8-2009

The Use of Music in Early Childhood Centers in British Columbia: A Survey of the Perceptions and Practices of Early Childhood Educators

Michelle Lawrence
Western Michigan University

THE USE OF MUSIC IN EARLY CHILDHOOD CENTERS IN BRITISH COLUMBIA: A SURVEY OF THE PERCEPTIONS AND PRACTICES OF EARLY CHILDHOOD EDUCATORS

by

Michelle Lawrence

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Master of Music
Advisor: Brian Wilson, M.M.

Western Michigan University
Kalamazoo, Michigan
August 2009

ACKNOWLEDGMENTS

I would like to express my appreciation to my music therapy colleagues, my thesis committee, family, and friends who have supported me in this project. I would also like to thank the participating early childhood educators, as none of this would have happened without their responses.

My greatest acknowledgment is extended to the young children and families I work with everyday, as they are the inspiration and motivation behind my research and practice.

Michelle Lawrence

THE USE OF MUSIC IN EARLY CHILDHOOD CENTERS IN BRITISH COLUMBIA: A SURVEY OF THE PERCEPTIONS AND PRACTICES OF EARLY CHILDHOOD EDUCATORS

Michelle Lawrence, M.M.

Western Michigan University, 2009

This study explored the current practices of early childhood educators' utilization and perception about music in their classrooms. Early childhood educators are defined as individuals who have completed post-secondary training at an accredited college or university in early childhood education and are registered with the ECEBC Registry. Early childhood centers are defined as either preschools or licensed group child care centers. An online survey was been designed to obtain information regarding demographics and characteristics of early childhood centers in British Columbia, relevant musical and educational training, comfort level of the early childhood educator leading group music activities, implementation of the role of music in the classroom, purposes for including music at early childhood centers and information related to early childhood educators' perceptions about the effectiveness of music to teach non-musical concepts. Synthesis and thematic analysis of these results are presented with discussion related to the implications for further research and education.

TABLE OF CONTENTS

Table of Contents Continued

CHAPTER

Table of Contents Continued

Table of Contents Continued

APPENDICES

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Statement of the problem

Numerous studies have explored the use of both music education and music therapy methods with preschoolers. Studies authored by music therapists have reported the benefits of music therapy for developing specific skills (reading, arithmetic, listening/attention) in young children with developmental disabilities (Humpal, 1990; Standley & Hughes, 1996; Register, Darrow, Standley, & Swedberg, 2007). A relatively new area of research has explored the use of music to help preschoolers develop pre-academic skills such as pre-reading/pre-writing, writing, listening/attention, and literacy (Register, 2001; Sims, 2005; Wiggins, 2007). When examining the existing literature, there was a paucity of research investigating music educators/therapists working in early childhood centers. However, music educators have surveyed early childhood educators (ECEs) to determine if and how they teach musical concepts to their students, their own perceived musical skills and who is responsible for designing the music curriculum at their centers (Steven, 1998; Saunders & Baker, 1991; Nardo, Custodero, Persellin, & Fox, 2006). The majority of these surveys indicate that ECEs primarily use music in their classroom not for music education, but to assist in facilitating various other activities, including but not limited to: transitioning children between activities, supplementing general curriculum, or relaxation. However, no studies in the extant literature were found that assessed ECEs' perceptions about the efficacy of music in achieving non-musical goals in early childhood centers. As a result, there is a general lack of information about

how ECEs use music to facilitate learning objectives in areas other than those typically associated with music education.

Rationale for research

Although the music education profession has surveyed ECEs for decades in order to develop methods to support non-music specialists teaching music, little is known about whether music has been used to teach non-musical concepts. Furthermore, the published research has generally described practices in the United States; no studies were found that investigated if and how ECEs use music in Canada. A survey of educators' current music practices in early childhood centers would provide insight into the role of music in the classroom and ECEs' opinions regarding the effectiveness of music to aid in teaching non-musical concepts.

Specifically, the purposes for this study are as follows: (a) to gather current information on the demographics and characteristics of early childhood centers in British Columbia (BC); (b) to identify the musical training and relevant educational background of ECEs; (c) to inquire about the comfort level of ECEs in leading group music activities; (d) to gather current information about the implementation of group music at early childhood centers; (e) to investigate the primary purposes for the inclusion of music in the classroom; and (f) to discover the ECEs' perceptions as to the efficacy of music activities to address non-musical objectives.

Research questions

Research Question 1:

What are the demographic characteristics of BC's early childhood centers employing ECEs (preschool or group child care), population density (urban, suburban, rural and remote communities), student demographics (how many, number of students receiving government subsidies, number of ESL students) and employee demographics (length of time since certification)?

Research Question 2:

What training have ECEs obtained, and/or are interested in obtaining in the future, related to using music with young children? What is the musical background of ECEs currently working in BC's early childhood centers?

Research Question 3:

What is the comfort level of ECEs leading group music experiences?

Research Question 4:

What are the characteristics of group music experiences (average length and frequency per week)? Who is responsible for designing and leading group music activities? What types of musical experiences are offered to children (singing, listening to music, moving to music, playing instruments, composing music/improvising, musical drama/pageants)?

Research Question 5:

What are the primary reasons for engaging preschoolers in music experiences? Is it to teach musical elements (i.e. pitch, timbre, dynamics, notation and harmony) or non-

musical concepts (i.e. cognitive, language, gross motor, fine motor, social, and self help skills)?

Research Question 6:

What are the perceptions of ECEs regarding the efficacy of music to facilitate non-musical learning?

The first five research questions of this study were based on existing research. The first four research questions solicited demographic information about students, employees and early childhood centers, educational and musical background as well as comfort levels of ECEs leading musical activities were partial replication of Nardo, Custodero, Persellin & Fox's (2006) study. The fifth research question was taken from Golden's dissertation (1989) and modified by using the *HELP* assessments language. Specifically, this section of the survey explored whether ECEs were using music to teach musical elements or to teach non-musical skills (cognitive, language, gross motor, fine motor, social, self help skills). The last research question of the survey was developed by the researcher to investigate ECEs' perception about the efficacy of using music to assist in teaching non-musical concepts.

Definition of terms

For the purpose of this study, specific terms need to be defined.

The following definitions are provided by BC's Ministry of Children and Family Development (MCFD). The MCFD is a provincial branch of a federal governing body, which has authority over the licensing and programming regulations within BC

daycares/preschools. Early childhood development refers to the growth that takes place from birth until age six. The early years are the most critical for neurological development as the most significant brain growth occurs in the first six years of life. The experiences of early childhood have a profound impact on the overall health and well being of individuals throughout their lifetime (Ministry of Health and the Ministry of Children and Family Development, 2008).

Early learning is a term used to describe the knowledge and skills that young children acquire in key developmental domains: physical, language and communication, social, and emotional. Children who are vulnerable in one or more of these areas are less likely to be successful in Kindergarten and the early grades in school (Ministry of Education Province of BC, 2008).

In BC, there are two basic child care categories: licensed and license-not-required (LNR), also known as informal child care. License requirements are determined according to the number of children being cared for by a caregiver simultaneously. The law states that a caregiver looking after more than two children, who are not relatives, must have a license (Ministry of Health and the Ministry of Children and Family Development, 2008).

Licensed preschools are defined by the following: (a) serves children from 30 months (3 years of age prior to December 31) to school entry; (b) part day programs (maximum of four hours); (c) no naps; and (d) maximum group size of 20 children. The staff to child ratio in a preschool is a minimum of one ECE and one assistant for 20 children (Ministry of Child and Family Development and BC Health Planning, 2007).

Licensed group child care centers are defined by the following: (a) serves children from 30 months to school entry (Grade 1), or children from birth to 36 months (also known as infant/toddler care); (b) maximum group size for children under 36 months is 12, maximum group size for over 30 months is 25; (c) staff ratio for children under 36 months is 1 ECE and 1 assistant for 12 children, while for children over 30 months it is 1 ECE and 2 assistants for 25 children (Ministry of Child and Family Development and BC Health Planning, 2007).

For the purpose of this study, the term early childhood center will include both preschools and licensed group child care centers. The term preschoolers will denote children ranging from 30 months to school entry. License-not-required and ECEs working with children from birth to 36 months (infant/toddler) are not covered in this research study.

An ECE is an individual who has completed the basic Early Childhood Education training (at a post-secondary institution offering an approved Early Childhood Education certificate/diploma) and First Aid; has the requisite work experience; and has been certified as an ECE by the ECEBC Registry. While training programs vary slightly at all 34 BC colleges and universities offering the certification, they have met the requirements to be an approved program by the ECEBC Registry. Most programs state that a student registered full-time can complete the course work within two years, however, attending at less than full time status will prolong enrollment. As part of the training, two practicum experiences working in an early childhood center are required. Each practicum is between five-six weeks of 30-35 hours per week. Upon degree completion, students are

eligible to apply for certification. Certified ECEs must renew their certificate every five years by submitting an application to the ECEBC Registry. Two main criteria are required in order to be eligible for renewal: 1) a letter of reference from a co-worker, parent of a child attending the early childhood center or another ECE who can document satisfactory work in the field and vouch for the hours worked by the professional (minimum requirement is 300 hours over the course of five years) and 2) proof of attendance at a minimum of two seminars, conferences or workshops on early childhood education, lasting at least 12 hours total or proof of completion of a post-secondary institution course relating to early childhood education in the past 5 years.

A Registry for qualified ECEs (ECEBC Registry) was established by the province in 1965 and is currently the governing body responsible for administering and enforcing policies as determined by the Community Care and Assisted Living Act (2002). The Registry is the organization responsible for overseeing ECE's certificates, recertification and as of 1988, the suspension or cancellation of the ECE's Certificate (Ministry of Health and the Ministry of Children and Family Development, 2008).

In BC, an ECE may also be certified as a Special Needs Educator. To do so, qualified ECEs need to complete the basic Special Needs Education requirements, which involves further post-secondary courses and an additional practicum. This certification will enable Special Needs ECEs to care for children requiring extra support from birth to school age, provided they have registered as a special needs educator with the ECEBC Registry (Ministry of Child and Family Development and BC Health Planning, 2008).

The Area of Early Learners Framework is a document which complements and expands upon the BC Program Standards for Early Childhood Settings and the Child Care Licensing Regulations that requires child care facilities to provide a comprehensive program of activities addressing all areas of child development. This document provides guidelines about the type of environment ECEs should be creating at their center rather than a specific curriculum. Implementation of the framework is site and teacher specific (Ministry of Health and the Ministry of Children and Family Development, 2008).

This investigation will focus on examining if ECEs are using music to teach *musical elements* or if they are using music to teach *non-musical concepts*. A clarification of these terms is needed in order to provide accurate data collection. The first term, *musical elements,* refers to musical concepts such as: pitch, timbre, rhythm, notation, dynamics etc. The term *non-musical concepts,* refers to gross motor, fine motor, cognitive, language, social and self help skills.

Summary

An exploratory survey about music in BC's early childhood centers is needed to better understand how music is being used on a daily basis by ECEs and for what purposes. The results from this study can benefit the early childhood education profession by providing baseline data about how the profession as a whole uses music to support early childhood learning. It will also reveal whether ECEs believe musical activities effectively support early childhood learning.

CHAPTER 2

LITERATURE REVIEW

To understand current practices in early childhood education, one must be familiar with the major theories related to child development. This chapter will provide an overview of three prominent theorists of child development, a brief review of child brain development, and will relate this information to current early childhood education practices in Canada.

Prominent theorists

Compared to other areas of research, educational psychology is a relatively new field of study (Good & Levin, 2001). In the following section three prominent theorists of child development will be discussed as well as their impact on today's teaching in both post secondary institutions as well as early childhood centers. Dewey, Piaget and Vygotsky were all revolutionary theorists of their era (Jordan & Porath, 2006, Woodfolk, Winne, & Perry, 2006) and have stood the test of time as their theories continue to be published in educational text books and taught at numerous post secondary institutes in British Columbia (BC) (Camosun College, 2008; Douglas College, 2008).

John Dewey was born in the United States of America during the mid 19th century. Dewey proposed that children learn best through a variety of approaches, which should include outdoor education, adult training and experiential therapies (currently called creative arts therapies). He also believed that education falls into two main categories: formal and informal. "One of the weightiest problems with which the

philosophy of education has to cope is the method of keeping a proper balance between intentional (formal) and incidental (informal) education" (Page, 2006).

While Dewey believed that the content of the curriculum was appropriate, the method educators used to present information needed to change. He believed a greater emphasis needed to be placed on incidental learning and less on intentional learning. Dewey felt that a practical, hands-on approach to learning was just as valuable as sitting in a classroom and learning through listening (Page, 2006).

Jean Piaget, a Swiss theorist born in the late 19th century also believed that knowledge is a body of information or beliefs a person has acquired, either through instruction or through direct experience with the world (Flavell & Marma,1983). Piaget identified four stages of development: 1) The Sensorimotor Stage, from birth – 2 years; 2) The Pre-operation Stage, from 2 – 7 years; 3) The Concrete Operational Stage, from 7 - 11 years; and 4) The Formal Operational Stage, after age 11. Early childhood practices primarily refer to the Pre-operation Stage (ages 2-7). This stage sees the beginning of symbolic play, imaginative play and the acquisition of motor skills, but logical thinking is not part of the current skill set. Egocentrism is strong at the beginning of the Pre-operation stage and diminishes towards the end of this stage.

Although Piaget specified age ranges for each stage of development, these are merely intended to be guideposts as each child develops at his or her own rate. He believed several factors influence a child's rate of development through each stage. These include: "1) Internal maturation of the neural system - the time at which the maturational steps needed for a given level of cognitive functioning occur, is established…by the

child's genetic time schedule; 2) Psychological or spontaneous development - direct experiences in life (unguided experiences); and 3) Psychosocial development - formal instruction which needs to be preceded by the first two if it is to be successful." (Flavell & Marma, 1983, p. 319).

While Piaget is best known for his classification of stages in child development, his concept of cognitive play was also ground-breaking. Cognitive play allows children to focus on their thinking and reasoning skills (Piaget, 1962). An environment supportive of cognitive play stimulates children by providing an interesting and varying environment and encourages children to experiment and make discoveries. It allows children to interact in ways that build on their natural curiosity and provides opportunities for children to make use of their growing skills (Koralek, Newman & Colker, 2002).

Although Piaget introduced the concept of cognitive play, he was not the only child theorist who believed in it. Lev Semenovich Vygotsky, a Russian theorist born in the late 19th century, was considered a rival of Piaget. Vygotsky also endorsed play as a key element in learning for young children and did not believe formal education to be the only or best method of learning (Vygotsky, 1933). Vygotsky differed significantly from Piaget in his belief that it was crucial for adults or older, more skilled children to lead the development of younger children, resulting in social learning through the internalization of culture and social relationships. He described the gap between what an individual can achieve independently compared to what they can achieve with the help of a more knowledgeable person as the Zone of Proximal Development (Koralek, Newman & Colker, 2002). Vygotsky (1933) also believed that social interaction was necessary for

the development of self-regulation skills. Social interaction/play is a time when young children can engage with others and develop the ability to focus their attention along with the ability to control their impulses in favor of more planned actions.

While Dewey, Piaget, and Vygotsky differ slightly in their theories of child development, there are also marked similarities. All three theorists believed that young children need to learn from experiencing life, just as much as they need to learn from the formal classroom. They concurred that play should be considered a major part of learning as it allows the children to gain social skills, control impulses and learn about the world through a hands-on approach in a way that is meaningful for them. All three theorists are still studied today in early childhood education programs, and their theories are actively implemented in early childhood education centers worldwide.

Brain development

Over the past several decades, advances in science have dramatically increased our knowledge of when and how the brain develops. By the time a child reaches his or her third birthday, roughly 80 percent of brain growth is complete, and by the time she/he reaches kindergarten more than half of their critical development is complete (D'Arcangelo, 2000; Lindsey, 1998-99; Nash, 1997; Simmons & Sheehan, 1997). This is not to say that a child cannot be enriched upon entering the school system after the age of six. However, the more opportunities the brain has to develop prior to the age of five, the more likely it will be able to integrate other material that it receives through school or interacting with the environment.

A basic understanding of how information is processed in the brain will shed light on implications for research and development. When a child is born, the brain has about 100 billion neurons. The density of these neurons does not appear to change over time, however, the complexity of dendritic aborization does change with age. Synaptic connections between dendrites begin developing at roughly seven weeks post conception and continue after birth; with development increasing during the first two years of life. (Berninger & Richards, 2002). Those 100 billion neurons, which existed at birth, transform into more than 50 trillion synapses before the age of three. Our brains cannot use all of these synaptic connections and therefore begins to eliminate those connections that are seldom or never used (Nash, 1997). This disproves the previous hypotheses of researchers who believed that eliminated connections are predetermined.

Nash (1997) reported that "...researchers at Baylor College of Medicine...have found that children who do not play much or are rarely touched develop brains 20 percent to 30 percent smaller than normal for their age" (p.51). Washington (2002) concurs that play is vital in stimulating children's imagination and minds as it helps them gain an understanding of themselves and their relationship with others as well as developing their language and problem solving skills. While Nash's primary investigation focused on development inside the brain, Washington's focused on how that development affects the child in their day-to-day life.

With this recent research about brain development and the importance for children to be stimulated physically and mentally prior to age six, one wonders if and how much of this newly gained knowledge is being passed on to early childhood

educators (ECEs) and actually implemented in the classroom. One of the pivotal psychologists who has had a major impact on educational practices has been Dr. Howard Gardner (Slegers, 1997). Gardner believes intelligence is not an "all or nothing" event; there are numerous ways to be intelligent and the best way to learn is to combine a variety of the intelligences together. In a seminar conducted in 2001, Stone provided ECEs with information on Gardner's eight different intelligences, their definitions as well as how to structure activities around these intelligences in a way that supports curriculum outcomes.

If anyone doubts that ECEs and policy makers should understand brain development and be aware of brain-based research, it is important to remember that brain research has led to the improvement of early childhood education throughout the course of history. Many of the theorists mentioned above have had a huge impact on educational policies over time as well as current day policies. The theories of Piaget along with neo-Piagetians Hunt and Skinner are cited as being the influence behind the Head Start and High/Scope models. Gardner's theory of multiple intelligences is one example of brain-based education that promotes whole language learning with the coordination of themes and units (Slegers, 1997). As our understanding of the brain continues to grow, so must the development of curriculum in early childhood centers to better meet the needs of students.

