The Articulation of the Multiple Intelligence and Empathic Intelligence Theories in Educational Drama

by

Abigail Kitt
B.Ed., University of Victoria, 2004
B.F.A., University of Victoria, 1988

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Supervisor: Associate Professor Carole Miller

ABSTRACT

This study explored the articulation of multiple and empathic intelligences in educational drama. The investigation used a qualitative multiple-case study to examine the teaching methodologies of two teachers, as well as the structure of the drama units they taught. Following the observations the two teachers were then interviewed to explore their interpretation of their drama teaching. The findings indicate that multiple and empathic intelligences are articulated in educational drama in varied and complex ways. This finding was similar for both units, whether or not the teachers specifically planned with multiple and empathic intelligences in mind. The teachers confirmed that drama integrates the intelligences. Furthermore, they modelled the intelligences in their teaching. Also demonstrated was the ability of drama strategies to address individual needs of the students while exploring complex topics within a metaphorical context.

Supervisor: Associate Professor C. Miller (Department of Curriculum and Instruction)

TABLE OF CONTENTS

LIST OF TABLES

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Thank you to Carole Miller for her kindness, guidance and wisdom.

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DEDICATION

This paper is dedicated to my husband, Murray Bigam, for his support, patience, and confidence; and to my children, Chloë and Salvador, because you heard "Mama has to do her school work" far too many times.

CHAPTER ONE

Introduction

The Need for the Study

Multiple Intelligences in Education

Since the publication of *Frames of Mind: The Multiple Intelligence Theory* by Gardner in 1983, many educators have integrated the multiple intelligence framework into their pedagogy (Checkley, 1997; Gardner, 1993). Instruction manuals and evaluation tools have been created (Armstrong, 2003; Campbell, Campbell, & Dickinson, 2004; Lazear, 1999), and Gardner, along with Project Spectrum, has responded with research that examines the implementation of the multiple intelligence framework in schools (Chen, Krechevsky, & Viens, 1998). Concurrently, other intelligences have been hypothesized, including Goleman's (1995) emotional intelligence and Arnold's (2005a) empathic intelligence. The central philosophy underpinning all these theories is, that by attending to learners' unique abilities and by understanding the complex nature in which humans function successfully in society, teachers will be better equipped to empower students to contribute positively to society. This philosophy holds true for educational drama theorists and educators (Baldwin, 2004; Miller & Saxton, 2004; Wagner, 1999).

Educational Drama and the Multiple Intelligences

Drama pedagogy encourages children to perceive multiple perspectives in their classroom, their community, and in the world. Drama teachers support students' individuality by implementing a variety of learning strategies to assist students in meaning making. Consequently, when considering the multiple and empathic intelligence

theories, drama educators like Teacher B, who participated in the study respond, "the multiple intelligences are inherent in drama" (personal communication, March 4th, 2005). Given that is the case, my interest became how are the multiple and empathic intelligences inherent in drama and how do these intelligence theories enrich educational drama pedagogy.

The Value of the Study

My experiences planning and teaching drama lessons indicate that drama offers a solution for the holistic integration of multiple and empathic intelligences into the curriculum. Thus, this study has a dual purpose: firstly, to enable drama teachers to understand how drama utilizes multiple and empathic intelligences in order that they will consciously employ the intelligences when planning lessons, when engaged in teaching, and when reflecting on the lessons they have taught. In the process of integrating the intelligences into drama, teachers may be able to fine tune their lessons to suit the needs of their students. Moreover, educators can teach their students about multiple intelligences with the intent of inspiring students to consider how they are using their own intelligences in drama and the effect this has on their learning and the drama experience. Secondly, I believe educators who have experienced the value of drama as a cognitive and affective teaching methodology will be more likely to advocate educational drama to teachers with little drama experience, using multiple and empathic intelligence theories to corroborate their knowledge.

My literature review has revealed a paucity of research exploring multiple and empathic intelligences in educational drama. I believe this study will be valuable as an

examination of the diverse ways multiple and empathic intelligences can be engaged in educational drama.

Purpose of the Study

The purpose of this study is to explore the articulation of multiple and empathic intelligences during educational drama lessons by observing drama educators' pedagogy as they teach, and to examine lesson structures. The investigation concentrates on the following research question:

How are the multiple intelligences and empathic intelligence articulated in educational drama? Within that broad question, three additional themes were also considered:

1) the ability of teachers to utilize multiple intelligences and empathic intelligence through the published lesson plans in educational drama.

2) the effect of drama on transference of one intelligence to another intelligence, and the ability of drama to provide opportunities to combine intelligences.

3) the effect that a teaching pedagogy using empathic and multiple intelligences in drama has on student engagement in the learning process.

General Procedures

This study utilized a qualitative, multiple case study design (Gall, Gall, & Borg, 2005) to investigate how the intelligences are articulated by drama teachers and in drama units. Two teachers who had been recommended as exemplary drama teachers were observed independently in their classrooms.

Observation Setting

Teacher A, a specialist drama teacher in a middle school of 522 students, has been teaching for over 10 years. The school is situated on the edge of a small town of just over 10,000 people that serves a rural community of another 10,000 people. Teacher A implements the mandatory drama curriculum with grade six students. There were 31 students in the class, some of whom the teacher considered "high need." I observed seven 40 minute lessons that explored a theme based on the published drama unit: *The Little Immigrants: Parents of Our History* (Burke & Malczewski, 1993).

Teacher B has had over 25 years teaching experience and used educational drama as a teaching methodology in her grade 3 classroom of 20 students, who were generally considered "high need." The school of 121 grade 3 to 5 students was located in a suburban wooded setting and was slated for closure in the upcoming June. I observed Teacher B teach one 4-hour unit over the course of one day. She used the published drama structure *All Dried Up and Blown Away*, from the book, *Into the Story: Language in Action Through Drama* (Miller & Saxton, 2004). I also observed Teacher B teach a short unit where the students prepared for an all-school production. I have chosen not to use this unit because its playbuilding structure utilizes a different pedagogical approach than the other two units.

Interviews and Analysis

Upon completion of the observations, I interviewed each teacher in order to gain a clear understanding of their interpretations of the lesson structures and how their teaching incorporated the multiple and empathic intelligences in the drama activities. It should be

noted that I did not include naturalistic intelligence in the interview because I did not consider it part of my study. Initial research revealed that Gardner had not completed the extensive testing for naturalist intelligence that he had for the others. However, further examination showed that Gardner (1999) confirmed naturalist intelligence; therefore I added it to the study after the interviews.

Due to the differences in the teachers' experience, the schools' settings and structures, the grade levels, the length of the lessons, the unit structures, and the children themselves, this study will not address a comparison of any of the variables. I analyze each circumstance individually as it pertains to the articulation of the intelligences in educational drama. The overall purpose is to generate a holistic picture of the articulation of multiple intelligences in drama within the pedagogical experiences under investigation.

Within the context of this study, my intent is to reflect as accurately as possible the teachers' interpretations of lesson planning; their own teaching; student involvement; and student reflection on outcomes as these factors correlate with the multiple and empathic intelligence frameworks. I am aware that I analyze the data through my personal lens; however, by using the teacher interviews, classroom examples, and analysis of the drama lessons, I present a detailed, authentic presentation of the teachers' experiences.

Students' Developmental Levels

Understanding the physical, cognitive, personal, and social development of children is imperative to successfully analyze the information gathered in the study as it relates to students' ability to engage and make meaning in educational drama.

Grade Three Students

Teacher B taught a class of 20 grade 3 students aged eight and nine in a grade 3 to 5 school that was slated for closure at the end of the year. This was the students' first and last year in the school. According to Teacher B, the students had come from a traditional school where they spent the majority of time in their desks with little opportunity for autonomy. When Teacher B introduced personal choice the students lost self control and disregarded the class rules; consequently, Teacher B introduced drama later in the year than was her usual practice.

Research on the development of children indicate general stages of growth. Bee (2000) observes that typically by eight and nine years of age children have confident use of most gross motor skills but are still developing the fine motor skills needed for some school tasks. It is expected that the majority of students will be reading; however, while some may be fluent readers, others will need support (as was the case in Teacher B's class). Students are able to communicate successfully in writing, some more so than others (Soderman, Gregory, & O'Neill, 1999). Foundational mathematic concepts are being solidified and students are able to use inductive logic (Piaget, 1956). Eight-and-nine-year-old children are developing memory and problem solving strategies (Siegler, 1996).

Most children are learning to reflect cultural and school behavioural norms and seek approval from peers and authority figures. Children's sense of self-concept is becoming "a more abstract, more comparative, more generalized self-definition" (Bee, 2000, p. 292). They express positive and negative self-judgements. Children of this age

can express empathy and other pro-social behaviours and can distinguish between their own inner states and others'. They may have rigid stereotyping of sex roles and have begun to prefer to play with their own gender (Powlishta, 1995). Obviously, these descriptions serve as a general survey of typical development: no single child in the observed grade 3 class embodied the above descriptions; each child was on his or her unique, developmental journey.

Grade Six Students

Teacher A's class contained 31 grade 6, middle school students. This was their first year in middle school and they attended the mandatory drama class with the same homeroom group with whom they spent the rest of the day. The students had come to the school from various rural and small town elementary schools in the area. Teacher A admitted this was one of the most challenging drama groups she had taught in the year observed because of the students' "high needs" and antisocial behaviour.

Bee (2000) maintains that, typically, children of 11 and 12 years differ in physical development, not only between genders, but from child to child. Most boys are still childlike in their appearance and abilities, while many girls experience a substantial growth spurt during these ages and have begun puberty. Both sexes are building their gross and fine motor adeptness.

This age group demonstrates a variety of reasoning and memory strategies and some may begin to apply these reasoning strategies to objects and situations they have not seen first hand (Siegler, 1996). For instance, they may use a memory strategy such as chunking items to remember unfamiliar information. Reading and writing skills may differ dramatically; however, typically children of this age are fluent readers and write

short reports either in printing, handwriting, or on the computer (Soderman, Gregory, & O'Neill, 1999).

Most children of 11 and 12 execute all the basic skills and behaviours that are required in their community and school. Without these skills a child at this age will develop feelings of inferiority. Children in this age group will have a more complex, comparative, self-definition that is focussed on their feelings and ideas (Bee, 2000). Some are adapting to their new self as adolescents; however, self-esteem is unstable and likely to decline somewhat in these early years of adolescence, particularly with the move from elementary to middle school. These children choose to play solely with their own gender and even actively avoid the other gender (Powlishta, 1995). They have fewer long-term friends. They can initiate pro-social behaviour and empathy to benefit others (Bee, 2000). As noted previously these are generalizations that do not apply to each child.

Teacher Pedagogy

Inspiration through Observation

When I formulated my plan for this investigation, I knew that the major component of the research would take place in schools, observing teachers and students as they interact within the drama context. Although I could have obtained illuminating information from the published drama lessons alone, it was the observations that sustained my passionate interest in this topic. The teacher/student interactions bring to light the heart and humanity that underpin lessons given by a teacher who is in tune with her students; who is passionate about her work in the classroom; who values educational

drama as part of her pedagogy; who chooses quality material relevant to the curriculum and the students' interests; who teaches with intuition, flexibility, empathy, creativity, humour, energy, and curiosity. I was fortunate to situate the observations, discussions, and interviews with two such teachers who have served not only as an inspiration for this study, but for my own teaching. Observing their engagement with children has given this research the heart that an analysis of lesson structures alone could not provide.

Highly Effective Teachers

Miller, Saxton, and Morgan (2000) describe a teacher with the above attributes as an "artist teacher" and in their practice as teacher educators strive to encourage artistry in preservice teachers using drama pedagogy as a model for general teacher training. They claim that a teacher's use of "planning, coherence, pacing, presentation, focus, and selection, [is] . . . not unlike the skills of the actor and director" (p. 3). The authors distinguish the ability of a teacher as that of either the novice, the crafter, the effective, or the artist teacher.

With guidance from their mentors, novice teachers are better able to face fears and improvise within the framework of effective planning. Miller et al. emphasize the importance of learning reflective skills as a preservice teacher in order to think critically about her or his own practice. Some of the characteristics of a crafter teacher are "stable, . . . knowledgeable, dedicated, open-minded . . . responsible, and humane" (2000, p. 6). They also hold standards, integrate subjects, provide feedback, and encourage and challenge their students. With the honing and internalization of skills, such as reflection within the action, the crafter develops into an effective teacher. The effective teacher will possess the creative skills of "selecting, refining and capturing the essences" (Miller et al.,

2000, p. 9) of the meanings inherent in the lesson; creating an openness and energy that embraces students' multiple perspectives; suspending his/her own judgment in order to think critically and then formulating personal opinions; and knowing and being confident with his or her/self.

The teachers observed demonstrated some of the characteristics of artist teachers. They had the talent to decentre, to drop ego and self consciousness, and enter the students' world on their terms. Artist teachers engage and negotiate with the student through "reciprocity and responsiveness rather than [through] simple feedback" (Miller et al., 2000, p. 17), creating a classroom where students share ownership in the learning. The needs of the students are paramount, consequently, "the quality of artistry is embodied *in [the teacher's] presence in what is happening*" (p. 18). The two highly effective teachers observed had qualities of both effective and artist teachers.

The concept of the highly effective teacher described by Miller et al. (2000) appears to be aligned with Arnold's (2005a) definition of an empathetically intelligent teacher who models attunement, enthusiasm, engagement, expertise, and empathy in his or her pedagogy. For example, Miller et al. refer to the self-knowledge and reciprocity that Arnold defines as attributes of empathic intelligence.

The conceptions of these theorists serve to define the excellence I witnessed in my observations as I watched drama teachers interact with their students in the process of creative meaning-making. My intent in this study is to reflect the teachers' experiences and understandings of their own work as it pertains to the multiple and empathic intelligences.

Personal Bias

Granted, I bring many personal biases to this study. My prior interest in educational drama and the multiple intelligence theory has inspired me to research in this area. In fact, I believe this research is a culmination of my professional endeavours up until now.

My interest in educational drama began as an undergraduate in theatre; however, it was put aside while I pursued my career as an actor. I began teaching drama to supplement my actor's wages and soon teaching became my priority. I decided to pursue my Bachelor of Education, and then continued in graduate school with the intent to learn more about educational drama. In my undergraduate studies I learned about the multiple intelligence theory and observed a connection between it and educational drama. As a drama teacher, constantly looking for effective drama strategies that will enable students to process and reflect on the information they are learning, I have witnessed students who blossom in many skills during drama activities.

I believe that the redefinition of traditional logical and linguistic intelligence to a pluralistic view of intelligence encourages the recognition of each individual's unique blend of intelligences. My own daughter, who struggles in 'traditional' linguistic and mathematical/logical learning, excels kinesthetically and interpersonally and uses her knowledge to expand her learning in other domains. The multiple intelligence theory may inspire us to look closely at our lesson structures in order to build richer, more diverse lessons that may educate a diverse population of students.

Limitations of the Study

There are many limitations within this study that will affect its interpretation and generalization. First and foremost is the bias that I bring to the investigation. I am a drama teacher and I believe in the profound benefits multiple and empathic intelligence theories bring to student learning.

Second, empathic intelligence is a relatively new hypothesis compared to the multiple intelligence theory. Therefore, it has not received the same acknowledgment as Gardner's work by scholars and practitioners. Furthermore, empathic intelligence does not have the critical analysis from the fields upon which Arnold's research is based. Arnold's analysis is supported by researchers in the same areas of Gardner's; however, Arnold does not use his criteria to defend her suggestion of empathic intelligences. Although I am a neophyte researcher, through an analysis of Arnold's literature I have found that many of the definitions for empathic intelligence are consistent with Gardner's intelligence criteria, making it a credible intelligence candidate.

Third, the observation time was limited to about 4 hours and 40 minutes for Teacher A and four hours in Teacher B's class. Observations over an extended period of time would provide greater depth of information. Fourth, the qualitative case study design of this investigation explores the individual experiences of two teachers, each interacting with her own group of children; consequently, the results cannot be generalized beyond the classrooms observed. Lastly, while Gardner (1983) emphasizes the impact of culture on individual intelligences, it was not a construct that I examined. I approached the examination from a Canadian-European perspective, and while the

teachers also appeared to come from a similar viewpoint, that may not have been the frame of reference of each student involved in the study.

Summary

Investigation of my thesis question, How are the multiple intelligences and empathic intelligence articulated in educational drama?, requires that I consider the value and purpose of the study, the participants involved, and any preconceptions I might bring to the study. Through the observations of exemplary "effective" teachers in two diverse classrooms, I examine the questions using a qualitative, multiple case study research design.

My experiences as a drama teacher who has used the multiple intelligence framework in the classroom impelled me to undertake this study. I believe educational drama exemplifies the natural integration of the multiple and empathic intelligences into a powerful teaching methodology. Unfortunately, despite endorsement for the multiple intelligences in drama literature (Baldwin, 2004; Saxton & Miller, 2001), there is little evidence of research. Through my own research, my intent is to reflect the experiences of the two teachers studied, so that I may accurately portray the utilization of the intelligences in the lesson structures, and in the inculcation of educational drama in order to illuminate the complexity of drama, and its value as a powerful teaching methodology.

CHAPTER TWO

Literature Review

Introduction

This review of the literature examines the history of intelligence research leading up to and including multiple intelligence theory. A detailed description of multiple intelligence includes critical analyses by those in the field. The discussion of empathic intelligence involves complementary research and a description of the theory. A review of research in educational drama pertaining to individual intelligences will be summarized, as well as the response of drama theorists to multiple intelligence theory.

Early Intelligence Theories

With the implementation of universal education in the late nineteenth century, measures of intelligence were introduced to ensure educational resources reflected the academic level of students. Concurrently, psychologists were developing theories to define human intelligence. Galton (1907) believed each child's mind was a blank slate at birth "and that sensory experience writes on the slate to produce knowledge" (Thorndike, 1997, p. 4). Galton used statistical methods to rank intellectual and physical abilities. His ideas were further developed by Cattell (1971) who proposed widespread cognitive testing to assess intellectual ability.

In 1905, Binet and Simon created the Binet-Simon scale for measuring human intelligence in order to distinguish typical children with learning difficulties from those with mental retardation (Binet & Simon, 1916). Terman (1916), who developed a revised

Stanford-Binet scale, advocated graded classes where children would be placed in a grade that correlated with a specific developmental age based on cognitive testing results. The popularity of the standardized intelligence quotient test (IQ) rose in many areas of education over the subsequent four decades.

In 1927, Spearman proposed general intelligence ('*g*'), a general capacity for learning that varies from person to person but which remains consistent over a lifetime. A commonality among these theories and measurement scales is the view that intelligence is a single entity represented by one's ability to think logically and coherently. In contrast, psychologists (Guilford, 1967; Thurstone, 1938) began to consider pluralistic theories of intelligence. In his efforts to account for the individual differences in human intellect, Thurstone (1938) developed the theory of Primary Mental Abilities that identified seven groups of abilities (for example, verbal comprehension and reasoning). Guilford (1967) advanced the pluralistic theory, claiming that intelligence involved more than one hundred elements.

Piaget (1956) influenced education approaches with his child cognitive development theory which posits that children experience four different developmental stages, each comprised of a system of concepts, strategies, and assumptions. Piaget argues that when creating knowledge, children construct hypotheses in order to adapt to the world around them and generate knowledge.

History of the Multiple Intelligence Theory

Gardner's (1983) Theory of Multiple Intelligence claims that there are at least seven autonomous intelligences. His theory is a culmination of research in areas such as

problem solving (1971a), music (1971b), literary skills (Gardner & Gardner,1971), brain damage (1975), and visual arts (1972). Gardner questions some of Piaget's conclusions and argues that children cannot always generalize knowledge across domains and that individual states are more continuous and gradual than Piaget determines. Furthermore, Gardner claims that Piaget's theory uses the linguistic and logical-mathematical approach of intelligence tests, employing short answer questions that, according to Gardner, assess school achievement based on a limited theory of intellectual ability. The tasks do not consider the process of problem solving and are disconnected from everyday life. "Much of the information probed for in intelligence tests reflects knowledge gained from living in a specific social and educational milieu (1983, p. 18). During this time (1983), Gardner proposed using Piaget's methods and schemes to expand the analysis of human symbol systems beyond linguistic and mathematical-logical to include musical, kinesthetic, spatial, and the personal. The following section describes Gardner's theory in greater detail.

The Multiple Intelligence Theory

Gardner (1983), developed the theory of multiple intelligences "as a result of his own studies of the development and breakdown of cognitive and symbol-using capacities" (Gardner & Hatch, 1989, p. 4). Gardner addresses his concerns in his seminal book *Frames of Mind: The Theory of Multiple Intelligences* (1983). He categorizes human intellectual capacities into seven intelligences, each one with its own symbol system. Although his theory is inspired by research of developmental data, psychometric findings, people who have been brain damaged, and special populations, he believes that

study of the nervous system provides the most valuable knowledge. Gardner (1995) describes intelligence as a "biopsychological potential." Experiential, cultural, and motivational factors effect to what extent a person is able to realize that potential. According to him, intelligence is the "ability to solve problems or to fashion a product, to make something that is valued by at least one culture" (Chen, Krechevsky, &Viens, 1998, p. 16).

Gardner defines each intelligence under consideration as an intelligence candidate. Every intelligence candidate is examined in isolation using eight criteria (Appendix F). If some, or all of the criteria are absent, the intelligence candidate is eliminated. Gardner maintains that the intelligences are scientific constructs rather than physical entities: "An intelligence is a capacity, with its component processes, that is geared to a specific content in the world (such as musical sounds or spatial patterns [Gardner's parenthesis])" (1995, pp. 202-203).

A Brief Characterization of the Intelligences

Linguistic intelligence involves a sensitivity to, and fascination with, the sounds and rhythms of words. The linguistically intelligent are skilled at rhetoric and mnemonics, as well as explanation of the language itself. Linguistic intelligence includes both written and oral modes of expression, although Gardner argues that our society puts greater emphasis on the former. He describes the poet as achieving an "end state" in terms of linguistic intelligence (1983).

Musical intelligence, which includes the musicality of speech and environmental sounds, is the earliest of the intelligences revealed in children and this can manifest itself

in a variety of ways. The musically intelligent excel in the components of pitch, rhythm, and timbre. Those who are hearing impaired can nevertheless express musical intelligence through rhythm. As with all the intelligences, children may have a natural propensity, and skills can be developed through training and cultural incentives. Gardner describes the composer and the virtuoso musician as exemplifying the musically intelligent (1983).

Logical-mathematical intelligence initially involves the manipulation of objects. Manipulation can teach the student foundational concepts before abstract learning. It is not skilled memory or speed that defines mathematical intellect; rather, it is an ability to reason and use logic in order to understand the steps one takes to solve a problem. Gardner describes the mathematician and the hunting bushmen of the Kalahari as examples of end states of logical-mathematical intelligence (1983).

Those with spatial intelligence are able to "perceive the visual world accurately" (p. 173). They can also visualize an object from various angles and describe or draw the object without it being present. The visually impaired can be spatially intelligent. Gardner (1983) describes a study in which a four-year-old, who was blind, navigated a room with the use of a tactile map, although she had never previously used one. Gardner defines skilled chess players and visual artists as exemplars of spatial intelligence.

The bodily-kinesthetically intelligent work skillfully with tools or objects. They use their bodies in a variety of ways in order to express themselves or to reach a physical objective. Gross and fine motor skills are refined. They learn through imitation and have excellent use of muscle memory when repeating movements. Like musicians, instinct is

not enough to excel in this domain; consistent training is required. Gardner describes the mime or dancer as illustrating bodily-kinesthetic intelligence (1983).

Gardner (1983) combines the interpersonal and intrapersonal intelligences, believing that a sense of self is developed through an interaction with the self and with others. He identifies the ability to use these intelligences well as the significant emphasis in any society. He describes this as "the balance struck by every individual—and every culture—between the prompting of 'inner feelings' and the pressures of 'other persons'" (1983, p. 242). According to Gardner (1983), there are more serious social repercussions for those who are deficient in personal intelligences than for those who are wanting in the other intelligences, such as logical-mathematical or musical.

