PRESCHOOL PIANO METHODS
AND
DEVELOPMENTALLY APPROPRIATE PRACTICE

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Doctor of Philosophy

By

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The undersigned, appointed by the Dean of the Graduate School, have examined the dissertation entitled.

PRESCHOOL PIANO METHODS
AND DEVELOPMENTALLY APPROPRIATE PRACTICE

Presented by Fang Ting Huang,

A candidate for the Degree of Doctor of Philosophy,

and hereby, certify that, in their opinion, it is worthy of acceptance.

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Professor Martin Bergee

Professor Janice Wenger

Professor Karen Larvick

Professor Larry Kantner

Dedicated

to

My mother,
who encourages me to succeed with strength and diligent spirit.

My family and friends,
who support me with fine thoughts and blessings.

My sisters,
who show their unconditional love.

My husband,
who gives me his continuing belief and trust.

&

My children,
who grow to know patience and sacrifice through this process
and learn to sweeten my life with their angel love.

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PRESCHOOL PIANO METHODS AND DEVELOPMENTALLY APPROPRIATE PRACTICE

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ABSTRACT

The purpose of this study was to analyze preschool piano method books and identify ways in which they were or were not consistent with guidelines of *Developmentally Appropriate Practices in Early Childhood Programs* (Bredekamp & Copple, 1997) and developmental characteristics of children as identified in related research findings. The literature reviewed encompassed a historical overview, goals and designs of preschool piano method books, age-related developmental, musical, and learning characteristics of young children, and issues regarding curriculum, lesson planning, and instructional strategies. A qualitative, cross-case content analysis was performed, using as cases five preschool piano methods in publication at the time of the study. The five texts were found to represent two approaches: "traditional" or "whole-body" methods. Four themes emerged as a result of the initial constant-comparative analysis, which were used to guide data interpretation: philosophy, curriculum design logic, musical development, and non-musical aspects of the texts.

Findings of this study identified more DAP-relevant features within the whole body approaches as compared with the traditional methodologies. A set of principals grounded within the union of DAP guidelines and related research findings was developed and termed as the "Phil-Lo-Music-Aspect" principles. These principles were suitable for guiding the creation or analysis of future preschool piano teaching methods.

CHAPTER I

INTRODUCTION

Over the past decades, the number of early childhood programs has continued to increase, not only in response to the demand for out-of-home child care services but also in recognition of the critical importance of educational experiences during the early years (Andress, 1986; Katz, 1986; Rauscher, Shaw, & Ky, 1993; Willer, Hofferth, Kisker, Divine-Hawkins, Farquar, & Glantz, 1991; Zimmerman, 1986). Recognition of the importance of the preschool years has heightened interest in early childhood education programs that are believed to utilize the optimum windows of opportunity for building important foundations for children's future learning. This has resulted in increased parental interest in early childhood music classes, including preschool piano lessons.

Standards governing these early childhood classes vary widely from privately owned programs to public school systems. Many preschool settings emphasize formalized instruction for young children that is being "pulled down" from the upper grades (Bredekamp & Copple, 1997; Katz, 1986). Imposing this curriculum on preschoolers may result in "miseducation" (Elkind, 1987), raising concerns among child development and early childhood education professionals (Elkind, 1987; Hart, Burts, & Charlesworth, 1997; Katz, 1986). Increased stress levels may result in young children quitting lessons in frustration before realizing their potential (Hendricks, 2003). This might be reflected in the problem of retaining young pupils in piano study that Rennick (2000) referred to as a high "mortality rate." The difficulty of teaching from materials that are not well-matched to young learners may result in teacher frustration, as well.

This raises concerns related to the adequacy of the design and use of the existing preschool piano books. What is the role of published preschool piano method books? Do they engage very young beginners with material that is developmentally friendly, or are they merely simplified versions of the regular beginner curriculum? A thorough examination of the existing preschool piano methods may help answer these questions. The term "developmentally appropriate practice," which will be referred to as DAP throughout the remainder of this paper, becomes important because of developmental issues and their roles in children's learning. A teacher's lack of adequate knowledge about developmental issues may increase the chance of inappropriate practices within the teaching situation, while a teacher's familiarity with DAP may actually result in possible solutions for relieving the teacher's frustration and present a key to students' future success. At a time when piano is commonly favored as a beginning instrument for music learning, keyboard teachers often are the first within the profession to encounter beginning music students.

PURPOSE OF THE STUDY

In response to concerns regarding inappropriate approaches to early childhood education, the National Association for the Education of Young Children (NAEYC) recognized the need to provide leadership and a unifying presence for the increasing population of early childhood educators, both in public and private sectors. A position paper on *Developmentally Appropriate Practice in Early Childhood Programs* was published by the NAEYC, including a set of guidelines (Bredekamp, 1987). The revised edition by Bredekamp and Copple (1997) specified that all programs designed for children be based on what is known about young children. Since the publication of the

guidelines, the number of related research studies continues to grow, and adds valuable information to the body of DAP knowledge.

DAP publications of research on early childhood education reveal several directions, including DAP implementation in general kindergarten classes (Christian & Bell, 1991; Fox, 2003; Hart, Burts, & Charlesworth, 1997; Peery & Duru, 2000; Kostelink, Soderman, & Whiren, 1993; Zepeda, 1993), the views of in-service teachers, kindergarten teachers, or administrators regarding DAP implementation and related curriculum planning (Ricard, Brown, & Sanders, 2002; Lambert, 1991; Mercado, 1990; Moberly, 1996; Tyson, 1998), DAP and language learning (Sowers, 1996), DAP in physical education (Ignico, 1994; Sanders, 1994; Satchwell, 1994; Sawyers, 1994), and parental perceptions of DAP in early childhood education (Douglas, 1998; Park, 1955).

Perspectives on age-related issues and practices in the general preschool music class have been informed by the work of many researchers (Adachi & Trehub, 1998; Andress, 1986 & 1992; Andress, Heimann, Rinehart, & Talbert, 1973; Andress & Walker, 1992; Apfelstadt, 1984; Campbell & Scott-Kassner, 1995 & 2006; Chen-Haftek, 1997; Costa-Giomi, 1994; De Yarman, 1975; Feierabend, Saunders, Holahan, & Getnick, 1998; Geringer, 1983; Gordon, 1990; Gromko, 1994 & 1996; Gromko & Poorman, 1998a & 1998b; Guilbault, 2004; Jordan-DeCarbo, 1989, 1999, & 2004; McDonald & Simons, 1989; Morehead & Pond, 1977; Palmer, 1993; Palmer & Sims, 1993; Rauscher, 1999; Sims, 1990, 1991, 1993, 1995a & 2005; Webster & Schlentrich, 1982; Zimmerman, 1986). Several studies comparing DAP principles with early childhood music education have also been encountered. The current understanding of early childhood music and DAP discloses the following: (a) implications and implementation recommendations for

DAP guidelines within general music class settings (Jordan-DeCarbo & Nelson, 2002; Kenney, 1997; MENC, 1991; Miranda, 2002; Neelly, 2001; Peery & Duru, 2000; Sims, 1995b); and (b) investigations on reflecting DAP principles within the kindergarten general music class (Miranda, 2002, 2004), individual musical skills, such as vocal ability (Kim, 2000), and specialized music classes, such as Yamaha music class (Miranda, 2000).

To date, no study has researched preschool piano instruction in the context of existing literature and information related to DAP. Consequently and logically, an in-depth look at the link between the music study portrayed within preschool piano method books and DAP seems warranted. The information obtained may provide insights with direct applicability to an issue of concern within the profession, the appropriate ways to teach young pianists to result in longer retention in music study.

The purpose of the current study is to analyze preschool piano method books and identify ways in which preschool piano methods books are or are not consistent with DAP characteristics applicable to the piano lesson setting. The following research questions were addressed:

1. What are the salient characteristics of the existing preschool piano method books that will be identified as a result of qualitative, cross case content analysis?
2. To what extent will the characteristics identified be consistent with principles of and guidelines for Developmentally Appropriate Practice??

ORGANIZATION OUTLINE

Chapter II of this study will provide clarification of aspects regarding the research questions. The literature review helps to build a solid foundation for supporting

convincing judgment and directs audiences to three major components: (a) preschool piano methods: the historical overview, culture, and design of preschool piano method books; (b) developmental characteristics of preschool children: the age-related developmental, musical, and learning characteristics of young children; and (c) issues of curriculum planning and instructional strategies: attitude and philosophy of the preschool piano teacher, curriculum and lesson planning, and theories of instructional strategies.