Early childhood practice in Canada

Currently, there are three predominant models of early childhood programming used in Canada: Waldorf, Montessori and Reggios Emilia. Used worldwide, all three approaches have some similarities. They are built on the philosophy of supporting children to realize their full potential as intelligent, creative, whole people. In all of the approaches, the children are viewed as "active authors of their own development, strongly influenced by natural, dynamic, self-righting forces within themselves, opening the way toward growth and learning" (Edwards, 2002, p.5). Differing views of the young children's needs, interests and modes of learning inevitably lead to contrasting ways of interacting with children, which are characteristic of each approach.

Although all three practices are popular in Canada, the Reggio Emilia approach is most common on the west coast of Canada. Reggio Emilia is a town in Italy known for its civic engagement. Post World War II, a small group of parents began a municipal early childhood program under the guidance of early childhood educator Loris Malaguzzi. The main principals of the Reggio Emilia model are as follows: (a) children learn through play both in learning centers and in the "real world"; (b) parents and teachers play an important role in child development but not always as the leader; and (c) culture and social interaction are important to child development (Hewett, 2001; New, 2003; and New 2008). This philosophy is consistent with Dr. Howard Gardner's multiple intelligences in that it allows for integration of the arts as tools for cognitive, linguistic and social development. In both the multiple intelligence theory and the Reggio approach, concepts are presented in multiple modalities to aid the children's

understanding of these experiences. Both philosophies also consider music to be a medium appropriate for the presentation of information to support learning (Abbot & Nutbrown, 2001).

Although Reggio Emilia is a common model in early childhood centers in BC, it is not a mandatory philosophy for all centers to follow. However, the *BC Ministry of Early Childhood Education* has created universal guidelines in the area of early learning.

Early childhood practice in British Columbia

The following section will describe the current framework early childcare establishments have been following since the turn of the millennium. All information has been provided by a document called *"BC Early Learning Framework,"* co-published by the Ministry of Health and the Ministry of Children and Family Development and has been issued by the Early Learning Advisory Group. The document is meant to describe the broad vision, principles, and areas of early learning for children in BC. Application of the key concepts in the document can be put into practice in a variety of ways depending upon circumstances, resources, the individual child/families and the community

The framework is built on several key principles: (a) children are born with the innate desire to learn; (b) families are the primary caregivers of children and have the most important role in promoting their children's well-being, learning, and development in the context of supportive communities; (c) play is vital to children's healthy development and learning; (d) consistent, responsive and nurturing relationships are essential to the well-being and early learning of children; (e) all aspects of children's

development and learning (physical, social, emotional, cultural, linguistic, and intellectual) are interrelated and interdependent; (f) language plays a central role in connecting thought and learning; (g) children are active participants in their families and communities; (h) the individual, cultural, and linguistic identities of children and families are respected and integrated into early learning settings, programs, and activities; and (i) the physical environment shapes children's learning and well-being.

The aforementioned principles have then been combined and incorporated into key areas of early learning. The four areas of early learning are: 1) Well-being and belonging; 2) exploration and creativity; 3) languages and literacy; and 4) social responsibility and diversity. The government believes that providing all children with rich experiences in all four areas will support the growth and development of children in knowledge, skills, and dispositions that are the foundation for lifelong learning. Although there are no set guidelines as to how professionals are to promote the fours areas of early learning, it is critical that all areas are addressed on a regular basis.

As stated in principle (e), all areas of early learning are interrelated, therefore, learning in one area is likely to support learning in all three other areas. By designing environments that support overlapping areas of early learning, they each strengthen one another and allow children to learn holistically. This principle echoes similar beliefs of Reggio Emilia and Howard Gardner's multiple intelligence philosophies where multiple presentations of information in a variety of ways will provide the child with greater success in learning.

Even though the Canadian and BC governments have created frameworks and principles for early childhood learning, it is important to note that at this time, there is no set curriculum for early childhood centers to follow. Day-to-day curricula are designed and implemented independently at each early childhood center. A standardized assessment, which is used frequently by ECEs to assist in developing curriculum, is the *Hawaii Early Learning Profile (HELP).* HELP is a curriculum-based assessment, which focuses on 622 skills/behaviors broken down by age and domain. The age range for the assessment is birth to age 6 and the six domains in the HELP assessment are: a) cognitive, b) language, c) gross motor, d) fine motor, e) social and f) self help. ECEs can use this assessment in a variety of ways: a) to assess typically developing or at-risk preschoolers and b) as a guideline for creating age appropriate activities in the classroom.

Learning through play

Throughout the literature review, the importance of play in early childhood development has been a continuing theme. Rieber (1996) investigated the history, theory and research behind play and learning. There are numerous research studies that focus on play in a variety of academic areas: anthropology, psychology, and education. All areas indicate that play is, in fact, an important medium for learning and socialization at all stages of life. However, when used today in conversation the word *play* still has a negative/passive connotation to it. People believe that if you are "playing" then you are not working and therefore are not learning.

Although "play" may have a negative connotation in general society, professionals in the fields of child development, psychology, and education understand the significant role it has in the development of young children. Current theories of play state that there are four distinct categories of play: 1) play as progress, 2) play as power, 3) play as fantasy and 4) play as self (Rieber, 1996). While all areas of play are used throughout our entire life, the focus of this paper will be on play as progress. Play as progress means utilizing play to learn something useful, in which it improves one's psychological or social functioning. The early years of a child's life focus on play as progress. Children are constantly learning through play or interacting with their environment.

The benefits of play are numerous. Broadhead (2006) believes that play provides children with

> an environment in which their own interests and strengths find voice and place within the planned curriculum and where they can take their intuitive ideas about the world around them and, with scaffolding from adults and from peers, test them against other theories and possibilities. (p. 192)

Observations have shown that children incorporate music into their play when left alone or in their natural environment. Washington (2002) states that oftentimes a child can be observed speech singing or creating sound effects to go along with their imaginary play. If play is a natural way for children to learn and if children are intrinsically musical

(Olsho, 1984; Thrope & Trehub, 1989; and Weinberger,1998b), combining these two elements together may be appropriate to enhance brain development and learning.

Music and play

Since children tend to be fairly musical when they play, it is important to combine both of those concepts and investigate the importance of musical play for young children. According to Littleton (1991) "musical play consists of activities that allow children to explore, improvise, and create with sound. Functional musical play might include exploring vocal, instrumental and environmental sounds as well as the way in which these sounds are made (p.42)."

One might wonder how the use of music might impact play or make it different from regular play. Tarnowski (1999) observed children's musical play, analyzed their actions, and correlated them with developmental outcomes. She found that musical play can benefit children in a variety of ways: (a) it can enhance cognitive development; (b) social skills; and (c) physical development. When a child plays and creates an original song, there is an enhancement of language simultaneously to the development of musical understanding. Musical play provides children with the opportunity to interact socially, and "de-center" themselves by focusing on their playmate. They also learn how to share, take turns and cooperate with one another. Physical development can be aided by musical play when dancing to their own songs, and fine motor skills can be addressed in playing a variety of instruments along side of hand-eye coordination.

Musical play can happen in a variety of ways throughout the day. Child development theories propose that children learn through the exploration of their world. Thus, allowing children to explore musically will aid them in both their musical and non-musical growth. Kenny (2004) states that music centers or stations within the classroom are one way in which children have the freedom to explore and learn. Teachers might feel odd when using music centers in their classroom as they have to take on the role of observer or partner rather than teacher. However, musical play doesn't have to be solely child-directed. Singing a song with a whole group of children is another example of musical play. While children are not able to freely explore at their own pace during these types of activities, they are able to feel their own voice, listen to others and work in a group. Group singing for some children will motivate them to sing on their own at a later time, returning to self-directed play.

Because musical play and self-directed musical play may be unfamiliar concepts for some educators, it is crucial to raise awareness of how musical play can occur in the classroom as well as its importance in child development. According to Morin (2001), musical play can serve multiple purposes. Morin states:

> Musical play should be designed or created in response to thoughtful teaching purposes that might include providing for individuals or small-group follow-up to complement large-group instruction; encouraging exploration, discovery, or problem-solving; meeting specific needs of students in terms of pacing, remedial work, enrichment, or special interests; reinforcing other curriculum themes; or

providing regular opportunities for listening or representing thoughts, ideas and feelings through music. (p. 28)

Music and childhood development

While research has shown that young children are innately musical and use music on a daily basis, this in and of itself does not show how music is beneficial to their growth and development. In 1987, Levinowitz & Gordon investigated the typical growth and development of children in the following categories: perceptual-motor development, cognitive-linguistic development, and social-emotional development. Within each of those categories, the authors gave narrative descriptions of what children within particular age groups should be able to do, and what they might have difficulties with. The first category was for children aged 18 months to three years, the second grouping was for three-year olds, followed by four-year olds and finally five- to six-year olds. After outlining the developmental skill set of children in each age group, the authors then presented a music curriculum, which worked in conjunction with young children's natural development.

The authors grouped activities into different musical categories, which could be used to engage students while simultaneously addressing developmental goals. The musical categories were: 1) song instruction, 2) coordination and movement instruction, 3) chant instruction, 4) tonal pattern instruction, 5) rhythm pattern instruction, and 6) listening. For example a song about body parts from Levinowitz & Gordon's (1987) proposed music curriculum for children aged 18-months to three-years, would also focus

on coordination and movement instruction. The authors state that "children cannot achieve tension-free movement without an understanding of the following: 1) what each body part can do, 2) what body parts can do together, and 3) what the whole body can do." Chants, finger plays and patsching (patting ones knees in a steady beat) are good examples of musical activities, which assist in the development of the non-musical objective of body awareness. More than a decade after Levinowitz & Gordon proposed a preschool music curriculum, Levinowitz (1999) still believed in the importance of music for young children. She states "children's early years are a key time for musical growth, as well as for overall growth through music" (p.17).

Weinberger (1998a) examined many different aspects of the human brain, behaviors, biology and how music is universal and necessary for all humans. He explores how the brain intrinsically processes music based on the evidence shown in studies that preschool children are spontaneously musical in their behaviors.

Numerous studies have been undertaken comparing adults to infants and young children and how they respond to various musical stimuli (Olsho, 1984; Trehub, 1984; Thrope & Trehub, 1989). The results indicate that young children and, in certain instances even infants, could discriminate between different musical elements such as pitch, melody, and tempo similar to the adults tested in the studies. These findings suggest there is a biological factor that enables infants and young children to attend to and perceive musical stimuli. Therefore, the term "musical infant" is not just for certain infants, but is for all normal human infants (Weinberger, 1998a).

As stated previously, one key finding in brain research is that when synapses are used, they are strengthened; conversely, inactive or unused synapses are weakened. In other words, activity can grow new synapses or maintain existing synapses while inactivity will decrease synapses. This is true throughout life, but most relevant during brain development. The major components of the human brain, consist of the following sections and their respective functions: sensory and perceptual is responsible for auditory, visual, tactile, kinesthetic information; cognitive processing which deciphers symbols, language and reading; planning movement; motor skills (fine muscle and gross muscle coordination); feedback and evaluation of behaviors; motivational/hedonic (e.g. pleasures); learning; and memory. When engaging in either vocal or instrumental music, most, if not all, of those categories can be engaged simultaneously, therefore strengthening the synapses in the brain, which transfers to other areas of development (Weinberger, 1998a). Weinberger states "it isn't important how well a student plays but rather the simultaneous engagement of senses, muscles, and intellect. Brain scans taken during musical performances show that virtually the entire cerebral cortex is active while musicians are playing. In short, making music actively engages the brain synapses, and there is good reason to believe that it increases the brain's capacity by increasing the strengths of connections among neurons" (Weinberger, 1998b, p. 39).

More recently, Strickland (2001/2002) also explored research supporting the use of music and brain development. An interesting finding in her literature review was a study by Malyarenko et al. that reported that 4-year old boys who listened to background music for one hour a day had a greater interhemispheric alpha range than the control

group whose alpha range decrease. The music group members also appeared to tire less easily than the controls. One can postulate the results would indirectly enhance or affect learning, based on what type of internal state is evoked.

Music and curriculum learning

Using music as a tool to aid curriculum learning has also been investigated in several research studies. Weber et al. (as cited in Overy, 2000) conducted a study in 50 Swiss elementary schools where their language and math courses were replaced with musical-based instruction. The results indicated that language and reading skills increased and they were no worse in math when compared with students who attended standard language and math courses.

Howard Gardner, the father of multiple intelligences, conducted a seven-month study in 1996 comparing test scores in reading and math of first graders. The control group was comprised of students who were functioning at grade level, while the experimental group (test arts training) included students who were one term behind in their scores. The results of this experiment revealed the final scores of participants in "test arts" classrooms were essentially the same in reading, however, better in math than those of in the control group. Additionally, those who participated in the "test arts" classroom, had attitudes and behaviors at school which, were roughly equivalent to those of the control group at the end of the study, despite being significantly worse than controls at the beginning. A follow up study was conducted with second graders and similar results were achieved by those in the "arts classroom." The results indicated that

the greatest effect was for those students who had participated in both years of the special "test arts" class.

With all of this information supporting the use of music as beneficial for children's brain development, it is important to consider how research results can be transferred to a practical application with students. Two studies investigated the effects of an early intervention music curriculum on pre-reading and writing skills of 4-year olds in an early intervention classroom. Standley & Hughes (1997) initially measured skills using the Print Awareness Test for Logos, the Print Concept Checklist, and the Developmental Writing and Language Skills checklist. Based on pre- and post-test scores, results indicated that music enhanced print concepts and prewriting skills and children were excited about participating in the activities. In a follow-up study conducted in 2001, Register's results supported Standley and Hughes' findings. Moreover, the results suggested that music sessions designed with specific academic measures in mind, demonstrate increased gains in students measures of pre-reading and writing skills.

Sims (2005) investigated the effect of free versus directed music listening on pre-kindergarten children. During the free condition, children were directed to listen to the music as long as they would like, while during the directed condition they were given a concrete task to complete while they were listening. The results indicated that, as a group, the children did not listen significantly longer when presented with a specific task, however, some children they listened and attended to task longer with the music under both conditions than what would be generally expected at this age.

Citing results from the previous study, Wiggins (2007) wrote an article for ECEs on how to incorporate music into early literacy programs. The article includes a list of books and activities, which assist in developing both music education goals as well as emergent literacy skills. The author also provided background information about the importance of music for young children, resources for teachers to find more information and teaching ideas related to age-specific goals and objectives.

In the past two decades, music educators have been curious about how music is presented to young children in preschools and daycares (Golden, 1989; Daniels, 1992 Saunders and Baker 1991; Tarnowski & Barrett, 1992; Nardo, 1996; Steven 1998; Nardo, Custodero, Persellin, & Brink Fox, 2006). The topics covered in the above studies fell into one of two categories or, in some cases, both: 1) How are ECEs using music on a daily/weekly basis in their centers? and 2) What are their perceptions of their own musical skills?

Music and early childhood educatiors (ECEs)

This section will discuss articles that looked solely at how ECEs are using music in their classrooms. In 1989, Golden examined the use of music in selected licensed preschools/daycares in the state of Ohio. She was interested in the use of music in preschools; more specifically, how often, the purpose of the use of music, who led music time as well as the education/philosophical background of each center. The survey results indicated that 99.6% of preschools use music on a weekly basis with a range of 1 minute to over 2 hours per week. However, the results indicated that the primary purpose was for

recreation and enjoyment rather than using music to supplement teaching other academic areas.

In a multi-state survey, Daniels (1992) also investigated how music was being used, who developed the music curriculum, and who presented music to the children in daycares and preschools. The results of this survey indicated that larger schools tended to have structured programs, but overall 69% of the early childhood centers stated they did not have regular, structured music programs. Again, in the larger centers 34% stated they had a music specialist on staff; in the remaining centers, music was lead by an ECE on staff.

In a replication study of Golden's dissertation, Tarnowski & Barret (1992) surveyed preschool teachers in Wisconsin about their current musical practices. Similar to previous studies, their results indicated that music was present in early childhood centers, with large-group singing and finger plays being the most frequent musical activities. Roughly 30% of preschools in this study said they used music for nonmusical goals. "Integrating curricular themes" and "structuring the day" were stated as the most common uses, while developing musical understanding and skills was listed as significantly less important.

In a more recent study, Nardo, Custodero, Persellin, & Brink Fox (2006) noted that essentially all preschools use music on a weekly basis, albeit preschool teachers used music for purposes other than teaching musical concepts (2006). They used music for a variety of goals, including: (a) transitioning between activities, (b) recreation, (c) relaxation, and (d) support of curriculum. These answers were provided voluntarily, as

the survey did not specifically ask how music was being used. Teachers could add comments in the "other" category.

Based on the information gleaned from the above articles, it appears that the majority of ECEs use music in some capacity on a weekly basis. Music therapists might be interested in the results as it seems that music is used in early childhood centers more often to teach or assist with non-musical goals rather than musical ones.

ECEs' perception of musical skills

This literature review includes studies done on ECEs' perceptions of their own music skills and their thoughts on the types of professional development or support they would like from music educators. Both Saunders & Baker (1991) and Steven (1998) surveyed elementary education teachers and ECEs to determine which musical skills they felt were useful, needed improvement or not beneficial to their job. Information collected from the survey was used to construct a three-credit hour course for pre-service teachers entering the field to help give them the skills post-services teachers felt would be beneficial. Some of the skills in question were the ability to: 1) read music; 2) play an instrument; 3) sing; and 4) teach musical concepts. Findings from both studies indicated that the main purpose for using music in the classroom was to supplement other curricula and was considered priority for both sets of teachers. However, when asked what skills they were currently using but had not been taught, 86% of respondents from the Saunders & Baker (1991) study indicated that they use music to support other curriculum materials. When asked in both studies what areas of professional development they have sought,

less than 25% of respondents in each of the surveys indicated they have accessed professional development for music skills and understandings. However, as mention previously they felt one of the most useful and beneficial skills and understandings gained from post-graduation sources was in reference to using music to supplement other curricular areas.