Interpersonal intelligence involves the ability to understand how another person is feeling and to compare that person's emotions to the feelings of others through consideration of moods, temperaments and personalities. The ability to influence others as did Mahatma Gandhi, also demonstrates interpersonal intelligence (1983). The intrapersonally intelligent have a deep knowledge of their own emotions. They can distinguish one emotion from another, understand and describe emotions, and use their knowledge to modify their own behaviour. For Gardner, a therapist emulates this intelligence (1983). Gardner (1983, 1993) states that, while there may be many other intelligences, "MI theory attempts to articulate only a manageable number of intelligences . . . [O]ne might want to have a larger set of intelligences if one were pursuing other theoretical or practical ends" (1993, pp. 45-46). Therefore, although theoretically the possibility of more intelligences exists, Gardner illuminates a number that are "manageable" yet address diverse learning needs in educational contexts.

In 1999, Gardner recognized naturalistic intelligence as another, defending its ability to fulfill the eight intelligence criteria. The naturalistically intelligent, for example, Darwin, have a deep interest in the natural world and have the ability to recognize and categorize natural or artificial specimens according to formal taxonomies. Gardner (1999) also considers spiritual or existential intelligences as candidates for the multiple intelligence group; however, he believes that spiritual intelligence goes beyond the intellect in definition. He maintains that, while the existential as a "stripped-down version of spirituality . . . qualifies reasonably well as an intelligence . . . [he] finds the phenomenon [of existential intelligence] perplexing enough and the distance from the other intelligences great enough, to dictate prudence" (p. 127). Considering Gardner's analysis, I include naturalist rather than existential as the eighth intelligence in my study.

While Gardner does not attach moral standards to any of the intelligences, he maintains that they can be used for positive or negative purposes. However, he does propose a curriculum that considers morality in the study of what is considered historically to be 'good' (2000).

Gardner's concerns about human intellect on a practical level become apparent when considering standard IQ tests. These focus primarily on students' linguistic and logical-mathematical skills, allowing few children to experience educational success (1983). While problem solving is recognized, the ability to fashion a product is not. Moreover, in traditional intelligence testing, intelligence is deemed universal, whereas multiple intelligence theory recognizes that the roles of the intelligences vary depending on a particular culture's values (Gardner & Hatch, 1989). Where one culture may use music as the core of its everyday experience, another may consider literacy (the written

word) as fundamental to the culture. Furthermore, each culture has distinct interpretations of the intelligences; where the West might emphasize individual autonomy as an intrapersonal attribute, the Ojibwa include relatives and the natural environment as part of self. Gardner asks, "Given what we know about the brain, evolution, and the differences in cultures, what are the sets of human abilities we all share?" (Checkley, 1997, p. 9).

According to Gardner (1983), although intelligences have core distinctions and function independently, they are easily combined. Moreover, in many cases intelligences must be combined in order to be well articulated. Consequently, Gardner advocates exploring the relationships between intelligences and lists examples of successful combinations: an actor demonstrates how well bodily-kinesthetic intelligence combines with the personal and linguistic intelligences and musical rhythm can be used to teach mathematical concepts. According to Gardner (1993), "nearly every cultural role of any degree of sophistication requires a combination of intelligences" (pp. 26-27). However, synchronized intelligences do not apply only to exceptional individuals. "[I]n normal human intercourse, one typically encounters complexes of intelligences functioning together smoothly, even seamlessly in order to execute intricate human activities." (1983, p. 279) Each individual is unique and has his or her own combination of intelligences and different combinations produce different social roles, thus articulating a "plurality of intellect" (1993, p. 9). Likewise, if a learner excels kinesthetically, that learner will not necessarily become a dancer without aptitude in musical and spatial intelligences (1990).

In *Building on Children's Strengths: The Experience of Project Spectrum* (1998), Gardner and his colleagues comment on the ability of children to transfer their strength

from one domain to another. For example, they recount how a skillful storyteller drew her stories at the art table. Thus, through exploring multiple intelligences, children can use areas of strength as entry points to domains where they are challenged, thereby possibly improving their performance in other domains. It is important to note, however, that Gardner does not contend that the intelligences are transferred from one to another but that an intelligence expressed in one domain or subject can be used to gain a better understanding in another, such as using analytical skills gained from reading literature to understand a concept in science.

Critical Responses to the Multiple Intelligence Theory

Gardner's theory has provoked criticism from scholars in many areas. Sternberg (1988) developed a triarchic theory of human intelligence, which identifies three kinds of information-processing components: performance, knowledge-aquisition, and metacomponent. Sternberg explains that the relationship between intelligence and the individual's internal, experiential, and external world function in an integrative manner. He criticizes Gardner's use of the term "intelligences" to describe what he defines as "talents." Gardner responds by maintaining that "placing logic and language on a pedestal reflects the values of our Western culture and the great premium placed on familiar tests of intelligence" (Walters & Gardner, 1986, p. 175). His intent is to give equal value to all the intelligences. Sternberg also finds fault in the potential for the number of intelligences to grow indefinitely. Gardner (1983) admits the likelihood of further intelligences being defined and the possibility of subcomponents. He encourages empirical research to explore other candidates for intelligence, as well as the testing of

established intelligences. Finally, Sternberg criticizes the difficulty of measuring the intelligences proposed by Gardner. Gardner agrees that multiple intelligence assessment instruments require "more naturalistic sources of information about how peoples around the world develop skills important to their way of life" (1993, p. 7).

Eisner, another critic of Gardner, believes that Gardner does not sufficiently address the artistic aspect of intelligence. Eisner argues that:

> either the intelligent use of a symbol system—say music—requires an artistic treatment for it to be intelligent, or the artistic treatment of a symbol system is not an indication of intelligence. If neither of these conclusions holds, then the ability to treat a symbol system artistically is a manifestation of a form of intelligence. (1994, ¶ 13)

Gardner (1994) reminds us that intelligence is a biopsychological potential within a cultural context. He maintains that

> it is a cultural—and sometimes an individual—choice as to whether an intelligence becomes mobilized artistically. So, for example, linguistic intelligence is used artistically when one decides to write a play or when one lives in a culture in which everyone composes poetry. It is used nonartistically, for the most part, by lawyers . . . who tend to employ language pragmatically. (1994, ¶ 5)

Gardner has also received criticism from educators of the gifted. Delisle (1996, 2001) blames multiple intelligence theory and its influence on classroom practices for the replacement of many gifted programs in favour of enrichment programs for all children, in the name of egalitarianism. He adds that "giftedness is someone you are, not something you do. . . [and that] there is an added element to all gifted people—the emotional element—that fits neither clearly nor wholly into the MI theory" (1996, p. 13).

In the development of his theory, Gardner (1982b) undertook substantial research in regard to giftedness and concludes that the important factor is the energy the culture

invests in the individual who seems "at promise" for a certain gift. However, when educators focus on testing an individual's particular gift they neglect other attributes, such as motivation, purpose, and personal perspectives that may influence those gifts. He adds that he has posited the multiple intelligence theory "in opposition to the notions that there exist extremely general human cognitive abilities and that an individual may be generally gifted or non gifted" (1982b, p. 56).

A more recent criticism can be found in *Multiple Intelligences Reconsidered* (Kincheloe, 2004) which contains postmodernist, feminist, critical social theory, and postcolonial analysis interpretations of Gardner's work. Where Gardner positions himself in the psychological and pedagogical domains, Kincheloe believes it is impossible for Gardner to decontextualize his own personal history from the social, cultural, political, and epistemological domains of experience. Editor Kincheloe defines aspects of multiple intelligence theory as: "antidemocratic; supportive of an abstract individualism; epistemologically naïve; subversive of community; insensitive to race and socioeconomic class issues; patriarchal; Western colonialist" (pp. 7-15). The editor and the text's authors acknowledge the democratic optimism in Gardner's work, but believe that diverse approaches to pedagogy must be considered to "move the conversation about MI forward with a vision of a complex, rigorous and transformative pedagogy" (p. 7).

I have not found a response by Gardner to this critique; however, it is evident in *The Disciplined Mind* (2000) that he favours Western knowledge in his choice of subjects to examine the universal concerns of "truth" (evolution), "beauty" (Mozart's Figaro), and "good" (the holocaust: as antithesis). Nevertheless, he contends that multicultural curricula that draw on a variety of historical, cultural, and ideological sources are

beneficial and can be altered to suit the individual community. Gardner decries postmodernists for thwarting his quest for truth in education before it has been established. However, he concedes that the postmodern perspective may be correct insofar as truth, because it is constantly changing, may be unattainable:

> A curriculum grounded in the traditional verities should not claim to be definitive. Instead, it should seek to elucidate current cultural conceptions of true, beautiful, and the good; and it will certainly include a review of opposing claims and contentions as important, it should legitimate the continuing search for examples to admire, to condemn, to puzzle over . . . . These perennial concerns continue to be the proper ones for human beings. (2000, p. 57)

Emotional Intelligence

Emotional intelligence is not a construct in this research; nevertheless, it is an important factor to consider because knowledge of the theory has inspired education of the affective mind. The term emotional intelligence was coined in 1990 by Salovey and Mayer (in Van Rooy & Viswesvaran, 2004)) and was popularized by Goleman (1995). Mayer and his colleagues (1997) divide the intelligence into four branches: the perception of emotion, integration and assimilation of emotion, knowledge about emotions, and emotional management. Goleman's (1995, 1998) definition adds personality characteristics such as empathy, motivation, social skills, zeal and persistence. Cobb and Mayer (2000) assert that Goleman's popularized "mixed model", "mixes emotional intelligence as an ability with social competencies, traits and behaviors, and makes wondrous claims about the success this intelligence leads to" (p. 15). Goleman (in O'Neil, 1996), and Mayer, Salovey, and Caruso (2004) state that emotional intelligence is learned and can increase with experience; hence Goleman's recommendation that schools

implement programs to teach emotional intelligence. However, Cobb and Mayer (2000) argue that emotional intelligence programs are premature because they are based on popular claims rather than research. According to Van Rooy and Viswesvaran (2004) "when Goleman (1995) published his book on EI there was a relative dearth of empirical studies examining the link between organizational performance and EI." (p. 74). Goleman (1995) claims he waited until "the scientific harvest was full enough" (p. xi) to write his book and cites neurological and psychological findings to support his hypothesis that teaching the basics of emotional intelligence encourages better communication, motivation, caring, and personal success.

Mayer and Cobb (2000) describe their "ability model" where emotional intelligence is "a set of abilities and [they] make[s] claims about the importance of emotional information and the potential uses of reasoning well with that information" (p. 15). The model is based on research findings of nonverbal perception, empathy, artificial intelligence, and brain research. In the ability model, emotional intelligence "involves perceiving and reasoning abstractly with information that emerges from feelings" (2000, p. 15). In order to understand the importance of emotional intelligence, Mayer, Salovey and Caruso (2004) developed a measurement instrument that measures the four branches outlined above. Emotional intelligence tests have been described as unreliable and invalid (Decker, 2003). In their defense Mayer, Salovey, and Caruso (2004) contend that their instrument tests emotional intelligence ability, rather than popularized self-perception. They also state that, "criticism is aimed at the naïve popularizations of the concept, and particularly the irresponsible claims of the popular press . . . . This theory is deeply rooted in psychological literature" (p. 210). They are

convinced that their assessment tool addresses key issues of emotional intelligence and can assist further research in this new field of knowledge that will explore the implications of emotional intelligences in education (2004).

Empathic Intelligence

Gardner's Views on Empathy

Gardner (2000) discusses the influence of findings in neurological research, including the role that emotions play in learning. Emotional engagement during learning stimulates brain activity, which enables the brain to retain information and use it in new circumstances. He explains that the emotional response of a child signals whether he or she finds the material stimulating or uninspiring. When referring to a child's ethical choices Gardner states,

> we must accept the harsh reality that one can be intelligent without being moral; creative without being ethical; sensitive to emotions without using that sensitivity in the service of others . . . . [T]hose of us who seek a fuller view—who speak of personal intelligence, emotional intelligence, moral intelligence, wisdom—are all declaring that the skill in the literacies and facility at a certain kind of problem-solving are not enough. (2000, p. 248)

Arnold and Empathic Intelligence

Drama in Education theorist Arnold (2005a) posits a definition of empathic intelligence as a "fuller view" of intellectual capacities. Empathic intelligence is

> an ability to understand your own thoughts and feelings and by analogy, apply your self-understanding to the service of others, mindful that their thinking and feeling may not match your own. It is a sophisticated ability involving attunement, de-centering, conjecture and introspection: an act of thoughtful, heartfelt imagination. (p. 23)

Arnold recognizes that emotions support cognition and reasoning, asserting, "it is not *what* is learned but how experience is shaped by feelings, relationships and reflective thought which determines the nature of learning" (Arnold's emphasis, 2004, p. 2). She underpins her theory of empathic intelligence with evidence from liberal, student-centred, experiential educational philosophies, and brain/mind and psychological research (2005b). Arnold argues the research theories of Dewey, Piaget, and Vygotsky point to the significance of the affective mind in educational development.

Dr. Stern, a pediatrician is cited for his studies of empathy in infancy, which, according to Arnold "illuminate[s] the importance of empathic attunement in early learning, emotional development and socialization" (2005a, p. 45). Barnes and Thagard describe empathy as analogic thinking, which connects with Arnold's argument that "empathic intelligence involves the capacity to understand one's own thinking and feeling processes and the dynamic between them" (in Arnold, 2005a, p. 114). Neuroscience has demonstrated, through brain-imaging and empathy scales, that there exists empathy-related brain activity, as well as individual differences in empathy. Arnold considers Damasio, who posits that emotion and feeling "provide the bridge between rational and non-rational processes, between cortical and subcortical structures" (in Arnold, 2005a, p. 100). Given the difficulty researchers have in testing empathic intelligences, Arnold challenges researchers to find the means to analyze empathy in order to understand the complex nature of empathic intelligence, so that we may actualize its potential (2005a).

For Arnold (2005a), empathic intelligence is not synonymous with emotional or cognitive intelligence; rather, she perceives a dynamic between them beneficial for ethical purposes and the making of meaning. Moreover, while empathic intelligence can be

described as a combination of interpersonal and intrapersonal intelligence, Arnold's definition goes further, claiming that "it can be promoted through artistic, creative, interpersonal, intrapersonal, musical and visual literacies, provided attention is given to both the affective and cognitive dimensions inherent in their development" (p. 145). Arnold also refers to the rational/reasoning side of empathy which I would argue represents logical intelligence.

The most significant attributes of empathic intelligence are defined by Arnold in the following four ways. In the category *Attunement and Reciprocity*, empathy is a "mutually responsive system of engagement" (Arnold, 2005a, p. 49) that requires attunement and reciprocity similar to that between a mother and infant. For educators, this requires "self-awareness, imagination, concentration, reflection and practice" (p. 164) where the teacher must monitor his/her own emotions while suspending his/her needs for the interests of the student. In *Mirroring and Scaffolding*, mirroring is a physical means of building empathic understanding. Arnold maintains that "it is a powerful form of self/ other modulating. It is the means by which we manage our relations with others, and with our inter-subjective world" (p. 39). Where mirroring reflects effective communication, scaffolding assists areas needing improvement. The empathetically-intelligent educator knows when to challenge a student. According to Arnold, when we use *reflection* we closely observe our own thinking and feeling processes as well as our world. It is a solitary and communal act that can establish bonds between people and allows us to make meaning and gain a deeper understanding of experiences. In the final category of *Metaphor, Imagination and Creativity*, she says "Metaphors and artistic works can function for their spectators (and their creators [Arnold's parentheses]) as an affective and

cognitive analogy—a way of expanding one's psychic boundaries" (2005a, p. 71). By living vicariously in an imagined world, students can gain confidence in their ability to function in a complex world. Arnold defines imagination as a cognitive capacity essential to empathic intelligence. Imagination works most effectively with curiosity, a combination that inspires the learner toward intellectual and emotional growth.

The author's focus on empathic intelligence is primarily for pedagogical purposes. She maintains "the philosophy underpinning empathic pedagogy values enrichment of individual lives in the belief that well integrated people wish to contribute to society because from such contributions develops further personal and community growth" (Arnold, 2005a, p. 93). She believes the arts to be instrumental in the stimulation of complex affective and cognitive states. These works of Arnold are recent; thus, I have been unable to find critical analysis of her empathic-intelligence framework.

Multiple Intelligences in Educational Practice

The multiple intelligence theory has been actualized by educators in multiple intelligence school classrooms (for example, Russell Elementary, Kentucky; Key Elementary and Middle School, Indianapolis; Eagle View Elementary, Victoria, B.C.; Hamilton Elementary, Richmond, B.C.), and through educational manuals. Some of the pedagogy texts on multiple intelligence propose games and multiple intelligence tests in order to incorporate multiple intelligence into everyday lessons—which is antithetical to Gardner's purpose (Gardner, 1995). Other educators (Armstrong, 2003; Campbell, Campbell, & Dickinson, 2004; Lazear, 1999) write about the educational implications of

the multiple intelligence framework and suggest valuable pedagogical methods based on the multiple intelligences and the unique intelligence profile of each student.

Gardner illuminates his central philosophy, mentioned above, in *Theory in Practice* (1993),

> In my view the purpose of school should be to develop intelligences and to help people reach vocational and avocational goals that are appropriate to their particular spectrum of intelligences. People who are helped to do so, I believe, feel more engaged and competent, and therefore more inclined to serve the society in a constructive way. (p. 9)

He furthers his framework of intelligences by considering their practical use in the classroom, as subject matters in themselves and as methods for inculcating diverse subject matter (1983).

When his research team worked on Project Spectrum (1998), they applied multiple intelligence theory to preschool and primary grades by creating exploration stations. These stations employed materials that embodied valued "end states" rather than materials specifically labeled for each intelligence. For example, reporter activities encouraged children to describe their own experiences and act as reporters for others, thus engaging more than one intelligence. The team referred to these centres as "a bridge between academia and more child-centred approaches to early education" (Chen, Krechevsky, & Viens, 1998, p. 29). The bridging took place on two levels: whole group and individualized. Teachers encouraged students to work with their peers at stations or on group projects and followed-up with specific help for individuals. By individualizing the work, children's strengths were observed and additional activities were created to suit each child's skills and social characteristics. Because of the uniqueness of emotions,

personality, and individual intelligences, Gardner insists we do not attempt to motivate students "*en masse*;" rather, educators should group children according to the activities that stimulate them (2000). Project Spectrum researchers advocate classroom projects where each group explores a different aspect of one topic. When the students perform their understandings in a form of presentation, then question and critique others, they gain a well-rounded understanding of the topic (Chen, Krechevsky, & Viens, 1998). It is suggested that three to four projects can be completed each year, along with acquisition of basic skills in disciplines that may not have been fully covered in the projects.

Gardner (2000) has developed a foundational curriculum based on the disciplines of science, mathematics, the arts, and history, and incorporating the individual's cultural "fundamental questions of existence" (p. 226): beliefs of truth, goodness, and beauty. He calls this curriculum "education for understanding" (p. 126). By exploring the fundamental values of one's culture through these disciplines, using open-ended projects, Gardner believes education will go beyond the memorization and regurgitation of facts to elicit a deeper understanding of fewer standard topics than are presently prescribed. Students will develop the skills to think like historians, scientists, and artists, and will apply their new knowledge to critically explore issues and make choices relevant to their understanding of culture, humanity, and other world phenomena.

Gardner (2000) suggests three ways to use multiple intelligences within his foundational curriculum. The first is to provide a powerful entry to the topic. The entry points are narrative (story telling), numerical (mathematics), existential/foundational (belief systems), aesthetic(artistic), hands-on (experiential), and interpersonal (collaborative). However, it is only necessary to use those that allow for immediate

engagement in the topic. The second approach is to offer appropriate analogies and metaphors that provide a context more familiar than the topic itself, thus guiding students to create their own analogies and think more deeply about the topic (for example, theatre). The last approach is to use multiple representations of the central ideas. Using a "model language" (for example, a letter or statue) particular to the chosen mode of communication (written word, sculpture, etc.), students can capture a topic's central idea in a way that illuminates meaning for them. This process can show how well the students understand the core issues and, in turn, it will aid future assessment. Gardner does not relate multiple entry points, metaphors, and multiple representations to specific intelligences but concedes they have connections. He uses narration as an example where linguistic intelligence is engaged; however logical, interpersonal, and intrapersonal are also involved (2000). Gardner's intent through these approaches to understanding is to use a variety of carefully chosen methods in order to educate students according to individual needs.

Empathic Intelligence in Educational Practice

According to Arnold (2005a), the purpose of the empathic educator is to "facilitate powerful learning about the world and the mastery of skills" (p. 162). Students involved in empathic learning can alter affective and cognitive states, expanding understanding of life's possibilities. Empathic intelligence requires teachers to employ attributes involving *enthusiasm*, a personal energy conveyed to others and motivated by hope; *expertise*, an ability to attune to other's learning needs, recognize universality in symbol systems, mobilize imagination, and use modelling to teach others; *engagement*, an ability to mirror,

to attract and centre students' attention, and to communicate vision; and, of course, *empathy* (2005a).

The teacher with empathic intelligence engages with students' thoughts and emotions, encourages student input, adapts lessons to suit the needs of the class, understands that students have individual learning abilities, discusses the group's dynamics with them, and monitors his or her own energy level for effective ongoing teaching. "If educators can model attunement, enthusiasm, expertise and empathy, students may become autonomous, self-motivated learners without even realizing it" (Arnold, 2005a, p. 156). Students exposed to empathic teaching have the potential of becoming empathetically intelligent themselves (2005c).

A practical example of empathic teaching in educational drama is demonstrated by "artist teacher" Heathcote. In the video *Building a Nation* (Gregorio, 1967), she stops students who are in-role and involved in a funeral procession. She asks them to consider the magnitude of the situation and gently challenges them to continue only if they are able to do so with the degree of empathy required. Heathcote's enthusiasm, expertise, engagement, and empathy elevate the students' ability to engage in the drama with a degree of empathy and commitment that energizes the experience and inspires a deeper level of understanding.

Educational Drama

The term 'educational drama' refers to Heathcote's description of "a conscious employment of the elements of drama to educate" (Wagner, 1988, p. 13). One of these elements is role drama where, rather than creating plays for an audience, students step

into a role in order to reach a deeper understanding of a perspective, topic, or issue within the safety of the classroom community. Through creation and reflection students question the possibilities existing in a given situation. Wagner, (1998) states, that through educational drama,

> the teacher's goal is to transform students' understanding of human dilemmas and conflicts rather than to provide simple practice in how to solve social problems. Educational drama strives to achieve a distance from the participants' real-life situations so they can explore alternatives. (p. 4)

Educators can employ a variety of entry points to study topics related to curriculum content in order to encourage their students to examine the complexities of multiple perspectives within a topic. Drama, however, is equally concerned with students' cognitive and affective states. Moreover, drama theorists and practitioners like Arnold (2005) believe, as does Gardner (1983), that positive emotional engagement stimulates cognitive abilities. Educational drama, like the multiple and empathic intelligence frameworks, can be employed across the curriculum.

One of the essential elements in educational drama is the use of reflection, either in or out of a role. This allows participants to discuss the consequences of their actions in that role, while contemplating their classmates' perspectives. Out of role, students are encouraged to consider how they would react in comparable real-life situations. Another essential element of drama in the classroom is the position of teacher-in-role (Wagner, 1988). The teacher takes on a role within the drama and thus is able to monitor, from the inside, the progress of the drama, enabling her/him to help students deconstruct, clarify, and extend the search for meaning within the drama.

Gardner's (2000) request for powerful entry points, the use of analogy and metaphor, as well as multiple representations of central ideas, are all evident in educational drama. Drama educators use literature, music, art, math, science, and history as entry points and students are encouraged to represent their work in a variety of ways. Gardner (2000) suggests that the ability to understand metaphor and analogy demonstrates "higher understanding," while Arnold defines metaphor as an attribute of empathic intelligence. She discusses the metaphorical exploration of "universal human emotions" (p. 187) in Shakespeare's plays. Bolton (1992) describes drama as "a metaphor for what goes on in the real world" (p. 1). From a professional production of Othello to a role drama in a classroom, drama exists within a metaphorical context. In-role with their peers and teacher, students use knowledge from their own experiences to explore a fictional world. For example, as a means to explore bullying in the classroom, Heathcote suggests creating a drama where office employees are involved in accommodating a disabled person to explore potential issues of rejection (Heathcote & Bolton, 1995). Thus through metaphor, drama transports the classroom into the world of imagination and, by doing so, distances the event. During or after the drama the teacher facilitates reflective discussion meant to develop deeper understanding of issues embedded in the drama. Furthermore, drama pedagogy provides a concrete approach to teaching challenging, abstract concepts, such as justice or empathy.