The method of data management is illustrated in Chapter III. The data collection for the current study highlights one of the major ingredients in the piano lesson: the method book. The existing preschool piano methods represent a body of essential knowledge about the piano instruction industry. Many of them enclose a teacher's manual that offers essential information regarding philosophy and lesson plans, to teaching sequences and assessment; all of those elements allowed the investigator to reenact the actual state of suggested teaching. Stored in the form of written documents, these method books of preschool piano teaching and learning not only withstand the test of time and space (Hodder, 2000), but also served as the central database for this study to perform a qualitative content analysis on behaviors of the lesson situation. Although the teacher's manuals and the lesson book served as the primary data source, correlated books and teaching aids such as flashcards, CDs, magnet boards, etc., of the same series provided the secondary sources of data. Each set of the preschool piano method represents a single case. Before cross-case analysis, scrutiny was executed on single cases individually.

In this study, I served as the primary source of the data method, while two peer checkers served as secondary source of data method. The function of peer checkers resembles that of peer examination (Merriam, 1988) or peer debriefing (Lincoln & Guba,

1985). Their major task is to examine for bias on the part of the researcher, “aspects of the inquirer that might otherwise remain only implicit within the inquirer’s mind” (Lincoln & Guba, 1985, p. 308), as well as to create a credibility level of the study. Issues relating to trustworthiness are also addressed within Chapter III, as is an explanation of the step-by-step data management, including the emergence of themes and the organization of data presentation and analysis for the subsequent chapters. Consequently, Chapters IV to VII encompass discussions for each emerging theme individually.

Chapter VIII concludes this study with educational implications and recommendations based on the findings. I anticipate findings that can provide educational implications for, and make contributions to, improving the quality of future preschool piano methods and instruction.

CHAPTER II

LITERATURE REVIEW

The purpose of this study is to analyze preschool piano teaching method books and materials to determine the extent to which they appropriately address the developmental levels and needs of young children. Before examining the method books themselves, it was necessary to examine the definitions of "developmentally appropriate" with respect to pedagogical practices and teaching materials for preschool aged children. This required a survey of the related literature from the fields of piano pedagogy, music education, child development, early childhood education, and learning psychology. The material found through extensive reviews of these bodies of literature will provide the standards and criteria against which the preschool methods may be assessed and compared.

DEFINITION OF THE PRESCHOOL PIANO STUDENT

The "preschool piano student" has become a moniker for the "average-age beginner" (Collins, 1996, p. 37) in the new age of piano pedagogy. The proper definition for the preschool piano student was described in *The Well-Tempered Keyboard Teacher* published by some of the most respected authorities of the piano pedagogy field (Uszler, Gordon, & Smith, 2000). The authors of this eminent book are celebrated pianists, piano pedagogues, authors, editors, and experts in many other keyboard-related areas, and have accumulated significant knowledge and experiences about the piano profession.

According to Uszler and her co-authors, children who begin music instruction "between four and six years old" (p. 35) are called preschool piano students. This age

classification is recognized in the field of piano pedagogy (Bastien, 1995) and has been endorsed by authors of the majority of preschool piano method books (Barden, Kowalchyk, & Lancaster, 1999a, 1999b, & 1999c; Bastien, Bastien, & Bastien, 1993a, 1993b, & 1994: Collins & Clary, 1981a, 1981b, 1987a, & 1987b; Pace & Pace, 1971& 1972; Palmer, Morton, & Lethco, 1988a, 1988b, & 1988c). Nonetheless, the meaning of "preschool" refers to a slightly different version in the field of early childhood music education.

The term "preschool," as defined by the editors of *Developmentally Appropriate Practice in Early Childhood Programs* published by the National Association of Education for Young Children [NAEYC] (Bredekamp & Copple, 1997), is used to denote "the years before school attendance" (p. 97). This age span still includes the years between the ages of two-and-a-half and six and represents a large subset within the current definition of early childhood, which spans the period from birth to eight years (Andress, 1986). According to Andress, the early childhood years can be refined into divisions such as "the neonate/infant (0-18 mo.); toddler (18-36 mo.); three year old; four year old; kindergartener (five-six yrs.)" (p. 11).

By combining the age divisions in early childhood music education with that offered by Uszler, Gordon, and Smith (2000), it seems justifiable to consider children from the ages of three to six to fall within the definition of "preschool" for the purposes of this study. The age demarcation represents an approximate stage of development and should not be taken literally. The rationale supporting this statement is based on degrees of developmental maturity of children in all areas of human functioning, such as physical, social, emotional, cognitive, and other aspects of intellectual development. The typical

three- or four-year-old children usually demonstrate more advanced language ability, motor skills, and other behaviors as compared with toddlers. In comparison, five- and six-year-old children may gain considerable control and growth in all domains of development, but still be included in the span of preschoolers because of the shift in cognition—commonly known as "achieving the age of reason"—that should occur between ages 5 and 7 (Bredekamp & Copple, 1997; Case, 1991; Hardacre, 1999; Piaget, 1952; Sameroff & McDonough, 1994; White, 1970; Whiting & Edwards, 1988). Perhaps more importantly, children learn and develop at their own individual paces, which sometimes put their "mental development level" behind and other times ahead of their chronological age (Vygotsky, 1978). Two- to five-year delays in music developmental levels have been found in children whose actual ages are between 5 and 8 (Guilmartin, 2000).

According to Vygotsky (1978), human mental development encompasses two levels, the "actual development level" and the "zone of proximal development" (p. 87). The actual development level is manifested by what children know and can do, while the zone of proximal development is characterized by what children have the potential to achieve with the help of more experienced others. No matter how wide the span of the zone of proximal development in each child, Vygotsky's argument connoted the existence of certain degrees of freedom in the cutoff of age division for preschool children. The age focus of the current inquiry places the beginning moment of preschool piano study under the spotlight.

Be it a year—longer or shorter—the initial moment of keyboard study should occur within the first level of each preschool piano method series. Consequently, children

whose actual age is at least three or four and who are not yet entering the elementary level of the public school system define the preschool piano student in this study. This definition includes children at both pre-kindergarten and kindergarten levels.

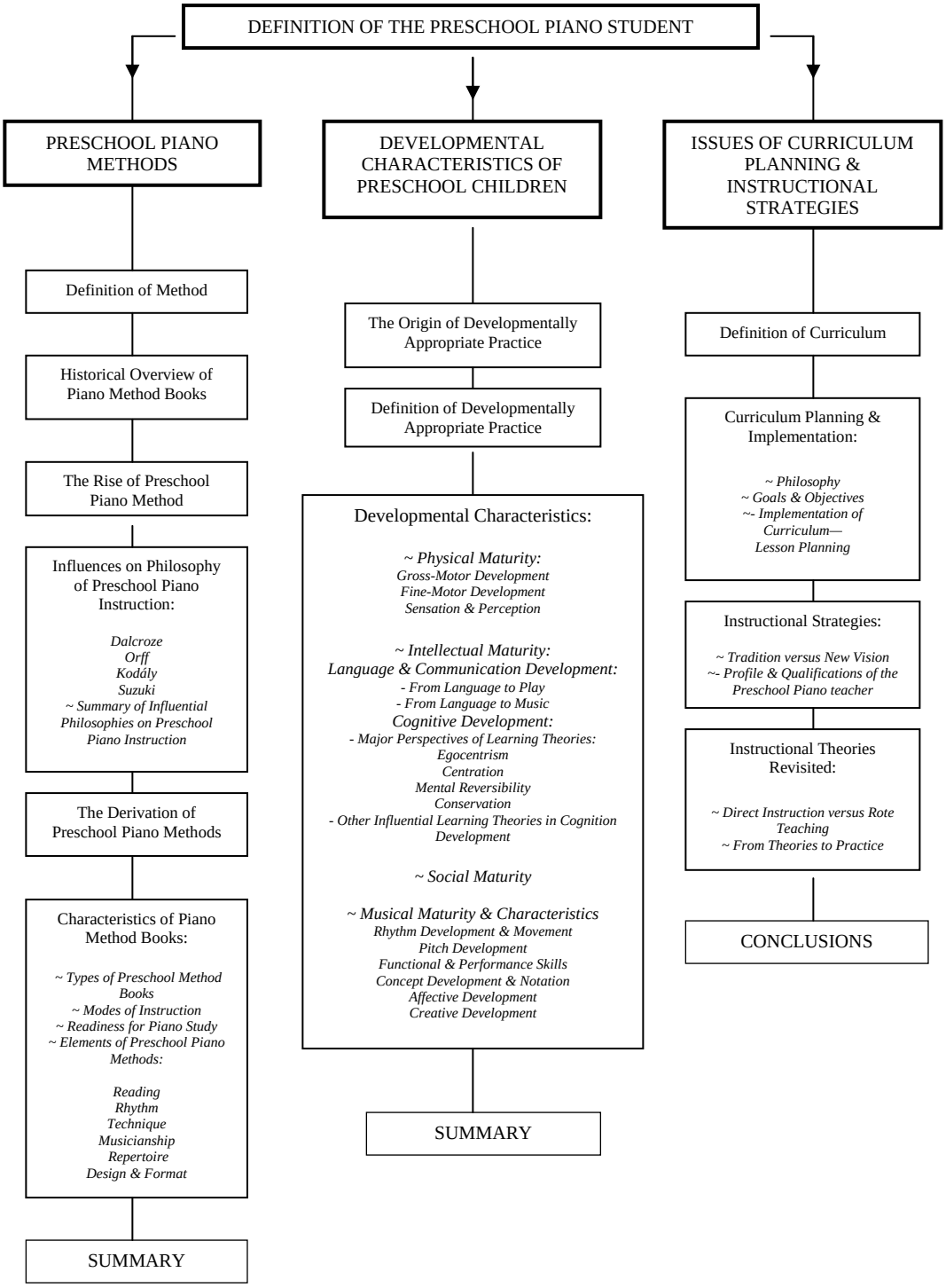
With the establishment of a definition for the preschool piano student, I now continue to review the literature related to preschool piano methods, followed by a literature survey of age-related developmental, learning, and musical characteristics of young children, and then the attitude and philosophy of the preschool piano teacher, issues regarding curriculum and lesson planning, and theories of instructional strategies. Individual sections will be devoted to each of these aspects. Please refer to Figure 1 on page 11 for an outline of the literature review.

