data provided by the participants in this study? This study's purpose was to validate the existence of intuition and intuitive knowledge in teaching and to recognize its usage and trustworthiness as a valuable source of information for the classroom teacher with which to enhance the practice of teaching. As the researcher, I can conclude that this purpose was indeed accomplished. I will support this statement with a discussion of the conclusions drawn from the data and follow that with specific implications for teacher education programs and possibilities for further research.

While the nature of this qualitative study is such that generalizations about the widespread use of intuitive knowledge by practicing teachers in their classrooms is not possible, it is possible to state that within the context of this study the use of intuition and intuitive knowledge by these two participants was acknowledged as providing valuable information to assist them in their daily practice of teaching.

It is also possible to state that their use of this knowledge was observable in the physical setting of the classroom, the overall classroom management, the classroom

climate, the implementation of the curriculum, and, most importantly, the student-teacher relationship. While the participants were reluctant to whole heartedly endorse the possibility of transferring this knowledge to teachers in preservice education, they still made suggestions on how this might be accomplished if one persevered.

It is necessary to now describe the conclusions that can be made from an interpretation of the data presented in Chapters 4, 5, and 6. Remaining consistent with the format of the study, I will once again frame this discussion around the guiding questions for this research:

* What is involved in the expertise of teachers? To what do they attribute this expertise? Might it be attributable to intuition?

* What is intuition? What is intuitive knowledge? How is intuitive knowledge used by practicing teachers?

* How is this intuitive knowledge observable to others in a classroom setting?

* How is it attained and maintained by these practicing teachers?

* Can it be identified to the degree that it can be developed in preservice and inservice teachers? If so, how might it change our teacher education programs?

An analysis of the data revealed that the questions involving the definitions of intuition and intuitive knowledge, the use of this knowledge in the classroom, the observable nature of this knowledge, and the inclusion of intuitive knowledge in teacher education programs clearly arrive at the forefront of the discussion. The questions relating to how a teacher attains and maintains the use of intuitive knowledge and whether it is an attribute of a teacher with expertise seem to become lost and insignificant throughout the interviews and observations.

A Definition for Intuition and Intuitive Knowledge

Arnheim (1986) defines intuition as a "cognitive capacity reserved to the activity of the senses..." (p. 80), and a "... gestalt aspect of perception" (p. 81). He goes on to explain that intuition is one aspect of perception and has the unique ability, in a gestalt experience, to grasp the interactive effects. He is also adamant about the fact that intuition and thinking are not separate (Arnheim,

1986). Taking these points: (1) intuition enacted through the senses; (2) intuition occurring through a gestalt experience; and, (3) intuition's ability to perceive the interactive effects involved in an experience, I will connect the participant's definitions of intuition with these characteristics listed by Arnheim (1986).

Intuition enacted through the senses is explained by Mr. Newsome in his reference to watching and observing the children to find out how to direct their learning and Mrs. King talks about it being a feeling. Mr. Newsome refers to intuition occurring through a gestalt experience when he states that he knows how he should work with a child but can not explain how he knows this is the best way, while Mrs. King says almost the same thing again when she knows what and when to work with a child even if she is not aware that she knows. When Mr. Newsome declares that intuition is definitely "... a matter of being perceptive," he certainly supports intuition's ability to perceive the interactive effects involved in an experience. And Mrs. King comments that you must go below the surface of the child and the teacher and contemplate how it all fits together.

Although Arnheim (1986) does not use the term intuitive knowledge, he does discuss how one understands inferences "acquired by intuitively gained knowledge" that have been "... perceived in the past" and applied in the

future automatically (p.79,82). Mr. Newsome refers to these perceptions from the past as experience and together with intuition guide your teaching. Mrs. King moves even closer to Arnheim's (1986) explanation by describing intuitive knowledge as the ability "... to pull anything from [her] past... without thinking about it and being able to apply what [she's] garnered from other places ... to give to [the] child what they need."

What does an intuitive teacher, his/her classroom, and his/her students look like?