In 1996, Nardo investigated the music education needs of California early childhood education centers in relation to community college music courses offered to early childhood education (ECE) majors. The results of the survey were that more than 60% of ECE teachers were designing and leading their own music instruction. Children in the centers were participating in group music activities four to five times a week, mostly in large-group singing, although nearly half of the centers never assessed the students musical development or the ability to sing in tune. While the community colleges stated they were offering music curricula to ECE majors, less than 20% of majors stated they were aware of these courses. One of Nardo's main recommendations was that professional music educators needed to develop strategies for outreach to the ECE community.

Another study conducted in 1998 by Kelly also surveyed ECEs and their perceptions of useful music skills and musical understandings. Responses from this survey indicated that educators felt that traditional music skills (singing and playing instruments) were either not often used or not considered useful. Although teachers did indicate that they valued training experiences where applicable pedagogical strategies were taught as they were able to transfer knowledge back into the classroom.

From the aforementioned studies, some general conclusions can be drawn about the average ECEs' sentiments regarding the use of music in the classroom. First, most ECEs seem less well-prepared to use music, even though they recognize the importance of music for young children. Secondly, they often feel inadequate as musicians or music teachers. Because they lack the training to implement a music program, they will turn to commercial materials, which reinforce basic skills in non-music areas (Scott-Kassner, 1999).

Continuing education for ECEs

Although ECEs may lack musical training, there are options available to address this issue. In a study comparing different types of training modules, Register (2004) investigated different types of classes/workshops available to ECEs and pre-service ECEs to aid in their comfort about using music in their classroom. In all groups, a negative correlation was found in regard to the amount of years teaching and amount of music used during the course of the week. In general, the longer the teacher had been teaching, the less they were apt to use music on a regular basis. It was also interesting to note the primary reasons for using music were for fun, as background music, movement, and relaxation. They most frequently used recorded music and a cappella singing. All of post-service teachers who participated in a workshop indicated they were able to implement more music in their classroom and that their students responded positively to the change. They also indicated that instruction regarding the use of manipulatives, such as puppets, scarves, and streamers, paired with music was most beneficial. The other group in this

study was made up of music education students placed in an early childhood education centers who received on-site training from a music education supervisor. All students indicated they learned a lot from being in an actual early childhood setting and were grateful for the experience. Results from this study suggest that while both types of training are beneficial, most likely an on-site training model prior to degree completion would have a larger impact and help the ECEs to gain more confidence.

The results from these studies would seem to indicate that many ECEs would welcome training in the use of music to assist with teaching of other curriculum areas especially if this information was not included in their post-secondary training. Although ECEs currently use music to support other curriculum goals and gross motor development more often than they do to teach specific musical concepts, when they have received training on how to use music to teach non-musical concepts, it has been beneficial and applicable to their programs.

Summary

Based on the findings from the extant literature, several conclusions can be offered. Although ECEs use music on a regular basis, the role of the music is rarely to teach music. Music educators have been trying for decades to assist ECEs through course development, professional development, and one-to-one training to improve their use of music in the classroom and their musical skills. However, there have been a limited number of investigations regarding the role of music in early childhood centers nor how music educators or music therapists can assist ECEs to develop appropriate musical

comfort level of ECEs leading group music activities; (d) to gather current information about the implementation of music at early childhood centers; (e) to investigate the primary purposes for the inclusion of music in the classroom; and (f) to learn the ECEs' perceptions regarding the efficacy of music activities in addressing non-musical objectives.

CHAPTER 3

METHOD

Participants

The participants selected for this study were licensed early childhood educators (ECEs) worked in a British Columbia (BC) early childhood education center (preschool or licensed group child care) and registered with the ECEBC Registry.

According to BC Ministry of Children and Family Development (MCFD) a preschool is defined by the following: (a) serves children from 30 months (3 years of age prior to December 31) to school entry; (b) part day programs (maximum of four hours); (c) no naps; and (d) maximum group size of 20 children. A licensed group child care center is defined by the following: (a) serves children from 30 months to school entry (Grade 1); (b) maximum group size for over 30 months is 25; (c) staff ratio for children over 30 months is 1 ECE and 2 assistants for 25 children.

Preschool and licensed group child care centers were chosen as they differ from other childcare centers in regard to their programming and planning of daily activities for children. A greater academic and overall focus on growth and development is generally given to this age group compared to infant/toddler rooms. In order to ensure an up-to-date rather than historical study, only teachers on the ECEBC Registry who are currently working in an early childhood education setting were included. Due to the consistent turnover and job relocation in the profession, it was decided to email the entire registry in hopes of obtaining a reasonable sample.

The pool of potential participants for this study included all members who are registered with the ECEBC Registry. While it is mandatory that at least one of the ECEs in each center has a certificate in Early Childhood Education and is also registered with the ECEBC, individuals with those credentials may be employed in positions (e.g., program managers, out-reach support workers, directors etc.) other than as a classroom teacher. Since the registry does not discriminate between teachers and other early childhood education professionals, the invitation to participate in the survey was sent to everyone on the membership directory. However, those who were not classroom teachers or affiliated with ECEBC Registry were excused from participating in the survey.

An email invitation to participate in the survey was sent to all individuals currently listed in the ECEBC Registry's directory at the time the study was implemented. In total, approximately 800 invitations were sent to ECEs residing in BC. Upon receiving the email invitation the participants chose if they wanted to complete the online survey. A letter of consent (See Appendix A) was sent as an attachment, which explained the purpose and process of the survey. If they chose to participate, there was a link in the body of the email that took them to the survey. It was estimated that completion of the survey would take approximately 15 minutes.

Research design

Due to the limited number of investigations into the educational practices of ECEs and their use of music to teach non-musical goals, a survey-based, mixed-method exploratory study was designed. The survey instrument was designed to collect

demographic information, educational background, characteristics of group music, purpose for using music and the ECEs' perception of music's effectiveness.

A self-administered online survey (See Appendix B) was selected for this study for a variety of reasons. First, online questionnaires are efficient for the participant to receive, complete and return (Wheeler, 2005). Secondly, received data can be compiled instantaneously through an online system and readily available for analysis by the researcher. Also, the number of invalid responses can be minimized when using an online survey due to the online instrument, as compliance with answering all the questions as well and following instructions is monitored by the online survey. Finally, the online survey method is a cost efficient method of surveying a large participant pool (Wigram, 2005). A sizable participant pool is seen as desirable due to the lack of published information found identifying the use of music to facilitate the learning of non-musical goals in a preschool setting in Canada or elsewhere. It was also essential to ensure that all ECEs working in urban, suburban, rural and remote communities had access to this study to allow for deductions to be made and to provide direct comparisons between geographical locations and education outcomes.

The first seven questions focused on demographic information relating to research question 1. Questions eight through fourteen investigate the ECEs relevant musical and educational background information as it related to research question 2. Question 15 was the only survey question linked to research question 3. It specifically investigated the comfort levels of ECEs leading group music with various instruments. The characteristics of group music time was the focus of research question 4 and the corresponding survey

questions were questions seventeen thru twenty. Questions twenty-one and twenty- two, were the sub questions for research question 5 and investigated what the purpose was for including music at early childhood centers. Finally question twenty-three related to research question 6 and examined ECEs' perceptions of the efficacy of music to teach non-musical objectives.

Prior to the sending out the pilot study, the Human Subject Institutional Review Board (HSIRB) (See Appendix C) committee from Western Michigan University reviewed the study and survey and made corrections where they felt appropriate. In addition, the president of the ECEBC Registry also reviewed the survey and made corrections in order to assure that it met ethical standards. Once the survey received the Registry's endorsement, the researcher was granted permission to send the survey out to all members of the ECEBC Registry who provided an e-mail address on the annual registration form.

After the HSIRB committee and the president of ECEBC Registry granted approval, an invitation to participate in a pilot survey was sent to 4 ECEs currently working in the field (See Appendix D). The pilot participants were asked for feedback on whether the survey instrument is thorough, clear, and concise and if any modifications were recommended. Pilot participants did not indicate any areas of improvement for the instrument. The survey was then distributed to the 794 potential participants.

Data collection

An online research company, *Survey Monkey*, was selected for this study based on the researcher's positive experience regarding user accessibility. The survey was posted online for two weeks at the beginning of February 2009. An e-mail requesting participation in the survey was sent to each participant with the link to the online survey contained in the e-mail.

Implications and delimitations

The limitations of this study include its dependence upon anonymous and voluntary participant responses. This survey did not yield a calculable response rate due to the need to send it to a wide variety of individuals, some of whom might not qualify as survey respondents.

In order to be employed as an ECE in BC, one must be registered with ECEBC Registry. Of the organization's current membership directory, roughly 800 members provided e-mail addresses. As per the organization's request, the researcher sent one master copy of the survey link to the president of the ECEBC Registry. Upon final approval of formatting and content, the researcher received a list of all members email addresses.

The survey attempted to establish if and what non-musical goals were being addressed through the use of music, and ECEs' perception about the effectiveness of music in addressing non-musical concepts. This study will gather useful information that will guide future research, educational programs, and provide music therapists/music

educators with insight into how ECEs are using music to facilitate the learning of non-musical goals. Publication and presentation of this information could serve to inform music therapists, ECEs, center directors, and higher education curriculum developers of the needs and wants of currently practicing ECEs in developing their skills using music to facilitate the learning of non-musical goals for young children.

CHAPTER 4

RESULTS

Electronic invitations to participate in the study were sent to 794 licensed early childhood educators (ECEs) who were members of ECEBC Registry. Fifty four of those e-mails were returned as undeliverable. Participants in the pilot study were not included in the final sample. Several individuals responded directly to the researcher and indicated they were not eligible to participate because their employment did not match the stated criteria.

One hundred and thirteen licensed ECEs responded to the invitation to participate in the survey. One respondent began the survey but dropped out after answering the first question indicating he or she did not meet the criteria for continuing with the remainder of the survey. The remaining 112 participants completed the questionnaire from question 1-16 inclusive. For question 16, one respondent answered that he or she never used music in their early childhood center and therefore was allowed to exit the survey at that point. An exact response rate could not be calculated for this study, as the subject pool of licensed ECEs who belong to ECEBC Registry and currently work with children in preschools or group child care centers with children 30 months to school entry was unknown.

Demographic information

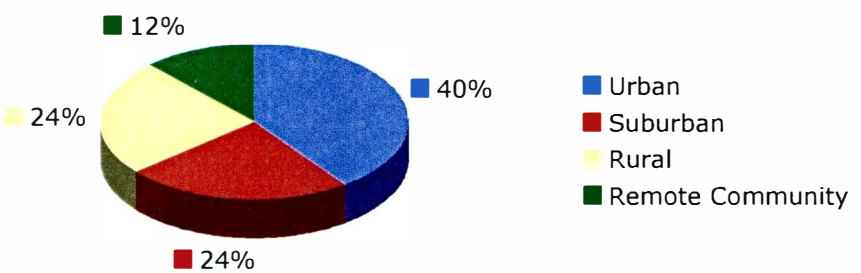
Research question 1:

What are the demographic characteristics of BC's early childhood centers employing ECEs (preschool/group child care), population density (urban, suburban,

rural and remote communities), student demographics (how many, number of students receiving government subsidies, number of ESL students) and employee demographics (length of time since certification)?

Over half (59%; n=66) of the respondents indicated they were employed by a group childcare facility while 41% (n=46) were employed by a preschool. Geographical location of the early childhood centers were 40% (n=45) urban, 24% (n= 27) suburban, 24% (n=27) rural, and 12% (n=13) remote communities. (See Figure 1)

Figure 1. Geographical location of employment



Student populations in early childhood centers varied throughout the province. Thirty nine percent (n=43) had 25 or fewer children, 26% (n=29) had 26-40 children,

17% (n=19) had 41-60 children, 6% (n=7) had 61-80 children, and 13% (n=14) had 81 or more children. (See Figure 2) The number of children's families receiving government subsidies to attend their early childhood center also varied with the majority of respondents reporting that less than 20% of their students were receiving subsidies. Thirty six percent (n=40) of the respondents reported that their centers had less than 9% of students receiving funding, 18% (n=20) had 10-19%, 8% (n=9) had 20-29%, 7% (n=8) had 30-39%, 6 % (n=7) had 40-49%, 6% (n=7) had 50-59%, 5% (n=6) had 60-69%, 5% (n=5) had 70-79%, 7% (n=8) had 80-89% and 2% (n=2) had 90-100% of students receiving government subsidies. (See Figure 3)

Figure 2. Enrollment at early childhood centers

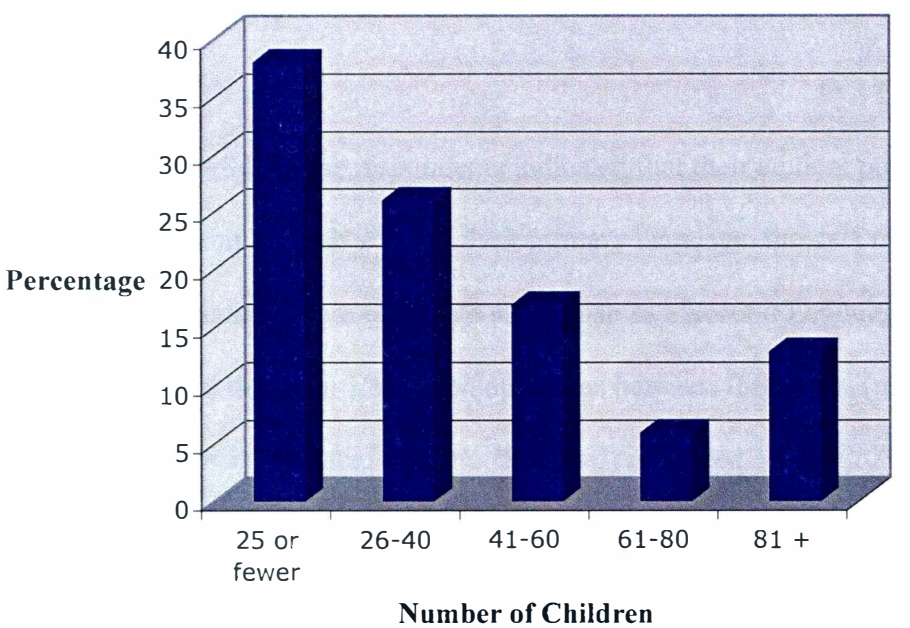
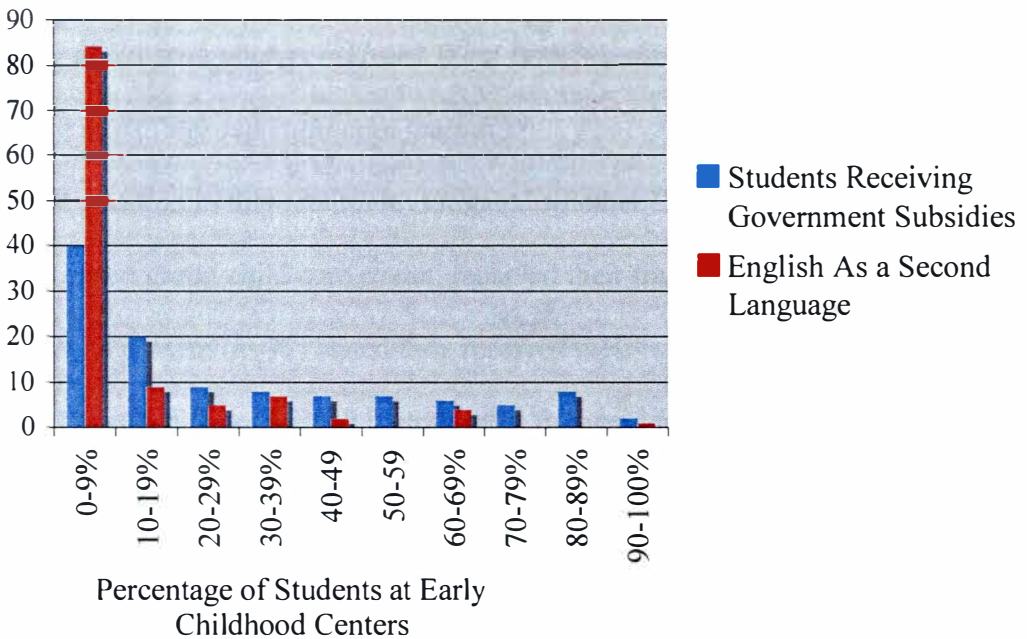


Figure 3. Student demographics



Although 75% (n=84) of the respondents indicated that their student population included students for whom English was not their primary language, the data revealed that only a minority of students were classified as English as a Second Language (ESL). Eight percent (n=9) stated that their ESL population was between 0-9%, 8% (n=9) indicated 10-19%, 5% (n=5) indicated 20-29%, 6% (n=7) indicated 30-39%, 2% (n=2) indicated 40-49%, 4% (n=4) indicated 60-69%, and 1% (n=1) indicated 90-100% of their student population was ESL.

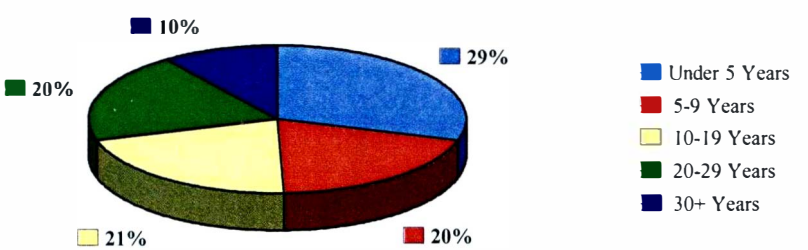
Educational background

Research question 2:

What training have ECEs obtained, and are interested in obtaining in the future, related to using music with young children? What is the musical background of ECEs current working in BC's group child care facilities?