PRESCHOOL PIANO METHODS

Definition of Method

The word *method*, according to the dictionary definition (Merriam-Webster Online Dictionary; Cambridge Dictionaries Online) implies a systematic procedure, technique, or mode of accomplishing something. More often than not, a method equals the promise of fruitful results that are derived from an integrated system of learning (Bastien, 1995). In the educational world, method means “a way of teaching someone to do something, and it often refers to showing someone how to perform a particular skill” (Uszler, Gordon, & Smith, 2000, p. 339). The pedagogical writing of Uszler, Gordon, and Smith (2000) contains valuable and unique information regarding the definition, history, and culture of piano method books at the time of this study, and thus serves as the main source in this segment of literature review.

FIGURE 1 LITERATURE REVIEW OUTLINE



As stated by Uszler et al., two types of methods exist in the field of music. Mostly before the 20th century, music methods were linked to particular schools of teaching or playing techniques as advocated by an individual (e.g., Breithaupt, Neuhaus) or by the embodiment of a national approach (Russian, French, or German). Beginning with the emerging interest in early childhood education during the 20th century, more and more music methods, especially those in the United States (Lyke, 1996c), encompassed psychological principles of learning and pursued a document format of an instructional nature, that demonstrated, according to Uszler et al. (2000), how the instrument should be taught, rather than the manner of playing the instrument.

Historical Overview of Piano Method Books

The birthplace of the piano method was Europe, where formal piano teaching was at its zenith in the first half of 19th century. Characteristics of these older piano methods take on the appearance of "essay-like advice, question-and-answer format, sequential exercises, lists of rules, analysis of styles, etudes" (Uszler, Gordon, & Smith, 2000, p. 339). Authors of these piano methods capitalized on their multiple talents; many were performers, teachers, conductors, piano manufacturers, and publishers, such as Clementi and Kalkbrenner.

In an effort to "show the way" of playing the piano, Richardson was among the many Americans who studied in Europe and made contributions to the emergence of American piano methods. According to Uszler et al.'s review of American piano methods, Richardson published the *Modern School for Piano-Forte* in 1859, which pioneered dance-like tunes with broken-chord accompaniments, entitled "Amusements," intermingled among the didactic principles and exercises. At a time when owning pianos

symbolized social status and those who learned how to play them were not necessarily pursuing virtuoso careers, Richardson's publication responded to the growing number of recreational players. From that point on, the American piano method books presented music fundamentals in a feasible format together with a variety of attractive music to ensure the joy of playing. Gradually influenced by interests in brain development, early childhood education, and learning theories, American piano methods transformed into instructional books that stressed approaches to teaching and study with unified skills of reading, rhythm, technique, repertoire, and keyboard skills as a whole (Lyke, 1996c). The quality of children's learning experiences was enriched by the addition of folk music and composed repertoire by method book authors.

The Rise of Preschool Piano Methods

During the second half of the 20th century, the integration of music teaching and learning, child development, and psychological theories developed into the norm for educational materials, and affected the vital philosophy in the construction of the piano method. The time came for the advent of preschool piano methods when music educators, method writers, and publishers realized that preschool-aged children needed a unique level of materials for piano study.

Influences on Philosophy of Preschool Piano Instruction

Piano teacher preparation at universities, colleges, and conservatories that did not address preschool aged children (Uszler, Gordon, & Smith, 2000), often put pianists and performers in awkward positions in regard to teaching very young beginners. This resulted in the hunt for adequate preschool music instructional materials that could be incorporated into piano lessons. Forces that Uszler et al. have named as influential and

relevant to preschool piano instruction include the music teaching methods of Dalcroze, Orff, and Kodály, the instrumental teaching of Suzuki, the educational theories of developmentalists like Piaget, and cognitive theorists like Bruner. Despite arising "from outside the United States," influential ideas from these musicians and educators "surface repeatedly in much preschool music education, even though these influences are not always adopted consciously or acknowledged" (Uszler et al., p. 37). In addition, the instructional theory of Gagné and the music learning theory of Gordon have generated considerable influence over the shaping of the preschool piano profession.

A brief review of music teaching methods by Dalcroze, Orff, Kodály, and Suzuki will be provided below. Discussion of the influences of the other individuals mentioned directly above, whose work did not focus primarily on music instruction, will be included in subsequent sections of this chapter.

Dalcroze

The Swiss music educator Émile Jaques-Dalcroze (1865-1950) devised a music teaching approach to improve aural skill by inspiring natural rhythmic responses involving the use of the whole body (Campbell & Scott-Kassner, 1995 & 2006). This approach includes three major elements: eurhythmics (harmonious rhythm), solfège (ear-training), and improvisation. Eurhythmics are best described by Uszler, Gordon, and Smith (2000) as exercised for stimulating awareness of the body's muscular rhythms and nervous sensibilities, such as breathing or the balance involved in walking, and for developing the ability to physically express aspects of music like metric patterns, melodic progression, and dynamic change. The early stage of eurhythmics instruction prepares the "human instrument" by exercising body rhythms and movements of ordinary life,

sometimes with singing, other times without music (McDonald & Simons, 1989). Once becoming proficient, children will discriminate and respond to even “the slight gradations of duration, time, intensity, and phrasing” (Campbell & Scott-Kassner, 1995, p. 48) by means of physical and spiritual resources. Throughout the Dalcroze triangle training, imagination, aural sensitivity, and the immediacy of response to the musical stimulus serve as the keys to musical accomplishment.

The development of eurhythmics is enriched by broad training in solfège, ear training, and keyboard improvisation. Daily singing of songs is encouraged in combination with solfège exercises and vocal improvisation. The solfège training contains sequential exercises that are graded for the study of theory and practice of music fundamentals (Choksy, Abramson, Gillespie, Woods, & York, 2001). A reading approach called sol-fa reading (McDonald & Simons, 1989) incorporates notes placed on a one- or two-line staff, which in turn inspired some piano method writers to introduce music reading with the partial staff system, for example, Frances Clark’s *Time to Begin* (1955). By means of the musical foundation of eurhythmics and solfège, the improvisational component brings children “to a freedom to expression through movement, in rhythmic speech, with instruments, or at the keyboard” (Campbell & Scott-Kassner, 1995, p. 50). The initial preparation for improvisation is precise imitation. Experiences based on imitation will accumulate and serve as the repertory of movement and musical ideas from which children can draw for improvisation. Vocal or keyboard improvisation is used at the beginning stage to convey rhythmic ideas in any style and tempo. Throughout the Dalcroze triangle training, imagination, aural sensitivity, and the immediacy of response to the musical stimulus serve as the keys to musical accomplishment.

Orff

Influenced by Dalcroze's belief that the primacy of music is rhythm and movement, the German composer Carl Orff (1895-1982) and his colleague founded a school of music and gymnastics to teach "creative musicianship" to all children (McDonald & Simons, 1989). The experience with such a school established the origin of the Orff Schulwerk (translated "schoolwork"), which encompassed "the natural behaviors of childhood—singing, saying, dancing, playing, along with improvisation and creative movement" as the key elements of music making (Campbell & Scott-Kassner, 1995, p. 53-54).