Theoretically, educational drama aligns with the constructivist theory of learning. Wagner (1998), claims that Vygotsky and Bruner,

> both see cognitive growth as dependent upon interactive play and upon children imagining themselves acting in worlds that are developmentally a bit above their

> actual physical and intellectual level. Both provide a solid foundation for using drama in the classroom as a way that deepens and enlarges understanding. (p. 15)

Vygotsky (1978) defines *the zone of proximal development* as that transitional moment of play where a child experiences a task above his or her level of understanding in order to learn. He (1978) also emphasized the social nature of learning because it allows for the integration of cognitive and affective thought. Through a social constructivist perspective, students construct their own meaning, based on an understanding of their place in their culture, as well as through repositioning themselves in the world through imagined situations in collaboration (Wagner, 1998).

Wagner cites Multiple Intelligence Theory as another theoretical support for drama, anticipating the theory will guide researchers and teachers of educational drama. She maintains that, through assimilation of the constructivist theory and the development of intelligences through drama, "we see drama as a highly efficient way to create a powerful pull toward development" (p. 33).

Research of Multiple and Empathic Intelligences in Educational Drama

In the literature, drama educators and theorists discuss the relationship between multiple and empathic intelligences and drama; however, I have found no research specific to this subject. Thus this review will attend to the secondary sources, followed by research that addresses criteria aligned with individual intelligences.

Drama and Multiple Intelligences

Brown and Pleydell (1999) discuss the relevance of separate symbol systems for each of the seven intelligences, stating that "drama utilizes those symbol systems that might be considered more compatible with young children's thought processes" (p. 13).

Baldwin (2004) describes drama as "a teaching and learning medium [that] utilizes and develops the range of multi-intelligences in an integrated way" (p. 46). Baldwin and Fleming (2003) suggest educational drama strategies that could be applied to each of the intelligences, adding, "when planning drama it is worth considering whether the range of strategies, materials and resources used in a lesson or series of lessons are spanning multi-sensory and multi-intelligence learning" (p. 15). Miller and Saxton (2004) contend that, "when students engage holistically, affectively, and cognitively within the meanings offered in the story, they develop new ways of seeing the content at both the interpersonal and the intrapersonal levels" (p. 2). Miller and Saxton recognize the importance of multiple literacies within their story drama structures as foundational to meaning making, and other theorists reference the positive relationships between drama and the multiple intelligences (Cusworth & Simons, 1997; Rogers, O'Neill, & Jasinski, 1995; Wagner, 1998).

Roper and Davis (2000), drama theorists critical of Gardner's theory, argue that Gardner does not acknowledge a specific symbol system for drama in education; rather, he recognizes only those of traditional theatre study. They suggest that six of the eight intelligences could be employed in drama, but they believe that drama articulates the Vygotskean theory and therefore cannot be aligned with the multiple intelligences theory, with its social constructionist underpinnings. Saxton and Miller (2001) counter Roper and Davis by claiming that Gardner recognizes that educators are capable of deciding how to implement multiple intelligences in the classroom. Saxton and Miller find that educational drama involves educational approaches compatible with the multiple intelligence theory. For example, drama pedagogy supports educating the individual

child, using his or her abilities in meaning making, and recognizing multiple perspectives. Saxton and Miller conclude that "Gardner has produced a theory that helps to validate our practice and the place of drama in a variety of educational contexts" (p. 115).

Drama theorist Guss (2005) finds fault with Gardner's exploration of symbolic play (drama) in preschool children. She maintains that Gardner considers children's musical, kinesthetic, spatial, and linguistic capacities in terms of aesthetic qualities, and relates them to particular end states. Pretend playing is not related to an end state. Guss' research explored how children embody and actualize their experience and awareness in dramatic play, suggesting a dramatic intelligence where children engage all the multiple artistic symbols within a dramatic framework.

Skills Specific to Individual Intelligences

In order to examine research in drama as it relates to multiple and empathic intelligences, a study of research material that explores skills specific to individual intelligences was undertaken. Research constructs that align with Gardner's definitions of multiple intelligences, as well as specific references to empathy, were examined in order to understand how effectively drama can engage each intelligence.

Drama and Linguistic Intelligence

Of the nine intelligences investigated, the greatest amount of drama research is related to linguistic intelligence. The majority of research is carried out in an effort to demonstrate the positive effects of drama on oracy, comprehension, and the written word. Significant improvements and positive effects in all domains appear in two research projects: a 1983 review by Vitz of empirical research in drama and language from 1968 to 1983, and a 1987 meta-analysis by Kardash and Wright of two journal articles and 14

dissertations examining the effects of creative drama on reading, oral and written communication, person-perception, and drama skills. Vitz, Kardash, and Wright all concede that limitations such as the Hawthorn Effect, sample size, duration of treatment, and paucity of empirical studies "temper the conclusions or generalizations" (Vitz, 1983, p. 23).

In their study of the effect of drama on the writing development of adolescents, Neelands, Booth, and Ziegler (1993) found that concrete metaphorical contexts provided by drama encouraged and enabled students to write for authentic reasons. The results revealed that, while engaged in drama, students had "a significant increase in positive attitude to writing from month one to month four" (p. 21). According to Crumpler and Schneider (2002), drama allowed children to create "text out of an oral event" (p. 77). Students considered their emotional and intellectual attitudes in relation to literature. Studies have also revealed that, following drama activities, students write more than those in a control group without drama (McNaughton, 1997; Warner & Anderson, 2004) and they write across different genres and for different purposes (Schneider & Jackson, 2000). Dupont (1992) and Galda (1982) found that drama increases reading comprehension rates in students.

Statistically significance gains in language acquisition have been demonstrated when using drama with preschool children in experimental research (Brown, 1992; Stewig & Young, 1978). Podlozny (2000) completed a meta-analysis of research that concentrated on strengthening verbal skill through drama and concludes that "drama is an effective tool for increasing achievement in story understanding, reading achievement, reading readiness, and writing" (p. 286). In her seminal text *Educational Drama and*

Language Arts: What the Research Shows, Wagner (1998) presents an assessment of the research concerning drama's influence on oral language that produced diverse results. Consequently, Wagner suggests that "new studies need to describe more fully the structure of drama teaching to determine which teacher strategies and interactions with the students are critical to expanding the range and raising the level of the children's oral language" (p. 55).

Drama and Musical Intelligence

Using music in drama is recommended in many drama methodology texts (Baldwin, 2004; Miller & Saxton, 2004). Although I found a paper that described the use of music in performance, I was unable to locate articles relating to educational drama and music. While my search was extensive, it may not have been extensive enough to uncover every study; however, the clear lack of research alerts me to the fact that, although master teachers and theorists recommend using music in drama to inspire movement and dialogue, it could be that drama is either not considered a means to strengthen musical abilities, or music is not thought of an integral part of educational drama. Yet over 30 years ago, Way (1967) asserted that "because children hear sound emotionally and pictorially, music will help not only with the creation of mood but also with the sustaining of it and with the intuitive awareness of change of mood" (p. 218). While the following is not based on research, it is an example of effective use of music in educational drama. During a drama workshop at the University of Victoria, Neelands (1995) had music playing while students created and presented their tableaux, and while they created specific body movements. He deliberately chose music that provided a quality of seriousness and concentration necessary to the work and supported the

students' use of rhythm to create a mood. It should be noted that drama texts (Baldwin, 2004; Miller & Saxton, 2004) suggest methods such as soundscape to explore environmental sounds, which are described by Gardner as a musical intelligence criterion. Gardner does not discuss the musicality of speech; however, pitch, tone, and rhythm are components of vocal expression that are engaged in drama activities.

Drama and Mathematical/Logical Intelligence

Although there are references to mathematics and logic in drama literature and lesson plans (Baldwin, 2004; Pennington & Faux, 1999), I found only two research papers that observe drama's effect on mathematics skills. Results of Clift's (1985) study, where an experimental group engaged in drama for two days, showed that "dramatic enactment was judged more effective . . . for facilitating curriculum related problem solving in all classes [social studies, English, and science] but the math class" (p. 41). Fleming, Merrel, and Tymms (2004) conducted a two-year study as part of the National Theatre Transformation Project that strove to improve students' social and academic skills. Researchers found statistically significant difference between the progress in mathematics in the drama group and the control group, with drama showing a favourably "large effect size" (p. 195). The researchers do not clarify whether they used drama to teach mathematic activities. In 1992, Kase-Polisini and Spector found that during science lessons drama students practiced organizing, predicting, speculating, evaluating, and testing hypotheses.

Drama and Spatial Intelligence

One of the most useful drama strategies for building belief in a theme is visual imagery. Teachers create an imaginative scene for the students or they inspire students to

create their own images for the work. DuPont (1992) claims that "mental imaging is the link between reading and doing" (p. 51). She infers that mental imaging activities determine the gains in post-test scores. However, in her research, the use of imagery was integrated into drama activities and consequently, "it is difficult to discern the actual contribution each made to the end results" (p. 51). Neelands, Booth, and Ziegler (1993) used spatial intelligence activities to explore status relationships, proximity, and distance between students in-role, and to understand the difference between functioning in familiar territory verses alien spaces. Students challenged by writing found that using objects to represent places and ideas was beneficial, suggesting knowledge gained through one intelligence can be transferred to another domain. Spatial awareness can also be explored through individual physical skills and physical relationships between people and objects, which combines spatial and bodily-kinesthetic intelligence.

In their examination of drama and writing, Moore and Caldwell (1990) theorize that "drama has close ties with the visual and kinesthetic imagery involved in narrative composition, and thus provides a better match [than other teaching methodologies] between forms of thought and forms of expression" (p. 18). Wagner (1998) cites studies (Nobel, Egan, & Mcdowell, 1977; Rosenberg, Castellano, Chrein, & Pinciotti, 1982) that show improvement in the drawing and spatial skills of students following drama lessons. Warner and Anderson (2004) also comment on the more detailed drawings by science students exposed to drama than by those without drama.

Drama and Bodily-Kinesthetic Intelligence

I was unable to find research that used bodily kinesthetic activities as variables for analysis; however, the strong influence of movement and particular drama strategies

involving physical awareness are evident in almost each piece of literature. Movement is an integral part of drama for individuals, and complex interactions between individuals. Nevertheless, kinesthetic skills seem to be taken for granted in research. Perhaps because movement is inherent in drama, it has not been separated as a distinct entity to explore for the impact it may have on the intellectual development of students. The few studies that refer to specific kinesthetic skills used in drama do not consider them as variables for study. For example, Neelands, Booth, and Ziegler (1993) discuss how students "used their bodies, voices, objects, and furniture to help represent lifelike events . . . [providing them] with insight into the theme of the drama which was often abstract and conceptual" (p. 26). The researchers found that students skilled at writing enjoyed finding subtext in the gestures and action of improvisation.

Tableau is a kinesthetic activity that is used frequently in drama. The students create a frozen picture using their bodies to represent a idea, theme, conflict, or story. One tableau can move into another to explore different perspectives. McKean and Sudol (2002) observe that dialogue, stemming from tableau work, encouraged personal and direct writing. They define rich images provided in movement and song as inspirational to writing. Without drama research that uses bodily-kinesthetic intelligence as a variable it is difficult to acknowledge these references other than as hypotheses.

Drama and Interpersonal and Intrapersonal Intelligences

Drama and the personal intelligences are also well documented areas that have conflicting research results. In the interpersonal domain, students in Clift's (1985) study believe that drama gave them "insight into the feelings and emotions of peers as well as historical or literary characters" (p. 41). Bieber-Schut's (1991) study involving 12

students who experienced drama for four days found that drama "positively influenced visually impaired adolescents' acquisition of social skills" (p. 340). When considering the influence of drama on self perception, Mimick (1999) uses the multiple intelligence theory to support her hypothesis that the personal intelligences are a stimulus for learning. She also argues that drama facilitates multiple entry points into a topic. Danielson (1992) revealed that drama activities fostered greater social cohesion and self-esteem in a class of students labelled "low ability." He notes, "this study is fundamentally trying to understand the very complex phenomenon and it is virtually impossible to control all the variables" (p. 7).

Conversely, Conard and Asher's (2000) meta-analysis examining the effect of drama on self-concept and self-esteem found that "creative drama has no effect on the self-concept of elementary students" (p. 83). An experimental study in 2003 (Freeman, Sullivan, & Fulton), which used social skills, self concept, and behaviour as dependent variables, showed no significant difference between third and fourth grade students involved in 18 weeks of drama, and a control group involved in no drama. They argue that previous studies have used small sample sizes and have reported conflicting results. Moreover, they appeal to drama researchers for more well-designed and documented experimental studies with longer periods of investigation.

Drama and Naturalist Intelligence

Baldwin (2004) asserts that "drama can focus on the development of naturalist intelligence or use it in the devising of dramas" (p. 47). Kase-Polisini and Spector (1992) use multiple intelligence theory to support their argument that educational drama pedagogy in science addresses a variety of intelligences. Their study, where students are

treated as science experts, shows that students were able to integrate newly-learned science concepts with their personal understanding of the world (1992). Christofi and Davies (1991) recommend drama as a teaching methodology for science because it provides a context that simulates real-life experience when learning abstract concepts. Students are given opportunities to predict, hypothesize, classify, and experiment in the role of expert. Littledyke (2001) and Warner and Anderson (2004) found that using drama to study snails improved students' detail and scientific accuracy in drawing. Additionally, Littledyke (2001) found that, compared to a control group, drama students demonstrated "increased understanding of scientific concepts . . . and a raised priority for health" (p. 2).

Drama and Empathic Intelligence

I was unable to find any primary research material pertaining solely to empathy and drama; however, Neelands, Booth, and Ziegler (1993) found that the majority of students involved in drama "experienced a heightened sense of moral purpose in the writing . . . . [and that] the writing would have a serious and profound effect on the thinking and actions of its audience, as well as on themselves" (p. 27). Wagner (1999) cites several studies that have shown the positive effects of educational drama on self-confidence, self-concept, self-actualization, cooperation, and empathy. She maintains, "To play any part well, you have to put yourself inside the skin of another person, to view the world from a different perspective, and to develop empathy" (1999, p. 148). Miller and Saxton (2004) define empathy as one of the three foundational elements in theatre practice. Baldwin (2004) describes drama as "a stimulating and rich opportunity to discuss and understand our own emotions, attitudes and beliefs through observing,

empathizing with, feeling and exploring the emotions of characters both portrayed and interacted with in role" (p. 51).

Crumpler and Schneider (1993) claim that drama takes student writing beyond the sphere of the personal into transactions with their peers and their teacher. In-role, the teacher is able to empathize with and understand the students' connections from drama, to personal, to text experience.

The Ability of Drama to Transfer and Combine Intelligences

Podlozny (2000) argues that drama facilitates the transfer of skills from one domain to another, while DuPont (1992) found that readers transferred and applied abilities acquired during drama activities to new, unrelated reading material on a standardized test. In addition, McKean and Sudol (2002) claim that when students are encouraged to transfer drama experiences into writing there is a potential to "increase their abilities to succeed in the more traditional tasks of school" (p. 30). They found that students elevated their use of language when they were asked to create a line of dialogue for their character in a tableau. This suggests that such an exercise combines kinesthetic, linguistic, interpersonal intelligences, and shows that kinesthetic understanding can inform language use. "This process enabled students not only to practice writing their own lines of dialogue but also to listen to others as they shared their tableaux" (McKean & Sudol, 2002, p. 32). Throughout the literature review I found numerous accounts of intelligences being combined in educational drama activities (Bieber-Schut, 1991; Crumpler & Schneider, 2002; Kase-Polisini & Spector, 1992; McNaughton, 1997; Neelands, Booth, & Ziegler,1993; Warner & Anderson, 2004; as well as; de la Cruz, Lian, & Morreau, 1998; Ferree, 2001; Fleming, Merrell, & Tymms, 2004; Kieffer, 1996).

Gardner's References to Educational Drama

In reference to the arts in general Gardner states, "intelligences singularly or in combination can be put to artistic uses. They can be used to create or to understand artistic works, to work with artistic symbol systems, to create artistic meanings" (1990, p. 20). Furthermore, he asserts that creativity entails learning about a subject thoroughly, then using that knowledge in new ways (1990). Although Gardner mentions acting, and refers to learning through play, he makes no reference to educational drama. He does, however, emphasize the importance of the young child's exploration of different roles in the community through "pretend play, gestures, drawing, and the like" (1983, p. 246). It is through exploration, he says, that a child develops an understanding for how he or she feels and behaves in a role. Moreover, the child develops a sense of who he or she is, or wishes to be in the world. Gardner interprets the development of imaginative play as "literary imagination," and, as the child matures, a "narrative structure" (1982a, p. 173). However, for Gardner, the culmination of the imaginative play experience is story telling rather than educational drama (process) or dramatic performance (product).

Generally, Gardner suggests creating a curriculum of understanding that highlights the arts (2000). Gardner's suggestions for drama activities, however, are limited by his understanding of the discipline. They involve roles in government debates and watching a performance of *Figaro* in order to stimulate several forms of understanding. Project Spectrum's references to drama include acting out the plot of a well-known play (Chen, Krechevsky & Viens, 1998). While Gardner (2000) recommends and recognizes that drama can be employed to explore multiple perspectives, his examples do not address the complexity and depth of the work involved in educational drama, nor do they articulate

the ways in which drama naturally uses the multiple intelligences and requires reflection and critical thinking on the part of students. Canadian drama theorists Saxton and Miller (2001) argue, "Gardner's knowledge of the arts would appear to be classical and traditional and his perception attaches very closely to the prevalent view held by many North American educators that theatre and drama are text-based and strongly rooted in performance" (p. 112).

Arnold's References to Educational Drama

In her discussion of empathy and early language development, Arnold (2005a) frames language, play, symbolic interactions, and fantasy as "possibilities for rehearsals of life, the codifying of experiences and expression of inter-subjective/intra-subjective experiences" (2005a, p. 50). In the exploration of narrative, role play facilitates identification with, and reflection upon, issues and perspectives as well as a variety of narrative endings. Arnold advocates drama, along with other artistic expressions, as a means to communicate feeling and thought through multiple literacies. Role drama "can provide opportunities for developing constructive behaviour patterns. With increased self-awareness one develops sensitivity to others" (2005a, p. 174). Thus, she concludes, "drama can have an profound effect on children's emotional, social and learning development" (p. 211) and should be encouraged not only in the early years, but throughout the school experience.

Summary

The development of the multiple intelligence theory provides an alternative to the traditional view of a single intelligence. Gardner defines intelligence as the ability to solve problems, or to fashion a product, or to create something that is valued by at least one culture. He lists eight autonomous intelligences and argues that every individual has his or her unique blend of intelligences. Arnold furthers Gardner's theory with the development of empathic intelligence which she defines as an ability to understand one's own thoughts and feelings and, by analogy, understand the thoughts and feelings of others, in order to be of service to others. Arnold conceptualizes empathic intelligence as a dynamic between emotional and cognitive intelligence. Although both theorists use criteria to determine an intelligence, critics argue that multiple and empathic intelligences are merely talents and therefore impossible to test.

Gardner and Arnold, in their concerns for education, have described how they think their theories can be utilized in school settings to support the development of the arts. Arnold advocates drama in particular because of its ability to inspire empathy and cognitive understanding. Her claim is verified by drama theorists, researchers, and practitioners. Research and educational documents reveal successful incorporation of multiple and empathic intelligences in drama; however, drama is a pedagogical discipline that is not yet half a century old and the amount of research is limited. As the powerful relationship of educational drama and multiple intelligence theories is explored, a greater depth of research will demonstrate the importance of drama methodology in education.

CHAPTER THREE

Methodology

Introduction

The aim of this chapter is to provide a detailed description of the procedures used to investigate the research question: How are the multiple intelligences and empathic intelligences articulated in educational drama? Additionally, the procedures used to examine the themes underlying the research question will be revealed. This chapter will examine: a) the rationale for the methodology, b) the procedures for selecting subjects, c) the setting and personal context of the participants, d) data collection, and e) the procedure for data analysis.

Rationale for the Methodology

As a drama teacher, I was compelled to understand the pedagogical significance of educational drama as experienced and interpreted by drama teachers. I studied two teachers whose pedagogical concerns began when choosing their unit plans. Their choices were realized through active interaction with their students as they taught and adapted the units to the students' needs. The teachers' understanding of the multiple and empathic intelligence frameworks influenced their pedagogy and their students' learning, thus uniting their teaching philosophies with their teaching practice. In order to follow the experiences of these teachers as accurately as possible, I used a qualitative, multiple case study research design, considering it the most appropriate methodology for this study.

Qualitative research is based on an interpretivist epistemology where "social reality is seen as a set of meanings that are constructed by the individuals who participate in that reality . . . . The purpose . . . is to discover the nature of those meanings" (Gall, Gall, & Borg, 2005, p. 305). Qualitative research describes the context, setting, and participants' frame of reference (Marshall & Rossman, 1989). A case study is effective when open-ended questions are asked about events that the researcher has observed, but not manipulated (Yin, 1994). In a case study there is opportunity for the researcher to present both the emic (participant's) and the etic (researcher's) perspective (Gall, Gall, & Borg, 2005). While my intent is to reflect the participants' perspectives, my own experience as a drama teacher and a researcher will involve etic perspective. It is vital to the validity of the study that I state when I am using etic perspective. Moreover, in order to present the most accurate emic perspective, I have consulted the teachers regarding questions about their experiences, and Teacher A and Teacher B have read and approved the findings of the data analysis.

As a multiple site case study researcher, I can examine the diverse experiences of two drama teachers working in unrelated classroom settings, with students at different developmental and intellectual levels, and analyze data using a multiple intelligence theoretical framework in order to demonstrate whether a phenomenon is found in more than one case (Yin, 1994). The phenomena I chose to study were the teachers as they taught drama and the drama units selected by the teachers. My focus was the use of multiple and empathic intelligences in the drama units and in the teachers' pedagogy. Each teacher and unit was considered a separate element of analysis. However, data involving the teachers were examined in conjunction with the units they taught. In

keeping with the characteristics of a case study, I observed the teachers in their natural context in order to develop a better understanding of the experiences of the teachers as they taught the units and interacted with their students.

Selection of Subjects

The subjects were recommended by my graduate supervisor as exemplary teachers in the field of drama in education. Following approval of the research study by the University of Victoria Human Research Ethics Board and the school board (Appendix A: Sample of Consent Form for School Board), my supervisor wrote to the teachers, asking them to contact me if they were willing to participate in my research study. When the teachers responded positively, I asked them to sign a letter of consent in which I outlined the purpose of my study and the details of their involvement (Appendix A: Sample of Consent Form to Teachers). I left the teachers with parent/student consent forms that outlined my plans to observe the students in drama activities, and I returned to collect the forms 10 days later (Appendix A: Sample of Consent Form to Students and Guardians). All students except one gave consent to participate in the study. I sent him and his parents a letter to clarify that, while the student would continue to participate in the drama activities, none of his comments or activities would be recorded.

Physical Setting

The participants of the study taught in the same school district in the capital region of Victoria, British Columbia. The district combined city, suburban, and farm communities.

Teacher A worked in a middle school serving combined small town and rural communities of 20,000 people. The school held 522 grade 6, 7, and 8 students, a diverse population, some of whom were English as a second language (ESL), special needs, and First Nation students, as well as students from single, blended, and typical families.

The grade 6 students had a homeroom class with specialist teachers for some subjects such as drama. Drama was a mandatory subject for all grade 6 students. The students I observed attended drama daily for 40 minutes over seven weeks.

The drama class was held in a multipurpose room that had been divided by a movable, accordion wall. It was roughly 25 by 50 feet in size. An open linoleum floor space of about 20 feet by 35 feet was available in the centre of the room. One end of the room had blocks, steps, and a puppet theatre. The teacher gave permission to use these items on the final day; nonetheless, at times the students were drawn to the equipment and were asked to return to the group. The opposite wall held mirrors, as did the wall parallel to the accordion wall. The teacher usually grouped the students facing away from the mirrors. The students entered through a single door which the teacher unlocked at the beginning of each session. The teacher had a small storage space from which she or a student collected properties for each lesson.

Teacher B taught half time in a grade 3 classroom, in an elementary school for grades 3 to 5. The school population was 121 and the school faced closure at the end of the year. It was located in a suburban area within a wooded setting. The principal was shared with another school.