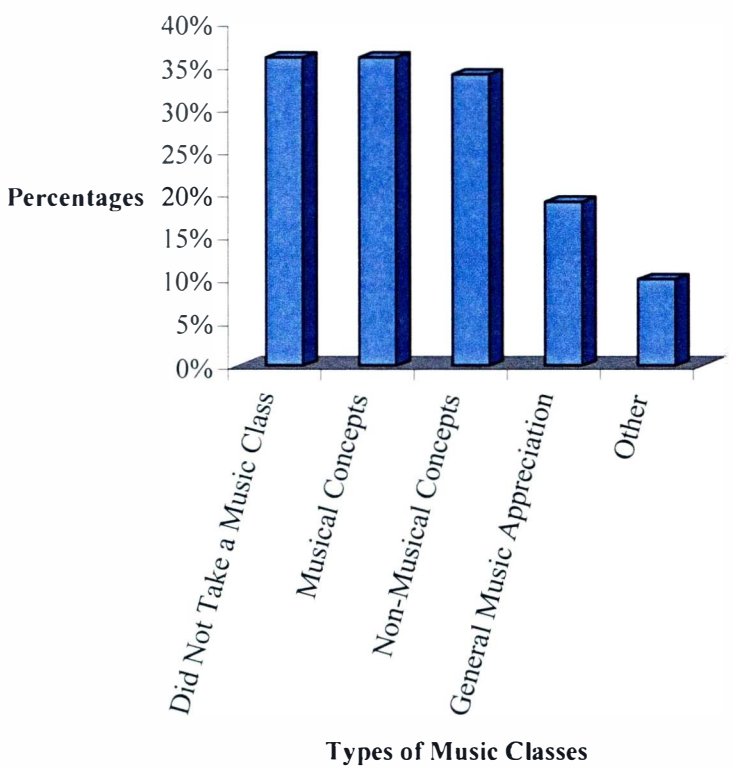
The first question in this section investigated whether ECEs, who work in a preschool or licensed group child care center, received their training in British Columbia (BC). Eighty-seven percent (n=97) stated they received their training in the province while 13% (n=15) stated they received it elsewhere. In regard to length of time since graduating, 29% (n=33) of participants indicated they graduated within the past 5 years, 20% (n=22) stated they graduated between 5-9 years ago, 21% (n=24) graduated 10-19 years ago, 20% (n=22) graduated 20-29 years ago, and 10% (n=11) graduated more that 30 years ago. (See Figure 4)

Figure 4. Number of years practicing



The next group of questions focused on whether music courses were offered and/or required in the respondents' degree programs. Fifty six percent (n=62) indicated that music classes were required as part of their training, while 44% (n=50) stated they were not required. When asked if music classes were offered as electives, 84% (n=94) responded they were not offered while 16% (n=18) said they had music electives offered to them. Further investigation into the types of courses offered to the ECEs during training, indicated 36% (n=40) did not take a music class at all, 36% (n=40) took a music class on how to teach musical concepts to children, 34% (n=38) took a class on how to use music to teach non-musical concepts, 19% (n=21) took a class about general musical knowledge, and 10 % (n=11) checked the "other" category. (See Figure 5)

Figure 5. Types of music classes taken

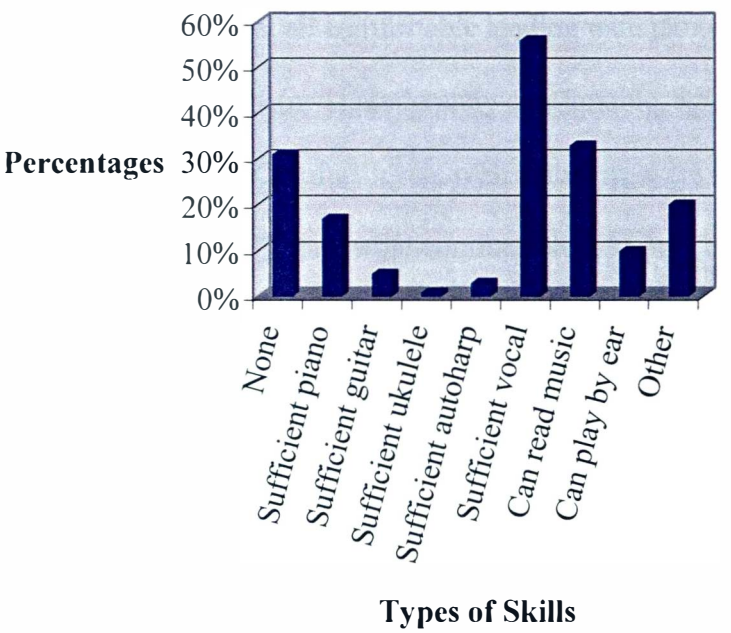


Continuing education is a requirement in order to stay licensed in the province of BC. A minimum of 12 hours of training over 5 years needs to be documented when renewing licenses. Sixty-one percent (n=68) of respondents stated they had attended a workshop or course about teaching musical concepts in the classroom, while 39% (n=44) stated they had not attended such types of workshops. Similarly, when asked if they had attended a course or workshop about using music to teach non-musical concepts, 63% (n=71) stated they had while 37% (n= 41) said they had not. However, when asked if they were interested in taking (additional) continuing education courses or workshops about using music in the classroom 94% (n=106) indicated they were interested, while 6% (n=6) indicated they were not interested.

Musical background

When asked to describe their own musical skills, 31% (n=35) stated they did not have any musical skills sufficient for leading group music activities. Conversely, 56% (n=62) stated they had sufficient vocal skills to lead a song during group music activities, 33% (n=37) said they could read music, 17% (n=19) had sufficient piano skills to accompany group music activities, 10% (n=12) could play by ear, 5% (n=5) had sufficient guitar skills to accompany group music activities, 3% (n=3) had sufficient autoharp skills to accompany group music activities, and 1% (n=1) had sufficient ukulele skills to accompany group music activities. Twenty percent (n=22) chose the "other" category, which included the following responses: "I played a band instrument in school", "hand drums", and "a variety of age appropriate repertoire for young children". (See Figure 6)

Figure 6. Musical skills for leading group music activities



Musical skills

Research question 3:

What is the comfort level of ECEs in leading group music experiences?

The participants were asked to rate their comfort levels leading musical activities with the following instruments: piano, guitar, ukulele, autoharp, and voice. Sixty-four percent (n=72) of respondents said they were not at all comfortable leading with piano, 22% (n=24) were somewhat comfortable, 10% (n=12) said they were moderately

comfortable and 4% (n=4) stated they were very comfortable leading on piano. When asked about guitar, 84% (n=94) stated they were not at all comfortable leading, 12% (n=14) were somewhat comfortable, 2% (n=3) were moderately comfortable, and 1% (n=1) stated they were very comfortable leading with guitar. The respondents indicated that 97% (n=109) of them were not at all comfortable leading with ukulele, 2% (n=2) were somewhat comfortable, and 1% (n=1) moderately comfortable, again with no one stating they were very comfortable. Comfort levels with autoharp, were 92% (n=103) were not at all comfortable, 7% (n=7) somewhat comfortable, 1% (n=1) were moderately comfortable, and 1% (n=1) indicated they were very comfortable leading group music activities with the autoharp. The respondents' comfort levels with using their own voice also varied. Ten percent (n=12) indicated they were not at all comfortable leading group music activities with their voice, 21% (n=24) stated they were moderately comfortable, 24% (n=26) stated they were somewhat comfortable, and 44% (n=50) stated they were very comfortable leading with their voice. (See Table 1)

Table 1

ECEs' comfort level using instruments

Instruments	Not at all	Somewhat	Moderately	Very
Piano	64%	22%	10%	4%
Guitar	84%	12%	3%	1%
Ukulele	97%	2%	1%	0%
Autoharp	92%	7%	1%	1%
Voice	10%	22%	24%	44%

Music in early childhood centers

Research question 4:

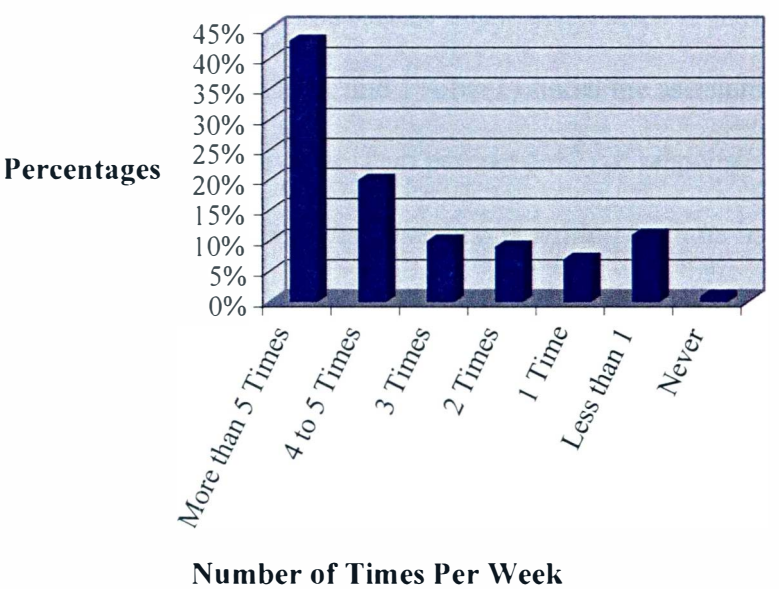
What are the characteristics of group music experiences (average length and frequency per week)? Who is responsible for designing and leading group music activities? What types of musical experiences are offered to children (singing, listening to music, moving to music, playing instruments, composing music/improvising, musical drama/pageants)?

Based on the responses obtained from the survey participants, the majority of ECEs in BC provide music experiences for their students several times each week. Forty three percent (n=48) reported that music occurs more than five times a week, 20% (n=22) have music 4-5 times a week, 10% (n=11) have music 3 times a week, 9% (n=10) have

music twice a week, 7% (n=8) have music once a week, and 11% (n=12) have music less than once a week. Only 1% (n=1) indicated that they never having music at his or her center. That individual was thanked for his or her responses and asked to leave the survey at that time. (See Figure 7)

Respondents who indicated they provide music for their students were asked to approximate the average length of group music time. Sixty seven percent (n=76) stated it ranged between 1-15 minutes, 31% (n=35) said 16-30 minutes, and 2% (n=2) 31-45 minutes.

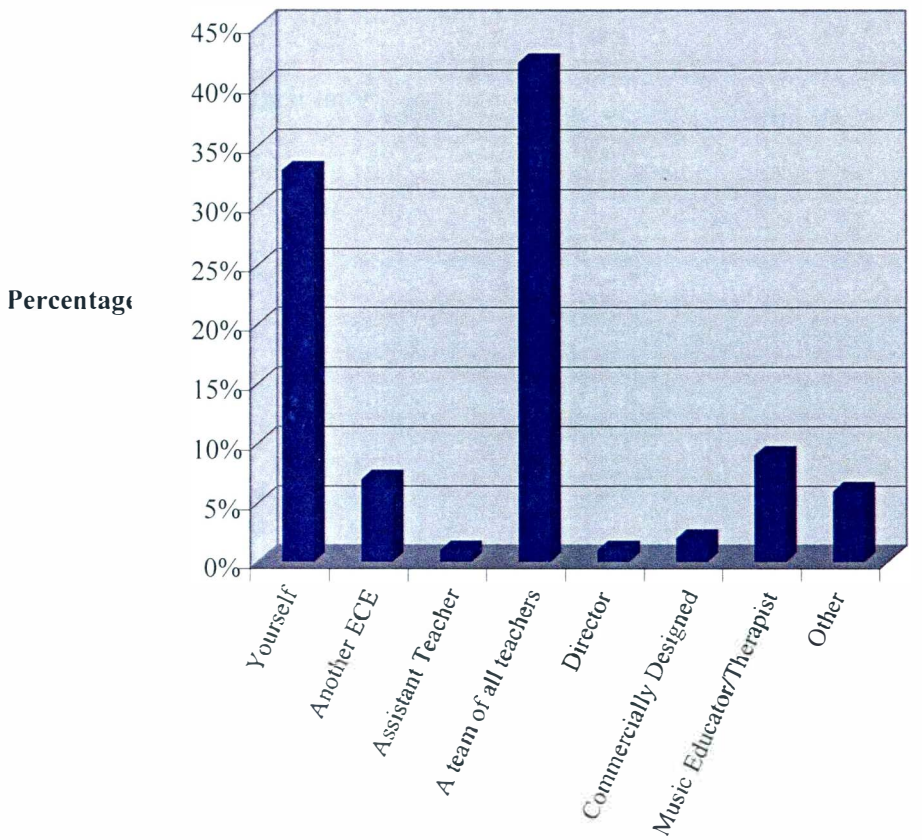
Figure 7. Group music per week



ECEs were asked to indicate who was primarily responsible for creating or designing the group music activities at their early childhood center. Forty two percent (n=47) stated a team of all teachers create the music programs, 33% (n=36) stated themselves, 9% (n=10) stated a music educator or therapist was responsible, 7% (n=8) another ECE, 2% (n=2) stated they use a commercially designed program such as *Music Together* or *Baby Einstein,* 1% (n=1) said the assistant teacher is responsible for creating the music program, and 6% (n=6) checked the "other" category. Of the latter group, some of the responses included: "the children create the music," "planning/lessons books," and "*High Scope* curriculum". (See Figure 8)

When asked which person(s) was primarily in charge of leading the musical activities, 42% (n=47) of the respondents stated that they were responsible for leading the musical activities, 39% (n=43) said all teachers led music activities equally, 9% (n=10) said a music educator or therapist came and led the music activities, 7% (n=8) said another ECE generally led music activities, and 1% (n=1) stated the assistant teacher was the primary leader of group music activities. Two percent (n=2) of responses chose the "other" category, with answers including: "anyone who is willing to come in and lead music activities for the children is welcome," and "we are a Montessori school and rarely have music". (See Figure 9)

Figure 8. Creators of group music activities



Respondents indicated that a variety of musical activities are being offered at early childhood centers in BC. These include singing (98%, n=109), moving to music (96%, n=107), listening to music (94%, n=104), playing musical instruments (86%, n=96), composing music/improvising (25%, n=27), and musical drama/pageants (22%, n=24). Fourteen percent (n=15) indicated the "other" category: "native drumming",

"painting to music", "free play with instruments", "traditional First Nations drumming and dancing", and "cultural awareness" were some of the answers provided. (See Figure 10)

Figure 9. Group music facilitator

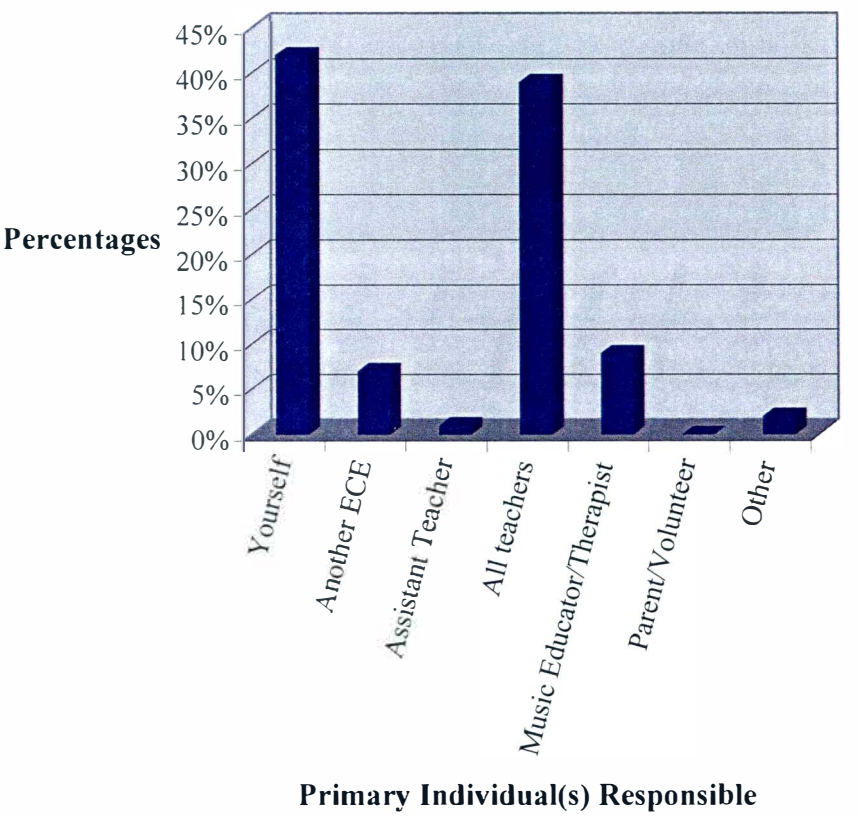
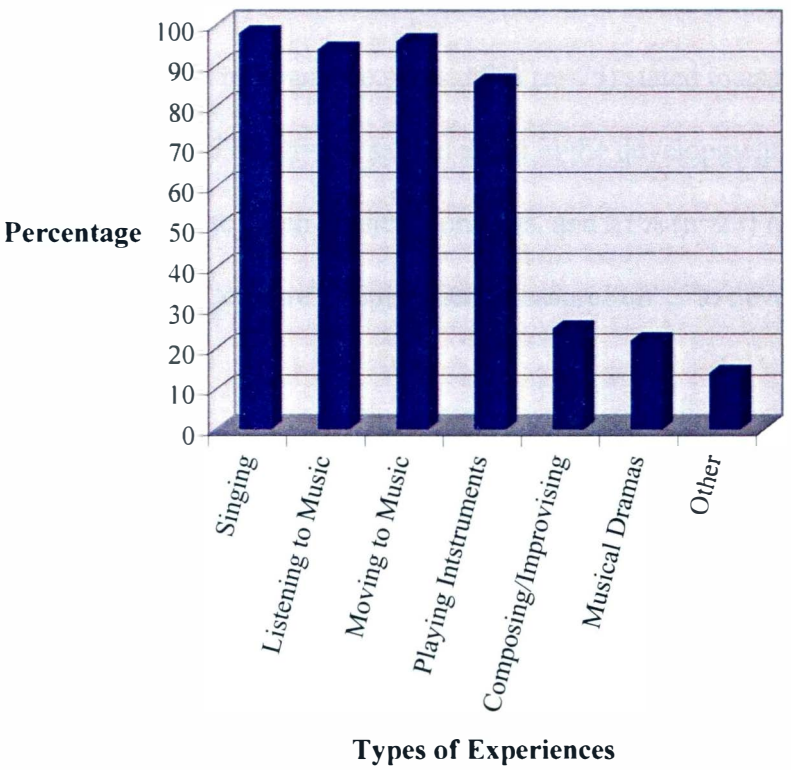


Figure 10. Music experiences offered at early childhood centers



Purpose of group music activities

Research question 5:

What are the primary reasons for engaging preschoolers in music experiences? Is it to teach musical elements (i.e. pitch, timbre, dynamics, notation and harmony) or non-musical concepts (i.e. cognitive, language, gross motor, fine motor, social, and self-help skills)?