The major components of the Orff approach are exploration and experience. Adapted for use in the United States, these two components were extended into four: imitation, exploration, literacy, and improvisation. According to Choksy, Abramson, Gillespie, Woods, and York (2001), "Imitation is the oldest mode of learning" (p. 108); while its early stage is filled with observation, its ultimate form connotes creation. In the Orff process, imitation can occur during songs or movement activities using either body or instrumental percussion, in the form of a simultaneous performance, a canon, or an echo. During the process of imitating, exploration emerges in every aspect of music learning. Body positions and motions represent the initial stage of space exploration that serves as the foundation for movement (Choksy et al., 2001). Environmental sounds and sounds without organization are the beginning materials for sound exploration. Use of the voice as a sound source is regarded as the standard for speech and singing. Literacy or "competency in reading and writing music" (Campbell & Scott-Kassner, 1995, p. 54) should germinate from children's extensive musical experiences and later develop into

their ability to work with both graphic and conventional staff notation. Beside the idea of experience before literacy, the Orff Schulwerk advocates teaching the rhythmic notation of quarter or half notes before melodic notation (Campbell & Scott-Kassner, 1995 & 2006), which then would use a limited set of pitches, such as sol-mi or mi-re-do. The ultimate aim of the Orff process, according to Campbell and Scott-Kassner, is improvisation, during which the child not only demonstrates comprehensive musicianship, but also invents musical ideas emanating from earlier learning.

All four Orff components can be integrated with various media including body percussion, voice, and pitched and non-pitched instruments. Nonetheless, as Uszler, Gordon, and Smith (2000) reported, proponents of the Orff Schulwerk approach preferred the use of simple mallet-playing instruments to the complicated finger operation at the piano. The musical materials used are often folksong-like at nature. Frequently, musical pieces are set in a pentatonic mode with ostinato patterns, pedal tones, or tonic drones in order to ensure success in ensemble playing. This successful experience in turn improves and enhances the sensitivity in movement and sound production.

Kodály

The Kodály approach has received more attention in American elementary music curricula than other teaching methods. Beginning in the 1940s in Hungary, the Kodály method was developed by the composer Zoltán Kodály (1882-1967), his colleagues, and his students as a comprehensive system of music education, based on the belief that music is for everyone (Choksy, Abramson, Gillespie, Woods, & York, 2001). This comprehensive curriculum contains content and sequence “derived from children’s musical development and from their musical literature” (Campbell & Scott-Kassner, 1995,

p. 51). With a curriculum that is highly structured and sequenced and closely related to child development, the ultimate goal of Kodály instruction is the development of music literacy (Campbell & Scott-Kassner, 1995 & 2006). Melodic and rhythmic patterns of singing games and nursery rhymes serve as the foundation for developing children's perceptions of melody and rhythm. Cognitive comprehension of intervallic relationships comes from repeated chants, "not from the presentation of patterns connected to an understanding of scale formation" (Uszler, Gordon, & Smith, 2000, p. 40). Interestingly, the uniqueness of the Kodály method, according to Choksy et al. (2001), is its combination of "borrowed" teaching techniques under one universal philosophy, including the hand signs corresponding to solfége syllables developed by Curwen in England and rhythmic syllables ("ta ti-ti") invented by Chevé in France.

The voice is identified by Kodály as the most natural instrument. Like Orff, art songs or folksongs used for instruction employ limited ranges and pitches (sol, mi, la, re, and do) and are typically sung unaccompanied (McDonald & Simons, 1989). According to Kodály (as described by Campbell & Scott-Kassner, 1995 & 2006), only folk music that carries cultural heritage and art songs that reflect musical tradition represent a high enough quality of music suitable for young children. In addition to singing, the Kodály method also emphasizes the development of inner hearing and musical memory. The theory of inner hearing, or the ability to think musical sounds without external voicing (Choksy et al., 2001) echoes what Gordon called audiation—the ability to hear the sound that is not physically present—and can be exercised through thinking the sound of designated phrases "in the head," without performing them out loud. Training of this kind not only helps to develop the ability to think and comprehend musical sounds, but also

aids the advancement of musical memory. Similar to methods used by Dalcroze, full body movements are used to express rhythms and melodic shapes at the early stage. However, whole-body movements are gradually replaced with the use of hand signals, which are then transformed into reading notation (Uszler et al., 2000).

Despite a seeming dominance of singing, the use of instruments is included; "although not until after children have learned to read and write music as a result of vocal experiences" (Uszler et al., 2000, p. 40). The role of the piano, either as a concept teaching tool or as an accompanying apparatus, remains insignificant due to the fact that a cappella singing is the preferable mode of learning and teaching in the Kodály method.

Suzuki

Designed to teach instrumental performance to the very young, the Suzuki method is known as Talent Education (McDonald & Simons, 1989; Suzuki Method: Talent Education Research Institute, n.d.) introduced by the Japanese music educator Shinichi Suzuki in the 1950's. The philosophy of the original Suzuki violin method is rooted in the "mother tongue" approach that parallels learning to play a musical instrument with "learning to speak through imitation and feedback from parents, adults, and other children" (McDonald & Simons, p. 166). Hence, instead of focusing on reading at an early age, the Suzuki Talent Education program smartly guides the young child to rely on his/her innate hearing capacity and delight in the repetitive imitation. Although Talent Education is not a general music method geared for group teaching *per se*, many strategies of the Suzuki method, such as rote instruction, movement and pitch imitation games, and parental involvement, can be transferable to general music teaching.

Rote teaching is at the heart of the Suzuki method, consistent with the joy that young children experience through imitation and repetition, (McDonald & Simons, 1989; Uszler, Gordon, & Smith, 2000). Imitating also extends to activities away from the instrument while children exercise rhythmic movement and singing games. Suzuki students use their own voices to associate with pitches and melodic patterns that are to be played. Child-appropriate teaching strategies are introduced in the form of various instructional games. Examples provided by Tolbert (1980, in McDonald & Simons, p. 167) include "collapsed left wrists are tickled; bow hands first learn to shape themselves into rabbits who can wiggle ears and eat carrots and bows." Recordings of assigned musical pieces are sent home with the pupils, so that the proper learning experience can be reinforced outside the studio. Another ingredient to the success in the home learning is parental involvement. Talent Education not only encourages parents to attend all lessons, but also prepares parents to play the instrument. These educated parents will carry on the method at home on a daily basis. The bond of parental involvement in instrument learning is parallel to that which occurred while the child learned his or her native language. A similar philosophy regarding the parents' role as the teacher at home can be encountered more recently in the United States in Gordon's (1990) learning theory for newborn and young children.

The effective and successful performance of Suzuki violin students stimulated teachers of other instruments to consider the possibilities of adapting Suzuki's teaching strategies. Based on more than fifteen years of accumulated experience, the Suzuki Piano School began in 1970, symbolizing the official beginning of the Suzuki teaching philosophy applied to other instruments, most notably stringed instruments. Although

criticisms of Suzuki musical materials including that they are homogeneous without contemporary compositions (McDonald & Simons, 1989), and that they are successful primarily within certain cultural expectations (Uszler et al., 2000), the fact that Suzuki trained four-year-olds to play instruments with precision and finesse has resulted in the acknowledgment of the importance and contributions of Suzuki techniques for instrumental instruction for young children.

Summary of Influential Philosophies on Preschool Piano Instruction

The applied nature of music teaching methods by Dalcroze, Orff, Kodály, and Suzuki has made a direct impact on preschool piano philosophy and instruction. The foremost characteristics of the aforementioned music teaching methods indicate several universal aspects:

1. The principle experiences illustrated in each method are developmentally appropriate: moving, singing, listening, and imitating are very natural behaviors that young children enjoy.
2. Albeit that they are based on different philosophical beliefs or strategies, the goal of all of these teaching methods aims at the child's ownership of total musicianship, encompassing exploration and experience of music, physical and spiritual understanding of music, and music reading ability.
3. The sense of rhythm is the primary skill to establish; even before the sense of pitch (most evidently in Dalcroze and Orff). Movement and aural skills play important roles in the matter of capturing the rhythmic sense.
4. All four music learning methods advocate that music notation not be introduced until adequate musical experiences have been obtained. The

importance of “experience before sign” has been discussed extensively and recognized by various music education researchers as the developmentally appropriate practice in the musical environment (Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985; Hart, Burts, & Charlesworth, 1997; Jordan-DeCarbo & Nelson, 2002; Kenney, 1997; McDonald & Simons, 1989; Neelly, 2001; Peery & Duru, 2000; Pohlmann, 1994/95; Zimmerman, 1981).