A quote from Arnheim (1986) establishes a set for this review. "Intuition is much less easily understood because we know it mostly by its achievements whereas its mode of operation tends to elude awareness (Arnheim, 1986, p.79). Achievements are observable in nature. It is therefore appropriate to review the participants' observable characteristics as supporting facts for the use of intuitive knowledge in their classrooms. Both Mr. Newsome and Mrs. King practice respect for the child, are involved in activities outside of their individual classrooms, are viewed as teacher leaders by their principals and "good" teachers by parents, create a classroom climate conducive to developing student responsibility, ownership, leadership, and appropriate social interaction, establish a physical

environment respectful of the child's need for belonging to a community of learners, encourage parental, community, and older student involvement in the classroom, and, finally, they allow for flexibility in planning and routine as well as free movement and a "hum" of learning taking place. Content knowledge and skill development are only one small part of the learning experiences in both of these classrooms. It is the whole child who is being addressed by each of these teachers. These conclusions are supported by the childrens' illustrations (pp. 176-180).

What would a teacher education program look like if it were conveying the importance of intuition and intuitive knowledge to its preservice teachers?

According to Arnheim (1986):

In educational practice, ... intuition has been considered an untrainable specialty of the arts, a luxury, and a recreational respite from the useful skills, which are considered purely intellectual [He explains how it is past time to change that belief and recognize intuition as] ... a cognitive capacity reserved to the activity of the senses... [and that] genetically... all knowledge of the environment and all orientation within the

environment begin with the intuitive exploration of the perceptually given. (pp.80, 82)

If Arnheim (1986) believes that intuition is a cognitive activity conducted through the senses and observation is a form of sensory input, then could the use of intuition and intuitive knowledge by practicing classroom teachers be modeled by intuitive teachers for preservice teachers as both Mr. Newsome and Mrs. King suggest? They propose that this observation occur while the preservice teacher is actively involved in the classroom at a time other than the student teaching phase.

Implications for Teacher Education Programs

The question as to why educators should bother with a topic as illusive and ethereal as intuitive knowledge when a survey of the practical problems facing teachers on a daily basis at first appears more immediate and concrete. Of course, attention deficit disorder, crime, child abuse, a frightful unstable economy, poverty, divorce, single parent families, etc. are all issues facing teachers every morning when they walk into a classroom. They are problems that must be dealt with in all their immediacy. This is where intuitive knowledge plays a vital role. It is a question of "best practice" that has been forced upon us by the end of

an era, the twentieth century, and the beginning of another, the twenty-first century. With teachers aware and predisposed to the value of intuitive knowledge gained through intuition, they will be able to assist their students with these dramatic problems by looking first to the students for the answers and then to the developing research in each of these areas. While this research may or may not be easily available to the classroom teacher, intuition and intuitive knowledge is within each educator and the educator can learn to access this ability to benefit the students in these classrooms.

Another question has come to mind involving the impact of this study on increasing the teacher knowledge base. It will not in the traditional sense of building volumes and volumes of research literature to be read and explored in graduate courses. I hope that is not the case because I hope it will impact in a more pragmatic and immediately serviceable manner.

I foresee this study of teachers making use of intuitive knowledge in the classroom becoming a catalyst for the development of a separate course for preservice, and possibly inservice, teachers in personal and professional development. As I understand the University of Arizona preservice program now, the topic of professional development is discussed in a seminar meeting of student

teachers as they are participating in their semester of student teaching. This is not sufficient nor does it tackle personal development.

I would envision a personal and professional development course for preservice teachers to be required in their last semester of their junior year or their first semester of their senior year. It would meet using a seminar/workshop format with groups of 10-12 students assigned to a seminar group. The very nature of the seminar sessions could possibly build a strong cohort group to lend support to the students as they progress through the program.