When asked what their center's purpose(s) for involving children in music-related activities were, 93% (n=103) of the respondents said that it was to assist in the development of language skills, 92% (n=102) said to assist in the development of gross motor skills, 91% (n=101) stated to assist in the development of social skills, 86% (n=96) said to assist in the development of cognitive skills, 68% (n=75) stated to assist in the development of self help skills, 53% (n=59) said to assist in the development of fine motor skills, 45% (n=50) stated to teach musical concepts, and 21% (n=23) responded in the "other" category, indicating "culture", "enjoyment/pleasure/fun", "to develop self-esteem" and "culture".

The respondents were also asked to indicate their primary reason for involving children in music-related activities, 27% (n=29) stated it was to assist in the development of language skills. Seventeen percent (n=19) stated their primary reason was to assist in the development of social skills while16% (n=17) said it was to assist in the development of cognitive skills. Eleven percent (n=12) stated it was to teach musical concepts and 6% (n=7) stated it was to assist in the development of gross motor skills. No one stated their primary reason was to assist in the development of fine motor skills or assist in the development of self help skills. Some of the reasons stated from the "other" category included: "to assist in the development of the whole child", "for enjoyment/pleasure/fun", "to foster a love of music", and "for exposure to their own culture as well as others". (See Table 2)

Table 2

Purpose(s) for involving children in music-related activities

Category	Purpose(s)	Primary Purpose
Musical Concepts	45%	11%
Cognitive Skills	86%	16%
Language Skills	93%	27%
Gross Motor	92%	6%
Fine Motor	53%	0%
Social Skills	91%	17%
Self Help Skills	68%	0%
Other	21%	25%

Further investigation of this question examined whether years since graduating would affect the three primary reasons given for involving children in music-related activities. For those respondents who graduated less than 5 years ago, 30% (n=10) stated that music was used to assist in the development of language skills, 21% (n=7) said to teach music skills and 17% (n=5) used music primarily to assist in the development of cognitive skills. Of those participants who graduated between 5-9 years ago, their top three reasons for using music were as follows: 29% (n=6) said to assist in the development of social skills, and 19% (n=4) stated to assist in the development of language skills and also the "other" category. For individuals who graduated 10-19 years

ago, 37% (n=9) stated their primary reason for using music was to assist in the development of language skills, 29% (n=7) indicated the "other" category, and 22% (n=5) said to assist in the development of cognitive skills. Of those respondents who stated they graduated 20-29 years ago, the primary purpose for involving children in music-related activities were: 36% (n=8) stated the "other" category, 25% (n=5) chose to assist in the development of language skills, and 20% (n=4) chose to assist in the development of social skills. More than half (55%, n=6) of the subjects who indicated they graduated more than 30 years ago chose the "other" category as their primary reason for using music, with assist in development of cognitive skills, language skills, gross motor skills and social skills all receiving 11% (n=1). (See Table 3)

Effectiveness of music

Research question 6:

What are the perceptions of ECEs regarding the efficacy of music to facilitate non-musical learning?

Each participant was asked to evaluate how effective they found music to be when teaching cognitive, language, gross motor, fine motor, social and self help skills. For assisting with teaching cognitive skills, 65% (n=73) of participants found music to be very effective, while 31% (n=34) found it to be moderately effective. Two percent (n=2) found music to be both minimally effective and not effective at all. When asked about the effectiveness of music to assist with language skills, 84% (n=93) found it to be very

effective, and 14% (n=16) found it to be moderately effective. Two percent (n=2) did not find music to be effective in developing language skills.

Table 3

Top three primary reasons for using music by years since graduation

	Music Skills	Cognitive Skills	Language Skills	Gross Motor	Social Skills	Other
Entire Group N= 111			1 (27%)		3 (17%)	2 (25%)
Under 5 yrs. N= 32	2 (21%)	3 (17%)	1 (30%)			
5-9 yrs. N= 22			2 (19%)		1 (29%)	2 (19%)
10-19 yrs. N= 24		3 (23%)	1 (37%)			2 (29%)
20-29 yrs. N=22			2 (25%)		3 (20%)	1 (36%)
30+ yrs. N=11		2 (11%)	2 (11%)	2 (11%)	2 (11%)	1 (56%)

When investigating the effectiveness of music to assist in developing gross motor skills, 67% (n=75) found it to be very effective, 31% (n=34) found it to be moderately

effective, 1% (n=1) stated they found it to be minimally effective and 1% (n=1) also thought it was not effective. For using music to assist in developing fine motor skills 33% (n=37) found it to be to very effective while 40% (n=44) found it to be moderately effective. Twenty-two percent (n=24) stated they found music to be minimally effective when working on fine motor skills and 5% (n=6) stated they did not find it effective at all.

The effectiveness of music to aid in the teaching of social skills was considered very effective by 66% (n=73) and moderately effective by 30% (n=33) of participants. Two percent (n=2) found it to be minimally effective, and 3% (n=3) do not find it be effective at all. In the category of self help, 44% (n=49) of respondents stated they found music to be very effective and 39% (n=43) stated found it to be moderately effective. Thirteen percent (n=14) stated they found music to be minimally effective while 4% (n=4) do not find music to be effective with self help skills. (See Table 4)

This data was also analyzed based on the number of years since graduation. While 65% of all respondents stated that music was effective in assisting to teach cognitive skills, 56% (n=18) of those who graduated within the last five years, found it to be very effective, 41% (n=13) moderately effective and 3% (n=1) minimally effective. Of the participants who graduated between five and nine years ago, 60% (n=13) thought music was very effective in teaching cognitive skills and 41% (n=9) found it to be moderately effective. For individuals who graduated between 10-19 years ago, 75% (n=18) found it to be very effective and 25% (n=6) stated it was moderately effective. Of those individuals who graduated 20-29 years ago, 68% (n=15) found music to be very effective

Table 4

ECEs' perception of music's effectiveness to aid in non-musical learning

	Cognition	Language	Gross Motor	Fine Motor	Social	Self Help
Not at all Effective	2%	2%	1%	5%	3%	4%
Minimally Effective	2%	0%	1%	22%	2%	13%
Moderately Effective	31%	14%	31%	40%	30%	39%
Very	65%	84%	67%	33%	65%	44%

while 18% (n=4) found it to be moderately effective. Of respondents who graduated more that 30 years ago, 91% (n=10) found it to be very effective and 9% (n=1) stated music to be moderately effective when assisting in developing cognitive skills. (See Table 5)

As a group, 84% of respondents found music to be very effective to assist with the development of languages skills. Those respondents who graduated less than five years ago answered the question very similarly, as 84% (n=27) also stated music to be very effective, while 16% (n=5) found it to be moderately effective. Those who graduated 5-9 years ago, had a slightly varying answer with 77% (n=17) stating that music was very effective and 23% (n=5) stating that it was moderately effective with the development of language skills. In participants who graduated between 10-19 years ago, 92% (n=22)

Table 5

ECEs' perception of music's effectiveness with cognitive skills

Cognition Skills	Under 5 Yrs. N=32	5-9 Yrs. N=22	10-19 Yrs. N=24	20-29 Yrs. N=22	30+ Yrs. N=11
Don't Find it Effective	0%	0%	0%	9%	0%
Minimally Effective	3%	0%	0%	5%	0%
Moderately Effective	41%	41%	25%	18%	9%
Very Effective	56%	60%	75%	68%	91%

found music to be very effective in this area, and 8% (n=2) said it was moderately effective. The graduates of 20-29 years ago, indicated that 86% (n=19) of them felt it was very effective, 5% (n=1) moderately effective and 9% (n=2) did not find it to be effective at all. Of those participants who graduated more than 30 years ago, 91% (n=10) found music to be very effective and 9% (n=1) found it to be moderately effective in assisting with language development. (See Table 6)

When examining ECEs perceptions about music's effectiveness for gross motor skills, of the entire group, 67% found it to be very effective. For those who graduated under 5 years ago, 81% (n=26) stated they found it to be very effective and 16% (n=5) stated it to be moderately effective. Of respondents who graduated between 5-9 years ago, 68%

Table 6

ECEs' perception of music's effectiveness with language skills

Language Skills	Under 5 Yrs. N=32	5-9 Yrs. N=22	10-19 Yrs. N=24	20-29 Yrs. N=22	30+ Yrs. N=11
Don't Find It Effective	0%	0%	0%	9%	0%
Minimally Effective	0%	0%	0%	0%	0%
Moderately Effective	16%	23%	8%	5%	9%
Very Effective	84%	77%	92%	86%	91%

(n=15) found it to be very effective while 32% (n=7) stated it was moderately effective. Participants who graduated 10-19 years ago indicated that 63% (n=15) found music to be very effective and 38% (n=9) stated moderately effective. The ECEs who graduated 20-29 years ago had the lowest effectiveness score in this category, only 50% (n=11) stated it to be very effective and 45% (n=10) stated it was moderately effective. However, those who graduated more than 30 years ago, indicated that 73% (n=8) felt music was very effective in assisting in the development of gross motor skills and 27% (n=3) found it to be moderately effective. (See Table 7)

Table 7

ECEs' perception of music's effectiveness with gross motor skills

Gross Motor Skills	Under 5 Yrs. N=32	5-9 Yrs. N=22	10-19 Yrs. N=24	20-29 Yrs. N=22	30+ Yrs. N=11
Don't Find It Effective	0%	0%	0%	5%	0%
Minimally Effective	3%	0%	0%	0%	0%
Moderately Effective	16%	32%	38%	45%	27%
Very Effective	81%	68%	63%	50%	73%

Music's effectiveness to assist in the teaching of fine motor skills was the next category to be examined by years since graduation. As a group, only 33% found music to be very effective and 40% found it to be moderately effective in this category. Of the ECEs who graduated within the last 5 years, 31% (n=10) felt that music was very effective and 38% (n=12) stated it was moderately effective. Those who graduated between 5-9 years ago, 36% (n=8) indicated music to be both very effective and moderately effective. Thirty three percent (n=8) of respondents who graduated 10-19 years ago indicated music as being very effective and 50% (n=12) stated music to be moderately effective. The group of participants who graduated 20-29 years ago indicated that 27% (n=6) of them found music to be both very effective and moderately effective.

Participants who graduated more than 30 years ago, stated that 45% (n=5) of them perceived music to be both very effective and moderately effective in teaching fine motor skills. (See Table 8)

Table 8

ECEs' perception of music's effectiveness with fine motor skills

Fine Motor Skills	Under 5 Yrs. N=32	5-9 Yrs. N=22	10-19 Yrs. N=24	20-29 Yrs. N=22	30+ Yrs. N=11
Don't Find It Effective	3%	10%	4%	5%	0%
Minimally Effective	28%	14%	13%	41%	9%
Moderately Effective	38%	36%	50%	27%	45%
Very Effective	31%	36%	33%	27%	45%

Upon investigating how effective ECEs believe music to be in assisting with social skills, as a group, 65% of them indicated it to be very effective and 30% to be moderately effective. Similarly those who graduated within the last 5 years indicated that 59% (n=19) of them felt music to be very effective and 38% (n=12) believed it to be moderately effective. The ECEs who graduated between 5-9 years ago, stated that 59% (n=13) of them found music to be very effective and 36% (n=8) moderately effective. Graduates from 10-19 years ago believed it to be the most effective with 79% (n=19) of them stating it was very effective and 17% (n=4) stating moderately effective. Those who

graduated between 20-29 years ago, also perceived music more effective to assist in the development of social skill than the group in its entirety. Seventy three percent (n=16) indicated they found it to be very effective and 18% (n=4) found it to be moderately effective. Respondents, who graduated more than 30 years ago, indicated that 64% (n=7) perceived music as being very effective and 36% (n=4) moderately effective. (See Table 9)

Table 9

ECEs' perception of music's effectiveness with social skills

Social Skills	Under 5 Yrs. N=32	5-9 Yrs. N=22	10-19 Yrs. N=24	20-29 Yrs. N=22	30+ Yrs. N=11
Don't Find It Effective	3%	0%	0%	9%	0%
Minimally Effective	0%	5%	4%	0%	0%
Moderately Effective	38%	36%	17%	18%	36%
Very Effective	59%	59%	79%	73%	64%

The last category to be examined is music's effectiveness to aid in developing self help skills. As a group, 44% perceived music to be very effective and 39% perceived it to be moderately effective. Those who graduated less than 5 years ago, had a similar response to the whole group. Forty four percent (n=14) indicated music to be very effective and 34% (n=11) stated it was moderately effective. The participants who

graduated between 5-9 years ago, perceived music to be the most effective between the age categories with 55% (n=12) stating it to be very effective and 35% (n=8) moderately effective. Individuals who graduated 10-19 years ago responded with 42% (n=10) indicating music to be very effective and 46% (n=11) to be moderately effective. The participants who graduated 20-29 years ago had the lowest perception of music's effectiveness with self help skills. Thirty six percents (n=8) perceived it to be very effective while 45% (n=10) perceived music to be moderately effective. However, those individuals who graduated more than 30 years ago, perceived music to be more effective than the group as a whole with 55% (n=6) indicating they believed it was very effective and 36% (n=4) indicating it to be moderately effective. (See Table 10)

Table 10

ECEs' perception of music's effectiveness with self-help skills

Self Help Skills	Under 5 Yrs. N=32	5-9 Yrs. N=22	10-19 Yrs. N=24	20-29 Yrs. N=22	30+ Yrs. N=11
Don't Find It Effective	6%	0%	4%	5%	0%
Minimally Effective	16%	10%	8%	14%	9%
Moderately Effective	34%	35%	46%	45%	36%
Very Effective	44%	55%	42%	36%	55%

CHAPTER 5

DISCUSSION

The intent of this study was to provide a clearer picture of the use of music in early childhood centers in British Columbia (BC). This was achieved through an online survey completed by 113 licensed early childhood educators (ECEs) throughout the province. The responses provided a wealth of information about employers, ECE demographics and training, and the use of music in early childhood centers. Finally, ECE's provided information about their perceptions of the effectiveness of incorporating music into early childhood programs.

Early childhood educator profile

Based on survey results, the typical ECE currently working in BC is employed by a group child care center in an urban area of the province with 25 or fewer children attending the center on a weekly basis. Fewer than nine percent of the students at the center where the ECE works receive government subsidies and less than nine percent are classified as ESL students.

The typical ECE received his or her post-secondary training in BC within the past five years and was required to complete one or more musical classes that emphasized teaching musical concepts to young children. Additional music classes were not offered as elective classes. Since graduating, the ECE has taken continuing education course(s)/workshop(s) about teaching both musical and non-musical concepts and would

be interested in taking continuing education courses related to the use of music in early childhood settings in the future.

The typical ECE reports having sufficient vocal skills to lead songs and feels most comfortable using his or her voice in leading musical activities. In a typical early childhood centre, music occurs 5 or more times a week, lasting between 1-15 minutes each time. A team of teachers is responsible for creating and designing group music activities, and the ECE typically leads the activities. Singing, moving to music, listening to music, and playing instruments are the most frequent musical activities. The most common motivations behind involving children in music-related activities are to support the development of language skills, gross motor, and social skills. The ECE finds music to be "very effective" in supporting the development of cognitive, language, gross motor, social and self help skills, and "moderately effective" in the development of fine motor skills.

Educational theories and practices

The results of this study can be compared to educational theories and practices discussed in the review of literature. Both researchers and educators emphasize the importance of utilizing music to support child development. Weinberger (1998b) stated that using music in any capacity was beneficial for children's growth and development musically and non-musically. In response to multiple questions in the current survey, ECEs also stated they used music to "engage the whole child" and for "an holistic experience." They also stated they believed that music had many benefits to the overall

development of children. The results of this study support previous findings that early childhood centers use music on a weekly basis. In fact, most centers use music on a daily basis. Therefore, children are reportedly receiving approximately one hour of structured group music activities per week. Similarly to the extant literature, the most frequently offered music activities were singing, moving to music, listening to music, and playing musical instruments (Tarnowski & Barret, 1992; Nardo, Custodero, Persellin & Brink Fox, 2006).

Programming in early childhood centers

The data did not reveal substantial differences between location or population of center and the amount of structured music time offered. Previous research (Daniels, 1992) suggested larger schools were more likely to have structured music time and to either have a music specialist come in once a week or to be part of the staff. The current findings did not support that trend. Only 10% of the participants stated they had an outside person provide group music experiences. However, the participants who reported working in remote communities did more frequently mention having "special cultural music time," such as First Nations Drumming, either regularly scheduled or sporadically throughout the year.

In terms of who designs or creates music programs, the respondents most often reported that a team of teachers share responsibilities equally in designing the music program. Similar to Daniels (1992) findings, when asked to describe who typically leads group music activities, the primary response was the ECE filling out the survey, followed

by all teachers lead music activities equally. Again, size and/or location of the early childhood center had no effect on the response to this question, which does not support the findings of Daniels' study.

This study also investigated whether taking a music course during the respondents' post-secondary education was a variable in who designs and leads the music activities as well as the purposes for using music in the classroom. Of those individuals who did not take a music class (n=40), over one third of them stated they were the primary person who created the music activities. Nearly half (n=17) of these respondents said they were the one who typically leads music activities, and 44% indicated that their primary purpose was to teach musical concepts. Those participants who did not take a music course as part of their degree responded similarly to those who had taken a music course, stating music was primarily used to assist in the development of language. It was evident that individuals who did not receive music as part of their training still use music for teaching both musical and non-musical skills.

Similar to Register's (2004) recommendations, educators and therapists must be sensitive to the needs of ECEs musical training when collaborating or consulting at early childhood education centers. It is also imperative for music educators and music therapists to be aware that some of the ECEs who have had no formal musical training are teaching musical concepts to their students. For those ECEs teaching non-musical concepts through the use of music, consultation with music therapists could be beneficial, as the initial certification may not have addressed learning to design and lead such experiences.