5. When music notation is introduced, instruction using rhythmic and melodic patterns is preferred over teaching single rhythm values or notes in isolation. Because most children learn songs by rhythmic and melodic patterns in phrases, the rationale for this type of instructional sequence endorses the philosophy of meeting the children where they are developmentally (Andress, 1992; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; McDonald, 1979; McDonald & Simons, 1989; Rennick, 2000; Sander, 1994) in order to respect and extend the child’s previous experiences, musical or not.
6. Musical materials contain traditional and folk songs, songs from the western classical fine art tradition, high-quality music composed for children, and improvised music.
7. Instructional sequences begin with imitation of rhythmic or melodic patterns that in turn lead to the complete musical vocabulary, enabling creativity through improvisation.

8. Repetition is represented throughout these instructional techniques. This is effective with young children who not only use it to achieve mastery but also enjoy the trial-and-error process (Bredekamp & Copple, 1997).

Within two of the music learning theories, the piano is not used in instruction for young children, for reasons consistent with the philosophical approach. This, however, does not necessarily diminish the value of piano in early childhood music. The element of parental involvement is unique to the Suzuki approach. Recognizing the parents as the child's first teachers (Carson, 1994) adds strength to instrumental learning, and is consistent with the line of interesting research on the positive effects of parental involvement on music learning (Berger & Cooper, 2003; Custodero & Johnson-Green, 2003; Zdzinski, 1992a, 1992b, &1996).

The Derivation of Preschool Piano Methods

The philosophy behind the idea of creating preschool piano methods may be valid, but evidently, preschool piano methods seem to have been secondary products added on to existing piano method series, not the first books written (Uszler et al., 2000). There seem to be several primary reasons for the later development of preschool-level books. The benefit of early formal music experiences described by a number of authors and researchers, and the presented in the popular press and media in the 1990s (Alvarez, 1993; Andress, 1986; Bastien, 1995; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985; De Yarman, 1975; Gordon, 1990; McDonald & Simons, 1989; Palmer, 1993; Rauscher, 1999; Rauscher, Shaw & Ky, 1993; Zimmerman, 1971) stimulated interested parents to arrange lessons for their preschool children. Materials covered in the elementary method books did not match the level of children who came to the lesson, resulting in a demand

for a different kind of piano method than those already existing. A lag between children's prior experiences and material presented in the method books resulted in a need for a developmentally appropriate alternative. This frustrating experience of first lessons is expressed in Enoch's (1996a) contemplation, "It is possible that the average lesson is often geared too much towards the talented student, requiring an early discipline that is remote from the ordinary student's vision of his own future ability" (p. 24). In accordance, Collins (1996) wrote that method books designed for average-age beginners could not suit the needs of four- and five-year-olds, because "the pacing is usually too fast and the visual presentation too complex for preschoolers to follow" (p. 43).

Another reason for the later development of the preschool books is based on marketing decisions. According to Uszler et al. (2000), "If a series is selling well, publishers and authors look to build a library of related books, and preschool or preparatory books often fall into this category" (p. 46).

Characteristics of Piano Method Books

While the purpose of this study is to analyze the specific characteristics of selected preschool piano methods in detail, there are a number of general aspects to consider that are relevant to the analysis, and which have been discussed in the literature. These include (a) types of piano method books, (b) modes of instruction, (c) the readiness for piano study, and (d) elements of piano method books.

Types of Piano Method Books

Generally speaking, piano methods display one of three characteristic styles. They are: (a) the chord-along approach, (b) the music and movement program, and (c) the piano readiness course.

The chord-along piano methods provide a basic introduction to music, in which the piano serves as a teaching tool. According to Uszler et al. (2000), this design produced methods “less performance oriented” (p. 349) than the piano teaching materials in current use. Robyn’s *Teaching Musical Notation with Pitcture Symbols* (1932) and Ada Richter’s *Kindergarten Class Book* (1937) were the representative methods for the chord-along style (Uszler et al., 2000).

The second piano method style—the music and movement program—is inspired by the ideals of early childhood music programs such as Kindermusik (developed during the 1960s in West Germany) and Music Together (developed in the United States in the 1980s). Writers of this preschool piano approach superimpose the essence of music and movement curricula onto the existing piano curriculum. CaraboCone’s *A Sensory Motor Approach to Music Learning* (1969) illustrated best the spirit of this method type (Uszler et al., 2000).

The third style of piano method books represents the focus of this study. The label—piano readiness—speaks to preparing the young child for playing the piano. As summarized by Uszler et al. (2000), two trends surfaced for this third style: (a) the whole-body approach, and (b) the traditional approach. The whole-body approach combines elements of music and movement instruction (whole-body movement or musical activities) “with the development of skills that enable one to play a keyboard” (p. 46), whereas the trademark of the traditional approach is to “get right down to the business of developing playing and reading skills” (Uszler et al., p. 46). Movement activities are purposefully left out most likely because traditionally, piano students “were expected to memorize” the musical fundamentals “before beginning to play the instrument” (Uszler et

al., p. 342). As a result, the intellectual domain of the player is highly engaged, while the physical domain is limited to the use of movements from arms, hands, and fingers while the child is seated at the piano. Most of the current piano methods fall into the readiness style (Uszler et al., 2000).

Modes of Instruction

Three modes of instruction are commonly recommended for lessons in preschool piano methods: (a) private, (b) group, and (c) both private and group lessons. Traditionally, the private lesson has been the primary mode for piano instruction. This "active teacher/passive student" (Uszler, 2003, p. 9) format is derived from the tutorial system of master/apprentice training, in which the teacher master serves as both the guide and model in piano lessons. Lyke (1996b) offered a description of the private piano lesson:

> Stated simply, the piano student prepares a body of work including several pieces, technical assignments and perhaps some theory papers. At the lessons, pieces are critiqued, suggestions made, demonstrations given, and written assignments, checked. (p. 29)

This traditional mode of private teaching has an oral and aural background, relying on students "imitating how the teacher plays" (Uszler, 2003, p. 9) and serves as the major mode of instruction for many of today's preschool piano methods.

Besides private teaching, some methods specify that their approach can also, or should only, be used in a group setting. Lee (1980) reported that group teaching represents a growing movement within the independent music teaching profession. According to Lee, the principle motivation for group teaching lies in "the stimulation, competition, and added excitement of the group dynamic" that inspires students to better learning (p. 16). The application of group teaching embraces a longer amount of lesson

time per week for students and affirms the responsibilities of the teacher to developing comprehensive musicianship (Lee, 1980; Lyke, 1996b). Descriptions concerning group teaching reveal that a broad curriculum can be introduced, class management and group techniques implemented, opportunities for solo and ensemble performances increased, and frequent evaluative conversations from the teacher to students and between peers exchanged (Lyke, 1996b).

In practice, the "both" teaching mode combines the private lesson with a group lesson in musicianship skills. Scheduled weekly and sometimes charged at an additional fee, musicianship classes are used to "fill in the musical gaps with activities" that "the private lesson leaves with little time to" (Lyke, 1996b, p. 33). For the regular private teaching, concentrations on pieces, techniques, and individual problems occupy the lesson time. If organized skillfully, preschool children will benefit from advantages of both the private and group instruction; if not, chaos may follow. Decisions on when, what, and how to use the material accordingly will depend on the discretion of the teacher.

Readiness for Piano Study

Many method books provide information about evaluating readiness for piano study, such as evaluating the ability to sing, to match, or to discriminate rhythms and pitches (Enoch, 1996a), as well as to assess the level of a child's listening skill or even writing skill (Bastien, 1995). Either as guidelines for the interview procedure or in the form of a detail-packed "readiness test," these features orient the teacher for the interview and assist in determining the readiness of each prospective student individually. Although many methods are designed for the use with both private and group lessons, only one type of interview test is offered for both instructional settings.

In considering the readiness for applied instrumental lessons, Kaesler (2002) conducted a survey to uncover "the portraits of the ideal beginning piano students" (p. 15). A questionnaire was sent to a nonscientific sampling of about 50 independent music teachers, containing one open-ended question—"What musical skills or developed responses would you like to see in a young beginner that would elicit your desire to have him/her become a keyboard student in your studio?" (p. 15). Analysis of responses returned from the field revealed two general qualities of the ideal beginning pianist: (a) ability and skill and (b) attitude and involvement.