The classroom was about 40 by 20 feet, with two doors at either end of the room, and a wall of windows that looked out onto a play area, woods, and the sea beyond. The

room also contained a reading corner, a tank where the class was spawning salmon and a circular table for projects. Every available space on the walls was covered with inspirational posters, illustrations charting the life-cycle of salmon, student reports, and art work. Drawings of hot air balloons labelled with some of the multiple intelligences hung from the ceiling. The desks were in rows of three, on a carpet in the middle of the room. At drama time the students moved their desks to the edges of the room and worked on the carpet which was about 15 by 20 feet.

Personal Context

Teacher A's class contained 28 grade 6 students (one not to be observed), ages 11 to 12. There were 16 boys and 12 girls. The class also included the specialist drama teacher and a Special Student Assistant who worked with two students in the class. The group was comprised of students with diverse cognitive and developmental needs, and a variety of cultural backgrounds were represented. According to the teacher, the class had higher needs than average in the general school population; however, she added that she experiences a challenging class every year. In the five months before I joined as observer, the students had been in the same homeroom class together; however, Teacher A had taught them for only three weeks. At the beginning of each class the students removed their shoes and sat in a circle in alphabetical order, to allow the teacher to take a quick, silent attendance and to review the previous day's work. When the students were given a choice of partners or groups, the boys and the girls tended to stay with their own sex; however, they did interact in other activities.

Class B held 20 grade 3 students: the 11 boys (including a set of twins) and 9 girls were either 7 or 8 years of age. Teacher B had been teaching the students for 5 months, half time. There were no student assistants; however, according to the teacher, there were several students with higher needs. The students were asked to work in a variety of groupings and mostly agreed with the teacher's choices for groups. Boys and girls worked comfortably together when they chose their own partners and they were instructed not to refuse an offer to partner with another student. The teacher began each session by asking the students to clear the desks for drama and followed it by a discussion in a circle.

Procedure for Data Collection

Qualitative data collection requires sensitivity, integrity, and keen observational skills. Gall, Gall, and Borg (2005) state that

> researchers themselves are the primary 'measuring instruments' relying heavily on personal observation, empathy, intuition, judgment, and other psychological processes to grasp the meaning of the phenomenon as it is experienced by the individuals and groups in the field. (p. 314)

Within the context of this case study, multiple data collection methods were used for a triangulation of methods in order to increase validity and reliability of the research findings. Yin (1994) maintains that "any finding or conclusion in a case study is likely to be much more convincing and accurate if it is based on several different sources of information, following a corroboratory mode" (p. 92). Consequently, if you ask the same question and get the same response from three different data sources you will have successful triangulation. The data analyzed in this case study include lesson plan

documents, observational field notes of drama instruction in the classrooms, and teacher interviews.

Documents

Yin (1994) argues that "for case studies, the most important use of documents is to corroborate and augment the evidence from other sources" (p. 81). More specifically, documents can be used to provide other specific details and to make inferences. My documents were the teachers' lesson plans, which they provided prior to the observations. In both cases the teachers used published lesson plans for their units. Teacher A used *The Little Immigrants: Parents of Our History* (Burke & Malczewski, 1993) and Teacher B used the story drama, *All Dried Up and Blown Away*, from the book, *Into the Story: Language in Action Through Drama* (Miller & Saxton, 2004) (Appendix B: Sample Units A and B). I was able to read the published units before I observed the teachers in class. As I read the lessons I considered opportunities for the engagement of multiple and empathic intelligences in the activities prescribed in the text; however, I did not undertake formal analysis of the units until all observations and interviews were complete. Many times Teacher A adapted the lesson, choosing to delete activities, or add activities that were not listed in the published text (Appendix B: Sample Unit A).

Observation

"Observation entails the systematic description of events, behaviours, and artifacts in the social setting chosen for study" (Marshall & Rossman, 1989, p. 79). The context of this study required that the observations occur in two teachers' classrooms. Prior to formal observations, I explained the purpose of my study to the teachers and students and gave them an opportunity to ask me questions. They were told they could withdraw from

the study at any time. The purpose of the visit was to explain my formal role as observer while generating a level of comfort with my presence in the students' classrooms. I used the opportunity to do some drama with the students to allow us to get know one another. From then on my role in the classroom was that of guest and visible observer, outside the events of the dramas.

The observations took place in the natural setting of the teachers' classrooms where I wrote detailed field notes on a laptop computer. I observed Teacher A in seven classes of 40 minutes in length, totaling 4 hours and 40 minutes; however, I did not observe most of the classes where students watched videos or played games as part of the drama unit. I watched teacher B for a single day broken into three sessions; Unit B totalled four hours, excluding breaks for recess and lunch. A transcript of the observations was read and approved by each teacher.

I chose to take field notes of the observations rather than audio recording because simultaneous activity in a drama classroom makes audio recording difficult to transcribe. I documented, in writing, as much of the teachers' directions, questions, and conversations with the students as possible. I also made notes about the students' discussions and physical activities. I made a conscious effort to record only what I saw and heard, rather than interpret a student's or teacher's responses or actions. My intent was to record opportunities where multiple and empathic intelligences could be engaged. The students often worked in small groups or partners, which complicated documentation of all the interactions. Consequently, I recorded the interactions one group at a time. Although the majority of information was recorded, observation limitations made it impossible to record every action or comment throughout the lessons.

Interviews

"Interviews are an essential source of case study evidence because most case studies are about human affairs . . . [which] should be reported and interpreted through the eyes of specific interviewees" (Yin, 1994, p. 85). In this thesis my intent is to reflect the teachers' experiences; therefore, their interpretation of their pedagogy is vital to my data collection and analysis.

Prior to the observations, I met with the teachers twice, in order to establish a relationship. I wanted the teachers to feel as comfortable as possible with my presence in the classroom and in the subsequent interviews. Additionally, we had short discussions before and after sessions concerning the plan for the day, reflection on the previous session, the teachers' concerns or feelings of satisfaction with the lessons, and the work of individual students. The observations and unit plans informed the development of the interview questions, initially inquiring about the general structure of the drama classes, then concentrating on the multiple and empathic intelligences (Appendix C: Sample of Interview Questions). While the list of questions was similar for both teachers, some questions were specific to each teacher's experience. The questions were asked in a defined order; however, not all were asked in each interview: in some circumstances the teacher answered a question before it had been asked.

Each interview took place a week to 10 days after the completion of the observations. Teacher A chose to be interviewed in her classroom, whereas it was more convenient for Teacher B to meet in a downtown university room. I used a semi-structured interview format because "the interviewed subjects' viewpoints are more likely to be expressed in a relatively openly designed interview situation than a standardized

interview or a questionnaire" (Flick, 1998, p. 76). The planned questions were of an open-ended nature where interviewees were asked for their opinions of, and insights into, events (Yin, 1994). Furthermore, the respondent was given unlimited time to respond to each question. The interview with Teacher A lasted 1 hour and 5 minutes, and Teacher B's interview was 50 minutes in length. During the interview each teacher was recorded on audio tape, which was later transcribed for data analysis. The teachers checked the transcriptions for accuracy and Teacher A requested an edit in one paragraph. I expressed respect and gratitude to both teachers for sharing their valuable experiences and insights, as well as their time.

Validity

"Researchers who embrace interpretivism do not judge their case studies using traditional notions of validity and reliability, but instead use criteria that are meant to demonstrate the credibility and trustworthiness of their findings and methods" (Gall, Gall, & Borg, p. 319). Some of the strategies used for this study to assist in trustworthiness include: a chain of evidence, usefulness, triangulation, member checking, contextual completeness, and researcher's self-reflection (Gall, Gall, & Borg, 2005).

A strong chain of evidence allows the reader to follow evidence from the research question, to the raw data, to the analysis, and conclusions of the data. I created a strong chain of evidence by transcribing all the collected data and the dates of data collection. Themes discovered in the data analysis were illustrated and supported by examples in the data from which they were inferred.

The criterion of usefulness demands that the study "enlighten the individuals who read the report of its findings" (Gall, Gall, & Borg, 2005, p. 320). My intention was to

create a document that will be theoretically and practically valuable to teachers using drama and the multiple and empathic intelligences in the classroom. Understanding the experience and insights of colleagues can provide the inspiration and support needed to examine one's own pedagogy.

Triangulation involves multiple data collection. The data analyzed in this case study include lesson plan documents, observational field notes of drama instruction in the classrooms, and teacher interviews.

Member checking requires that the participants review the data collected by the researcher. Once the lessons and interviews had been transcribed and examined by the teachers, I made all requested alterations to the transcripts. Furthermore, the teachers read the findings described in the study and each verified that her voice had been accurately represented (Teacher A personal communication, July, 7, 2005, & Teacher B, personal communication, July 24, 2005).

Contextual completeness places research phenomena in a context and requires that researchers consider contextual features as they investigate. As I collected and analyzed the data I considered the contextual features of physical setting; the number and group dynamic of participants; the activities; the temporal order of events; the routines; significant events, and participants' perceptions and meanings.

Researcher's self-reflection encourages the researcher to reveal her "qualifications to conduct the study and [her] relationship to the situation being studied" (Gall, Gall, & Borg, 2005, p. 323). As a drama teacher and a teacher who has applied the multiple intelligence theory to my own pedagogy, there is a concern that my personal experience

will impact the results of the study. By managing that concern by using the methods citied above, trustworthiness in the data and analysis is increased.

Data Analysis

Yin (1994) describes "relying on theoretical propositions" (p. 103) as the preferred strategy for analyzing case study evidence. He contends that "the original objectives and design of the case study presumably were based on [theoretical] propositions, which in turn reflect a set of research questions, reviews of the literature and new insights" (p. 103). I chose this approach because of the theoretical construction of my study.

In addition to Gardner's writing there is an abundance of material created to assess the multiple intelligences in the classroom; however, I chose to create my own assessment instrument because the materials I found were designed to assess individual students, rather than teachers or unit plans. The instrument assesses the articulation of the theoretical models of multiple and empathic intelligences in the observed dramas by dividing each intelligence into descriptive categories and applying those definitions to the activities in the units and to the teachers' pedagogy (Appendix D: Sample of Assessment Instrument). Most of the categories I used are based on the work of Campbell, Campbell and Dickinson (2004) whose book *Teaching and Learning Through Multiple Intelligences* is recommended by Gardner. I used their definitions as a foundational template for my assessment instrument. I then added intelligence attributes from the texts *Project Spectrum: Early Learning Activities* (Chen et al., 1998), and *Multiple Intelligence Approaches to Assessment* (Lasear, 1999). Lastly, I referenced *Frames of Mind* (1983) to compare the definitions in my assessment instrument with Gardner's intelligence definitions and added any criteria that were missing. Additional considerations such as

use of metaphor, and metacognition were taken from *The Disciplined Mind* (2000) where Gardner has developed an educational philosophy concerning key human achievements. Categories for empathic intelligence were taken from Arnold's published work (2003, 2005a).

I asked a teacher with a Ph.D. who lectured on the subject of multiple intelligences at a university and who used multiple intelligences in his elementary classroom to evaluate my Assessment Instrument for its ability to effectively assess the use of multiple intelligences in the unit plans and in teacher pedagogy. The teacher examined the instrument for its applicability to the grades observed, as well as for younger grades, and for its ability to assess other subject areas. The teacher asked me to defend why I chose not to include naturalist intelligence and to include more categories in empathic intelligence. I addressed both concerns.

My approach to the analysis of the data entailed systematic examination of the lessons and subsequent interviews in order to designate drama activities and teacher pedagogy into multiple and empathic intelligence categories. "Whether the data be interview transcripts or field notes, they must be examined thoroughly for each and every incidence of a phenomenon" (Allen, 1991, p. 180). The first step in analyzing the data involved transcription of the interviews and an accuracy check of the observation field notes and interview transcriptions by the teachers. The second step involved inferring where each intelligence was used, and recording the intelligence on the unit plans, the observation field notes, and in the transcription of the teachers' interviews. In the third step, descriptors from the second step guided the classification of the intelligences that were articulated in the unit, an activity, or teachers' comments. Subsequently, I referred

to the specific categories within each intelligence on the assessment instrument to analyze the manner in which the intelligence had been utilized. For example, in the margin of the observation notes I have written 'Spatial Intelligence' beside several different activities. In each case I read through the spatial intelligence categories in my Assessment Instrument to find the relevant description for the activity. (See Table 1.)

Table 1.

Spatial Intelligence

Criteria Students have the opportunity to:	Unit A How does the unit address the criteria?	Teacher A How does the teacher address the criteria?
navigate self and objects effectually, through space as one's body through apertures.	1) *Pickpocket* activity: negotiating the space when running, stretching and avoiding other students while trying to get the handkerchief.	1) Asks students not to touch each other in *Pickpockets*. 2) Models miming two jobs before they have their turn 3) Negotiating imaginary tables and miming eating in the orphanage.

For full detailed analysis of an intelligence see Appendix E.

In addition to analyzing the articulation of individual intelligences, I addressed the occasions where opportunities to engage intelligences were simultaneous, or where there

was a potential to transfer knowledge gained in one intelligence to another. I examined other elements of the multiple and empathic intelligence theories such as metaphor, multiple entry points to a subject, metacognition, and reflection. A final assessment table examined teacher pedagogy through categories including the reflection of the teachers' philosophies in their pedagogy; the inculcation of the multiple and empathic intelligences; and the adaptation of lessons to suit the needs of the students.

The data analysis produced complex and comprehensive information that explored the data thoroughly through the lens of multiple and empathic intelligences. Moreover, assessment beyond the intelligence definitions included other aspects of the theories as they pertained to teacher pedagogy and the classroom experience.

Summary

The purpose of this chapter was to describe the procedures used to investigate the research question: How are the multiple intelligences and empathic intelligences articulated in educational drama? The chapter discussed the ethical process of participant selection as well as the settings and personal context of each in middle and elementary classroom involved. A qualitative, multiple case study was defended as an appropriate design for the research because it allowed the researcher to study participants within their own context and to convey the participants' perspectives.

Triangulation was emphasized as an integral element of qualitative research that enables trustworthiness of the data by asking the research question through a variety of collection procedures. The methods of data collection, using triangulation, were defined as unit structure documents, lesson observations, and teacher interviews. Validity was

defined in the qualitative research context as 'trustworthiness' and 'credibility.' Many methods to achieve these criteria were described, including: a chain of evidence, usefulness, triangulation, member checking, contextual completeness, and researcher's self-reflection.

The instrument created to assess the articulation of the theoretical models of multiple and empathic intelligences in the observed dramas was described as an assessment instrument that divided each intelligence into descriptive categories which were applied to the activities in the units and to the teachers' pedagogy. An expert examined the assessment tool for validity. The assessment instrument and the three data collection methods presented in this chapter enabled me to collect, analyze, and interpret the data for the unit structure and the teachers' pedagogy as they pertain to the articulation of the multiple and empathic intelligences in educational drama. The results and conclusions will be discussed in chapters four and five.

CHAPTER FOUR

Findings

Introduction

Data used in this investigation have been organized first, according to my research question and the three theme statements that guided this study, and second, according to the categories in the assessment instrument that define each intelligence and pedagogical consideration (Appendix D: Assessment Instrument). The research question, How are the multiple intelligences and empathic intelligence articulated in educational drama? includes the following themes:

1) the ability of teachers to utilize multiple intelligences and empathic intelligence through the published lesson plans in educational drama;

2) the effect of drama on transference of one intelligence to another intelligence, and the ability of drama to provide opportunities to combine intelligences;

3) the effect that a teaching pedagogy using empathic and multiple intelligences in drama has on student engagement in the learning process.

In each of the following sections, several of the questions from the assessment instrument (Appendix D: Assessment Instrument) are posed. Correlating examples from data in the unit plans, observations, and teacher interviews describe how each category within each intelligence is actualized. For each intelligence, the total categories with correlating examples are noted. Some categories are not described in the findings, due to the large number for each intelligence, and the abundance of examples. The examples chosen illustrate the drama activities that exemplify the assessment instrument criteria.

Categories not supported by data will be made known to the reader. The first section of the chapter responds to the first theme question with analysis of data collected through observations and teacher interviews and describes how each intelligence is utilized. The second section uses the same data to demonstrate how the units reflect, and teachers perceive, the possibilities for intelligences to be transferred and combined. The third section uses several categories to examine how successfully teacher pedagogy engages students in the learning process, as it relates to the inculcation and modelling of the intelligences.

The purpose of this chapter is to reflect the teachers' experiences and interpretations of the lessons, in order to understand how the multiple and empathic intelligences are articulated in their pedagogy. Given the diversity of the units and the classes, there will be no comparison of data; however, the drama activities described are detailed in Appendix B: Sample of Unit Plans.

(Note: Student 1 (S.1) does not refer to the same student throughout the chapter. Each example starts with 1, 2, 3 to identify the different students in a particular example. In addition, the ellipsis (. . . or . . . .) indicates the omission of dialogue rather than a pause.)

How are the Multiple Intelligences and Empathic Intelligence Articulated in Educational Drama?

As an introduction to the teachers' pedagogical philosophies, I asked the teachers why they use educational drama as a teaching methodology.

Teacher A:

> I want to tap into the emotional aspect of learning. I think it's through educational drama that [learning] is transferred most easily into their lives . . . . I can talk to [the students] about history, but in drama they actually step into someone's shoes who may have lived in a different period of time, in different circumstances . . . . We have the wonderful safety of the fact that we're not really there, but we can imagine what it's like to be there . . . . The discussions and the understandings that kids have after doing drama are really powerful. It's the most powerful and hands-on way for kids to learn. (Interview, March 2, 2005, p. 2)

Teacher B:

> I choose to use [educational drama] because I think that there are many different things that happen in drama on all kinds of levels. In fact, I'd be hard pressed to say that over a period of time there are any intelligences that [drama] doesn't develop in some way. [The lines between intelligences] are blurred too, making it a very holistic way of working . . . It's a risky thing to do, in a lot of ways as well, and I think that makes it kind of fun. You don't always know what to expect as a teacher, although you have your questions ready and everything. You do, to some extent, take what they give you and then you have to make decisions about where you can go with it. (Interview, April 21, 2005, p. 1)

In a later e-mail she added, "I chose [*All Dried Up and Blown Away*] because it linked so well with a unit on Canada we were working on in Social Studies and because it is such a great example of a story drama that teases out many intelligences" (personal communication, July 24, 2005).

The Ability of Teachers to Utilize Multiple Intelligences and Empathic Intelligence Through the Published Lesson Plans in Educational Drama

Linguistic Intelligence

This subsection cites examples from five of the 10 linguistic category questions on my assessment instrument. In analysis, I found examples in the observations, units and interviews for all 10 categories.

Category One

Students have the opportunity to use listening, speaking, writing, and reading to remember, communicate, discuss, explain, persuade, create knowledge, construct meaning, and reflect upon language.

The following examples separate listening, speaking, reading, and writing while considering other aspects of the question.

Teacher A

Listening

The *Little Immigrants* unit provided an opportunity for students to focus on listening skills during guided imagery and, while listening to reflections and discussions, to gather information that moved the drama forward toward new learning. Teacher A facilitated student listening by modelling good listening skills. When discussing an Oliver Twist video:

Student: It was fun a lot of the time; you got to do what you liked.

Teacher: There was a lot of freedom; you didn't have adults watching you a lot of the time (Teacher A Observation, p. 3).

Speaking

Students constructed meaning when they questioned one student in-role as a society lady. She had the opportunity to remember and communicate learned information.

S. 2: Have you ever been poor?

S. 1: No.

S. 3: If people trespass, what do you do?

S. 1: My father goes out and deals with them but I don't; that's not lady-like.

S. 4: Do you want to help the street kids?

S. 1: Sometimes, and sometimes I think they get what they deserve.

T: What do you think is the benefit of the workhouse?

S. 1: It gives them a place to stay, so they don't have to wander around the streets.

S. 4: What do you think we should do about the homeless?

S. 1: They should give them a place to stay, so they don't bug people.

S. 5: Do you think the government should give them money?

S. 1: No, they should give them a place to stay because if they give them money they will spend it.

S. 5: What if they are responsible with their money and don't waste it?

S. 1: Most people spend their money. (Teacher A Observation, p. 8)

This transaction was the last in a series. The teacher guided the students/ interviewers by questioning the students-in-role, then gradually handed control over to the interviewers when their questions became more pertinent to the investigation. Through

interviews with Londoners, the students were able to recreate the world of street waifs more than a hundred years ago.

Writing

The students were asked to write sentences that described the drawings they created of a waif, record the conflicting perspectives of the Home Child program, and write a letter as either a street child or a philanthropist (Appendix B: Little Immigrants Sample Lesson Plan). Although the work was directly related to their experiences in the drama, each piece of work was original and from the perspective of the individual students.

When considering the ability of the students to meet writing criteria Teacher A states,

> I was really pleased to see . . . how [the students] tried to reach the criterion of making the voice come through in the writing. If they wrote as the philanthropist, they used a lot of high-level language and some old-fashioned terms. With the ragged children there were misspellings and poor grammar. There was a commitment to the perspective of the character. If they were writing as a philanthropist . . . there was a strong point being made as to whether they wanted to help the children, whether they felt sorry for them, or whether they wanted to deal with the problem of the children because it was interfering with their business. As well, students came up with solutions . . . . I was pleased to see that they got the idea that kids need love, and they need a family and they need somewhere safe. (Teacher A Interview, p. 8)

See Appendix G: Additional Findings for a further example.

Reading

Reading was a smaller component of the lessons in Teacher A's class; nevertheless, opportunities to read were integrated into drama activities. The students were asked to read the descriptions on the backs of photographs, the criteria for their

letter and Seeing Both Sides assignments, and the caption the teacher wrote on the board, "Welcome Ladies and Gentlemen to the Hope Place Mission. This Evening's presenter: Dr. Barnardo" (Teacher A Observation, p. 12). Some students read it aloud, which was beneficial to the students who could not read.

Category Two

Students have the opportunity to strive to enhance their own language.

Teacher A

The teacher often rephrased students' statements during discussions, or when they were in-role. She describes the significance of this teaching technique:

> I want to make sure everyone heard, or sometimes it could be . . . [that] I want to raise the level of their statement. Maybe they said it off-handedly but I want to bring a significance or attention to it. Or I want to help them with clarity. If it's a student who is trying to be silly in-role but they are actually on the mark, then I will restate it in a way that I want to elevate the statement . . . . If they're in-role I might ask them another question on top of that; 'You've said this, can you also tell us about that?'. . . to push the drama along a bit. (Teacher A interview, p. 5)

Category Three

Students have the opportunity to imitate sounds, language reading, and writing of others.

Teacher A

Teacher A modelled a London cockney accent, which some of the students imitated when in-role. She also modelled questions that moved the drama forward and emphasized important information. Teacher-in-role: Thanks for coming, sir, we appreciate you taking the time to come and answer our questions about the children on

the streets . . . What do you think should be done about the kids on the street? (Teacher A Observation, p. 7)

Category Four

Students have the opportunity to speak effectively to a variety of audiences for a variety of purposes, and know how to speak simply, eloquently, persuasively or passionately at appropriate times.

Teacher A

Students spoke to a variety of audiences including small informal groups, with partners in *The Debate* and as individuals addressing the class. When interviewed in-role as a rich nineteenth-century London businessman, a student described how he treats street waifs in front of his establishment.

S. 1: I usually kick them off the steps.

S. 2: Do they interfere in your work?

S. 1: Yes, they are always crowding around and getting in my way.

T: What do you think should be done about the kids on the street?

S. 1: They should be sent to work.

T: As one of our leaders, what do you think is the root cause of having all these kids on the street?

S. 1: Bad paying jobs and people who won't work.

T: What do you think of workhouses?

S. 1: They're good.

S. 3: Do you think the government should help them?

S. 1: No, they don't deserve it. (Teacher A Observation, p. 7)

Category Five

Students have the opportunity to read effectively, comprehend, summarize, interpret or explain, and remember what has been said.

Teacher B

In *All Dried Up and Blown Away*, reading was integrated into drama activities to enrich the drama or clarify meaning. The teacher verified student comprehension after they read a letter from the bank; she questioned word meanings while reading *The Dust Bowl*, and had the students read captions summarizing their tableaux.