Post-secondary training

Results from this study indicated that over sixty percent of early childhood centers in BC use music 4 or more times per week. However, thirty six percent of respondents indicated they did not take a music class as part of their post secondary education. Therefore, even though ECEs weren't given the formal training to use music in the classroom they understand the importance of using music with young children.

Each college or university offering a diploma in early childhood education has basic guidelines as to what they have to teach their students, while maintaining the flexibility on how they present the information to students. The Ministry of Children and Family Development (MCFD) is currently the governing body responsible for determining which post-secondary programs are accredited. In 2001, the Ministry of Health Services published a document with recommendations to the MCFD about their regulation of ECE institutions as well as desired requirements from licensed ECEs. Upon investigation, the Ministry of Health Services found numerous inadequacies with current legislations, one of which was: "The standards for early childhood training programs were established in 1985 and have not been changed to reflect current early childhood education practice" (Ministry of Health Services, 2001).

In an addendum, the Ministry further outlined other limitations of current Child Care Regulations which include the following: 1) A lack of authority to inspect, evaluate or remove an approval granted to a post secondary early childhood training program and 2) A lack of jurisdiction to approve appropriate professional courses. Early childhood educators understand the importance of using music in the classroom with young children

and utilize music regular basis; the government, who is responsible for accreditation of post-secondary institutes does not view the importance in the same manner as they have no set guidelines or requirements for post-secondary institutes to offer music courses to their students.

Continuing education

Required courses through degree programs are not the only means available for ECE's to further their education regarding effective use of music in the classroom. Continuing education courses can also provide up-to-date, relevant information about a variety of topics. Previous research (Saunders & Baker, 1991; Steven,1998) revealed that less than 25% of ECEs sought continuing education related to music skills. Results from the current study found that 61% of the respondents have already attended a workshop focused on teaching musical skills. This is just slightly less than the 63% who stated they have attended a workshop related to using music to teach non-musical skills. When ECEs were asked if they would be interested in taking additional music courses in the future, 94% responded affirmatively. This is useful information for both music educators and music therapists, as it indicates that ECEs are apparently interested in the advice and the expertise of specialists in both disciplines. Despite having taken previous courses or workshops, the overwhelming majority of participants were still interested in receiving additional training in this area.

Purposes for using music

Some of the notable differences from existing research are found in the ECEs purposes for using music. Whereas, both Golden (1989) and Register (2004) reported that the primary purpose of using music was for recreation, this study found that the primary reason given for using music currently was to assist in the development of language skills. Although current survey respondents frequently mentioned recreation and fun, those answers were more likely to come from participants who graduated more than 30 ago. While Register (2004) also discovered that there was a negative correlation between years practicing and the amount of music used in the classroom, results from the current research does not support those findings. Respondents who graduated more than 30 years ago were as likely as more recent graduates to use music, and to use it with similar frequency and duration.

This investigation found similar results to those findings of music educators (Daniels, 1992; Tarnowski & Barret, 1992; Nardo, Custodero, Persellin & Brink Fox, 2006) relating to the purpose of using music in the early childhood classroom. ECEs responded in numerous surveys they used music as a tool to teach many skills. However, in those surveys, ECEs only had an option to check the "other" category and could volunteer a free response to explain themselves. In the present study, it has been established that music is used for a variety of reasons in early childhood centers. Music has been identified as a tool to support musical learning, language, cognitive, motor, social, and self help skills as well as for enjoyment and recreation. The primary focus of using music is to assist in the development of language skills. This new information can

shed light into what previous survey respondents might have meant when they indicated the "other" category for questions relating the purpose of using music in early childhood centers.

It is well documented that songs and chants lend themselves extremely well to increasing vocabulary, pre-reading/writing skills, rhyming and identifying objects in stories or songs (Gardner, 1996; Standley & Hughes 1997, Register 2001). Songs and finger plays are easy, fun ways to engage children in language-based activities, which can help oral motor development (Gardner, 1996). Therefore the findings of this study regarding ECEs use of music to achieve non-musical goals are not surprising.

Length of time since graduating from ECE program

As noted in Register's (2004) research, length of time since graduating had a negative correlation with the amount of music used by ECEs on a weekly basis. As previously discussed, this study did not support those findings. Therefore the researcher wanted to examine if the number of years since graduating had an effect on the primary reason for using music. ECEs who graduated more than 30 years ago typically used music as frequently as younger ECEs, however, their purpose for doing so was substantially different. Over half stated their primary reason for involving children in music-related activities fit within the "other" category. When reading their narrative explanations, most stated it was used for fun, recreation or enjoyment. As the number of years since graduating lessened, the percentage of individuals utilizing the "other" category as an option for their primary purpose of using music also dropped.

Another interesting finding was that improving language skills was among the top three primary reasons for using music, regardless of the respondents' age. The use of music to aid in developing language skills was the only skill set where this occurred. This poses some interesting questions for future studies as one could investigate how music was being taught to pre-service ECEs and the philosophies for including music during each decade. It may be beneficial to do a replication of Nardos' 1996 research surveying community colleges that offered ECE degrees and their perceptions and/or philosophies as to music's importance in early childhood centers.

ECEs' perception of music's effectiveness

In this exploratory study, the researcher was able to glean information from ECEs regarding their perception of music's effectiveness to assist in developing non-musical skills. Overall, ECEs perceive music as an effective means to aid in the teaching of non-musical skills. However, its effectiveness was not consistent across all domains. Fine motor skills and language skills fell on opposite ends of the spectrum with 33% and 84% respectively of respondents reporting that music was "very effective" for developing these skills. It is also interesting to note that when asked to describe their musical skills, the answer most frequently given (56%) was they had sufficient vocal skills to lead group activities. Along the same lines, when asked to list activities offered at their center, 98% of respondents stated singing. With those findings, one might postulate that the frequency of a musical activity offered at an early childhood center, might correlate with the ECEs comfort level with the corresponding musical skill and might influence their perception of

music's efficacy to support non-musical learning. Further research in this area would determine the validity of these assumptions.

Another question raised by data collected is whether or not ECEs are making the connections between the musical activities and the corresponding non-musical goals it is addressing. When asked what type of musical experiences were offered at their centers, 86% of ECEs responded that they played instruments with their children. Yet when asked what their purpose for involving children in music-related experiences, only 53% responded that playing music supported the development of fine motor skills and only 33% indicated they found music to be very effective in aiding with the development of fine motor skills. Future researchers may choose to investigate why there is a discrepancy in the activities offered and ECEs perceptions of music's effectiveness within a domain, as well the differences in their perceived efficacy across the domains. Specifically, future research could determine if: (a) there is a correlation between ECEs comfort level with their musical skills and their perception of its effectiveness; (b) if training would increase their comfort level and also their perception of music's effectiveness; and (c) if ECEs are making the connection between their musical activities and the non-musical outcomes the students are achieving.

Conclusions and recommendations

The current findings both support existing research and expand to the literature published to date, while allowing for ideas of future research involving early childhood educators and their use of music with children. Both music therapists and music educators

can take the information from these findings and apply them clinically as consultants and/or collaborators with ECEs or undertake further research; this will serve to inform future clinicians, educators, educational training centers and, most importantly, the children. The conclusion outlines recommendations for future research and education/training for ECEs and their use of music in their classrooms.

Implications for future research

As in all research, the information gathered from this study can be used as a foundation for future research in the field of music therapy. Replication every five to ten years would help assess how trends in education and pop culture affect the use of music in the classroom. It would allow researchers to see if phenomenons such as *the Mozart Effect* change ECEs' perceptions of the effectiveness of music or if brain-based research allows more insight into how music can aid in the cognitive development of young children.

New research which expands upon current findings would be helpful in gaining insight into: (a) how ECEs are using music in the classroom; (b) is there a correlation between ECEs comfort or skill level and their perception of music's effectiveness; and (c) investigating ECEs effectiveness in using music to support non-musical learning.

The Canadian Association of Music Therapy (CAMT) states in their definitions of music therapy that "music therapy is the skillful use of music and musical elements to promote, maintain and restore mental, physical, emotional and spiritual health" (CAMT, 1994). The American Music Therapy Association (AMTA) also states that music therapy

is the "use of music to address physical, emotional, cognitive, and social needs of individuals of all ages. Music therapy improves the quality of life for persons who are well..." (AMTA, 2004). Within the past decade music therapy research has started to focus on the use of music to help preschoolers develop pre-academic skills (Humpal, 1990; Standley & Huges, 1996; Register, Darrow, Standley & Swedberg, 2007). With this new development in the field, music therapists need to continue expanding the areas of research as well as the groups of people who receive consultation and collaboration services. Early childhood educators have indicated they are receptive to support from music therapists to assist them on a day-to-day basis in their classroom.

Educational development

One of the first areas which needs to be addressed is the lack of awareness of the potential role and effectiveness of music in early childhood development. It does not appear to be addressed in all ECE training programs. Policy makers in post-secondary institutions with ECE programs need to be aware of how important music is for the growth and development of young children as well as how often it is used each day at each center. A third of participants did not receive any kind of courses in music, however, 63% stated they use music more than 4 times per week. Many teachers are going into the field with a void in their education if they have had no course work dealing with the use of music to support child development. This lack of training is not the fault of the teachers. Rather it is the secondary institutions that need to be informing their students of research findings related to the effect of music on child development. Music therapists

need to advocate their services and knowledge at a post-secondary level as guest lecturers and adjunct faculty or have students come and observe them working with young children.

A variety of training modules can be developed depending upon the needs and wants of the community. Presentations at conferences are a great starting point to get people interested in the subject matter and see the benefit of using or thinking about music in a slightly different way and how it can assist in achieving so many academic and behavioral goals for the children. Pre and post surveys during training sessions, could offer insight into how ECEs' perceptions and/or comfort levels have changed regarding the use of music in the classroom. Music therapists could also do a follow-up survey to see how ECEs have implemented their new knowledge into group music activities.

Another avenue for educating ECEs is for music therapists to provide music classes at early childhood centers in their area. This would be an ideal venue for ECEs to see the specialist execute music time, as well as learn new songs/activities and be able to debrief with the therapist about their choice of interventions. Music therapists could also provide follow-up services in assistance with lesson planning and programming ideas to support ECEs when they are leading and designing group music activities for their classes.

Reflections

This study confirms that early childhood centers in the province of British Columbia offer group music on a regular basis and it is often led by one of the ECEs on

site. While ECEs state they don't have a lot of musical skills, they feel comfortable enough to use their voice as the primary instrument to lead group activities. Children engage in music related activities primarily through singing, moving to music, listening to music and playing instruments. Reasons for offering music include: to teach musical skills, to assist in the development of language, cognitive skills, gross and fine motor skills, social skills, self help skills as well as for fun. The primary purpose for using music cited by most ECEs is to aid in the development of language skills. In terms of efficacy, ECEs stated they feel music is "very effective" in assisting with cognitive skills, language skills, gross motor skills, social skills, and self help skills and "moderately effective" to aid in teaching fine motor skills. Regardless of previous training an overwhelming number of ECEs stated they would be interested in future continuing education workshops on how to use music in their classroom. Continued research efforts, publications, and education for both ECEs, students and music therapists is needed to allow both professions to assist one another in providing the best education to children prior to their entry to school.

REFERENCES

Abbott, L., & Nutbrown, C. (2001). *Experiencing Reggio Emilia.* Philadelphia: Open University Press.

American Music Therapy Association. (2004). *What is music therapy?* Retrieved April 12, 2009, from http://www.musictherapy.org

Berninger, V., & Richards, T. (2002). *Brain literacy for educators and psychologists.* New York: Academic Press.

Broadhead, P. (2006). Developing an understanding of young children's learning through play: the place of observation, interaction and reflection. *British Education Research Journal*, *32*(2), 191-207.

Camosun College. (2008). *What you'll study – Early childhood care and education.* Retrieved January 27, 2009, from http://camosun.ca/learn/programs/ecce/ecce-study.html

Canadian Association of Music Therapy. (1994). *What is music therapy?* Retrieved April 12, 2009, from http://www.musictherapy.ca/musictherapy.htm

Daniels, R. D. (1992). Preschool music education in four southeastern states: Survey and recommendations. *Update: Applications of Research in Music Education*, *10*(2), 16-19.

D'Arcangelo, M. (2000). How does the brain develop? A conversation with Steven Peterson. *Educational Leadership*, *58*(3) 68-71.

Douglas College. (2008). *Early childhood education courses.* Retrieved January 27, 2009, from http://www.douglas.bc.ca/calendar/courses/cced.html.

Edwards, C. P. (2002). Three approaches from Europe: Waldorf, Montessori, and Reggio Emilia. *Early Childhood Research & Practice*, *4*(1) 1-14.

Flavell, J. H., & Marma, E. M. (1983). Piaget's legacy in cognitive development. In P.H. Mussen (Series Ed.), *Handbook of child psychology: Vol. 3 Cognitive development* (4th ed. pp 292- 310). New York: Wiley.

Golden, K. M. (1989). An examination of the uses of music in selected licensed preschools in the state of Ohio. *Dissertations and Theses, 50*(12). 3881. (UMI No. 9011176)

Good, T. L., & Levin, J. R. (2001) Educational psychology yesterday, today and tomorrow: Debate and direction in an evolving field. *Educational Psycology,* 36(2). 69-72.

Hewett, V. M. (2001). Examining the Reggio Emilia approach to early childhood education. *Early Childhood Education Journal*, *29*(2). 95-100.

Humpal, M. E. (1990). Early intervention: The implications for music therapy. *Music Therapy Perspectives, 8,* 30-35.

Jordan, E. A., & Porath, M. J. (2006). *Educational psychology: A problem-based approach.* (pp.70-96). Pearson Education. Toronto

Kelly, S. N. (1998). Preschool classroom teachers' perceptions of useful music skills and understandings. *Journal of Research in Music Education*, 46, 374-383.

Kenny, S. (2004). The importance of music centers in the early childhood class. *General Music Today*, *18*(1). 28-34.

Koralek, D. G., Newman, R. L., & Colker, L. J. (2002). *Caring for children/school-age programming.* Vol. 1. Toronto, Canada: Monarch Books.

Levinowitz, L. M. (1999). The importance of music in early childhood. *Music Educators Journal*, *86*(1). 17-18.

Levinowitz, L. M., & Gordon, E. (1987). *Preschool music curricula: Children's Music Development Program.*

Lindsey, G., (1998/99). Brain research and implications for early childhood education. *Childhood Education*, *75*(2), 97-100.

Littleton, J. D. (1991). Influence of play settings on preschool children's music and play behaviors. *Dissertations & Theses*. (UMI No. AAT 9128294)

Ministry of Child and Family Development and BC Health Planning. (2007). *Parents' guide to selecting child care: Selecting and monitoring of licensed and license-not-required child care.* Retrieved February 17, 2008, from http://www.mcf.gov.bc.ca/childcare/publications.htm

Ministry of Child and Family Development. (n.d.). *Early childhood development.* Retrieved August 8, 2008, from http://www.mcf.gov.bc.ca/early_childhood/

Ministry of Education. (2008). *Early Learning Initiatives- Strong Start BC General Guidelines.* Retrieved August 8, 2008, from http://www.bced.gov.bc.ca/early_learning/early_learning_framework.htm

Ministry of Health Services. (2001). *Health professions council recommendations on the designation of early childhood education.* Retrieved April 12, 2009, from http://www.health.gov.bc.ca/leg/hpc/reports/apps-ece.html#appb

Ministry of Health and the Ministry of Children and Family Development. (2008). *British Columbia early learning framework.* Issued by Early Learning Advisory Group. Retrieved August 8, 2008, from http://www.bced.gov.bc.ca/early_learning/early_learning_framework.htm

Morin, F. L. (2001). Cultivating music play: The need for changed teaching practice. *Music Today*, *14*(2). 24-38.

Nardo, R. L. (1996). California survey of music in early childhood: Teacher preparation and the role of the community college. *Dissertations and Theses*, *50*(01). (UMI 9720270).

Nardo, R. L, Custodero, L. A., Persellin, D. C., & Brink Fox, D. (2006). Looking back, looking forward: A report on early childhood music education in accredited American preschools. *Journal of Research in Music Education*, *54*(4). 278-293

Nash, J. M. (1997). Fertile minds. *Time*, *149,* 48-56.

New, R. S. (2003). Reggio Emilia: New ways to think about schooling. *Association for Supervision and Curriculum Development*, *April,* 34-38.

New, R. S. (2008). Reggio Emilia as cultural activity theory in practice. *Theory into Practice*, *46*(1). 5-13.

Olsho, L. W. (1984). Infant frequency discrimination. *Infant Behavior and Development.* 7, 27-35.

Page, R. N. (2006). Curriculum matters. In D. T. Hansen (Vol. Ed.), *John Dewey and our education prospect: A critical engagement with Dewey's democracy and education.* (pp.39-66). New York: State University of New York Press

Piaget, J. (1962). *Play, Dreams and Imitation in Childhood.* (pp. 62-75) New York: Norton.

Register, D. (2001). The effects of an early intervention music curriculum on prereading/writing. *Journal of Music Therapy*, *38*(3). 239-248.

Register, D. (2004). Teaching child-care personnel to use music in the classroom: A comparison of workshop training versus on-site modeling. *Music Therapy Perspectives*, *22*(2), 109-115.

Register, D., Darrow, A. A., Standley, J., & Swedberg, O. (2007). The use of music to enhance reading skills of second grade students and students with reading disabilities. *Journal of Music Therapy*, *44*(1), 23-37.

Rieber, L. P. (1996). Seriously considering play: Designing interactive learning environments based on the blending of microworlds, simulations, and games. *Journal of Educational Technology Research and Development*, *44*(2). 43-58.

Saunders, T. C., & Baker, D. S. (1991). In-service classroom teachers' perception of useful music skills and understandings. *Journal of Research in Music Education*, *39*(3). 248-261.

Scott-Kassner, C. (1999). Developing teachers for early childhood programs. *Music Educators Journal*, *86*(1), 19-25.