The first quality on the list, ability and skill, was divided into six areas of concern: (1) The notion of beat competence denotes that the sense of pulse should not be a foreign attribute to the prospective student; (2) Children should demonstrate the ability to sing, to listen, and to distinguish musical material with verbal and physical responses; (3) Children also demonstrate the cognitive ability of symbol reading and understanding (e.g. rhythm notation, alphabet letters, color symbols and pictures) by responding verbally and physically; (4) Children exhibit understanding of basic concepts like high and low, loud and soft, slow and fast; (5) A concentration span of 25-30 minutes; and (6) physical maturity, with "good eye-hand coordination and a degree of finger dexterity" (Kaesler, 2002, p. 24). Overall, these qualities describing ability and skill reveal an emphasis on the musical, intellectual, developmental, and physical maturity of children.

The second quality of the ideal piano student is concerned with attitude and involvement. To all participating teachers, the eagerness of the child and the support of the family represented the key characteristics. The eagerness of the child designates a "social maturity" that encompasses the student's attitude, curiosity, and interest to

explore the world of music, as well as the desire and ability to "pay attention, follow directions, and be comfortable with the teacher" (Kaesler, p. 24). The second key characteristic, the background of the family, included continuing commitment and support, and the parents' duty in assistance with assignments and scheduling practice.

These qualities, related to the child's levels of musical, intellectual, developmental, physical, and social maturities, coincide with interview criteria as provided by Bastien (1995). The lag between the reality of a young child's early musical experiences with the rather sophisticated requirements for instrumental readiness from the teachers' perspective forces educators to contemplate a remedy to bridge the gap. As a result, the transitional instrumental curriculum to connect both sides of the gap emerged (Azzara, 2002; Grunow, 1999; Hannagan, 1999; Tarr, 1999), developed primarily by music educators who also have an applied instrument background.

The issue of instrumental readiness remains an unresolved subject in the profession. Whether requiring the ability to sing in tune, to move the body to a "consistent" tempo (Grunow, 1999, p. 16), or the capability of experiencing musical sensations (McDonald & Simons, 1989), the start of instrumental study should capture the desire of the children to learn music and make connections to their previous experiences.

Elements of Preschool Piano Methods

Although not specifying the elements of preschool piano methods, Uszler et al. (2000) did delineate the content coverage of average piano methods in a systematic manner. Given that the nature of the preschool piano books almost always falls into the category of a side-line product (peripheral to the main piano method series for which it is

preparatory), it may be assumed that either structures or elements of the preschool level would follow the design of the already established elementary-level counterpart. In this section, general elements of preschool piano methods will be discussed, including (a) reading, (b) rhythm, (c) technique, (d) musicianship, (e) repertoire, and (f) design and format.

Reading

Music reading is a complex, multi-dimensional endeavor. This involves "seeing symbols, conveying the symbols to thought centers, sending physical signals to the body, realizing the sound" (Richards, 1996, p. 56). Richards' definition implies that eyes are to be kept on the music while reading. In the specialized case of "sightplaying" (Udtaisuk, 2005, p. 6), pianists' eyes move ahead of their hands. According to Udtaisuk, the execution of sightplaying relies on the physical navigation of the pianist to scan the range of specific note groups, rather than to depend on his/her visual monitoring. Given that learning to play at sight represents one of the many functions of studying the piano, teaching music reading is a primary goal and responsibility of a piano teacher (Chronister, 1996). Historically, the same goal and responsibility of the instructor were also assumed back in the 19th century—an era where pupils "were expected to memorize the basics before beginning to play" (Uszler et al., 2000, p. 342). While method books may have supplied technical guidance and presented facts in the form of exercises, etudes, and diagrams with supportive commentary, they did not offer the teachers sequenced instructions of how to teach music fundamentals. At the dawn of the 20th century, attention to a more systematic way of teaching reading and rhythmic skills began to emerge in the piano method books.

The significance of reading proficiency as a goal of piano study can be seen in method books for all age levels. Quarter and half notes on the staff, presented soon after with a time signature, are familiar images inside these method books. The backbone for the emphasis on music reading is that the skill of learning *by reading* rather than *by rote* creates "a worthwhile music experience" (Chronister, 1996, p. 71), which in turn awards the learner with a sense of accomplishment, motivation, and independence. With proficient reading skill, advanced music making is a joyful challenge.

In order to teach fluent music reading, piano teachers should be aware of the difference between "music reading" and "note naming" or "note spelling." The difference between these concepts is that the former engages interval recognition, relationships among notes (or groups of notes), and phrases and sections in the context of the entire musical work, while the latter focus only on the naming of each single note.

According to Richards (1996), music reading that involves intervals helps to develop aural imagery in the relationship of sounds. Building the auditory memory while music notation is not present has been coined "audiation" by Gordon (1971). This auditory link serves well at the stage where the child's cognitive understanding of visual notation transforms to physical actions, with simultaneous evaluation of the sound result. If music is learned by note naming, Richards postulated, the musical performance typically retells the note-for-note sound recorded by the audiation process; whereas when learned by reading intervals, the auditory memory naturally reveals a sense of musical flow. Davidson, Scripp, and Welsh (1988) also advised music educators to "make sure the symbol system of the domain is not taught in isolation of perception" (p. 73). To

connect the musical mind to the musical ear, researchers also suggested making use of singing (Davidson, Scripp, & Welsh, 1988; McLean, 1999).

Music reading can be introduced in various ways. The early method books offered no explanation of the reading process or illustrations linking notes on the staff to keys on the piano. In the survey of Uszler et al. (2000), general elements of music reading that emerged in method books, such as Robyn's *Teaching Musical Notation with Picture Symbols* (1932) and the *Oxford Piano Course* (1928) by Schelling, McConathy, Haake, and Haake, encompassed the five-C (CDEFG) position for extended keyboard knowledge, concepts of directional reading, recognition of intervals, and a multi-key reading approach as the result of choosing keys to match children's singing voices. Among the early American method books that introduced elements to music reading, Thompson's *Teaching Little Fingers to Play* (1936a), so described by Uszler et al., was the most popular. It combined the representation of music fundamentals and graphics linking notes and pitch names on the staff with keys on the piano. Reading melodic lines divided between the hands with thumbs starting on middle C become the trademark of this method. General elements of music reading, as adapted from both Richards (1996) and Chronister (1996), indicate the following four steps:

1. Pitch direction: up, down, and same, with each direction taught independently and moving to the next when concepts are aurally, mentally, and physically mastered.
2. Keyboard topography: from black keys to white keys. Black-key groups, preferably the two-black-key group before the three-black-key group, serve as reference points for the white-key groups. This procedure gives

the student ownership of the entire keyboard. In addition, the introduction of notes in groups supports music learning theories of Dolcroze, Orff, Kodály, and Suzuki and Collins' (1985) suggestion of three-note group as the best learning pattern. But most importantly, Richards emphasized the need to "tie" the audible image of the keyboard sound to the visual image of the printed notation in this second step. This is consistent with the theory of connecting musical mind to musical ear (Davidson, Scripp, & Welsh, 1988; McLean, 1999).

3. From keyboard topography, music reading progresses to the introduction of the musical alphabet. With the knowledge of the relationship between black-key-groups and white-key-groups, the use of musical alphabet letters for naming notes becomes more meaningful.
4. Learning keyboard anchoring points, the notes learned for reference, as Richards (1996) called them, is a critical step, whereby the focus on five-finger hand position, notation on the staff system (either partial or grand), whole and half notes, line and space notes, and the feel of intervallic relationships both by reading and by doing, will take a different route for each method book.

According to Richards (1996), the four steps listed above characterize the basics of music reading suitable for the first lesson. The gross-motor movement of arms, pretend playing in the air, and tracing notes on the printed music all were used to aid in music reading. Furthermore, Richards advocated that teachers use printed music with large notes to enhance reading success.

Nevertheless, music reading requires readiness. Small children who "cannot read the assignment and work alone each day" (Chronister, 1996, p. 70) should maintain their musical experiences with singing, moving, listening, and playing by rote rather than reading music. The aforementioned statement proposes social maturity and intellectual maturity as indicators for reading readiness. Social maturity refers to the ability to follow instructions in a lesson and the assignment at home practice; and intellectual maturity denotes the comprehension capacity that the child demonstrates, sometimes in the form of writing. Regardless of age or music reading readiness, children should understand that "music notation is something that reminds us of what we already know" (Chronister, p. 72) and that music reading is only a tool that turns notation into music.