Students demonstrated effective reading, understanding, summarizing, and explaining when they were asked, in-role, to write their feelings in their journals, then read their entries with the instruction to "underline a sentence that tells the best how you are feeling . . . the one thing that is the heart of the journal" (Teacher B Observation, p. 22). The teacher then asked the class to, "give me a quiet thumbs up if you know the one thing you can say. I am going to come around and do a tapping in. The rest of you can close your eyes and listen" (p. 22). Teacher B provided a safe atmosphere for the students to express themselves and gave them the choice to read aloud. A few examples of the "heart of the journal" follow:

S. 1: I had to borrow a lot of money from the bank. Now I have to pay it back.

S. 2: I will sell my chickens, eggs and, hopefully, the bank will give me some money.

S. 3: I'm leaving my kids to go to Ontario to get some money for our family.

S. 4: I feel happy because I have lived on the farm for a long time and I have decided to stay.

S. 5: It's just too hard to survive. (p. 22)

Musical Intelligence

Examples from five of the 10 categories for this intelligence were found in the data. Musical intelligence includes the use of the human voice and environmental sounds. The units provided opportunities for musically intelligent activities where music, as we generally understand it, was not involved. Categories that involved musical notation, singing, playing, listening, or creating and interpreting various musical genres (Appendix E: Assessment Instrument - Musical Intelligence) were not addressed by the teachers in the units.

Teacher A

The published lesson suggested teaching the class a hymn to sing as the students left the orphanage for Canada. Due to time constraints, Teacher A did not use that activity; therefore, singing was not incorporated.

Category One

Students have the opportunity to listen and respond with interest to a variety of sounds including the human voice, environmental sounds and music, and organize such sounds into meaningful patterns.

Teacher A

The *Oliver Twist* video and the teacher-in-role used a cockney accent. Some students imitated the accent while others did not. Through the use of accents and vocal expression, the teacher used variation in pitch, tone, and rhythm to express a variety of emotions, and ideas.

Logical-Mathematical Intelligence

This subsection cites examples from five of the 11 linguistic category questions on my assessment instrument. In analysis, I found examples in the observations, units, and interviews for nine of 11 categories; however, the data reveal greater emphasis pertaining to the systematic use of logic, reasoning, cause and effect, rather than to algorithms, statistics, graphing and other mathematical computations (Appendix D: Assessment Instrument). Teacher B notes that, while math was not a primary objective, mathematical skills were used in the drama (Teacher B Interview, p. 3).

Category One

Students have the opportunity to develop the concepts of quantity, time, and cause and effect.

Teacher A

Students were encouraged to consider the concept of "time" in their overall examination of the Victorian era through the videos *Oliver Twist* and *Childhood Lost*, and during class discussions. Comprehension of the physical and social environment (clothing, working conditions, government, children's rights) allowed students to realize that profound changes have occurred over the last hundred years and, consequently, consider the different ways of life.

Teacher B

In the interview, Teacher B related an earlier conversation with the students, one that effectively raised the concept of "quantity:"

> 'How much is a farm worth anyway?' . . . At that age they don't have a good sense of how much things do cost or, 'What would you have to do to save the farm?

> How much money would we be talking about, do you think, to pay the bank?' Those kind of things, that estimation. (Teacher B Interview, p. 10-11)

One of the most significant conversations Teacher B had about "cause and effect" concerned the drama contract. Teacher B asked the students what they believed were the effects of breaking the drama contract, and what did they need to remember to have a successful drama class.

T: Does anyone remember what those things are?

S. 1: You have to pay attention.

S. 2: You can't fool around.

T: Why is that important?

S. 2: So you don't lose control.

T: That is really important in drama but does it mean you can't have fun?

Students: No. (Teacher B Observation, p. 9)

The teacher guided a conversation that effectively allowed the students to go step-by-step through the logical processes of "cause and effect."

T: Why do you think the man feels so sad when he gets this letter?

S. 1: He finds out he is in debt.

T: Does he have the money to pay the loan?

S. 2: No.

T: What would he do if he can't pay the loan?

S. 3: Sell the farm.

T: Who gets the money if he sells the farm?

S. 3: The bank.

S. 4: Then he has no money to live. (Teacher B Observation, p. 19)

Category Two

Students have the opportunity to learn from a trial-and-error approach.

Teacher A

Trial-and-error was examined when students undertook the Pickpocket activity. The unit uses the context of Fagin and his orphan boys to examine the kinds of strategies required to pick pockets without being caught. Upon reflection, students commented as follows.

S. 1: It's like that scene where one guy is in front of a guy and says "hey you" and the other one picks the guy's pocket.

S. 2: I was thinking, when there's 20 kids and one guy takes it and the others make a crowd, and the guy who has it passes it to someone else, and the guy is still chasing the guy who took it (Teacher A Observation, p.11).

The students strategized that teams would be more effective picking pockets and tried again. Teacher A, as Fagin, soon stopped the play; "What kind of team work is that? Four boys are trying to get your handkerchief and your group is over there! (Student smiles and runs to join her group) . . . . Think about how you can improve that for next time" (p.11). As the students play many different strategies are attempted. Those waiting watch and play more strategically in their second round.

Category Three

Students have the opportunity to think mathematically and systematically by gathering evidence, making hypotheses, formulating models, developing counter-examples, and building strong arguments.

Teacher A

The students "gathered evidence" as they researched and experienced life as homeless children and adults of the Victorian era. They "made hypotheses" concerning what life might have been like for the homeless and they "formulated models" of different experiences these children might have had. They completed letters and "*Seeing Both Sides*" templates to support their different perspectives. Lastly, the students "built arguments" in The Debate, during which they strove to be open-minded.

Category Four

Students have the opportunity to demonstrate skill at logical problem-solving and reasoning.

Teacher B

In the interview, Teacher B referred to family and town meetings where students try to solve their financial debt problems.

> 'How would you solve that problem in a logical way? Would killing two chickens pay back the money? Can you leave without a vehicle? Have you still got your truck, or did you give that to the bank too?' They were quite surprised because they made a lot of assumptions there. They needed a little bit of guidance with that one. (Teacher B Interview, p. 11)

Other examples in this section also define logical problem-solving and reasoning abilities.

Category Five

Students have the opportunity to pose and test hypotheses.

Teacher B

There were instances where hypotheses were posed: for example, the students discussed their water source relative to the location of the animals, as well as the consequence of staying or leaving the farm for the city; however, their decisions were not investigated or tested.

Spatial Intelligence

The data revealed examples for 9 of the 11 categories. Four are cited below. Constructing and adapting three-dimensional objects, and perceiving both subtle and obvious patterns (Appendix D: Assessment Instrument) were not practiced.

Category One

Students have opportunity to learn by seeing and observing.

In both units, the students were given opportunities to fulfill the above criteria. They watched each other in drama activities and in-role, they watched pictures or videos to research a topic, and observed their classmates' drawings and tableaux.

Category Two

Students have the opportunity to navigate self and objects effectually thorough space, as when moving one's body through apertures.

Teacher A

For safety reasons, the Pickpocket activity demanded the students navigate past other students on the move. They maneuvered through the room's empty spaces, while protecting their handkerchief from being stolen. Their peripheral and depth vision were

engaged, as well as their awareness of negative and positive space. When asked by the teacher "What would you recommend is the most important thing to do in this round?" a student responded, "Team-up on one person and circle them" (Teacher A Observation, p. 11). Subsequently, the students changed their spatial relationship, staying in close proximity to their team members, in order to move as a unit to trap another person, without touching.

Category Three

Students have the opportunity to perceive and produce mental imagery, think in pictures, visualize detail, and use visual images to recall information.

Teacher B

In the *Little Immigrants* unit students were encouraged to visualize street waifs in London when they were drawing a street child or when in-role as a waif, through the use of photographs of street children, personal experiences in London, guided imagery, and the teacher's descriptions. One child in-role evoked images when he described the street waifs. "They are always crowding around and getting in my way" (Teacher A Observation, p. 7). Another described an incident where, "I was walking down the alley, heading toward my house. All at once a little boy comes up with a top hat and a brown jacket" (p. 14).

See Appendix G: Additional Findings for further examples.

Category Four

Do the students have the opportunity to decode graphs, charts, maps, diagrams, and learn through graphic representation or through visual media?

Teacher B

Granted, in *All Dried Up and Blown Away* the maps the students created were not decoded; the students did, however, consider specific information needed. They also discussed spatial relationships between objects on the map. The teacher facilitated visualizing a map by suggesting,

> You are going to draw a farm on the piece of paper . . . . This is going to be a Canadian farm so there should be nothing on your farm that shouldn't be there. You need food and shelter; . . . but don't draw anything until your group agrees, because you wouldn't want to make your house and have another person putting a lake under the house. (p. 11)

Bodily-Kinesthetic Intelligence

Although I found examples for all 11 categories, in this subsection only six are considered. The lessons observed enabled students to fulfill the category, "to learn by direct involvement and participation" (Appendix D: Assessment Instrument). The teachers facilitated this category by asking questions that drew the students into the topic, approaching each lesson with energy and enthusiasm, and organizing the lessons to involve everyone.

Category One

Students have the opportunity to develop coordination and a sense of timing.

Teacher A

The Pickpocket activity required balance and coordination, as well as good timing in order to retrieve classmates' hankies, while saving their own. I described these movements in my field notes:

> The students move around the space sideways and backwards, slowly at first, turning their heads to look all around them, moving in quick spurts, bending sideways, forwards, and backwards to avoid having their hankies stolen. They move suddenly to stretch around each other. They use snatching motions as they try to steal the hankies. Some take from each other without being noticed. (Teacher A Observation, p. 10)

When they worked in teams, students adjusted their timing and body movements.

Category Two

Teacher A

Students have the opportunity to demonstrate skill in acting, athletics, sewing, carving, etc.

The act of being in-role was used throughout the *Little Immigrants'* unit, but to different degrees. Those students who felt comfortable were questioned in-role: some changed their demeanour to portray a character. There were other opportunities where students could portray a character as part of a group of characters (*Hope Place Mission*, *Orphanage*, *Pickpockets*, and *Coppers in the Dark*). Taking on a role demands students foster a belief in the genuineness of the experiences of the persons they portray. A few students took on a silly persona while in-role, and Teacher A reminded them of the purpose of the role drama.

T: Ladies and gentlemen, I would like you to meet our guest, Dr. Barnardo (the teacher puts on the black jacket and moves behind a podium).

S: (Many of the boys cheer, and some call out inappropriately.)

T: (Starts to read the Barnardo speech from the text. When she says her name some students call out "Hi")

T: (Out of role. T removes the jacket.) When I am wearing this jacket who am I?

Students: Dr Barnardo.

T: And who are you?

S. 1: Rich English people who have come to the meeting.

T: Yes. I also used a long word "philanthropist." Does anyone know what this means?

S. 2: A person who is well-to-do.

T: Yes, and it's a person who has a lot of money, and the work they would do is to find different places to donate money to the less fortunate. They might support museums or the orchestra. (She has to settle a few boys.) You understand what that is and I have given you that role. If you are in that role there are a lot of things you can do to indicate you are in that role, but if it is too distracting you need to stop. (Teacher A Observation, p. 13)

Category Three

Students have the opportunity to develop sensitivity and responsiveness to physical environments and physical systems (exploring space and developing awareness of others in space).

Teacher A

As the teacher modelled how to use the space, the students learned how to use it in order to move and interact. Pickpockets, Coppers in the Dark, and The Orphanage were

activities that specifically required a sensitivity to physical environments and an awareness of others in the space. In The Orphanage, the teacher led the students into an empty space and established two large dining tables. They proceeded to mime eating and interacting in that space. Throughout the unit, the teacher encouraged the students to be physically aware by using comments such as

T: Now, where are you and what are you doing?

S. 1: We are in the Barnardo Home and we are about to eat.

T: What does the place look like?

S. 2: Long tables and benches.

T: Rather than tell you this, I directed you to the place . . . Show me you are at a long table. Can you imagine what you are eating? What you are eating with? (Teacher A Observation, pp. 16-17) See Appendix G: Additional Findings for further examples.

Category Four

Students have the opportunity to enjoy concrete learning experiences such as . . . role play, games, assembling objects, or physical exercise.

Teacher B

In the *All Dried Up and Blown Away* unit, the students engaged in concrete experiences such as tableau, drawing, and role drama. The level of energy and enthusiasm that filled the room while children performed concrete activities indicated student enjoyment during learning. While they were drawing the maps, the bell rang for recess, but they did not prepare to leave nor indicate they were ready to stop. When the first students returned (before their teacher) their comments were: "S. 1: Let's get back. S. 2: Let's get back to work, people!" (Teacher B Observation, p. 12). When a third

student put on a funny wig and performed a silly dance, Student 2 responded "Eeww, you have to get back to work" (p. 13), and continued to draw. The third student immediately went back to her map to draw. When the teacher arrived the students who had returned were all working on their maps.

In both units, drama activities integrate the following two examples.

Category Five

Students have the opportunity to show dexterity in working by means of fine or gross motor movements . . . and by isolation of different body parts.

Category Six

Students have the opportunity to practice balance, grace, dexterity, and precision in physical tasks.

Teacher B

During tableau work, Teacher B counted down to the freeze so students were able to decide the exact moment when they needed to be still, in order to achieve a successful presentation. Teacher B:

> I know that this group is a very kinesthetic, physical group. They love to work spatially, they love to work kinesthetically and artistically . . . . And the miming and the tableaux work really allows those kids who are terrific at expressing themselves in a quieter way sometimes, not to be verbally overrun by kids who have that style. (Teacher B Interview, p. 5)

Interpersonal Intelligence

The data reveal examples for all 11 categories in this intelligence, and five categories follow. The following two categories have been combined because they were

integrated in the units and observations. This was also the case for other interpersonal categories that weave through the examples.

Category One

Students have the opportunity to recognize and use a variety of ways to relate to others.

Category Two

Students have the opportunity to adapt behaviour to different environments, or groups and from feedback from others.

Teacher A

The *Little Immigrants* unit provided diverse ways to relate to others. Of particular note was the students' ability to adapt their behaviour in order to relate to the teacher. First they responded to her as an authority figure whom they listened to with respect, but they also were able to joke with her and question her. Second, they responded to her as the teacher-in-role. When Teacher A played Fagin, the students accepted comments like, "Hey are you being impertinent to me? If you are you won't get supper tonight!" (Teacher A Observation, p. 10). Third, they adapted to her in-role as the matron at the orphanage, and diligently recited as she led the Lord's Prayer. Finally, they related to her as a peer. When the students were in-role as philanthropists or policemen, the teacher talked to them as her equal or superior: "Thanks for coming sir, we appreciate you taking the time to come and answer our questions about the children on the streets" (p. 7). See Appendix G: Additional Findings for further examples.

Category Three

Students have the opportunity to develop skills in mediation, organizing others for a common cause, or working with others of diverse ages or backgrounds.

Teacher B

During the *Family Meeting* there was an opportunity for family members to mediate between those who disagreed. At the *Town Meeting* a student suggested "getting everyone together . . ." to which the teacher replied, "so you would organize everyone" (Teacher B Observation, p. 21), thus defining the magnitude of the student's intentions. It was a "teachable moment" where a shift in the focus of the meeting allowed "citizens" to consider the possibility of working together for a common cause. Teacher B:

> Social responsibility in my class is a huge thing—and developing interpersonal intelligence and intrapersonal intelligence . . . . Its probably what [the students] were lacking most as a group: the idea that self indulgence isn't what it's all about. When you're doing a lot of group work huge things are learned. In-role, peoples' personalities are put aside to a certain extent . . . . [Drama] gives them the chance to try out [social responsibility] in a role setting, but they personally get a lot out of that. (Teacher B Interview, p. 2)

Category Four

Students have the opportunity to perceive the feelings, thoughts, motivations, behaviours, and lifestyles of others.

Teacher B

Teacher B frequently placed students in groups or with partners. When she discussed her motives, she asked the students why she might choose partners.

S: So you get to know them more.

T: Yes. Did you get to know them? Did you get to trust them more?

Students: Yes.

T: You can get to know them by being gentle with them and being people-smart by learning about another person. (Teacher B Observation, p. 1).

When she allowed them to choose their own partners, she asked, "Remember if someone asks you, do you say no?

Students: No. (p. 1)

Category Five

Students have the opportunity to perceive diverse perspectives in any social or political setting.

Teacher B

Teacher B questioned students presenting tableaux, in order to reveal different perspectives of a single situation.

T: (Hand on S. 1 shoulder, signals him to speak) What is hard about what you are doing?

S. 1: Learning how to use a gun.

T: (Hand on shoulder of S. 2) How do you feel right now?

S. 2: I feel excited about using a gun for the first time. (Teacher B Observation, p. 16).

See Appendix G: Additional Findings for further examples.

Intrapersonal Intelligence

Examples were found in all of the 10 categories for this intelligence; five are referred to in this subsection.

Category One

Students have the opportunity to work independently.

Teacher A

In the *Little Immigrants* unit it was suggested that students work alone when they used visualization or when they drew pictures (Teacher A Observation).

Category Two

Students have the opportunity to manage ongoing learning and personal growth (for example, adapting one's choices to use newly learned appropriate behaviour).

Teacher A

In the *Little Immigrants* unit students were given some autonomy in shaping their own learning, in-role, in debate, and while playing Pickpockets and Coppers in the Dark. Teacher A provided an opportunity for "personal growth" when she asked one of them to consider his personal choices:

> I like you to make the choices about where you sit, but because you are going to have to give your attention to the person in the chair I don't think your choice is going to work. [She re-seats a student] I know this is hard for you but the group needs you to pay attention. (Teacher A Observation, p. 4)

Teacher A concluded the unit by discussing with the students' their knowledge about the Victorian waifs, in comparison to the homeless in today's society. She planted a seed, so students could grow in learning beyond the classroom.

Category Three

Students have opportunities to strive for self-actualization (realizing that something you are doing or learning is or will be of value to you).

Teacher A

The *Little Immigrants* unit considered the ethical treatment of homeless children throughout the unit and in a variety of activities. This allowed students the opportunity to experience self-actualization in a context that may well have become more meaningful to them as time went on. Following The Debate the teacher asked the students who had changed their opinions about the Barnardo Home Child Program to comment on that change.

T: What was said to you that changed things for you? Something in particular . . .

S: They got food, water, and shelter.

T: Their basic needs were met.

S: Clean clothes.

T: Why did you think it was bad before?

S: They hit the kids.

T: There was abuse that happened, so that really was a negative. (Teacher A Observation, p. 22)

Category Four

Students have the opportunity to gain insights into the complexities of self and the human condition.

Teacher B

In *All Dried Up and Blown Away,* diverse activities encouraged the students to consider the complex and personal decisions involved in the choice to stay on the farm or leave. As outsiders, they questioned the teacher in-role as a farmer in debt; they discussed their concerns as family members; they shared their decisions as part of a community; and finally, reflected privately on their feelings about their decisions. Teacher B generated a serious atmosphere throughout these activities with her own commitment to the work and urged the students consider the logic of their choices.

Category Five

Students have the opportunity to be aware of their range of emotions.

Teacher B

After the Town Meeting, Teacher B said, "I want you to write in your journal how you are feeling . . . . You are not talking to your family—they have all gone to bed. I want you to write what you are feeling about your farm, about your home" (Teacher B Observation, p. 21). As they finished, Teacher B asked the students to consider the sentence that represented the heart of their journal entry. Some of the entries related to feelings were: "I feel good because my brother told us he would take care of all the things;" "The happy part is it will be my first time at the city;" "The day was very stressful"; "I'm moving today. I lost my job. I am angry. I am going to sell my farm for some money" (Teacher B Observation, p. 22).

Naturalist Intelligence

When I began this investigation, I did not plan to use naturalist intelligence as a construct because references stated that this intelligence had not undergone the testing

that the others had. However, further readings revealed that Gardner (1999) confirms that naturalist intelligence meets the intelligence criteria, and thus I have included it. The use of naturalist intelligence was not the focus of questions in the interviews; nevertheless, it was referred to by Teacher B. Seven of 11 categories had examples which represented the intelligence and four are referred to in this subsection. The units did not address categories that explored the use of tools to study organisms or systems, learning taxonomies, or developing new taxonomies and theories (see Appendix D: Assessment Instrument).

Category One

Students have the opportunity to express their interest and enthusiasm [when exploring] human and natural environments.

Teacher A

The students explored the environment within the context of homeless children in nineteenth-century London in a variety of ways. They discussed the physical environment of children and their families, their clothing, work, and daily challenges. Teacher A encouraged the students to approach the topic by modelling interest and enthusiasm through her movement, stage design, and vocal energy.

Category Two

Students have the opportunity to show interest in the relationship among species and /or the interdependence of natural and human-made systems.

Teacher A

After participating in Pickpockets, Teacher A asked,

> What is the difference between working on your own as a street kid and working as a gang? How [was it] different and how successful was [picking pockets]? What would be the value for a kid living on the streets to be in a gang? (Teacher A Observation, p. 12)

See Appendix G: Additional Findings for a further example.

Category Three

Students have the opportunity to observe, identify, interact with, or care for objects, plants, or animals.

Teacher B

In the *All Dried Up and Blown Away* unit the students considered the animals and plants that are needed on a Canadian farm and how important water is to their survival.

Category Four

Students have the opportunity to pursue learning about life cycles of flora and fauna or the production of human-made objects.

Teacher B

Teacher B noted, "*The Dust Bowl* does address [naturalist intelligence]. We didn't have time to develop it that much, but it does talk about how much is happening with the land and what the growing cycle is like . . . . You could certainly expand that" (Teacher B Interview, p. 10).

Empathic Intelligence

In this subsection, five categories are addressed. In my analysis, correlating examples for all nine categories were found.

Category One

Students have the opportunity to commit to the well-being and development of self and other.

Teacher A

> One of the ways I teach empathy is through modelling. A big part of the ability to empathize is to understand why people act/react the way they do in certain situations. I am up-front with the students if I feel that I haven't behaved or responded as empathetically as I could have . . . I am very willing to admit my mistakes and offer an apology. One has to be careful to balance this openness with a bottom line approach. The students need to have faith that . . . the teacher/ leader will ultimately make the best decisions for the group. (personal communication, June 18th, 2005)

Teacher A's philosophy was reflected in her pedagogy when she confronted students who behaved in a way that was inappropriate and unrelated to a particular role drama. Teacher A stopped the behaviour and said,

> I am getting to the point where I am not interested in working any further. We are doing the drama that you have chosen to do, but there are things that are coming from outside the class that make this work impossible, and I am disappointed because I know the potential of this drama. There is an option of what we can do for the rest of the days instead of doing the drama. How many people are ready to get on with the drama? (All students put up their hands) That is a choice you are making, but along with the choice you must take responsibility . . . . I don't have the option to say I'll do some drama with you but not with the rest. I don't want to do that. In drama we need to [work together]. It's about social responsibility. (Teacher A Observation, p. 16)

See Appendix G: Additional Findings for further examples.

Category Two

Students have the opportunity to differentiate self-states from other-states.

Teacher B

Consideration of one's own state from other's state is not overtly discussed in the units; nevertheless, students described the actions and feelings of others in tableaux. Teacher B: "That's a terrific empathy exercise, being able to read [body language] and interpret it . . . . That's probably the best example of being able to read what's happening [in the drama]" (Interview, p. 11). Interpreting another's state enables a student to consider how "other-state" is different from their own.

Category Three

Students have the opportunity to synchronize both affect and cognition.

Teacher B

Teacher B and the class questioned students in tableaux.

S. 1: What are you doing?

S. 2: Sitting on the horse.

T: What do you want to be doing?

S. 2: Holding the horse.

T: Why can't you do that?

S. 2: Because the horse would go crazy.

T: (To class) How old do you think [the boy] is?

S. 3: Maybe five or six. (Teacher B Observation, p. 15)

The commitment and emotional engagement of student two enabled the class to connect with him emotionally while considering at what age it would be considered unsafe to

hold a horse.

Category Four

Students have the opportunity to engage in reflective and analogic processing to understand and mobilize a dynamic between thinking and feeling in self and others (self narrative).

Teacher B

When Teacher B began the Town Meeting in-role as mayor, she provided an opportunity for the students to commit to their roles and the topic on a deeper level.

> I know this is an important and serious meeting because we all had some bad news today. If there is anyone who is too upset, or think they can't help us to solve these problems, you may feel you want to leave now. (Teacher B Observation, p. 20)

As mayor, Teacher B reconnected the students to their roles as farmers and to the drama contract, which was established out-of-role at the beginning of the unit. She admitted,

> I run a pretty tight ship in the beginning as far as the drama contract goes, so that they know where the boundaries are, so that there's not going to be a lot of interrupting other people in what they are doing, and shattering their involvement in it. (Interview, p. 2)

See Appendix G: Additional Findings for a further example.

Category Five

Students have the opportunity to use speculative thought.

Teacher B

In order to make a final decision regarding their farm, the students reflected on their knowledge of farm life. Using the analogy of a farmer's life, they contemplated

universal issues of loss, separation, and family love through consideration of their own feelings and those of their in-role "family."