Suggested curriculum topics for a personal and professional development course might include teacher leadership, collaborative teaching, the demands of the teaching profession, the rewards of the teaching profession, staying abreast of current research, interpersonal and intrapersonal communications, stress and time management, and the developing of one's intuition! How can intuition be developed? Using many techniques outside of the mainstream of education - affirmations, verbal, visual, and musical focusing, imagery, meditation, breathing and relaxation - it is possible to develop one's intuitive process (Emery, 1994). The course would be of a very introspective nature and therefore facilitators for the course would have to be

well chosen. This type of a course prior to student teaching might, as an offshoot help preservice teachers to reflect on their decision to become teachers and either confirm or dissuade that decision.

The major goal of this course would be to give the preservice teacher "tools" necessary for a teacher promoting the "best practices" of the teaching profession in the twenty-first century. When you survey the medical, military, and business worlds of today, they are all having their professionals involved in courses and seminars of this nature. The teaching world has long left these topics alone relying on the dedication and character of their educators to automatically have leadership skills, personal confidence, communication skills, and management skills. Teacher educators can no longer leave these necessary skills to chance no more than they can leave the educational technology skills to chance.

The use of intuition by practicing teachers is not new. Both participants in the pilot studies (Maxwell, 1994) attest to the fact that they use intuition and they think teachers have always used it. So like many other educational theories, the use of intuitive knowledge finds its beginnings in practice and seeks to be validated in the teacher education research. While it is definitely in its infancy, its time to be researched is now. The reason for

this being the advances made in cognitive research that allow researchers to more clearly study intuition and intuitive knowledge. This knowledge becomes self-evident in the classroom of intuitive teachers through their choices made in curriculum, classroom management, environmental and social settings. Since it is an unconscious process, I want to create an awareness of it in preservice teachers where some who are receptive, and, according to Mrs. King, they must be receptive, will use it and not hide it away but be willing to talk about this knowledge.

Again, why do this? It is a challenge to the human potential. If we never challenge ourselves beyond our experienced boundaries, how can we hope to envision a future that our children will experience beyond what we have known. Intuition is one avenue that can move us to see ahead of ourselves in the future. If it is the basis for thinking and feeling as Jung (1923) suggests, then we can follow this foundation into the future.

Implications for Further Research

The following are questions and implications for further research that are derived from the study.

1. From where does intuition derive its source? Even though the participants attempted to address this question, it demands further in-depth study. A possible avenue of

exploration has been brought to my attention and I anticipate following up on it. I was recently introduced to a Dr. Gordon Olson specializing in internal medicine who has already begun research involving comatose patients and their state of consciousness or unconsciousness at the U of A and UMC. In our discussion the source of intuition was discussed as originating in the unconscious and we began to draw connections to his ability to communicate with comatose patients via intuition. While this sounds "sci-fi" in nature to many, it fascinates me and stimulates my curiosity. If we can pinpoint the source of intuition, then we can better help each person to develop that attribute within themselves to enhance their ability to relate to others.

2. Another recommendation for further research would suggest a broadening and enlarging of the research design to include participants from pre-k through graduate school to be followed over a greater length of time in order to compile case studies involving the use of intuitive knowledge in the classroom by practicing teachers. These case studies would then be used with preservice and inservice education teachers at some point during their teacher preparation.

3. And lastly, but most importantly, a comparative study of two classrooms and the children in each, to determine the effects on the children of a teacher who openly states usage

of intuition and intuitive knowledge and a teacher who does not.

APPENDIX A

DATA SAMPLES

[Interview Transcript from Ms. King: Interview One]

Rschr: Do you feel that you make use of intuition and how would you define intuition?

Ms. King: Well, I think I do. And, I think my definition of it would be that not everything has to be on paper or in a book somewhere. If you look at some child sitting over there or the teacher that's sitting over there, intuitively you know that what you've just taught them didn't have one single bearing on anything they've known, and so, therefore they didn't transfer or absorb anything. Or that what you've taught them ... just wasn't effective. Or, that they didn't have breakfast or that there's something else or you're just going to pick them up and hold them on you lap, because it didn't matter if they had breakfast that morning or how good your lesson was, they weren't ready to learn. The same thing with adults that you work with. I really feel that sometimes you just know to lay off or to do more or to quit for the day (laughter).