The role of audiation should not be neglected in dealing with music reading. In the investigation of making connections between early childhood music and beginning instrumental music, Grunow (1999) identified instrumental readiness as obtaining adequate early music experiences; moreover, he highlighted the significance of audiation engagement in the process of learning to read music:

> Those who begin instruction without that [instrumental] readiness face the daunting task of learning two instruments concurrently – the "audiation instrument" (the instrument in the head) and the "executive skill instrument" (the instrument in the hands). Too often, the first instrument is never learned, leaving the second to be played mechanically and unmusically. . . .
> Because their audiation is not engaged, those students often perceive music to be more of a visual art than an aural art. In reality, the imitation and decoding that typically occur in beginning instrumental music instruction is more closely related to intellectual behavior than to musical behavior. (p. 16)

This statement by Grunow (1999) clearly depicts a potential frustration of beginning instrumental study. Considering the young age of preschool children, proper preparation in the aural domain combined with singing, listening, and moving, as

Chronister suggested (1996), provides a solid foundation for future music reading. The component of visual music symbols can be introduced once broad aural experiences have been established. Even though the ultimate goal of the piano method points at proficiency of music reading, preschool children should be spared from overwhelming experiences that may frustrate them. In the western classical music tradition, music pieces are passed on to future generations using music notation; nevertheless, music reading will not serve its purpose if audiation remains unengaged.

Rhythm

Historically in piano methods, rhythm was taught by counting. Uszler et al. (2000) reported that metric counting (for instance, counting beats one, two, three, four to the meter of 4/4, or one, two, three to the meter of 3/4) is found in method books published before the 20th century. Although utilized as a means to assist the student to feel rhythm, "too frequently, teaching someone to count becomes the only teaching strategy used to help a student develop a sense of rhythm and an understanding of the principles of rhythmic notation" (Uszler et al., p. 343). Rhythm counting may have retained the spirit of capturing pulse and the grouping of pulses, but it certainly does not convey the nature of rhythm as a physical sensation, not to mention as the backbone of music. The use of counting systems represents only a tool to music ownership. The awareness and comprehension of the rhythm content is much more important. According to the investigation of Uszler et al. (2000), movement such as "swinging the arms, swaying the body, marching, dancing, [and] rhythmic games" (p. 344) are important for the establishment of rhythmic sense, before pitch awareness. Moreover, rhythm in patterns

should be experienced and felt, in stead of rhythm dissected in the single-note setting (Uszler, 2003). This capability is traditionally exercised through rote teaching.

During the mid-20th century, various counting systems started to emerge. Regardless of meter or metric placement, chanting the name of the note value, counting "one" for each quarter note, and "one-two" for each half note, or the use of neutral syllables such as "ta ti-ti" (for example, as used in the Kodály method), "du du-de" (Grunow, 1999), or "bum, bah" (Gordon, 1971), represent the most utilized counting systems in the profession. Today, most piano methods supply teachers with a variety of counting systems from which to choose, substitute from, or interchange as needed (Uszler et al., 2000).

Although the sense of rhythm should be established before that of pitch, as described above, the introduction of rhythm values often overlaps with pitch reading in piano methods. Rhythm does not appear to be regarded in its own right as the "backbone of the music," as advocated by Dalcroze and Orff. Throughout the reading process, Richards (1996) offered a very pitch-information-oriented procedure that includes identifying the names of pitches by saying and playing, determining the intervallic relationship between them, and figuring out the correct hand position, fingering, and the correct pitch with which to begin for each hand. The rhythmic element of the music reading excerpt was mentioned only shortly before playing, as Richards said, to "provide physical expression by counting, clapping, playing silently on a closed keyboard, or moving to the rhythm" (p. 67). Likewise, at the recommendation of Chronister (1996) to read music, the quarter note was included as part of the introduction to pitch reading on the staff system. At that point, Chronister's student learns to understand up, down, and

same pitches as line and space quarter notes in the printed music and play them at the keyboard. Chronister's viewpoint strongly relies on the rote experience that the young child obtains in playing before reading, and hence, assumes quarter notes are internalized as the steady pulse in the child's comprehension. With this belief, Chronister composed teaching materials and specified that:

> As we make new pieces using these basic fundamentals of pitch notation reading, we can also go beyond the basic fundamental rhythm we have been teaching. Once the student learns that a piece made of all quarter notes is played in a steady pulse, we can begin to add half notes and then dotted half notes. (p. 80)

To summarize, the actual exercise of learning rhythm in isolation is not evident in these rhythm learning theories for piano study. Even though the significance of building the rhythmic vocabulary is not emphasized in the given accounts, the presumption of adequate rhythmic experiences, with or without pitch information attached, should remain. If not, the challenge to decipher notational codes on the staff by playing without a clear idea of the rhythmic organization can be problematic to any young child and teacher. No wonder that in practice, many beginning pianists play a new piece in straight quarter notes, regardless of the actual rhythms notated. This is a rhythmic form that has been instilled in them while learning pieces composed of all quarter notes. Some beginning pianists cannot get beyond the quarter-note-rhythm syndrome, and apply it to all pieces. This could be prevented if rhythmic sense is established first, separately and before the concept of pitch is introduced (McDonald & Ramsey, 1992; Zimmerman, 1971).

Techniques

Akin to musical ownership through music reading, playing techniques represent the apparatus to ownership of the instrument. This notion is not only verified by Pace's

(2000) definition of technique as “the combined physical-mental-emotional capabilities one possesses to perform music at the piano keyboard” (p. 2), but also has been acknowledged by 19th piano method books in regards to “producing a virtuoso performer” (Uszler, Gordon, & Smith, 2000, p. 344). Logically, those technique-oriented methods displayed combinations of technical commentary, exercises, and etudes in order to prepare the virtuoso performer. According to Uszler et al. (2000), technical advice and commentary of American piano methods were usually printed in a preface, or occasionally in a teacher’s manual, while short exercises were either interspersed “among the pieces or within the text” (p. 344). Some of these piano methods offered isolated and sequenced technical explanations and pictures, others believed in technical demands developing from the music itself; thus technical drills in the early stage should be guided under the teacher’s total supervision, no home practice is suggested. Towards the mid-20th century, American technique books appeared as supplements to a series. Some technique books also evolved into a series of their own, such as Hirschberg’s *Technic is Fun* (beginning in 1941) and Burnam’s *A Dozen A Day* (beginning in 1950).

A summary of pedagogical views of teaching technique indicates two important aspects: (a) the knowledge of the body in connection with the instrument, and (b) the knowledge of the instrument through the body. There are five main issues that contribute to the way initial body knowledge is presented to children:

1. The whole-body philosophy. The importance of the physical movement of the body as a whole to technical development is recognized and addressed in this approach (Enoch, 1996b).

2. The recognition of the hand being an extension of the arm. This helps to prevent stiffness of hand muscles from developing. In order to feel good balance and a connection between the shoulder, elbow, and hand, Enoch (1996b) recommended that small children stand while playing.
3. The determination of the correct timing for the young child to sit at the piano bench. It is important to develop a correct sitting posture to allow for complete freedom of muscles and movements (Enoch, 1996b). The correct sitting posture is also recognized by Bastien (1995) as the basic technique for the preschool child. Suggestions such as having the child sit near the edge of the piano bench with a straight spine and knees slightly apart to keep the body balanced were included in many pedagogical writings (Bastien, 1995; Enoch, 1996b; Lyke, Enoch, & Haydon, 1996; Uszler, Gordon, & Smith, 2000). Additionally, according to Enoch (1996b), "small children will need a foot stool on which to place their feet and ensure body weight to transfer from one side [hip] to the other" (p. 107).
4. The experience of weight transfer. The best way to experience the transfer of the body weight is to play notes of black-key groups in every register at the keyboard. Not only should this type of freedom of movement over the entire keyboard be emphasized from the beginning, but it also reinforces the reality of the connection between the body and hands.
5. Good hand form and sitting posture. The playing hand should be held in a good arched position with knuckles as the highest point of the hand.

Enoch (1996b) suggested that the beginning student hold a solid ball in the palm of the hand and observe the position and the curve of the fingers around the ball while twisting the hand in all directions. The beginning student should then drop the ball into his or her other hand without losing the arched shape. The empty hand, maintaining the correct shape, can subsequently be applied to the keyboard.

Pedagogical views relating to the knowledge of the instrument through the body may be summarized into four categories:

1. The touch. It is often suggested that the black keys played at the beginning of study, using the hand in a fist, the index finger braced with the thumb, or fingers 2, 3, and 4. To use the large muscles from the beginning, Bastien (1995) suggested having the child raise the forearm with the third finger raised in the air over the particular key, and then drop it on to the key with arm weight. As a result, the initial touch at the keyboard acquires a *nonlegato* touch. Such a touch demands the hand move "in conjunction with forearm and/or causes the hand to be directed from the shoulder" (Uszler, Gordon, & Smith, 2000, p. 345), consequently fostering the feeling of arm-weight with the use of larger movements in the production of rich tones. Enoch (1996b) described the touch as "pulling" the key down, not "pushing," in order to avoid too big a distance from the shoulder to the finger. Teachers should not worry too much about the soft sound the young children produce during the early stages of study, since the volume of the sound will increase with time. Enoch (1996b)

recommended a light *portamento* touch, based on the ideas of the renowned Russian piano pedagogue Neuhaus. The preference for this light *portamento* touch was believed to avoid stiffness at later stages. But, the most decisive justification may be that the simple freedom and physical feel projected by the *nonlegato* touch attracts young children the most (Chronister, 1996, p. 76).