The Effect Drama has on Transference of One Intelligence to Another and the Ability of Drama to Provide Opportunities to Combine Intelligences

Combining and Transferring Intelligences

Category One

Students have the opportunity to transfer knowledge from one intelligence to another intelligence.

Teacher A

The *Little Immigrants* unit allowed opportunities for intelligence engaged in one subject or domain to inform understanding in another subject or domain. The students studied photographs of waifs, visualized their own individual waif, then drew that waif. Consequently, they used three aspects of spatial intelligence, as well as the bodily-kinesthetic intelligence needed to draw effectively. Adding a descriptive caption encouraged the students to engage linguistic and interpersonal skills to convey their interpretation of the drawing. Students less developed linguistically, but spatially intelligent, might find their spatial knowledge strengthens their ability to write a descriptive passage, as described by Gardner (1993).

Teacher A commented,

> In the unit, I incorporate story, real photos and video and accents in different ways . . . . I want to spark the spatial intelligence of those kids who perceive the visual, . . . and then hope that they will transfer that into their work when they're speaking or writing in-role . . . . Look at [Fred], taking in everything he had seen.

> He had seen the videos, he had heard me speaking with an accent, he heard other kids, and here's a little boy [Fred] who is speaking in this dear sweet little English accent begging for mercy for the copper not to take his brother away to jail. (Teacher A Interview, p. 11)

Category Two

Students have the opportunity to use intelligences in combination.

The majority of activities in all the units combined two or more intelligences.

Teacher B

All Dried Up and Blown Away gave students the opportunity to combine intelligences when they created a map of their farm. As the following excerpt demonstrates they used spatial skills to decide the best location for each building, animal, and water supply. Drawing requires spatial and bodily-kinesthetic intelligence: particularly fine-motor skills that are still being honed at ages eight and nine. The students needed intrapersonal and linguistic intelligence to articulate their ideas and feelings to their group, and interpersonal intelligences to interact with others. The students used logical intelligence to understand that the ideas of others may help to create a farm that meets the criteria better than their own ideas. The intertwining of cognition and affect also allowed opportunities for empathic engagement. The following example demonstrates where students combine the intelligences listed above.

Group One: (decides where the barn will go)

S. 1: We need to make it darker—outline it in black.

S. 2: Not yet, we need to draw it first.

S. 3: We need a bull.

S. 2: You can draw it.

S. 4: I can't draw it.

S. 3: I can. I'm going to draw a bull (he moves around to the other side and starts drawing in pen close to the barn).

S. 4: Don't draw it there.

S. 3: It needs to be close to the barn.

S. 4: Don't draw in pen (she grabs it from his hand).

S. 3: (asks for pen back but S. 4 will not give it to him. S. 3 explains he wants to put it back into his box. S. 4 gives S. 3 the pen. He puts it away and uses a pencil)

T: (Approaches the group) Wow! You have a big farm. Have you thought about your food and your water?

S. 2: Yes, the water is here. (She draws a river.)

T: What is in the fence?

S. 3: A bull.

T: (Asks another student where the water is from.)

S. 1: A well.

S. 4: (to T) Yes, that would be a good idea!

S.'s: (They draw for a while)

S. 2: What's that?

S. 4: A well.

S. 2: Oh. (Teacher B Observation, p. 11)

See Appendix G: Additional Findings for a further example.

The Effect that a Teaching Pedagogy Using Empathic and Multiple Intelligences in Drama has on Students' Engagement in the Learning Process

Student Engagement and Teacher Pedagogy

The theme of student engagement is examined using Gardner's (2000) pedagogical suggestions for the application of the multiple intelligences and the categories for teacher pedagogy are based on interview questions (Appendix D: Assessment Instrument).

Student Engagement

Category One

Students have the opportunity to experience multiple entry points to a topic.

Teacher A

The unit *Little Immigrants* began with narrative, hands-on, and interpersonal entry points where the students discussed the pictures of the street waifs.

Teacher B

The *All Dried Up and Blown Away* unit began with a narrative entry point that was a discussion of the needs of a Canadian farm. This acted as an introduction to hands-on, and interpersonal entry points that involved the creation of maps.

Category Two

Students have the opportunity to use analogy and metaphor.

Teacher B

All Dried Up and Blown Away explored the devastating effect the 1930s drought had on the land, the farmers, their families, and communities. It is a metaphor for calamities that may befall any family and the challenging choices people have to make in

extreme hardship, as outlined by Miller and Saxton (2004) under "key understandings." See Appendix G: Additional Findings for a further example.

Category Three

Students have the opportunity to experience multiple representations of a topic.

Teacher A

Diverse representations of a topic were used in the *Little Immigrants* unit within the context of orphan immigration. Many of these representations involved different intelligences. For example, speech, writing, interviews, interpersonal skills, logic, and empathy were utilized in role play. Teacher A stated that she incorporated a variety of approaches into each lesson,

> based on what we got through in the day before, or it could be an inspiration that I got that morning when I was reflecting on the kids. I may want to come at it from a different angle. I might want to go back to the exact same place, or I realize that they need to be doing something more active . . . I feel it's been too cerebral during the last lesson. I never teach the same unit twice. (Teacher A Interview, p. 4)

Category Four

Students have the opportunity to use reflection.

Teacher A

The *Little Immigrant* unit offered opportunities for students to reflect either as a class or in-role, through open-ended questions that focussed attention on issues to be explored. The students also reflected privately when they drew a street child.

Teacher A usually reflected on the previous day at the beginning of each class.

> Yesterday we got to meet two characters and we got to ask them some questions. I left you with thinking-homework about them. Who remembers what you were to think about? . . . What are the similarities and differences you noticed about those kids from the interviews? (Teacher A Observation, p. 1)

The teacher guided the students in a reflective discussion until she thought they had the background knowledge and belief in the context required to continue the drama.

Category Five

Students have the opportunity to use metacognition.

Teacher B

T: What did I ask you to think about while you were outside?

S. 1: What was the same about the mirroring and the sculpture game.

T: Why do you think your teachers chose those two activities? What was the same about them?

S. 2: You had to move slowly.

T: Why was that important in the sculpture game?

S. 3: 'Cus if you don't move slowly you could, wap! (makes a gesture with arm)

T: Why did I pick your partner for you?

S. 4: You can get wound up. (Teacher B Observation p. 1)

Through this reflection, students took understanding beyond learning within the activities themselves. They examined the activities objectively, discussed similarities and differences between activities, why some activities were combined, and why the teacher organized activities in a particular way.

Teacher Pedagogy

Category One

The teacher adapts the lesson to meet the needs of the students individually and as a group.

Teacher A

Teacher A addressed the learning needs of two students who were unable to write by privately discussing activities with them. After he had drawn a waif, the teacher scribed for a student while he described his pictorial interpretation.

Category Two

The teacher models the intelligences through her own actions and beyond the scope of the lesson plan.

Teacher A

Given that many examples from this category take place throughout the unit and therefore have been cited above, I will address one intelligence holistically.

Teacher A modelled excellent linguistic skills for the students. She used clear instructions;

> We're going to talk to the children, but we're also going to talk to the people passing by who have seen the children in the city or in their neighbourhood . . . . I want you to use your background knowledge to ask them some questions about the street children they may have seen. (Teacher A Observation, p. 5)

Teacher A also showed enjoyment in using language by adopting accents when in-role. She used language to express emotions, empathy, curiosity, and critical thinking, as well as to motivate the students.

Category Three

The teacher believes drama is a motivating force in learning for her students.

Teacher A

> Middle school kids love the physical aspect [of drama], they love the game aspect, they love the group dynamics, they like being up and moving, being able to share their opinions, and they do really enjoy the performance aspect, not always for a whole group, but definitely in front of a smaller group like their peers. Grade 6 is an interesting year because it is probably one of the first years [they become] aware of the world around them. For a lot of kids it's the first year that they start to question things that maybe they haven't questioned before. Drama education gives them the opportunity to do that in a real way; in a safe way, but in a meaningful context. (Teacher A Interview, p. 11)

Category Four

The teacher teaches the concept of multiple and empathic intelligences.

Teacher B

Teacher B had been informing students about the multiple intelligences since the beginning of the school year and that framework was incorporated into her teaching pedagogy. Balloons listing the intelligences hung from the ceiling. Teacher B said,

> When all our [multiple intelligence] balloons had fallen down, I asked 'what other ones are we missing?' And they got all of them. I was really delighted with that because it shows [the students] know [the intelligences] and they're getting good at finding places where they know [the intelligences] exist. (Teacher B Interview, p. 5)

She concluded the interview with the statement,

> You're dealing with someone who is very much a convert to this. That's one of my big philosophies with teaching—I've seen it time and time again and [drama is] one of the best things you do with the intelligences because it's . . . very rich. And that's why it's worth taking the risk. (p. 12)

Summary

The intent of this chapter was to reveal the experiences and reflections of two teachers in relation to the multiple and empathic intelligences. I used specific categories within each intelligence to show how the intelligences correlate with examples within unit structure and teacher pedagogy. The units and the teachers fulfilled many of the criteria for each intelligence as well as additional criteria relating to teacher pedagogy. However, musical, naturalist, and mathematical-logical intelligences left more categories unaddressed than the others.

Teacher A emphasized the importance of empathic intelligence in her teaching, and demonstrated her philosophy by modelling empathy to the students and using empathy throughout her unit. Teacher B described drama as an excellent teaching methodology because of the holistic way it integrates the multiple intelligences. She taught her students about the multiple intelligences and reflected on that learning later, after drama sessions. Both teachers are convinced that drama is a powerful teaching methodology that successfully integrates the multiple intelligences in the classroom.

CHAPTER FIVE

Discussion

Introduction

How are the multiple intelligences and empathic intelligence articulated in educational drama? This chapter discusses the research themes and the ways in which my findings from document analysis, observations, and interviews, answer the above thesis question. In the first section, I consider the first theme: the ability of teachers through the published unit plans to utilize multiple intelligences and empathic intelligence in educational drama. In regard to theme two, the effect drama has on the transference of one intelligence to another and the ability of drama to provide opportunities to combine intelligences, I examine the results holistically, in order to consider the integration of multiple and empathic intelligences throughout the drama lessons. Theme three concerns: the effect of a teaching pedagogy that considers empathic and multiple intelligences in drama on student engagement in the learning process. In this regard, I explore the diverse methods the observed teachers used to engage students in learning. Lastly, I discuss the implications of my research and suggest areas for further exploration.

How are the Multiple Intelligences and Empathic Intelligence Articulated in Educational Drama?

The Ability of Teachers Through the Published Lesson Plans to Utilize Multiple Intelligences and Empathic Intelligence in Educational Drama

Linguistic Intelligence

The findings are similar to the literature review results in that drama articulates linguistic intelligence by providing an abundance of opportunities to communicate through speaking, listening, reading, and writing. The findings show that speaking and listening had the greatest emphasis; however, reading and writing were involved in both units. In each class students had the opportunity to communicate orally individually, with a partner, in a group, or in-role with the rest of the class. Students in one class were able to experience reading that was personally meaningful when they read the "heart" of their journal entries based on their own thoughts and feelings. This authentic reading was one of many activities that committed students to the dramatic context while engaging more than one intelligence. Both Teacher A and Teacher B were pleased with the students' level of achievement in linguistic communication throughout the units.

Musical Intelligence

In the observed lessons, musical intelligence was applied least of all. This result correlates with the literature review. Teacher B concedes that music was not one of her major learning outcomes (Teacher B Interview). Drama literature would suggest that the lack of music in the observed units does not mean that it should be omitted from drama. Both Neelands (1995) and Way (1967) advocate music in drama to create and sustain

mood. Specific involvement of musical intelligence was limited in the units; however, students responded enthusiastically to using a cockney accent. Furthermore the teachers used utilized pitch, rhythm, and tone by employing a variety of vocal expressions throughout the units (Appendix E: Assessment Instrument - Musical Intelligence).

Logical-Mathematical Intelligence

The findings produced more opportunities for mathematical-logical engagement than was indicated in my literature review. The abundant and diverse use of cause and effect, trial and error, problem-solving, and systematic thinking verifies that this intelligence is a necessary cognitive component in the drama units.

Spatial Intelligence

Multi-layered approaches to spatial intelligence were exercised in the observed units. Three activities Teacher A used to engage students' spatial intelligence were: examining photographs, visualization, and drawing, to build belief in the drama context, the lives of London street waifs. Each activity not only facilitated a deeper understanding of the topic, it allowed for a greater engagement of spatial intelligence. Teacher B's use of tableau gave students the opportunity to integrate spatial intelligence with other intelligences, while creatively presenting their interpretations of the topic. The engagement of spatial intelligence included transition activities such as creating a group circle. Teacher B: Show me what a drama circle looks like. She noted, "look, all the air is coming out of our circle; it needs to be filled in" (Teacher B Observation, p. 3). This is one of many examples where these teachers engaged students' spatial intelligence consistently throughout the sessions through metaphor.

Bodily-Kinesthetic Intelligence

Data gathered for this intelligence align with research in the literature review (McKean & Sudol, 2002; Neelands, Booth, & Siegler, 1993). Teacher B's students had an opportunity to gain a deeper understanding of farm life after creating and presenting a tableau of farm jobs. Tableau required isolation of body parts and strength to hold a position. Picking pockets required that the students move quickly and with dexterity. When in-role, students changed their demeanour to suit a persona. Apart from prescribed activities, the teachers constantly reminded their students to use their bodies appropriately within the space and in relation to other students.

Interpersonal Intelligence

The literature review reveals disparate results in regard to the effect of drama on interpersonal intelligence. This study, however, reveals that opportunities to engage this intelligence are plentiful and diverse (for example, the Town Meeting and Tableaux). Students used interpersonal intelligence to adapt their behaviour toward each other and their teacher during group work and when in-role. In both units the ability to understand multiple perspectives was emphasized. Students not only considered the perspectives of their classmates, they were encouraged to express themselves as a farmer or orphan. In doing so, they had opportunities to gain an appreciation for the daily life of that person.

Intrapersonal Intelligence

Opportunities for personal reflection, self-actualization, and the exploration of universal questions (Arnold, 2005a; Gardner, 2000) were presented. A comparison between a student's own life experiences and that of a farmer or an orphan was given less attention because the units concentrated on the characters and issues to be explored.

Nevertheless, while experiencing the perspective of the characters portrayed, students had the opportunity to evaluate their own feelings in relation to the "other," for example, while drawing or in discussion. Teacher A believes students experienced the drama in ways that allowed them to access their emotions and retain acquired knowledge longer than through other teaching methodologies (Teacher A Interview). Although the teachers observed in this study encouraged intrapersonal intelligence (for example, during individual reflection time such as journalling or drawing and when considering personal opinions), it is difficult to assess to what extent this has been a success.

Naturalist Intelligence

The involvement of naturalist intelligence was minimal in all the units. Examples in seven of 11 categories most often touched on a naturalist theme within a larger discussion. Teacher B describes naturalist intelligence as an area that could have been explored further in *All Dried Up and Blown Away,* if her focus had been in that area (Teacher B, Interview).

Empathic Intelligence

In the observed lessons, there were many opportunities for students to experience and express empathy. Of equal significance, teachers modelled empathic intelligence as they taught. Teacher A found modelling empathy is an important way for students to learn how to behave empathetically (personal communication, June 18, 2005). Both teachers expressed empathy during activities and reflection time. As the units progressed and students became more involved in the lives of the characters, it is possible empathic intelligence was engaged at a progressively deeper level.

The Effect Drama has on Transference of One Intelligence to Another and the Ability of Drama to Provide Opportunities to Combine Intelligences

Transferring Intelligences

The collection and analysis of these data have deepened my understanding of the transference of knowledge. In interviews, I asked each teacher to describe where in their drama lessons knowledge gained from one intelligence had been transferred to another. I came to realize that I should have framed the question differently. According to Gardner's eight intelligence criteria (Appendix F: Gardner's Eight Criteria for an Intelligence) each intelligence has its own distinct ability. Therefore an ability such as critical thinking in one intelligence does not guarantee the ability to think critically in another (Gardner, 1993). However, it is possible, as was shown in the findings, that an individual can use his or her strength in one intelligence (for example, spatial) to gain understanding of a topic such as orphan immigration, then transfer that knowledge to inform learning in another domain (for example, writing).

Transference appeared to occur over a longer period of time. In the *Little Immigrants* unit a student may engage interpersonal intelligence throughout the unit, yet not transfer that knowledge to empathy until the final day (or even later in the student's education). There are fewer examples in the data reviewed for this study of a transfer of knowledge than of combining intelligences.

Combining Intelligences

In regard to the data analysis and the presentation of findings, my greatest challenge has been to separate drama activities into distinct intelligences. The reader may have noted that single examples are used in more than one intelligence category. This is

also the case in the literature review where, in drama research, several variables are examined concurrently. Baldwin (2004) argues that drama conventions and strategies

> offer a multi-intelligent access to information, ideas and concepts and gives opportunity to participants to make, respond, express and communicate meanings and ideas multi-intelligently through a range of aesthetic forms, through the creative juxtaposition of images, movement, words and sounds. (p. 46)

Rather than compartmentalizing intelligences into distinct learning activities, educational drama is a teaching methodology that encompasses a broad range of intelligences in a single lesson or activity. Drama reflects "real life" experiences where a student must engage intelligences in combination in order to complete a task. The unit structures and teachers' pedagogy in the observed classes reveal that, within the context of the drama, intelligences are used in combination most of the time. Consequently, drama exemplifies Gardner's premise (1983, 1993) that each human possesses a complex combination of intelligences. Most cultural roles incorporate multiple intelligences rather than "a singular problem-solving faculty that can be measured directly through pencil-and-paper tests" (1993, p. 27).

The Effect that a Teaching Pedagogy Using Empathic and Multiple Intelligences in Drama has on Students' Engagement in the Learning Process

The Flexibility of Educational Drama in its Articulation of the Multiple and Empathic Intelligences

Teachers' comments made it evident that the units were not immutable. The objectives of each unit could be adapted depending upon the needs and interests of the students. In fact, Teacher A altered the prescribed drama unit several times. Moreover,

her personal influence seemed to affect students' understanding of the topic. For example, her interaction with a child with special needs (scribing his drawing, encouraging him to question others, and guiding his speech in-role) appears to have had a profound effect on his expression of understanding on the final day of the unit (Teacher A Observation).

Teacher B suggested adapting the journal activity to accommodate students who needed more assistance in writing. In our interview she described logical-mathematical and naturalist intelligence as other areas she might have explored more deeply. My interpretation is that had she wanted to emphasize naturalist intelligence, there were many points in the drama where she might have guided activities in that direction. For example, tableaux could have interpreted how farmers' chores change when confronted with a drought or locusts. Another choice to include musical intelligence might have been to incorporate music from the depression era, or create a farm soundscape. In reference to *All Dried Up and Blown Away*, authors Miller and Saxton (2004) state, teachers are "adapting the structures and activities in all sorts of ways . . . the classroom contexts are different and it is this difference that teachers recognize and respond to intuitively" (p. 5). The flexible approach of Teachers A and B allowed them to adapt lessons according to their students' interests and learning needs, providing them with the opportunity to experience their learning in personally meaningful ways.

Multiple Entry Points

To review, Gardner's points of entry are narrative, numerical, existential/ foundational, aesthetic, hands-on, and interpersonal (2000). He concedes that it is a pedagogical challenge to decide which entry point most effectively stimulates

understanding of a topic and warns against the use of too many entry points. The research findings reveal no single prescribed entry point into the drama lessons I observed. Gardner's description of hands-on or narrative could be considered the closest; however, neither captures the multifaceted approach of educational drama as found in my data. Moreover, neither describes the influential role the teachers had in the inculcation of their topics. These "highly effective" teachers used drama as a teaching methodology that encompassed many of the entry points listed above; particularly narrative, aesthetic, hands-on, existential/foundational, and interpersonal. Both teachers believe the hands-on aspect of drama motivates students to learn. They see drama as an entry point that engages students in a topic, within a metaphorical context. Guss (2005), in her consideration of drama as a distinct symbol system, agrees and suggests that drama is in itself its own entry point, rather than a conglomeration of those stipulated by Gardner.

Metaphor

> Capacities that prove more challenging to account for in terms of M. I. theory include the abilities to make *metaphors*, to perceive *analogies*, and to cut across various intellectual domains in the process of forging such illuminating connections. In fact, this family of capacities seems at odds with the whole notion of separate intelligences, for the metaphoric is defined by the very capacity to integrate diverse intelligences. (Gardner, 1983, p. 291)

The units observed used two metaphoric contexts (19th century child immigrants and the 1930s drought) to examine the universal issues of ethical behaviour, loss, interdependence, family, and people against nature. Theatre is metaphor, and drama, in its capacity to articulate all the intelligences, enables students of all intellectual capacities to access metaphor both cognitively and affectively to deepen their understanding.

Arnold (2005) claims that metaphors work well when "previously unconnected images, words, concepts, memories and apperceptions fuse into a palpable whole" (p. 155). She adds that empathy, because it is metaphoric, uses metaphor to create meaning out of disconnected experiences, which releases tension and enables progress. Like the orphans and the farmers they portrayed, the grade 6 and 3 students observed may have experienced interdependence, loss, ethical dilemmas, or concern about natural disasters in their own lives. The metaphor in the dramatic contexts of 19th century London and the prairie drought provides distance enough to consider fears and to work through difficult decisions.

Multiple Representations of Core Ideas

According to Gardner (2000), there is no single best representation for an idea and he proposes using multiple representations to reach the heart of a topic. For example, *Little Immigrants* used speaking and movement to understand the profound ethical decisions that were made for those in need. Interpersonal representations, such as understanding multiple perspectives, define "unsettling" representations of the core ideas that will, Gardner says, develop fresh and powerful representations. He states that multiple representations can result in learning that is deep, genuine, and enduring—learning that will reach a variety "of students in ways that are meaningful to them and that allow them to build on their understandings, to perform them publicly, and to stretch them in new appropriate directions" (2000, p. 208). The findings reveal teachers' and students' responses fulfilled Gardner's criteria as set out above.

Pedagogical Power

Both classes had several children with behavioural challenges and all students required guidance in social responsibility. Teacher B gradually introduced drama structures over the course of five months. Teacher A had a three-week period in the mandatory drama class where she employed a short fairy tale unit in order to build trust, cohesiveness, and commitment within the group before embarking on the *Little Immigrants* unit. Despite such diverse settings, ages, teacher experience, and topics, educational drama proved to be a teaching methodology that resulted in a profound examination of universal issues, as well as engaging the multiple and empathic intelligences. How did the teachers do it? I address this question below.

The Strengths of Teachers in Terms of Multiple Intelligence

> Ultimate selection of entry points, analogies and [multiple representations] must proceed in an intuitive—indeed artistic—manner. There must be a constant dialectic among the ideas to be stressed, the modes of instruction that are comfortable for the teacher, and the identified interests and needs of the students. (Gardner, 2000, p. 211)

The following discussion demonstrates how these teachers address Gardner's criteria.

Teacher B clearly planned her units to engage the intelligences; she specifically taught the multiple intelligences, and during reflection the students discussed how they had used the intelligences in the drama. She used the framework to inspire each child's strengths and to encourage growth in weaker areas. Teacher B was concerned about students' interpersonal skills and she tried to engage that intelligence throughout the lesson. Above all, Teacher B modelled enthusiasm for learning via the multiple intelligence framework and congratulated the children on their individual successes.

Although Teacher A did not underpin her planning with the multiple intelligence framework, she believes that drama "lends itself" to multiple intelligences (Teacher A Interview). She taught activities that engaged the intelligences in a variety of ways throughout her unit. She was attentive to the students who needed assistance in a particular intelligence, and modified lessons to suit student needs by scribing for students, and changing the lesson plan. She examined empathy throughout the unit, using different representations of core ideas in order to increase students' empathic understanding within the context of orphan immigrants.

Although Gardner (2000) recommends that teachers do not teach students "*en masse*;" nevertheless, students in the observed lessons had the opportunity to involve themselves in activities with others while expressing and exploring their individual strengths. Granted, Gardner may find small-group learning ideal; however, in a class of 31 students with mandated curriculum, the educational drama methodology appears to maintain a successful balance between the individual and the *en masse* approach.