R: What would you consider intuitive knowledge to be? What does it mean to you? How would you equate intuition and intuitive knowledge?

Ms. King: Intuitive knowledge to me would be able to pull anything from my past and any part of my past, educationally, home, classroom, wherever, without thinking about it and being able to apply what I've garnered from other places to this. So that this little child, ... without thinking about anything else, I can pull from my background and give to this child what they need. And, not ever having to have seen that in a textbook.

APPENDIX B
FIELDNOTE SAMPLES

Day 3 - Observations - Mr. Newsome - Aug. 29, 1995 - 11:39-2:20 - Day 9 of the school year

I arrived to see the children intently listening to another myth, Hercules, in the reading corner with lights out in the room and the lamp on that was beside the comfortable chair that Mr. Newsome was sitting in. The blinds were drawn and the children were on the "edge of their seats" so to speak as he was reading. They were sitting on the carpet on their bottoms facing Mr. Newsome. After the conclusion of the story, Mr. Newsome reviews the mythological characters that they have learned about so far and calls the childrens' attention to the empty bulletin board. He asks them to draw centaurs, hydras, minotaurs, buildings, Icarus, Arachne, Hercules, etc. to place on the board. Mr. Ross, the principal, walks in and strolls around the room; speaks to Mr. Newsome then to the children; leaves. Mr. Newsome returns to the discussion of the drawings, reminding the children to work together with their partners and plan the buildings and characters that they will draw together. He urges them to think and talk about what they will do before they just start drawing.

[R:Researcher Comments: The children are enthused and excited about the content of their lesson.]

The students return to their tables to begin their work on the mythological creatures or "monsters" as they call them. Some students sharpen pencils; go to the bathroom; and get drinks of water.

[R: There is a quiet hum going on in the room.]

"If you can hear me, clap twice. If you can hear me, clap 3 times. I like the way you are working. You're all excited." Mr. Newsome reminds the children to keep their voices low because their partners are right across the table from them and that they are not finished until their partners are finished.

[R: Mr. Newsome encourages a community of learners with a great deal of peer interaction.]

Mr. Newsome moves around the room sitting beside various students in the student chairs as he checks with them on their work.

APPENDIX C

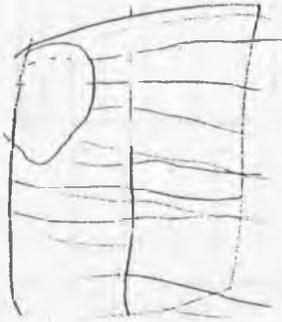
CHILDRENS' ILLUSTRATIONS FROM MR. NEWSOME



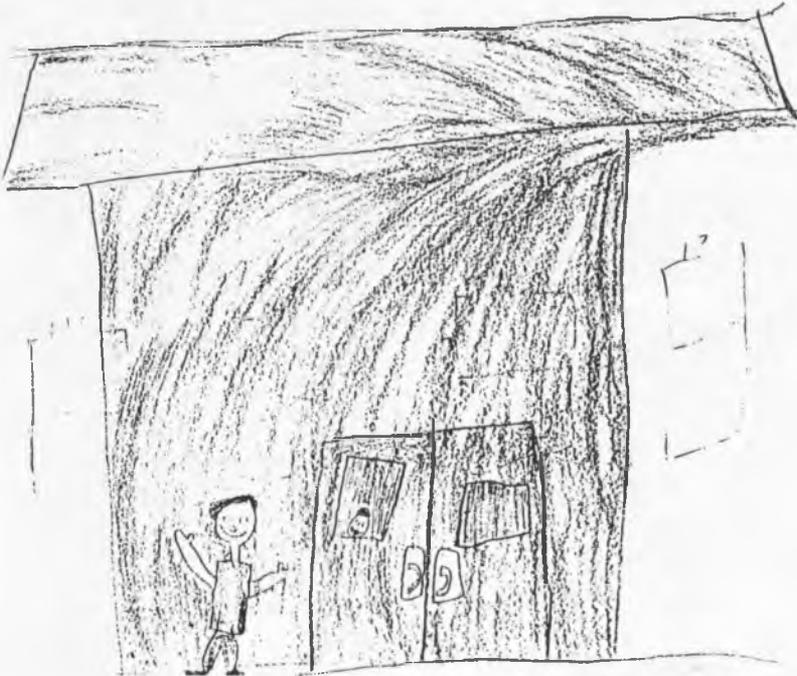
Drawing 6: Curriculum meaningful to students