Simmons, T., & Sheehan, R. (1997). Brain research manifests importance of first years. *The News & Observer*. Retreived June 1, 2007, from http://www.nando.net/nao/2litlle2late/stories/day1-main.html

Sims, W. L. (2005). Effects of free versus directed listening on duration of individual music listening by prekindergarten children. *Journal of Research in Music Education*, *53*(1). 78-86.

Slegers, B. (1997). *Brain development and its relationship to early childhood education.* Paper presentation at EDEL 695 Seminar in Elementary Education (Long Beach, CA, April 17, 1997). Retrieved June 14, 2008, from http://firstsearch.oclc.org.libproxy.library.wmich.edu/WebZ/FSQUERY?format=BI:next=html/records.html:bad=html/records.html

Standley, J., & Hughes, J. (1996). Documenting developmentally appropriate objectives and benefits of a music therapy program for early intervention: A behavioral analysis. *Music Therapy Perspectives*, *14*(2), 87-94.

Standley, J., & Hughes, J. (1997). Evaluation of an early intervention music curriculum for enhancing pre-reading/writing skills. *Music Therapy Perspectives*, *15*, 79-85.

Steven, N. K. (1998) Preschool Classroom Teachers' Perception of Useful Music Skills and Understandings. *Journal of Research in Music Education*, *46*(3), 374-83.

Stone, J. (2001). Early years are learning years: Eight ways for young children to be smart. National Association for the Education of Young Children. ECT staff workshop teacher handout. May, 2001.

Strickland, S. J. (2001/02). Music and the brain in childhood development. *Childhood Education*, *Winter*, 100-103.

Tarnowski, S. M. (1999). Musical play and young children. *Music Educators Journal*, 86(1). 26-29.

Tarnowski, S. M., & Barrett, J. (1992). The beginning of music for a lifetime: Survey of musical practices in Wisconsin preschools. *Update: Applications of Research in Music Education, 51*, 78-94.

Thrope, L. A., & Trehub, S. E. (1989). Duration illusion and auditory grouping in infancy. *Developmental Psychology, 25* (1). 122-127

Trehub, S. E. (1984). Infants' perception of melodies: The role of melodic contour. *Child Development, 55*(3) 821-30.

Vygotsky, L. (1933). *Play and its role in the mental development of the child.* Psychology and Marxism Internet Archive. Retrieved July 12, 2008, from http://www.marxists.org/archive/vygotsky/works/1933/play.htm

Washington, V. (2002). Why early childhood education matters now more than ever. *Scholastic Early Childhood Toady*, *17*, (3), 5-7.

Weinberger, N. M. (1998a). Brian, behavior, biology, and music: Some research findings and their implications for education policy. *Arts Education Policy Review*, *99*, 28-36.

Weinberger, N. M. (1998b). The music in our minds. *Educational Leadership*, *56*(3). 36-40.

Wiggins, D. G. (2007). Pre-k music and the emergent reader: Promoting literacy in a music-enhanced environment. *Early Childhood Education Journal*, *35*(1) 55-64.

Woodfolk, A. E., Winne, P.H., & Perry, N.E. (2006). *Educational Psychology.* (pp. 39-54). Pearson Education. Toronto

Appendix A

Email invitation to participate and give consent

E-mail invitation to participate and give consent

You are invited to participate in a pilot study for a research project designed to collect information related to the use of music in early childhood education centers in British Columbia. This research is being conducted as part of thesis requirements for Michelle Lawrence, for the degree Master of Music in Music Therapy, at Western Michigan University.

If you are a licensed early childhood educator who is currently working in a preschool or licensed group child care center with children between the ages of 30 months- school entry in British Columbia, Canada, you are invited to participate by completing an online survey within the next two weeks.

You will be asked to answer questions relating to demographics, relevant educational background and professional development, music curriculum at your center, purpose for using music and your perception about its effectiveness to teach non-musical concepts. The survey is comprised of 23 multiple choice and free response questions and will take approximately 10 minutes to complete.

Confidentiality will be maintained through the anonymous online survey format. By completing the online survey form, you are giving consent for the use of the answers you supply. Your responses will benefit early childhood educators, music therapists and researchers through expanding the current breadth of information available related to the use of music in preschools in British Columbia. You may choose not to participate in this survey.

If you have any questions, you may contact Brian Wilson, at 269.387.4724 or Michelle Lawrence at 250.217.4243. You may also contact the Chair, Human Subjects Institutional Review Board 269.387.8293 or the Vice President for Research 269.387.8298 if questions or problems arise during the course of the study.

To participate in the survey, please click on the link below

http://www.surveymonkey.com/s.aspx?sm=XB9nlwNzZvY4RNMkkuv_2faQ_3d_3d

Western Michigan University, Department of Music
Principal Investigator: Brian Wilson Student Investigator: Michelle Lawrence
Study Title: The use of music in early childhood centers in British Columbia: A survey of the perceptions and practices of early childhood educators

Appendix B

Questionnaire

Questionnaire

The Use of Music in Early Childhood Centres in British Columbia

1. Music in Early Childhood Centers in British Columbia

Thank you for choosing to participate in a survey about current practices of music in early childhood centers in British Columbia.

This survey contains 23 multiple choice/fill in the blank questions and your answers will remain anonymous.

For the purpose of this study early childhood centers are defined as preschools or licensed group day care centers working with children between the ages of 3-5.

If you are a licensed early childhood educator working in an eligible center please respond to the survey questions based on your training, background and current practices of the use of music at your center

Page 1

The Use of Music in Early Childhood Centres in British Columbia

2. Demographic Characteristics

The purpose of this section is to gain general knowledge about your current place of employment and the children you work with.

1. Are you currently a licensed Early Childhood Educator teaching in a licensed early childhood center (preschool or group child care center) with children 30 months to school entry in British Columbia?

- ◯ Yes (Please proceed to the following questions)
- ◯ No (Thank you. Please click "exit this survey" in top right hand corner)

2. Describe the type of early childhood center where you are currently employed.

- ◯ a) Preschool
- ◯ b) Group child care

3. Which of the following best describes the location of the early childhood center where you are employed?

- ◯ a) Suburban
- ◯ b) Urban
- ◯ c) Rural
- ◯ d) Remote Community

4. On average, how many children attend your center on a weekly basis?

- ◯ a) 25 or fewer
- ◯ b) 26-40 children
- ◯ c) 41-60 children
- ◯ d) 61-80 children
- ◯ e) 81 or more children

5. What are the current student demographics of children attending your center?

	0-9%	10-19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-89%	90-100%
Students Receiving Government Subsidies	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
ESL Students	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

6. Did you receive your ECE training in British Columbia?

- ◯ a) Yes
- ◯ b) No

Page 2

The Use of Music in Early Childhood Centres in British Columbia

7. How long ago did you receive your ECE diploma?

- ◯ a) Under 5 years
- ◯ b) 5-9 years
- ◯ c) 10-19 years
- ◯ d) 20-29 years
- ◯ e) 30+ years

The Use of Music in Early Childhood Centres in British Columbia

3. Educational Background

This section will inquire about your musical background, courses offered as part of your degree and continuing education courses taken since graduating.

The phrase teaching musical concepts is defined as teaching students to reading and writing music, dynamics and tempo.

The phrase teaching non-musical concepts is defined as teaching students skills that are not related to music, e.g. pre-literacy skills, social skills, math etc.

8. As part of your training, were music classes required?

- ◯ a) Yes
- ◯ b) No

9. As part of your training, were music classes offered as electives?

- ◯ a) Yes
- ◯ b) No

10. If you took a music course(s), what was the primary emphasis of the class? (Check all that apply)

- ☐ a) How to teach musical concepts to young children
- ☐ b) How to use music to teach non-musical concepts
- ☐ c) A general musical knowledge class (music appreciation, history, therory, etc.)
- ☐ d) Did not take a music class
- ☐ Other (please specify)

11. As part of your continuing education requirements have you ever taken a course (s)/workshop(s) about teaching musical concepts in your classroom?

- ◯ a) Yes
- ◯ b) No

12. As part of your continuing education requirements have you ever taken a course (s)/workshop(s) about using music to teach non-musical concepts?

- ◯ a) Yes
- ◯ b) No

Page 4

The Use of Music in Early Childhood Centres in British Columbia

13. Are you interesting in taking (additional) continuing education course (s)/workshop(s) about using music in your classroom?

- ◯ a) Yes
- ◯ b) No

The Use of Music in Early Childhood Centres in British Columbia

4. Musical Skills

The next section will ask question regarding your comfort level leading musical activities

14. Describe your own musical skills. (Check all that apply)

- [ ] a) I have none
- [ ] b) I have sufficient piano skills to accompany group music activities
- [ ] c) I have sufficient guitar to accompany group music activities
- [ ] d) I have sufficient ukulele skills to accompany group music activities
- [ ] e) I have sufficient autoharp skills to accompany group music activities
- [ ] f) I have sufficient vocal skills to lead a song during group music activities
- [ ] g) I can read music
- [ ] h) I can play by ear
- [ ] Other (please specify)

15. Please rate your comfort level leading musical activities with the following instruments.

	Not at all	Somewhat Comfortable	Moderately Comfortable	Very Comfortable
Piano	○	○	○	○
Guitar	○	○	○	○
Ukulele	○	○	○	○
Autoharp	○	○	○	○
Voice	○	○	○	○

The Use of Music in Early Childhood Centres in British Columbia

5. Group music time at your center

The following section will ask questions regarding group music time at your early childhood center

16. Which of the following most closely describes how often group music time occurs in your center?

- a) More than five times a week
- b) Four to five times a week
- c) Three times a week
- d) Twice a week
- e) Once a week
- f) Less than once a week
- g) Never (Thank you. Please click done and exit survey)

17. Currently at your center, on average how long is group music time?

- a) 1-15 minutes
- b) 16-30 minutes
- c) 31-45 minutes
- d) 46 minutes or longer

18. Which of the following BEST describes the sources used to create/design the group music activities at your center? (Check one)

- a) Yourself
- b) Another Early Childhood Educator
- c) Assistant teacher
- d) A team of all teachers
- e) The director of the center
- f) Commercially designed- (Music Together, Baby Einstein etc.)
- g) Music Educator/Therapist
- Other (please specify)

Page 7

19. Who typically leads the children in group music activities? (Check the one that MOST applies)

- ◯ a) Yourself
- ◯ b) Another Early Childhood Educator
- ◯ c) Assistant teacher
- ◯ d) All teachers lead music activities equally
- ◯ e) Music Educator/Therapist
- ◯ f) A parent/volunteer
- ◯ Other (please specify)

The Use of Music in Early Childhood Centres in British Columbia

6. Purpose of music

The following questions will ask about the purpose of using music at your center

20. Of the following activities, which are offered at your center? (Check all that apply)

- [ ] a) Singing
- [ ] b) Listening to music
- [ ] c) Moving to music
- [ ] d) Playing instruments
- [ ] e) Composing music/improvising
- [ ] f) Musical Drama/pageants
- [ ] Other (please specify)

21. Of the following options, what is your center's purpose(s) for involving children in music-related activities? (Check all that apply)

- [ ] a) to teach musical concepts
- [ ] b) to assist in the development of cognitive skills (counting, colors, shapes etc.)
- [ ] c) to assist in the development of language skills (rhyming words, identifying objects in stories etc.)
- [ ] d) to assist in the development of gross motor skills (walking, jumping, skipping, hopping etc.)
- [ ] e) to assist in the development of fine motor skills (puzzles, matching colors, pincer grasp etc.)
- [ ] f) to assist int he development of social skills (sharing, waiting, cleaning up, transitions etc.)
- [ ] g) to assist in the development of self help skills (tie laces in a bow, brushing teeth, covering mouth when sneezing or coughing etc.)
- [ ] Other (please specify)

22. Of the following options, what is your center's PRIMARY purpose for involving children in music-related activities? (Check only one)

- ◯ a) to teach musical concepts
- ◯ b) to assist in the development of cognitive skills (counting, colors, shapes etc.)
- ◯ c) to assist in the development of language skills (rhyming words, identifying objects in stories etc.)
- ◯ d) to assist in the development of gross motor skills (walking, jumping, skipping, hopping etc.)
- ◯ e) to assist in the development of fine motor skills (puzzles, matching colors, pincer grasp etc.)
- ◯ f) to assist in the development of social skills (sharing, waiting, cleaning up, transitions etc.)
- ◯ g) to assist in the development of self help skills (tie laces in a bow, brushing teeth, covering mouth when sneezing or coughing etc.)
- ◯ Other (please specify)

The Use of Music in Early Childhood Centres in British Columbia

7. Efficacy of Music to teach non-musical concepts

The following questions will ask you about how effect you believe music is when trying to teach non-musical concepts

23. How effective do you find music in teaching the following concepts.

	I don't find it to be Effective	I find it to be Minimally Effective	I find it to be Moderately Effective	I find it to be Very Effective
Cognitive Skills	○	○	○	○
Language Skills	○	○	○	○
Gross Motor	○	○	○	○
Fine Motor	○	○	○	○
Social Skills	○	○	○	○
Self Help	○	○	○	○

Appendix C

HSIRB application and approval letter

Date: December 8, 2008

To: Brian Wilson, Principal Investigator
Michelle Lawrence, Student Investigator for thesis

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 08-12-09

This letter will serve as confirmation that your research project entitled "The Use of Music in Early Childhood Centers in British Columbia: A Survey of the Perceptions and Practices of Early Childhood Educators" has been **approved** under the **exempt** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may **only** conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: December 8, 2009

Walwood Hall, Kalamazoo, MI 49008-5456
PHONE: (269) 387-8293 FAX: (269) 387-8276

WESTERN MICHIGAN UNIVERSITY

Human Subjects Institutional Review Board
APPLICATION FOR PROJECT REVIEW

I. BASIC INFORMATION

PROJECT TITLE: The use of music in early childhood centers in British Columbia: A survey of the perceptions and practices of early childhood educators

WMU INVESTIGATORS

PRINCIPAL INVESTIGATOR OR ADVISOR

Name: Brian Wilson — Degree Attained: Other Masters
Department: MUSIC — Title: Professor
Electronic Mail Address: brian.wilson@wmich.edu
Street or Campus Address: 1903 W. Michigan Ave
City: Kalamazoo — State: MI — ZIP: 49008-5200
Office Phone: 269.387.4679 — Home Phone:

CO-PRINCIPAL OR STUDENT INVESTIGATOR

Name: Michelle Lawrence — Degree Attained: BA, BS, BBA, BSW
Department: MUSIC — Title: Student
Electronic Mail Address: michelle.58.lawrence@wmich.edu
Street or Campus Address: 908 Selkirk Ave
City: Victoria — State: BC — ZIP: V9A 2V1
Office Phone: 250-217-4243 — Home Phone: 250-590-3631

If this is a student investigator, please indicate status:

☐ Undergraduate ☒ Master level student ☐ Doctoral level student

and level of involvement in the research:

☐ Assisting Faculty Research ☒ Thesis ☐ Dissertation ☐ Other (please specify):

CO-PRINCIPAL OR STUDENT INVESTIGATOR

Name: — Degree Attained: Select one
Department: — Title: Select one
Electronic Mail Address:
Street or Campus Address:
City: — State: — ZIP:
Office Phone: — Home Phone:

If this is a student investigator, please indicate status:

☐ Undergraduate ☐ Master level student ☐ Doctoral level student

and level of involvement in the research:

☐ Assisting Faculty Research ☐ Thesis ☐ Dissertation ☐ Other (please specify):

If there are more WMU investigators, please complete the "Additional WMU Investigators" form

COLLABORATING INVESTIGATORS AND AFFILIATIONS

Name: — Affiliation:
Name: — Affiliation:
Name: — Affiliation:

PROPOSED PROJECT DURATION: From (mm/dd/yy): 11/01/20 (date following anticipated approval) — To (mm/dd/yy): 07/01/09 (maximum one year later)

II. TARGETED PARTICIPANT POOL

Total number of subjects: 1100 Number of subjects in the control group: 0

Age range (lower limit – upper limit): 18-99 Gender: Both Ethnic Minority: None/Not applicable

Inclusionary criteria: Early childhood educators in British Columbiaworking in a preschool or group child care center with children ages 30 months to school entry and registered with ECEBC Registry.

Exclusionary criteria: Early childhood educators in British Columbia who currently are not working in a preschool or licensed group child care center, or those working with children under the age of 30 months.

Source of participants: ECEBC Registry

Length of participation (x min/session, y sessions, over z months): 20 minute one time online survey

Participants in Special Consideration Categories: (Check all that apply.)

- ☒ None
- ☐ Children (age range:)
- ☐ Cognitively impaired persons
- ☐ Prisoners
- ☐ Pregnant or lactating women
- ☐ Blind individuals
- ☐ Military personnel
- ☐ Wards
- ☐ Institutionalized individuals
- ☐ Non-English speaking individuals
- ☐ Students
- ☐ Other subjects whose life circumstances may interfere with their ability to make free choice in consenting to take part in research (please specify):

III. Funding and Research Site

Potential source(s) of funding: None

WMU proposal number for funded project: Date of submission to funding agency:

Site(s) of the research activity: WMU

Letters of approval from project site officials Select one

IV. Protocol Outline

Prepare a proposal that follows the outline below. Include page numbers. **Do not submit your thesis or dissertation proposal, grant application, etc. These cannot be processed by HSIRB and will be returned to you.** Please review your proposal and mark each box below with a ☒ following review of that section.

☒ **PROJECT DESCRIPTION:** Include purpose, research procedure (including what exactly participants will do as part of the study), method of data collection, research design, location of data collection, duration of study, and how the results will be disseminated (e.g., thesis, dissertation, peer-reviewed journal, presentation).

☒ **METHOD(S) OF ANALYSIS:** Briefly describe the planned methods of analysis for the data being collected.

☒ **BENEFITS OF RESEARCH:** Briefly describe the expected or known benefits of the research. Indicate benefits specific to the research participant in addition to longer term or more general benefits.

☒ **SUBJECT SELECTION:** Describe in detail how you intend to contact and recruit participants. Attach all written advertisements, posters and oral recruitment scripts.