Teaching with Empathic Intelligence

The teachers specifically chose drama structures that are compelling, flexible, and examine universal issues. They had taught these units previously and were confident with their approaches. Both teachers embodied artistry and empathic intelligence in their teaching. They were, and are, aware of the "risks" (Teacher B Interview) involved in using drama as a teaching methodology but continue to teach it because they believe it is the best way to reach children affectively and cognitively. Arnold (2005) makes the point that:

> Empathic intelligence is generative because it enables and stimulates emotional and intellectual growth. When that occurs in a climate perceived as caring, it tends to create social well-being, or social capital. That is, a climate that cares about personal growth and autonomy generates participation and a willingness to share and engage because such processes are mutually beneficial. (p. 144)

A comparison between the teachers' pedagogy and Arnold's definition of empathetically intelligent teachers (See Literature Review), reveals that the teachers demonstrated *attunement* with the students through discussions, where the teachers investigated students' knowledge then adapted activities to facilitate learning. The ability to adapt lessons took *imagination and creativity* on the part of the teacher, as well as confidence in their own pedagogy. The teachers established a drama contract with the students in which the activity was explained and obligated the students to *reciprocate* the teacher's commitment to the task at hand. Teachers A and B engaged in *mirroring and scaffolding* when they facilitated reflection on students' experiences in and out of role, taking time to let them process and further their learning, challenging their logic when necessary. *Enthusiasm, expertise, engagement, and empathy* were used successfully in their teaching. They continually modelled empathy and provided their students with opportunities to engage their empathic intelligence. Empathic modelling allowed students to experience the power of empathy and relate that experience to their own lives beyond the classroom, expanding their own empathic abilities.

Other Pedagogical Considerations

This section includes a summary of significant pedagogical choices made by the observed teachers, beginning with reflection. Reflection was used to consider what was learned during a previous activity or at the beginning of each class to consider the last

session. A variety of reflection methods were articulated after an activity (to partners, the class, or in a picture, or journal, or in-role), and the students left with questions to consider. When a student became disruptive, both teachers used proactive and positive language to reflect that child's feelings, the effect that the behaviour was having on the group and the teacher, and to suggest alternatives, if s/he could not commit to the drama. For example, Teacher A upheld the drama contract when she stopped a role drama because of disruptive students. They were not demeaned; however, they understood what was expected of them: the following day they were eager to contribute. This example shows the confidence and direction demonstrated by the teachers within a methodology that requires both student autonomy and cooperative learning.

Transitions between activities were smooth: sometimes students were asked to consider a question while they prepared for the next activity. The teachers retained a sense of humour and expressed joy in teaching, even when teaching their class was challenging. For example, before starting the drama, Teacher A stopped the class to watch a boy perform a magic trick that had been disturbing the group (Teacher A Observation). She gave time, energy, laughter, and her full attention to the activity before renewing the drama contract with the students.

The teachers used clear objectives to move the lessons forward. They shifted their attention from group to group, guiding activities, remaining engaged. Each had an intuitive sense of their students' needs for a different approach to learning. Each had high expectations which were explained clearly. Using learner-centred activities, they encouraged students to think critically, to perceive multiple perspectives, and to engage in

complex subject matter creatively. These teachers were committed to the students, the topic, and to educational drama as a powerful teaching methodology.

By examining the overall student responses in the data, it is evident they enjoyed learning through educational drama. They participated with enthusiasm, creativity, energy, curiosity, and commitment. For the most part, those who were disruptive remained involved in the drama, but sometimes took fun into the realm of silliness (Teacher B Interview). The students were happy to be in the classroom, happy to be engaged in the dramatic experience. The teachers' attunement with their students along with the compelling aspect of the drama helped to ensure this commitment.

Summary of the Findings

The purpose of this study was to discover how multiple intelligences and empathic intelligence are articulated in educational drama. The investigation used a multiple-case study approach to examine the teaching methodology of two teachers, as well as the structure of the units they taught. The research focussed on three themes. The first is the ability of teachers to utilize multiple intelligences and empathic intelligence through the published lesson plans in educational drama. It is evident in the observed sessions that opportunities were plentiful and varied for the articulation of the intelligences as described previously. Although some intelligences were given greater emphasis, the majority of the intelligences involved more than one approach to fulfill the criteria of a category within an intelligence. An important finding showed that, although one of the teachers did not plan specifically to employ a multiple intelligence approach, the multiple

and empathic intelligences were nonetheless effectively articulated in her unit structure and her teaching methods.

The second theme concerns the effect of drama on the transference of one intelligence to another and the ability of the discipline to provide opportunities to combine intelligences. While an intelligence as a separate entity cannot be transferred to another intelligence; nevertheless, within the drama units, one intelligence can be used to gain knowledge in a domain, and this new knowledge can inform another domain that engages a different intelligence (See Teacher A, pp. 99-100 of this thesis). The units allowed a flow of drama activities, where students could combine intelligences and transfer knowledge gained from one intelligence to another domain. In the units there were opportunities to revisit intelligences in order to deepen understanding within each intelligence.

The final theme looks at the effect on student engagement in the learning process, through drama, a teaching pedagogy that uses empathic and multiple intelligences. Findings reveal that in these classes drama provided the opportunity to explore all the intelligences. The students engaged in this multi-modal approach to learning with enthusiasm and commitment. The metaphorical context of drama gave students the opportunity to connect with universal issues by stepping into the role of another person, all the while engaging many intelligences. Multiple entry points and multiple representations of a topic enabled each student access through their unique intellectual strengths. In conclusion, based on my observation of the teachers, their units and their interpretations of the lessons, it is clear that multiple and empathic intelligences were

articulated in profound, complex, learner-centred, and integrated ways, and within the creative metaphorical context of drama.

Implications

The findings of this research indicate that, in the two observed classes, the teachers provided many opportunities to engage the multiple and empathic intelligences within the educational drama teaching methodology. In these classes drama was an ideal pedogogy for an integrative approach to the inculcation of the multiple and empathic intelligence frameworks. Drama activities combined the intelligences within a metaphorical context that is comparable to the engagement of intelligences in real-life experiences. The units and teachers address the central philosophy underpinning Gardner's (1983) and Arnold's (2005a) theories, where, through understanding the individual needs of students, education can assist students to contribute positively to society.

Gardner (1983) states that a teacher can provide the opportunities to learn; however, "proper motivation to learn may well be the single biggest difference between a successful and unsuccessful educational program" (p. 373). The effective drama structures and enthusiastic and empathic educators observed inspired motivation for cognitive and affective learning.

Although two intelligences were engaged only minimally in the observed units, Gardner (2000) states that teachers should not try to employ all the intelligences in one lesson, or even one unit. The implication is that some intelligences can be omitted and used as a focus in another drama unit. It is possible that planning a drama lesson with the

intent to integrate multiple and empathic intelligences, and with concern for students' needs, can enable teachers to critically examine how they are engaging the students' affective and cognitive capacities. Also, planning dramas that involve the intelligences will enable teachers to focus on intelligences they want to emphasize or combine in the unit, or alert them to intelligences they may be neglecting. Teachers who are aware of the effectiveness of drama, for its articulation of the multiple and empathic intelligences, can work as advocates for educational drama.

This study has shown that drama is a complex, intellectual teaching methodology and, taught with confidence, careful planning, and an empathic approach, it provides rich opportunities for students to develop their intellectual strengths, as well as motivate learning in underdeveloped intellectual areas.

Limitations and Future Research

> all research starts with a question, awareness that one does not know something. The problem is that research tends to end with an answer. Hello? Of course, I am not saying that researchers should not try to answer questions. The problem is ending with answers—being unaware of or uninterested in the ethical questions generated or avoided. The "answers" to research questions do not end things but offer new circumstances for exploring the persistent question of what is good for people. (Hostetler, 2005)

In light of the limitations discussed in chapter one of this thesis, I consider the following suggestions for future research. First, more research is needed to determine whether or not empathic intelligence is in fact viable according to Gardner's criteria. The study of empathic intelligence in regard to educational drama is particularly important because it offers a way by which we can connect affective and cognitive understanding.

Second, a study over the course of a year would provide more data and reveal results over the long-term. Third, as an initial study of multiple and empathic intelligence in drama, this investigation captured the experiences and interpretations of two teachers, as well the articulation of intelligences. Further research could use a design that allows for generalization. Quantitative research with an effective assessment design could effectively assess the degree to which intelligences are articulated and experimental studies could provide a comparison with other teaching methodologies. Lastly, future studies could investigate, as Gardner proposes (1983), how a cultural perspective of various drama structures influences the expression of the intelligences.

A further consideration includes a study of the transference of knowledge gained in an intelligence to a different domain to reveal how effectively drama encourages transference. A final suggestion is an investigation of the assessment of student achievement in drama education, with a focus on multiple intelligences. Examining the multiple ways in which students can learn and express their understanding can inform the design of drama lessons. The research recommendations listed above will build on earlier educational drama research to validate drama's position as an essential teaching methodology.

Conclusion

This research has been a culmination of my experience as an actor, a drama teacher, and a classroom teacher. As a teacher and researcher I have observed children who struggle in traditional subjects express excitement while learning and achieving

educational goals through drama. Educational drama is a child-centred methodology that encourages teachers to adapt lesson plans according to the needs of their students. The pedagogical choices of the two teachers observed served to ameliorate the educational power of the drama units. Both teachers informed me that their groups were challenging. Nevertheless, students experienced complex learning through the integration of multiple intelligences in drama. Often, following a lesson, the students left the room energized, talking about their learning. Drama enabled the students to be successful because they had opportunities to develop their intelligences and to construct their own learning in a social setting.

Systematic research has allowed me to thoughtfully examine drama lessons and teacher-student interactions. I have a deeper understanding of the complexity of learning in drama and the empathic teaching that is required to successfully engage students. I look forward to using my assessment instrument as a tool to assist me, as I learn about the needs of my students, and develop lessons accordingly. However, along with the intent to assess the articulation of individual intelligences, this study has revealed to me the importance of the dramatic metaphor to integrate the intelligences naturally into learning experiences that engage students' imaginations.

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APPENDIX A

Consent Forms

Sample of Consent Form for School Board

Abigail Kitt
Dept. of Curriculum and Instruction
University of Victoria

School District.

Dear Sir,

My name is Abigail Kitt and I am a graduate student at the University of Victoria researching drama in education. My advisor, Carole Miller, referred two teachers in your district to me as experienced teachers who consistently use educational drama in the classroom. I would like your approval to observe these teachers using drama in their classrooms to generate data for my research that explores the articulation of the multiple intelligences and empathic intelligence in educational drama. My Master of Arts thesis is titled, *The articulation of the multiple intelligence and empathic intelligence theories in educational drama.*

I believe this research to be important to the field of drama in education in British Columbia because while some associations between educational drama and cognitive intelligence have been made, there are few studies that are particular to British Columbia schools.

I seek your permission to allow me to observe these teachers in two classrooms for three to six sessions while they integrate educational drama with their students. Initially, I will introduce myself to the students by telling them about myself and teaching some drama activities in order to create a level of comfort for observations.

During the observation I will take field notes to use as data for my research and if possible use the teachers' lesson plans for the same purpose.

When all the sessions are complete I will conduct an audio taped interview with each teacher for no more than two hours. The interview will cover the teachers'

approaches to educational drama, discuss the structure of the lessons and indicate successes of individuals or groups of students in the drama activities. These interviews will be transcribed.

Because the students are secondary participants, I will inform their guardians through a letter of information.

The participation of all involved will be kept confidential. Because there are only a few teachers in the Saanich school district who use educational drama, the teachers' confidentiality may have some limitations but teachers' names, the names of their schools, and students' names will be kept anonymous and referred to only in code in all data and in the thesis itself.

The teachers' signed letter of consent completed before the research begins will be kept in a locked enclosure in my office. The field notes, audio tape, lesson plans and transcript of the audio tapes will be kept in a locked filing cabinet and will only be accessible to myself and the three members of my graduate committee. The transcript of the audio tape and any other data put on my computer will use a password to gain access. At the completion of my degree all data will be destroyed.

The teachers' and students' participation is voluntary and they may withdraw at any time without explanation and with no negative consequences. The District also has the power to end the research at any time. Should the teachers or the district choose to withdraw during the study, I will ask them to sign a consent form that will allow me to use the data generated until the point of termination. However, if they do not want any data used and do not sign the consent form, the data will immediately be destroyed. If there are questions in the interview that the teachers choose not to answer they may do so without explanation.

When my degree is complete a written copy of the findings will be made available to you and a summary of the findings will be available for the students, the students' parents/guardians, the principals and the two teachers. If I publish any of the material based on the research all names will be anonymous.

You are welcome to contact me at home (385-8068), or my advisor Carole Miller (721-6348) at the university if you have any questions or need further information

concerning research procedures. You may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice-President, Research at (250) 472-4545 or ovprhe@uvic.ca.

I have included a letter of information for the students and parents as well as the letter of consent to the teachers and principals. Because of the tight time frame for my research I would appreciate hearing from you as soon as possible and I will collect the signed consent from the District office. I will not approach the teachers until you have given consent.

I appreciate the time you have taken to read this letter and to consider your support of this study.

Sincerely,

Abigail Kitt

I give Abigail Kitt permission to carry out research for her graduate thesis in School District #63 - Saanich. I have read the above letter carefully and understand the roles of the students and the teachers in the study. I understand that their participation is voluntary and that they can choose to withdraw at any time. I also understand that School District #63 can suspend the research at any time without explanation.
Abigail Kitt and I will keep a copy of this letter of consent.

Signature: _____

Date: _____

Sample of Consent Form to Teachers for Observation and Interview

Abigail Kitt
Dept. of Curriculum and Instruction
University of Victoria

Dear Teacher,

My name is Abigail Kitt and I am a graduate student at the University of Victoria researching drama in education. My advisor, Carole Miller, referred you to me as an experienced teacher who consistently uses educational drama in the classroom. I would like to invite you to participate in my research study. I have contacted the superintendent of school district #63 and he has given approval for the research.

I seek your permission to observe you using drama in your classroom to generate data for my research that explores the articulation of the multiple intelligences and empathic intelligence in educational drama. My Master of Arts thesis is titled, *The articulation of the multiple intelligence and empathic intelligence theories in educational drama.*

I believe this research to be important to the field of drama in education in British Columbia because while some associations between educational drama and diverse intelligences have been made, there are few studies that are particular to British Columbia schools.

I would like to ask your permission to allow me to:

1. have time (15-20 minutes) to introduce myself to your students and teach some drama activities in order to create a level of comfort for observations.
2. observe three to six sessions of educational drama activities in your classroom over a two month period. (I will probably only need three times but in case of changes in schedule or errors in my written field notes I would like to ask for six to be safe.)
3. view and make copies of any available lesson plans or published materials of the sessions I observe - if possible, before I observe each one.
4. take field notes during my observations to use as data for my research and thesis.

5. conduct an audio taped interview with you of no more than two hours, after I have observed all the sessions. Also I would like permission to transcribe the audio tape onto my computer. The interview will cover your approach to educational drama, discuss the structure of the lessons, and indicate successes of individuals or groups of students in the drama activities.

Your participation will be kept confidential. Because there are only a few teachers in the Saanich school district who use educational drama your confidentiality may have some limitations depending on who reads the thesis, but your name, the name of your school, and students' names will be kept anonymous and referred to only in code in all data and in the thesis itself.

Your signed letter of consent will be kept in a locked enclosure in my office, and the field

notes, audio tape, lesson plans and transcript of the audio tapes will be kept in a locked filing cabinet and will only be accessible to myself and the three members of my graduate committee. The transcript of the audio tape and any other data put on my computer will need a password to gain access. When I have completed my degree all the data will be destroyed.

If I publish any of the material based on the research all names will be anonymous.

Your participation is voluntary and you may withdraw at any time without explanation and with no negative consequences to you. Should you choose to withdraw during the study I will ask you to sign a consent form which will allow me to use the data generated until the point of termination. However, if you do not want any of the data used by me and you do not sign the consent form, the data will immediately be destroyed. If there are questions in the interview that you do not want to answer you may do so without explanation.

When my degree is complete a summary of the findings will be made available to you, your students, the students' parents/guardians, and your school district.

You are welcome to contact me at home (385-8068), or my advisor Carole Miller (721-6348) at the university if you have any questions or need further information

concerning research procedures. You may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice-President, Research at (250) 472-4545 or ovprhe@uvic.ca.

I have included a letter of informed consent for the students and parents of your class. If you agree to participate in the study I would appreciate it if you send this letter out to the parents. I will keep one copy of this consent form and the other is for your records.

I appreciate the time you have taken to read this letter and to consider your involvement in this study.

Sincerely,

Abigail Kitt

I consent to participate in Abigail Kitt's research study for her graduate thesis. I have read the above letter carefully and understand that field notes will be taken of my classes and I will be audio taped in an interview that will later be transcribed. I understand that my participation is voluntary and that I can choose to withdraw at any time.
Abigail Kitt and I will keep a copy of this letter of consent.

Signature: _____

Date: _____

Sample of Consent Form to Students and Guardians for Observation

Abigail Kitt
Dept. of Curriculum and Instruction
University of Victoria

Dear Students and Parents/Guardians,

My name is Abigail Kitt and I am a graduate student at the University of Victoria. I have asked your teacher to participate in the research for my graduate thesis titled, *The articulation of the multiple intelligence and empathic intelligence theories in educational drama.* She has agreed.

My study explores educational drama and the many ways it can help students to learn and use all their intelligences. When I watch the lessons in your class I will be looking for all the ways your teacher can teach you and ways you can learn while doing drama activities.

This is a letter of informed consent to ask your permission to observe you in drama activities taught by your teacher.

I will be coming into your classroom three to six times over two months starting in January 2005. The first time I come in I will introduce myself and you can ask me questions about myself and my research. Also I will do some of my favourite drama activities with you.

The next time I visit I will be there to observe you and your teacher working with drama. I will take written field notes about the activities while I watch.

After all the sessions are completed I will interview your teacher about the lessons and the activities involved.

You will not have to do anything extra for the research, I will be watching the drama activities your teacher would normally do with you if I was not there.

Your participation is voluntary and you or your parents may choose to withdraw at any time without explanation and with no negative consequences to you. If you choose to withdraw you may still be involved in the activities but no reference will be made to your

work in my notes after you withdraw. If you do not want me to use any data that may have reference to you it will be destroyed.

Your participation will be kept confidential. I will use codes instead of your name. Your school name and your teacher's name will be in code as well. If I publish any of the material based on the research your name will be anonymous.

All data, (audio tapes of the teacher's interview, transcripts of the tapes, lesson plans, and field notes) will be kept in a locked filing cabinet and in my computer with access only by password. They will only be available to me and my three graduate committee members. At the completion of my degree all data will be destroyed.

A summary of the findings will be made available to students, parents/guardians, and your teacher.

Thank you for taking the time to read this letter. If you have any questions or need more information concerning research procedures, please contact me (385-8068) or my advisor, Carole
Miller at the university (721-6348). You may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice-President, Research at (250) 472-4545 or ovprhe@uvic.ca.

Sincerely,

Abigail Kitt

I consent to participate / to allow my child to participate in Abigail Kitt's research study for her graduate thesis. I have read the above letter carefully and understand that field notes will be taken of the drama activities, and that the activities and students will be discussed in an interview with the teacher. I understand that my participation is voluntary and that I can choose to withdraw data involving me / my child at any time.

Abigail Kitt and I will keep a copy of this letter of consent.

Parent Signature: _____ Date:_____

Child Signature _____ Date:_____

APPENDIX B

Sample of Unit Plans

Sample of Unit A

Based on: The Little Immigrants: Parents of Our History by M. R. Burke and C. L. Malczewski

Session One: Feb. 8, 2005

1) Teacher guides students in a reflection regarding interviewing the teacher-in-role.

2) In small groups, students discuss photographs of street waifs in Victorian London.

3) Teacher leads guided imagery, encouraging students to visualize a London street waif.

4) Students draw a picture of the waif they have seen, in his/her surroundings and write a description about the waif. Students hand in pictures.

Session Two: Feb. 10, 2005

1) Teacher leads a discussion concerning the *Oliver Twist* video watched last day.

2) Teacher shows props and costumes to identify the character that matches the item.

3) Teacher leads guided imagery, describing the streets of London and its people.

4) Students individually go into role and are questioned by their classmates as street waifs, policemen, business men, and society ladies.

Session Three: Feb. 14, 2005

1) Teacher reflects how the students were successful in-role.

2) Teacher and students discuss Fagin from *Oliver Twist*.

3) Teacher separates the class into two groups and teaches the rules of the game *Pickpockets*.

4) Each group has two attempts at the game with time to discuss strategy between rounds.

Session Four: Feb. 16, 2005

1) Teacher keeps the students lined up outside the door and asks six students to set up rows of chairs and a podium.

2) Teacher brings the class to the back of the room to discuss the role students will assume as philanthropists. The students describe how they will portray the characters.

3) Students enter the "Barnardo Hope Place Mission" in-role.

4) Teacher-in-role as Dr. Barnardo, asks to hear stories of any encounters they have had on the streets with street waifs. Students come up to the podium individually, in-role, to describe their stories.

Session Five: Feb. 22, 2005

(Students have written letters as philanthropists or street waifs and hand them in today.)

1) Teacher reviews information the class has learned about the waifs thus far and explains that they are short of class time for the drama and will have to miss out a few steps in the unit. Teacher asks the students to vote on the next part of the drama. The choice is to learn how the waifs got off the streets or to learn what it is like in the Barnardo Home for orphans.

2) Students choose the Barnardo Home. In-role as the matron of the Barnardo Home, the teacher endows students with the role as street waifs in the home.

3) Teacher asks students to dine, then pack their bag for Canada. Teacher ends the role drama at this point because of disruptive students.

4) Teacher asks volunteers to individually mime jobs that a young child may have had in Canada in the Victorian era. The other students guess the job.

Session Six: Feb. 24, 2005

1) Teacher leads a discussion regarding the *Childhood Lost* video they watched last day of London orphans who describe their immigration experience.

2) Students add to the "Seeing Both Sides" sheet completed last day, describing the positive and negative aspects of the Home Child program.

3) Take a Stand Debate: students chose a position to defend—either for or against the Home Child program—and debate with a student opposite them. They change partners several times. Students are given the opportunity to switch sides.

Session Seven: Feb. 25, 2005

1) Teacher reflects on the opinions voiced in last day's activity.

2) Teacher describes the rules of Coppers in the Dark, where the students hide in the dark as street waifs using the blocks in the darkened room. In-role, the teacher speaks to 'the waifs' individually as either a policeman or Dr. Barnardo. As the policeman, she asks them to move on and as Dr. Barnardo, she asks them to come to the Hope Place Mission and to immigrate to Canada. The students respond "yes" or "no" and state their reasoning. The game is played twice.

3) Teacher leads a short discussion where she connects the experiences as street waifs to the street people in our society. She asks whether the Home Program was a good way to deal with the problem of homelessness.

Sample of Unit B

Based On: All Dried Up and Blown Away by Carole Miller and Juliana Saxton

Session One: April 8, 2005 (All day unit—sessions designate lessons after breaks)

1) Warm up mirroring activity.

2) Teacher reviews the drama contract and the multiple intelligences with students.

3) Teacher shows the students the cover of the book *The Dust Bowl* (Booth & Reczuch, 1996) and asks them for ideas for happy aspects of living on a farm, as well as necessities for a Canadian farm.

4) Teacher assigns "family groups" for students to work in, to create maps of their farm.

Session Two

1) Students discuss their jobs on the farm while they finish the maps. Teacher puts the maps on the wall.

2) Students create a tableau in their family group depicting a family job. They write a caption to go with the tableau. Teacher 'taps in' to students in tableau (Teachers hand is placed on the shoulder of a frozen character while she asks them a question which they answer) and asks the observers to use their interpretations to deduce what the caption says. Teacher encourages students to "tap in" .

3) Teacher reads *The Dust Bowl* (Booth & Reczuch, 1996) to the students from beginning to "how fast things change on a farm."

4) Teacher shows projection of an illustration in the book that shows two of the characters. Teacher asks students to sculpt her as one of the characters.

5) Teacher asks the students to ask her questions while she is in-role.

Session Three

1) Teacher continues to read the book to "those insects could stop a train".

2) Teacher asks students to silently read the letter the assistant (myself) hands out, then the teacher reads the letter aloud.

3) Students return to their family groups to decide together whether they will stay on the farm or sell it in order to pay the bank.

4) Teacher asks students to attend a Town Meeting and greets them in-role as the mayor. She renews the drama contract with the students in-role and asks them what decision they have made as a family. Students share their ideas while the teacher questions the logic of their choices.