Drawing 1: Peer interaction



Drawing 2: Curriculum comes alive for students



Drawing 3: Friendship important

APPENDIX D
CHILDRENS' ILLUSTRATIONS FROM MRS. KING



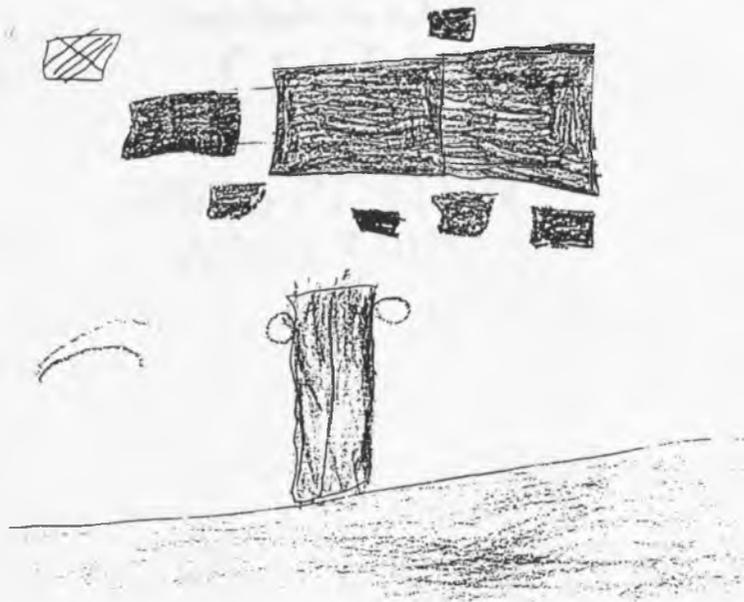
Drawing 2: Each student valued as special and unique



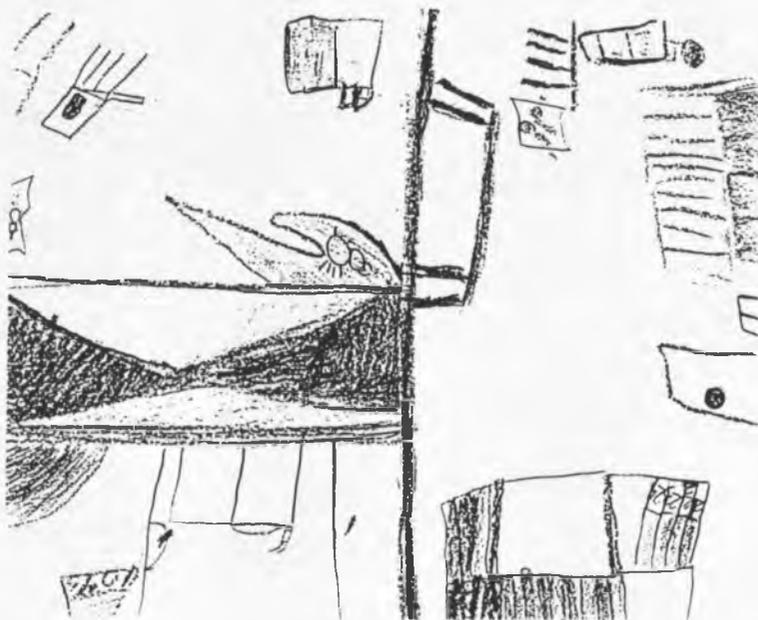
Drawing 3: Classroom ownership demonstrated



Drawing 5: Prominent display of childrens' work



Drawing 6: Computers and art work take focus



Drawing 7: Knowledge of physical environment available to students for their usage

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