☒ **RISKS TO SUBJECTS:** Describe the nature and likelihood of possible risks (e.g., physical, psychological, social) as a result of participation in the research. Risks include even mild discomforts or inconveniences, as well as potential for disclosure of sensitive information.

☒ **PROTECTION FOR SUBJECTS:** Describe measures to be taken to protect subjects from possible risks or discomforts.

☒ **CONFIDENTIALITY OF DATA:** Describe precautions to ensure the privacy of subjects and confidentiality of information. Be explicit if data are sensitive. Describe coding procedures for subject identification. Include the method, location and duration of data retention. (Federal regulations require data to be maintained for at least 3 years. Your professional society may require you to keep it longer.)

☒ **INSTRUMENTATION:** Attach questionnaires, interview scripts, and data collection instruments, etc. Coding sheets for video- or audio-tapes and other data collection procedures are required.

☒ **INFORMED CONSENT PROCESS:** Describe the process by which informed consent will be obtained. If the participant is a child or mentally challenged, explain how the parent(s)/guardian(s) will be contacted for consent and how the researcher will insure that the participant understands and assents to the research. A copy of all consent/assent documents, including non-English and Braille translations, if applicable, must be provided.

CONSENT DOCUMENT DEVELOPMENT CHECKLIST

The following information must be included in the consent documents. Mark (☒) each of the requirements you have included. Omitted information must be justified on a separate sheet of paper. Sample consent documents are posted on the HSIRB webpage under Consent/Assent Document Development.

☒ A header that includes "Western Michigan University, Department of _____" (if departmental letterhead is not used), Principal Investigator: (name), Student Investigator: (name(s)), and title of the study.

☒ Language in the form of an invitation to participate AND at a reading level appropriate for the participants (Note that the mean reading level in the United States is 6th grade.)

☒ The nature, purpose, and duration of the study

☒ Procedures to be employed in the research; exactly what the subject is expected to do

☒ Risks (hazards, inconveniences, discomforts) the subject may undergo, so far as they are known, and how any risks will be minimized

☒ Benefits to the subject (and to the general subject population)

☒ Conditions of participation

☒ How confidentiality will be maintained and any limits to confidentiality

☒ Statement that the participant can refuse to participate; stop participating at any time; or refuse to answer any question without prejudice, penalty, or risk of any loss of service he/she would otherwise have

☒ The researchers' names and telephone numbers (including the faculty advisor) as well as the following statement: *"The participant may also contact the Chair, Human Subjects Institutional Review Board (387-8293) or the Vice President for Research (387-8298) if questions or problems arise during the course of the study."*

☒ Do not include phrases like "informed consent" or "I am aware" or "I understand" anywhere in the document.

☒ A place for date and signature of participant and a witness line, if required (e.g., with subjects who are not legally competent); a place for date and signature of translator, if applicable; a place for date and signature (or initials) of individual obtaining the consent, if applicable

☒ The following statements must be included in all consents: *"This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year."*

☒ Do not include language that would absolve the researcher of responsibility for negligence

☒ Leave a minimum top margin of 2 inches on all pages. Submit the final version of the consent document without headers such as "Informed Consent Document" "Draft" or "Appendix___."

The following are only to be included if appropriate:

☐ If there is physical activity or a possibility of physical injury, include the statement: *"As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or additional treatment will be made available to you except as otherwise stated in this consent form."* Any available compensation or additional treatment should then be specified, if appropriate.

☐ If the research is therapeutically related, disclose alternate procedures the subject might choose.

☐ Any significant new findings affecting risks will be promptly reported to the participant.

☐ Circumstances under which the researcher may terminate the subject's participation

☐ Any additional costs the participant may have to bear

☐ Consequences of the participant's withdrawal from the study

☐ The approximate number of participants in the study

☐ Debriefing procedures

Abstract

This study explores the current practices of early childhood educators and their perceptions about using music to teach non-musical goals to preschoolers. Preschoolers are defined for this study as children between the ages of 30 months to school entry (Gradel). Early childhood centers are defined as either preschools or licensed group child care centers.

An online survey has been designed to obtain demographic, relevant musical and educational training, the role of music in the classroom and information related to early childhood educators' perceptions about the effectiveness of music to teach non-musical concepts. Finally early childhood educators were invited to answer questions related to whether or not they felt they have adequate training and available resources when using music in the classroom.

A pilot study of four early childhood educators currently working in preschools or group child care center indicated that the survey tool was clear and comprehensive. Synthesis of results and examples will be presented with discussion related to the need for further research and consultation in the area of the use of music in early childhood education centers.

Purpose/Background Information

Numerous studies have explored the use of both music education and music therapy methods with preschoolers. Studies authored by music therapists have reported benefits of music therapy for developing specific skills (reading, math, listening/attention) with young children with disabilities (Humpal, 1990; Standley & Hughes, 1996; Register, Darrow, Standley & Swedberg, 2007). A relatively new area of research has also explored the use of music in assisting preschoolers with pre-academic skills such as prereading/writing skills, listening/attention, and literacy (Register, 2001; Sims, 2005; Wiggins, 2007). When investigating the existing literature there was a paucity of research investigating music educators working in early childhood centers. However, music educators have surveyed early childhood educators to determine if and how they are teaching musical concepts to their students, their perceived musical skills and who is responsible for designing the music curriculum at their center (Steven, 1998; Saunders & Baker, 1991; Nardo, Custodero, Persellin & Fox, 2006). In the majority of these surveys, the early childhood educators indicated that the primary purpose of using music in their classroom is not for the purpose of teaching music but to assist in facilitating various other activities including but not limited to transitioning children, supplementing general curriculum or relaxation. However, no studies were found in the extent literature that assessed early childhood educators' perceptions about the efficacy of the use of music to address non-musical goals in preschools. This has resulted in a general lack of knowledge

about how early childhood educators use music to facilitate learning objectives in areas other than those typically associated with music education.

The music education profession has been surveying early childhood educators for decades in order to figure out ways to support non-music specialists teach music, however, the music therapy profession currently has not done the same. A survey of early childhood educators' current practices of music in early childhood centers would provide a more accurate picture about the role of music in the classroom and early childhood educators' opinion regarding the amount of resources and training available to them. Specifically, the purposes for this study are as follows: (a) to gather current information about the demographics and characteristics of early childhood centers in British Columbia; (b) to identify the musical training, relevant educational background and of early childhood educators; (c) to inquire about the comfort level of the early childhood educators leading group music activities; (d) to gather current information about the implementation of music at early childhood centers; (e) to investigate the primary purposes for the inclusion of music in the classroom ; and (f) to discover the early childhood educators' perceptions as to the efficacy of music activities to address non-musical objectives.

References

Humpal, M.E. (1990). Early intervention: The implications for music therapy. *Music Therapy Perspectives, 8,* 30-35.

Nardo, R. L, Custodero, L. A., Persellin, D. C., & Brink Fox, D. (2006) *Looking back, looking forward: A report on early childhood music education in accredited American preschools.* Journal of Research in Music Education. 54(4)

Register, D. (2001). *The effects of an early intervention music curriculum on prereading/writing.* The journal of music therapy. 38(3). 239-248.

Register, D., Darrow, A.A., Standley, J., & Swedberg, O. (2007). The use of music to enhance reading skills of second grade students and students with reading disabilities. *Journal of Music Therapy*, *44* (1), 23-37.

Saunders, T. C & Baker, D. S. (1991). *In-service Classroom Teachers' Perception of Useful Music Skills and Understandings*. Journal of Research in Music Education. 39(3). 248-261.

Sims, W. L. (2005). *Effects of free versus directed listening on duration of individual music listening by prekindergarten children.* Journal of research in music education. 53(1). 78-86.

Standley, J. & Hughes, J. (1996). Documenting developmentally appropriate objectives and benefits of a music therapy program for early intervention: A behavioral analysis. *Music Therapy Perspectives, 14*(2), 87-94.

Standley, J. & Hughes, J. (1997). Evaluation of an early intervention music curriculum for enhancing pre-reading/writing skills. Music Therapy Perspecitves, 15, 79-85.

Steven, N. K. (1998) *Preschool Classroom Teachers' Perception of Useful Music Skills and Understandings.* Journal of Research in Music Education. 46(3), 374-83.

Wiggins, D. G. (2007). *Pre-k music and the emergent reader: Promoting Literacy in a music-enhanced environment.* Early Childhood Education Journal. 35(1) 55-64.

Subject Recruitment

The participants selected for this study are certified early childhood educators currently working in British Columbia early childhood education centers (preschool or licensed group child care) and registered with the Early Childhood Educators of British Columbia (ECEBC).

According to British Columbia Ministry of Children and Family Development (MCFD) a preschool is defined by the following: (a) serves children from 30 months (3 years of age prior to December 31) to school entry; (b) part day programs (maximum of four hours); (c) no naps; and (d) maximum group size of 20 children. The staff to child ratio in a preschool is a minimum of 1 Early Childhood Educator (ECE) and 1 assistant for 20 children. An ECE is an individual who has completed the basic Early Childhood Education training (post-secondary institution offering approved Early Childhood Education certificate/diploma) and First Aid; has the required work experience; and has been certified as an Early Childhood Educator by the ECE Registry.

A licensed group child care center is defined by the following: (a) serves children from 30 months to school entry (Grade 1); (b) maximum group size for over 30 months is 25; (c) staff ratio for children over 30 months is 1 Early Childhood Educator and 2 assistants for 25 children.

Preschool and licensed group child care centers will be chosen as they differ from other child care centers in regard to their programming and planning of daily activities for children. A greater academic and overall focus on growth and development is generally

given to this age group compared to infant/toddler rooms. In order to ensure an up-to-date rather than historical study, only teachers on the ECE Registry who are currently working in an early childhood education setting will be included. Due to high confidentiality issues in Canada, as well as consistent turnover in the profession, it was decided to email the entire registry in hopes of obtaining a reasonable sample.

The subject pool for this study includes all members who are registered with the Early Childhood Educators Registry of BC. While it is mandatory that at least one of the early childhood educators in each centre has a certificate in Early Childhood Education and is also registered with the ECEBC, individuals with those credentials may be employed in other positions. Since the registry does not discriminate between teachers and other early childhood education professionals (educators, assistants, program managers, etc.), the invitation to participate in the survey will be sent to everyone on the membership directory. However, those who are not classroom teachers or not affiliated with ECEBC will be excused from participating in the survey.

The ECEBC Registry will send out the survey through their database, in total, approximately 1100 surveys will be sent out to early childhood educators who will be identified as potential subjects. Upon receiving the email, the subjects will be invited to participate in the online survey. If they choose to participate, there will be a link in the body of the email that will take them to the survey. Once they are in the site to take the survey, there is a letter of consent (see Appendix A), which explains the purpose, the process and the survey. At that point if they choose to continue they will enter the survey and their participation will take approximately 15 minutes.

Informed Consent

In the e-mail letter of invitation to participate in the survey, the following information appears:

> You will be asked to answer questions relating to demographics, relevant educational background, music curriculum at your center, purpose for using music and your perception about its effectiveness to teach non-musical concepts as well as if you have adequate training or resources. The survey is comprised of multiple choice, rank order and free response questions and will take approximately 20 minutes to complete.
>
> Confidentiality will be maintained through the anonymous online survey format. By completing the online survey form, you are giving consent for the use of the answers you supply. Your responses will benefit music therapists and researchers through expanding the current breadth of information available related to the use of music in preschools in British Columbia. You may choose not to participate in this survey.

If you have any questions, you may contact Brian Wilson, at 269.387.4679, or Michelle Lawrence at 250.217.4243. You may also contact the Chair, Human Subjects Institutional Review Board 269.387.8293 or the Vice President for Research 269.387.8298 if questions or problems arise during the course of the study.

Methodology

Due to the limited number of investigations into the educational practices of early childhood educators and their use of music to teach non-musical goals, a survey-based, mixed-method exploratory study will be designed. A survey instrument will be designed to collect both demographic and educational practice responses for quantitative analysis, and narrative responses relating to desired professional development.

A self-administered online survey was selected for this study for a variety of reasons. First, online questionnaires are efficient for the participant to receive, complete and return (Wheeler, 2005). Secondly, received data can be compiled instantaneously through an online system and readily available for analysis by the researcher. Also, the number of invalid responses can be minimized when using an online survey due to the online instrument, as compliance with answering all the questions as well and following instructions is monitored by the online survey.

Another reason for selecting the online survey method was due to the fact that online surveys are a cost efficient method of surveying (Wigram, 2005) a large participant pool. A sizable subject pool is important in this study, due to the lack of Canadian studies as well as lack of published information found identifying the use of music to facilitate the learning of non-musical goals in a preschool setting. It is also essential to ensure that all early childhood educators working in urban, suburban, rural and remote community will have access to this study to allow for deductions to be made and to provide direct comparisons between geographical locations and education outcomes.

While there is not currently a complete study that can be replicated in its entirety, the first two segment of this study will be based on existing research. The first sections will be a partial replication of Nardo, Custodero, Persellin & Fox, a study conducted in 2006 which questions the general characteristics of each center (funding, staffing, population), how often music activities occur, who leads them, and the primary purpose of music activities. The second group of questions will be taken from Golden's dissertation (1989) and modified by using the *HELP* assessments language to examine the purpose of using music. Are early childhood educators using music to teach musical concepts, to teach cognitive, language, gross motor, fine motor, social, self-help or other skills? The last section of the survey will investigate if early childhood educators feel comfortable in leading music activities, as well as their perceptions of using music to assist in teaching

non-musical concepts. Another part of the study is to see if early childhood educators feel they have adequate training and resources made available to them to use music in the classroom and their interests in continuing education.

The results of this study will be submitted for completion of Master's Thesis, publications in peer-reviewed journals and presentation at conferences both in the field of music therapy as well as early childhood education.

Risks and Cost to and Protection for Subjects

There are no foreseen costs or risk to subjects participating in this survey, as it is personal choice to partake in the anonymous on-line survey.

Benefits of Research

An exploratory survey about music in British Columbia preschools is needed to better understand how music is being used on a daily basis by early childhood educators and for what purposes. In addition, results from this study will reveal whether early childhood educators believe that music activities effectively support early childhood learning and whether the teachers feel adequately prepared to provide those music experiences for the children in their classroom.

The results from this study can benefit the early childhood education profession by providing baseline data about how the profession as a whole uses music to support early childhood learning. Further, the results will indicate areas in which early childhood educators would like to receive further training or assistance. Music therapists will be able glean information from the results and find ways to support early childhood educators in using music to facilitate non-musical learning.

Confidentiality of Data

No identifying information is collected in this study. The e-mail address used to contact each subject is in no way linked to the results, making the process anonymous. Data will be stored on the researcher's password protected computer.

Letter of Consent for Pilot Study

LETTER OF INVITATION TO PARTICIPATE IN PILOT STUDY

[E-mail Subject line: Music in the Early Childhood Centers]

[Name of pilot participant],

You are invited to participate in a pilot study for a research project designed to collect information related to the use of music in early childhood education centers in British Columbia. This research is being conducted as part of thesis requirements for Michelle Lawrence, for the degree Master of Music in Music Therapy, at Western Michigan University.

If you are a licensed early childhood educator who is currently working in a preschool or licensed group child care center with children between the ages of 30 months- school entry in British Columbia, Canada, you are invited to participate by completing an online survey within the next two weeks.

You will be asked to answer questions relating to demographics, relevant educational background, music curriculum at your center, purpose for using music and your perception about its effectiveness to teach non-musical concepts as well as if you have adequate training or resources. The survey is comprised of multiple choice, rank order and free response questions and will take approximately 20 minutes to complete.

Confidentiality will be maintained through the anonymous online survey format. By completing the online survey form, you are giving consent for the use of the answers you supply. Your responses will benefit early childhood educators, music therapists and researchers through expanding the current breadth of information available related to the use of music in preschools in British Columbia. You may choose not to participate in this survey.

If you have any questions, you may contact Brian Wilson, at 269.387.4724 or Michelle Lawrence at 250.217.4243. You may also contact the Chair, Human Subjects Institutional Review Board 269.387.8293 or the Vice President for Research 269.387.8298 if questions or problems arise during the course of the study.

To participate in the survey, please click on the link below

Western Michigan University, Department of Music
Principal Investigator: Brian Wilson Student Investigator: Michelle Lawrence
Study Title: The use of music in early childhood centers in British Columbia: A survey of the perceptions and practices of early childhood educators

Appendix D

Letter of invitation to participate in pilot study

Letter of invitation to participate in pilot study

[E-mail Subject line: Music in the Early Childhood Centers]

[Name of pilot subject],

You are invited to participate in a pilot study for a research project designed to collect information related to the use of music in early childhood education centers in British Columbia. This research is being conducted as part of thesis requirements for Michelle Lawrence, for the degree Master of Music in Music Therapy, at Western Michigan University.

If you are a certified early childhood educator who is currently working in a preschool or licensed group child care center with children between the ages of 30 months- school entry in British Columbia, Canada, you are invited to participate by completing an online survey within the next two weeks.

You will be asked to answer questions relating to demographics, relevant educational background, music curriculum at your center, purpose for using music and your perception about its effectiveness to teach non-musical concepts as well as if you have adequate training or resources. The survey is comprised of multiple choice, rank order and free response questions and will take approximately 20 minutes to complete.

Confidentiality will be maintained through the anonymous online survey format. By completing the online survey form, you are giving consent for the use of the answers you supply. Your responses will benefit music therapists and researchers through expanding the current breadth of information available related to the use of music in preschools in British Columbia. You may choose not to participate in this survey.

If you have any questions, you may contact Brian Wilson, at 269.387.4724, or Michelle Lawrence at 250.217.8855. You may also contact the Chair, Human Subjects Institutional Review Board 269.387.8293 or the Vice President for Research 269.387.8298 if questions or problems arise during the course of the study.

To participate in the survey, please click on the link below

http://www.surveymonkey.com/s.aspx?sm=XB9nlwNzZvY4RNMkkuv_2faQ_3d_3d

Western Michigan University, Department of Music
Principal Investigator: Brian Wilson Student Investigator: Michelle Lawrence
Study Title: The efficacy of music to support early childhood learning: A survey of the perceptions and practices of early childhood educators in British Columbia.