4) Teacher asks students to write a journal entry, in-role, to describe how they are feeling about their choices. She asks them to underline one sentence in their entry that represents the heart of the journal entry.

5) Teacher asks students to put up their thumbs if they want to speak their chosen sentence. She "taps in' to these students.

6) Teacher reads the end of the book and discusses with the students why she chose that book.

APPENDIX C

Interview Questions

Technical Aspects of the Classroom

1.) How does the space you are working in impact the lesson structure and student learning?

2.) I noticed you chose to have the students gather in a circle or a group. Can you tell me about that?

3.) Why do you choose to use educational drama in your classroom?

4.) What were the learning outcomes for these units? What other learning outcomes other than drama did you include?

Questions Related to the Teaching Philosophy and the Research Topic

5.) What were the strategies you built into the lessons that allowed for different assessment tasks? (How do you address the diverse learning needs of your students during drama activities?)

6) What is your teaching philosophy?

7.) I noticed many times during the course of the lessons you rephrased the students' statements when they answered a question or made a comment. Can you tell me about that?

8) You discussed multiple intelligences with the students and used empathy in the classroom. What consideration does that have for you when you are planning lessons?

9.) How do you use empathic intelligence in your own teaching style?

10.) When considering the writing-in-role the students completed, what did you read or see that adds to your assessment?

11.) What would you consider to be some of the most effective learning moments of the drama sessions?

Additional Questions Related to Multiple Intelligence and Empathic Intelligence

12) One of the theories of multiple intelligence is that gaining an understanding in one intelligence can allow a student to transfer that knowledge to another intelligence (for example, understanding a concept spatially and transferring that knowledge to linguistic intelligence). Can you think of any examples of that in your unit? Can you describe examples where empathic intelligence was transferred to other cognitive intelligences?

13.) In what ways do you see drama as a motivating discipline for grades 3/6 students?

14) I am going to list the intelligences and ask if you can describe activities you may have done in this unit that used the intelligence: Linguistic, Logical/Mathematical, Musical, Spatial, Interpersonal, Intrapersonal, Bodily/Kinesthetic, Empathic.

(I provide a reference sheet with definitions for the teacher.)

APPENDIX D

Sample of Assessment Instrument for the Articulation of Multiple Intelligence in Educational Drama

The following criteria are quotes from *Teaching and Learning through Multiple Intelligences* (2004) by Campbell, Campbell, and Dickinson, unless otherwise stated. The criteria were answered in analysis according to 1) how the unit addressed the criteria and 2) how the teacher addressed the criteria.

Linguistic Intelligence

Students have the opportunity to:

Category One: use listening, speaking, reading and writing to remember, communicate, discuss, explain, persuade, create knowledge, construct meaning and reflect upon language itself.

Category Two: strive to enhance their language use.

Category Three: imitate sounds, language, reading, and writing of others.

Category Four: speak effectively to a variety of audiences for a variety of purposes, and know how to speak simply, eloquently, persuasively or passionately at appropriate times.

Category Five: read effectively, comprehend, summarize, interpret or explain and remember what has been read.

Category Six: write effectively, understand and apply the rules of grammar, spelling, punctuation, and use effective vocabulary.

Category Seven: listen and respond to the sound and rhythm of the spoken word.

Category Eight: listen effectively, comprehend, paraphrase, interpret, and remember what has been said.

Category Nine: create new linguistic forms of original works of writing or oral communication.

Category Ten: demonstrate interest in poetry, journalism, story telling, debate, speaking, writing, or editing. (Campbell, Campbell, & Dickinson, 2004, p. 4)

Musical Intelligence

Students have the opportunity to:

Category One: listen and respond with interest to a variety of sounds including the human voice, environmental sounds and music, and organize such sounds into meaningful patterns.

Category Two: enjoy music or environmental sounds in the learning environment.

Category Three: respond to music kinesthetically, emotionally, and intellectually.

Category Four: recognize and discuss different musical styles, genres and cultural variations and the role music has to play in human lives.

Category Five: collect music and information about music in various forms.

Category Six: develop the ability to sing and/or play an instrument alone or with others.

Category Seven: use the vocabulary and notations of music . . . understand melody, rhythm and tone (latter; Gardner, 1983, p. 105).

Category Eight: enjoy improvising and playing with sounds and can complete a musical statement in a way that makes sense.

Category Nine: offer his or her own interpretation of what a composer is communicating through music.

Category Ten: create original compositions and/or musical instruments.

(Campbell, Campbell, & Dickinson, 2004, pp. 130-131)

Logical-Mathematical Intelligence

Students have the opportunity to:

Category One: develop the concepts of quantity, time, and cause and effect.

Category Two: use and learn from trial-and error approach (Chen, Isberg, & Krechevsky, 1998, p. 26).

Category Three: think mathematically systematically by gathering evidence, making hypotheses, formulating models, developing counterexamples, and building strong arguments.

Category Four: demonstrate skill at logical problem-solving and reasoning.

Category Five: pose and test hypotheses.

Category Six: use abstract symbols to represent concrete objects and concepts.

Category Seven: use diverse mathematical skills such as estimating, calculating algorithms, interpreting statistics and visually representing information in a graphic form.

Category Eight: perceive objects and their function in the environment and manipulate, order and reorder objects (Gardner, 1983, p. 131).

Category Nine: perceive patterns and relationships.

Category Ten: compare and generalize information (Chen, Isberg, & Krechevsky, 1998, p. 26).

Category Eleven: create new models or perceive new insights in science or math.

(Campbell, Campbell, & Dickinson, 2004, p. 33)

Spatial Intelligence

Students have the opportunity to:

Category One: learn by seeing and observing.

Category Two: navigate self and objects effectually through space, as when moving one's body through apertures.

Category Three: perceive and produce mental imagery, think in pictures and visualize detail. Use visual images to recall information.

Category Four: decode graphs, charts, maps, diagrams. Learn through graphic representation or through visual media.

Category Five: enjoy doodling, drawing, painting, sculpting or otherwise reproducing objects in visible forms.

Category Six: enjoy constructing a three-dimensional object and changing its form, physically or mentally.

Category Seven: learn by direct involvement and participation.

Category Eight: see things from new perspectives such as negative space around a form . . . and explore relationships between objects (latter: Lazear, 1999, p. 21).

Category Nine: practice representational or abstract design.

Category Ten: perceive both obvious and subtle patterns.

Category Eleven: create new forms of visual-spatial media or original works of art.

(Campbell, Campbell, & Dickinson, 2004, p. 95)

Bodily-Kinesthetic Intelligence

Students have the opportunity to:

Category One: develop coordination and a sense of timing.

Category Two: demonstrate skill in acting, athletics, sewing, carving, etc.

Category Three: develop sensitivity and responsiveness to physical environments and physical systems. . . exploring space and developing awareness of others in space (latter: Chen, Isberg, & Krechevsky,, 1998, p. 111).

Category Four: enjoy concrete learning experiences such as . . . role play games, assembling objects, or physical exercise.

Category Five: show dexterity in working by means of fine or gross motor movements and . . . by isolation of different body parts (latter: Chen, Isberg, & Krechevsky,, 1998, p. 111).

Category Six: practice balance, grace, dexterity and precision in physical tasks (fine or gross).

Category Seven: learn by direct involvement and participation.

Category Eight: explore the environment and objects through touch and movement.

Category Nine: develop ability to imitate, (Gardner, 1983, p. 228) then to fine-tune and perfect physical performances through mind and body integration.

Category Ten: evoke moods and images through movement using gestures and body postures (Chen, Isberg, & Krechevsky, 1998, p. 111).

Category Eleven: invent new approaches to physical skills or create new forms of physical activities. (Campbell, Campbell, & Dickinson, 2004, p. 66)

Interpersonal Intelligence

Students have the opportunity to:

Category One: recognize and use a variety of ways to relate to others.

Category Two: adapt behaviour to different environments or groups and from feedback from others.

Category Three: develop skills in mediation, organizing others for a common cause, or working with others of diverse ages or backgrounds.

Category Four: perceive the feelings, thoughts, motivations, behaviours, and lifestyles of others.

Category Five: perceive diverse perspectives in any social or political issue.

Category Six: participate in collaborative efforts and assume various roles as appropriate from follower to leader in group endeavours.

Category Seven: understand and communicate effectively in both verbal and nonverbal ways.

Category Eight: influence the opinions or actions of others.

Category Nine: make conclusions about others based on their activities. (Chen, Isberg, & Krechevsky, 1998, p. 172).

Category Ten: form and maintain social relationships.

Category Eleven: develop new social processes or models.

(Campbell, Campbell, & Dickinson, 2004, p. 155)

Intrapersonal Intelligence

Students have the opportunity to:

Category One: work independently.

Category Two: manage ongoing learning and personal growth.

Category Three: strive for self-actualization (realizing that something you are doing or learning is or will be of value to you).

Category Four: be aware of their range of emotions.

Category Five: gain insights into the complexities of self and the human condition.

Category Six: find approaches and outlets to express his feelings and thoughts.

Category Seven: develop motivation to identify and pursue goals.

Category Eight: establish and practice an ethical value system.

Category Nine: develop curiosity about the "big questions" in life: meaning, relevance and purpose.

Category Ten: understands self in relation to others (Lazear, 1999, p. 20).

(All others: Campbell, Campbell, & Dickinson, 2004, p. 188)

Naturalist Intelligence

Students have the opportunity to:

Category One: express interest and enthusiasm when exploring human and natural environments.

Category Two: show interest in the relationship among species and/or the interdependence of natural and human-made systems.

Category Three: observe, identify, interact with, or care for objects, plants or animals.

Category Four: pursue learning about life cycles of flora or fauna or the production of human-made systems.

Category Five: categorize or classify objects, plants or animals.

Category Six: recognize patterns among members of a species or classes of objects.

Category Seven: want to understand "how things work".

Category Eight: develop interest in how systems change and evolve.

Category Nine: use tools such as microscopes, binoculars, telescopes, observation notebooks, and computers to study organisms or systems.

Category Ten: learn taxonomies for plants and animals or other classification systems for linguistic structures or mathematical patterns, e.g., fibonacci numbers or fractals.

Category Eleven: develop new taxonomies, or theories of life cycles, or reveal new patterns and interconnection among objects or systems. (Campbell, Campbell, & Dickinson, 2004, p. 222)

Empathic Intelligence

Students have the opportunity to:

Category One: commit to the well-being and development of both self and other.

Category Two: differentiate self-states from other states.

Category Three: synchronize both affect and cognition.

Category Four: engage in reflective and analogic processing to understand and mobilize a dynamic between thinking and feeling in self and others (self narrative).

Category Five: use speculative thought.

Category Six: practice empowering others.

Category Seven: value caring and integrity.

Category Eight: use expertise (an ability to attune to others learning needs, recognize universality in symbol systems, mobilize imagination, and use modelling to teach others).

Category Nine: use enthusiasm and engagement.

(Arnold, 2005; Arnold, 2003)

Combining and Transferring Intelligences

Students have the opportunity to:

Category One: transfer knowledge in one intelligence to another intelligence (Gardner, 1983).

Category Two: use intelligences in combination (Gardner, 1983).

Student Engagement

Students have the opportunity to:

Category One: experience multiple entry points to a topic.

Category Two: use analogies and metaphors.

Category Three: experience multiple representations of a topic.

Category Four: use reflection.

Category Five: use metacognition.

Category Six: expand and improve on the knowledge gained in an intelligence. (Gardner, 2000).

Teacher Pedagogy

The following statements, created by the researcher, were answered in analysis according to 1) how the teacher addresses the criteria when teaching and 2) how the teacher reflects on the criteria in the interview.

The teacher:

Category One: adapts the lesson to meet the needs of the students individually and as a group.

Category Two: models the intelligences in her own actions beyond the lesson plan.

Category Three: sees drama as a motivating force in learning for grade six or three students.

Category Four: teaches the students about the multiple and empathic intelligences.

Category Five: reflects her philosophy of teaching in her teaching.

Category Six: believes the unit achieved her expectations.

Category Seven: uses empathy in her teaching.

APPENDIX E

Assessment Instrument for Multiple Intelligence in Educational Drama Lessons

Musical Intelligence

Criteria: Students have opportunities to:	Unit A: How does the unit address the criteria?	Teacher A: How does the teacher address the criteria?
listen and respond with interest to a variety of sounds including the human voice, environmental sounds and music, and organize such sounds into meaningful patterns.	1) When watching the *Oliver Twist* video students listen to the accents of the characters and to the city sounds. 2) Published unit suggests the teacher tell the students "I will speak as if I am that child," alerting their attention to the voice (p.10). 3) Unit refers to the environmental sounds such as laughter, horse-drawn carriages, and children in narration/ visualization (p.10).	1) Teacher A uses her own speaking voice in an expressive manner, using variation in pace, rhythm, tone, and volume. 2) Teacher A uses more than one accent (Canadian, cockney and upper-class British). 3) Teacher A allows students to try a cockney or upper-class British accent when in-role. 4) Students sometimes changed the tone or pitch of their voice when in-role.

Criteria: Students have opportunities to:	Unit A: How does the unit address the criteria?	Teacher A: How does the teacher address the criteria?
enjoy music or environmental sounds in the learning environment.	1) See examples above: students have the opportunity to enjoy the variety of pitch, rhythm, timbre, and tone in the accents in the video as well as environmental sounds.	1) Before the students assume the role of various people on the street, Teacher A describes the noise of the P.E. class next door "like the noise of a busy city street" (p.5).
respond to music kinesthetically, emotionally, and intellectually.	1) Unit provides option for students to sing hymns of the Victorian era when in-role as immigrants.	1) Teacher does not choose to use hymns due to time constraints.
recognize and discuss different musical styles, genres, and cultural variations, and the role music has to play in human lives.	N.A.	N.A.

Criteria: Students have opportunities to:	Unit A: How does the unit address the criteria?	Teacher A: How does the teacher address the criteria?
collect music and information about music in various forms.	N.A.	N.A.
develop the ability to sing and/or play an instrument alone or with others	1) Unit provides option for students to sing hymns of the Victorian era when in-role as immigrants.	1) Teacher does not choose to use hymns due to time constraints.
use the vocabulary and notations of music... understand melody, rhythm and tone (latter: Gardner, 1993, p. 105)	N.A.	N.A.

Criteria: Students have opportunities to:	Unit A: How does the unit address the criteria?	Teacher A: How does the teacher address the criteria?
enjoy improvising and playing with sounds and can complete a musical statement in a way that makes sense.	N.A.	1)Teacher models use of accents other than her own. 2)Teacher uses an expressive voice with variation of pitch, tone, and rhythm.
offer his or her own interpretation of what a composer is communicating through music	N.A.	N.A.
create original compositions and/or musical instruments.	N.A.	N.A.

APPENDIX F

Gardner's Eight Criteria for an Intelligence

1. Identifiable core operation(s)

2. Evolutionary history and evolutionary plausibility

3. Recognizable end-state and distinctive developmental trajectory

4. Existence of savants, prodigies, and other individuals distinguished by the presence or absence of specific abilities

5. Potential isolation by brain damage

6. Support from experimental psychological tasks

7. Support from psychometric findings

8. Susceptibility to encoding in a symbol system. (1999, p. 113-114)

APPENDIX G

Additional Findings

Linguistic Intelligence

Category One

Students have the opportunity to use listening, speaking, writing, and reading to remember, communicate, discuss, explain, persuade, create knowledge, construct meaning and reflect upon language.

Writing

Teacher A addressed the linguistic needs of two students who were unable to write by privately discussing activities with them. After he had drawn a waif, the teacher scribed for a student while he described his pictorial interpretation.

Category Three

Students have the opportunity to imitate sounds, language reading, and writing of others.

Teacher A:

> I can think of two special needs kids off the top of my head who, in another class, if they were told to sit and read a book about history and explain what the Home Children program was, they wouldn't be able to tell you. But through the drama work that we have done they've been able to do amazing things that tell you they have understood the work, they feel a part of it and they've taken it in. (Teacher A Interview, p. 3)

Category Six

Students have the opportunity to write effectively: understand and apply the rules of grammar, spelling, punctuation, and use effective vocabulary.

In the unit *All Dried Up and Blown Away.* Teacher B responded to the students' journal entries

> Grade threes need more time to work with it, and perhaps even giving them a choice at that stage, . . . I could have actually had them draw using thought bubbles and speech bubbles and then speaking one of those out loud. In hindsight it would have been a way of modifying it a little bit and giving them a choice . . . The writing was less of an assessment than what some of them said when we were at the meeting. That was more indicative for that age group. (Interview, pp. 7-8)

Spatial Intelligence

Category Three

Students have the opportunity to perceive and produce mental imagery, think in pictures, visualize detail and use visual images to recall information.

Teacher A: "When you have a strong image of what the children look like you are going to get some paper and draw what you see on this street. Create as realistic a picture as possible, as much detail as possible (p. 2).

Teacher A helped to bridge the gap between images from the *Oliver Twist* video and assuming a role as a waif.

T: Think of the first scene where all the boys [crowd] around Oliver. Can you think of ways to describe those boys' clothes and hair, and how they looked?

S. 1: Dirty and ripped up.

S. 2: Raggedy.

T: Yes, and raggedy is a word they used to describe children then. This dirty coat will represent Fagin and, later, this hat will represent a policeman. (p. 9).

Bodily Kinesthetic

Category Three

Students have the opportunity to develop sensitivity and responsiveness to physical environments and physical systems (exploring space and developing awareness of others in space).

Teacher A :

We always start out with the routine of having a circle; everybody being able to see each other . . . If we are in the middle of the class and its time to do a transition or if I want to read to them or I really want their attention, then I'll call them in close to me. That way I don't have to speak too loudly and then they know that I am the main focus. And I usually sit on a chair for that—not at the same level—so they can look up at me. I do that mainly to get everybody as focussed as possible. (Teacher Interview, p. 1)

Teacher A:

When they first come in and start working in [the drama room], it's really exciting and can be a bit overwhelming for some of them. They just want to come in and run and run and climb on things. The first impact is to set the ground rules and talk about safety and things like that . . . . And what I have found over the years is that [the space] lends itself really nicely to group work and big movement. But at the same time its almost too much space . . . sometimes we just need to create a smaller space. (p. 1)

Interpersonal Intelligence

Category One and Two

Students have the opportunity to recognize and use a variety of ways to relate to others. Students have the opportunity to adapt behaviour to different environments or groups and from feedback from others.

Teacher A :

> I have a number of costumes and now we have done some research and met some characters. I am going to give you the opportunity to go into role and answer questions. The audience—everybody gathered—might ask you questions of what your life was like and what experiences you have. Let's agree that each of these costumes represents a certain person in this society. (p. 4)

Teacher A gave the class individual and group feedback;

> I talked to Mrs. T about the quality of work you give when you to go into role. I told her about your ability to stay in-role and the background knowledge you brought to the role and your ability to help us move the drama along. (p. 9)

Category Five

Students have the opportunity to perceive diverse perspectives in any social or political setting.

In the family groups, at the Town Meetings, and when listening to the journal entries, Teacher B encouraged students to listen to multiple perspectives.

> Now I'm going to get you into your family groups and you need to decide as a family what you are going to do . . . . Are you going to stay or not? Make it a family decision. I am looking for a circle shape for your family conference. (p.19)

Naturalist Intelligence

Category Two

Students have the opportunity to show interest in the relationship among species and/or the interdependence of natural and human-made systems.

Teacher B

The *All Dried Up and Blown Away* unit examined the interdependence between people and the land, as well as plants, people and weather systems. Students were given the opportunity to consider the necessity of water. When discussing drought and plagues of locusts, they were able to consider the devastating effects of nature on people, plants and animals. Teacher B: "Somebody even said, . . . they were going to have some more trees on their farm so everything wouldn't blow away" (Teacher B Interview, p. 10).

Empathic Intelligence

Category One

Students have the opportunity to commit to the well-being and development of self and other.

Teacher A asked the students to write a letter either as a philanthropist or as a ragged child in which they considered the plight of the waifs and generated solutions to their problems. In the letters, the "philanthropists" proposed orphanages with food, clothing, a home where they could be loved, and education for the waifs to improve their prospects of employment in adulthood. The "ragged children" asked Dr. Barnardo to send them food, stop 'the Bobbies' from and beating them, give the waifs jobs that were not in the work house, and provide them with a warm, safe, place to live (Teacher A Observation). Teacher A:

Take a Stand, . . . I think that's when they really brought in that empathy of, 'Kids were getting abused, no way, its not good', or 'At least they lived; they survived; they got off the streets; it was better than where they were before'. Those were just snippets of things that kids were saying to each other. So its that empathy; that ability to put themselves in the shoes of the all those children or characters that they had met. (Teacher A Interview, p. 11)

Category Four

Students have the opportunity to engage in reflective and analogic processing to understand and mobilize a dynamic between thinking and feeling in self and others (self narrative).

Teacher B:

I think they did, [use empathy] considering that they are, by and large, a group that is very much into . . . their wants and needs . . . their gratification . . . . When you look at the lines that they picked to say . . . . That sense of empathy for the situation they were all in. It was a collective situation, it was their family situation, it wasn't just affecting them personally. It was that sense of community where someone said, 'I think I've got some seeds, I'll run them over in my truck'. (p. 9)

Combining and Transferring Intelligences

Category Two

Students have the opportunity to use intelligences in combination.

Teacher B:

[tableau] is used with so many different age groups and in almost all drama you find that there's some kind of tableau work done, and I think that is because of [the] integrative aspect that it addresses; the linking of those intelligences together. (Teacher B Interview, p. 11)

Teacher Pedagogy and Student Engagement

Category Two

Students have the opportunity to use analogy and metaphor.

Teacher B:

> Why is it, if I ask you to sit out, I do not give you another chance until the next time? . . . Everyone else has moved along in their imaginations and if [you] come back [you] might not be able to catch up. Its like if you are on a plane trip. You couldn't get on the plane in the air, you have to wait for the next plane. (Teacher B Observation, p. 10)

Category Eight

The teacher teaches the students about the multiple and empathic intelligences.

In the interview Teacher B stated,

> At the very beginning of the year I say, 'In which ways do you think you're intelligent and in which ways do you think you'd like to become more intelligent?' At the end of the year we look at them and we talk about how that happened—if there were changes. 'What made the difference for you there, do you think?' 'What kind of things did we do that you think made the difference?' And drama comes up a lot. (p. 6)

Appendix H

Glossary

For the purposes of this thesis I will use particular words that require specific definitions relevant to the subject matter.

Articulate: When I pose the question: "How are the multiple and empathic intelligences articulated in educational drama?", I use the term in a variety of ways. Firstly, it considers how the intelligences are *expressed* within the drama environment. Secondly, it is how the intelligences are *made accessible* either through the structure of the lessons or in the teacher's direction. Thirdly, it is how the intelligences are *actualized or embodied* by the students. Finally, it is the way in which intelligences are *connected to the drama* activities to create a flow of experience for the students.

Domain: As Gardner (1995) describes, domain is "the discipline or craft that is practiced in society" (p. 37). For example writing is a domain within linguistic intelligence.

Framework: A simplified description of a complex entity or process. In this thesis "framework" is used to define Gardner's theory, particularly when applied to educational contexts.

Intelligence: I have chosen Gardner's interpretation of intelligence because I believe it is compatible with Arnold's construct of empathic intelligence. Gardner states, "an intelligence is a capacity, with its component processes, that is

geared to a specific content in the world (such as musical sounds or spatial patterns) (Gardner, 1995, p. 202-203).

Pedagogy: Pedagogy is the profession or theory of teaching, as well as the principles, methods and instructional activities.

Skill: For Gardner, 'skill' is the embodiment or physical representation of an intelligence. For example, the bodily skill used by a dancer embodies ` bodily-kinesthetic intelligence (1993).

Theory: Commonly, theory refers to a well-substantiated or tentative theory that explains some aspect of the natural world. Conversely, when I refer to Gardner's theory of multiple intelligences I use his stated definition,"In labeling multiple intelligences a theory, I have always taken care to note that it is less a set of hypotheses and predictions than it is an organized framework" (Gardner, 1994, ¶ 9).

Understanding: My definition is the ability to comprehend, learn, judge or make decisions. Gardner's definition is as described in the review of the literature and pertains only to the immediate discussion.

Utilize: To make use of or take advantage of something. When I consider if a teacher can utilize the multiple intelligences, I am concerned with her ability to inspire students to employ their intelligences or capacities in order to gain understanding of a concept or contribute to an event.