2. Quality of sound production. The quality of sound production is dependent on the speed of the hammer striking the string. Likewise, the speed of the finger playing the key at the keyboard controls the speed of the hammer, which in turn affects the loudness projected by the struck string.
3. Listening skill. Good playing techniques develop from good listening skills. Whether loud or soft, detached or legato, the beginning student should be aware of sounds that he or she is producing at the piano.
4. Scales. Termed "the staple inclusion in beginning piano books" (Uszler, Gordon, & Smith, 2000, p. 346), the one-octave scale serves an important role in teaching thumb crossing. In this way, it provides a technique to allow the expansion out of the five-finger position. Building a scale and playing a scale represent two different levels of cognitive and physical requirements and experiences. Recent piano method books expose the beginning student to the scale displayed as a concept long before the playing of a single-hand scale. Traditionally, thumb crossing was introduced to tuck under the third or the fourth finger in order to complete the scale single-handedly. The preparation of the thumb motion evolves

into a crossing-over-the-thumb movement (Enoch, 1996b; Uszler et al., 2000) that is believed to be a more effective training than the thumb under for the continual thumb adjustments during the multi-octave scale activity. In regards of the use of the thumb, the rotation of the hand remains an indispensable agent to prevent awkwardness and stiffness (Bastien, 1995; Enoch, 1996b).

In summary, the combination of both aspects of technique teaching, namely the knowledge of the body in connection with the instrument and the knowledge of the instrument through body, ensures the development of appropriate music-making techniques. Without each other, well-balanced technical development is incomplete.

Musicianship

The meaning of musicianship implies all the musically-pertinent qualities enabling a human being to be a well-rounded musician. Hence, musicianship is more than just learning music theory; it is the integrated comprehension of multi-faceted musical components, such as history, theory, music reading, essential musical concepts, applied analysis and improvisational skills, creativity, as well as listening skills and sight singing involved in solfège training (Lyke, 1996a).

During the 19th century, according to Uszler et al. (2000), musicianship instruction was slighted in favor of method compendiums of technical exercises and repertoire. Teachers who used technique-oriented piano method books may have found little time to incorporate musicianship as part of piano study. Even today, it appears that many of piano teachers, especially novice teachers, rely on method books to organize teaching, such that the versatility and quality of the method book strongly affects their

competency and ability to deliver instruction. Designed to address these concerns and improve the quality of instruction, adequate and effective piano methods aiming at overall musicianship skills were published in the first decades of the 20th century (Uszler et al., 2000). The prototype of this genre took advantage of the piano as the natural instrument for teaching musicianship offered related information within the method book format. Consequently, this genre of the modern piano methods designates, according to Uszler, et al., the instruction of music fundamentals as the focus and conveys the belief in music making at the piano as a manner of personal expression. The following comment by Uszler et al. (2000) refers to the *Oxford Piano Course*:

> This ground-breaking course advocated singing before, and while, playing; directed immediate attention to the establishment of the five-finger position in many keys; notated music in phrases; introduced the primary triads as resources for harmonization very early; included unfinished musical phrases and pieces to stimulate creativity; and gave directions for "varying" pieces and "creative practice." All of these emphases were an indication that performing was not the only goal of piano study. (p. 346)

Besides using singing, creative thinking, and a multi-key approach in the O*xford Piano Course*, methods like Thompson's *Modern Graded Piano Course* (1936b) emphasized the same-different discrimination of rhythm and pitch material while still continuing the middle C tradition. Gradually, the new genre demanded a greater integration of performance and functional skills with comprehensive musicianship; the amount of such combined information expanded the number of correlated books that were published individually, but used in conjunction with one another. The mature form of the new genre encompasses an extensive coverage of the elements mentioned, including developing functional skills such as reading, a sense of rhythm and pitch, singing and moving to understand music, preparing for performance using quality

repertoire and essential techniques, exercising the knowledge of musicianship through harmonization, transposition, improvisation, and creative activities. The inclusion of all these pertinent aspects expedites well-rounded music learning.

Before completing this discussion of musicianship, the topics of music improvisation and creativity warrant further consideration. While it is generally believed that playful and improvisational musical experiences foster students' creative potential, most teachers feel less confident in their abilities either to initiate improvisation nor inspire creativity, mostly due to their "limited knowledge or skill" (Pace, 1999, p. 2), obtained from their own musical training, or "little guidance" provided in existing curriculum for "making clear connections [from research] to applications in the classroom" (Hicky, 2002, p. 410). According to Lyke (1996a), the creative session can be easily generated in a musicianship class, where students "learn from one another through hearing, comparing, evaluating and emulating the better efforts" (p. 99). Lyke suggested that, starting at the early stage of music study, students improvise with every new set of notes or rhythms presented, and based on those, invent other interesting motives, ostinato patterns, or contrasting musical responses. Uszler et al. (2000) indicated that the teacher's manuals attached to piano methods books or workshops usually offer specific ideas regarding how to improvise; such information should be helpful to interested teachers. Development of improvisational skills and creativity requires extensive experiences with related activities and materials.

Repertoire

At the early stage of music study, educators recommend examining "what children are doing musically in their spontaneous music-making activities" and "taking

cues from the children" (McDonald, 1979, p. 6). In other words, songs and rhymes with text related to daily life and those with which the young children are familiar represent the most appropriate repertoire choices to engage learning (Pohlmann, 1994/95). This is consistent with Kodály's philosophy that "the folk songs of a child's own linguistic heritage constitute a musical 'mother tongue' and should therefore be the vehicle for all early instruction" (Choksy, Abramson, Gillespie, Woods, & York, 2001, p. 83). Questions about "the nature and quality of the music the student plays and hears" (Uszler, Gordon, & Smith, 2000, p. 21), and concerns surrounding the tastefulness and appeal level to children as discussed by Bastien (1995), can find their answers in the advice of the music teaching theories of Dolcroze, Orff, Kodály, and Suzuki, that both folk and composed music of the highest artistic value should serve as the repertoire choices for teaching young children. In accordance, the curriculum guide offered by Debra Gordon (n.d.) on the official MENC website specifies that literature choices for learning should be "worthwhile, motivating, and important in order to provide a general, fundamental base" (p. 3) involving singing, movement, listening, improvising, performing, and reading music.

To translate the above statements into preschool piano repertoire choice, method books should start the young beginners playing with familiar folk songs and traditional nursery rhymes that they already can sing and chant. Music with appealing melodies and artistic value represents the appropriate repertoire for the preschool children, from which valuable musical experiences and learning can be fostered. The preschool piano repertoire also comprises music composed or prepared by the piano method authors to serve the purpose of concept teaching. This type of composed repertoire typically

includes text for singing. Besides folk, traditional, and composed songs, the study of classic repertoire of a variety of cultures, styles, and time periods can nurture the development of children's musical taste (Gordon, n.d.).

Collins (1996) highlighted aspects of words, length, and repeated patterns to the song as compositional aspects to be considered in repertoire for young children. Collins believed that "singing helps keep the flow of music going and prevents undue rhythmic hesitation" (p. 43). Repeated words and repeated melodic phrases in a short piece can facilitate children's assimilation and thus accelerate learning (Pohlmann, 1994/95). This view coincides with the principles of Dalcroze, Orff, Kodály, and Suzuki, which recommend that children learn rhythm and pitch materials through repeated patterns and repetition.

Design and Format

Design and format elements of the preschool piano method center mostly on the color scheme of the illustrations or graphics, legibility and size of print, and structural layout. Concerns related to design and format found in piano pedagogy writings pose general questions such as, "is color used?" (Bastien, 1995, p. 43) or "are the graphics and format attractive, tasteful, pertinent, or excessive?" (Uszler, Gordon, & Smith, 2000, p. 21).

In their evaluation of preschool piano methods, Uszler et al. (2000) did not extend their attention to the choice of color. They instead shared their opinions on the overall expression of illustrations within the given method and devoted one sentence to describe this. For the series *Music for Little Mozart* (1999), Uszler and her co-authors wrote, "the graphics and layout are colorful and uncluttered" (p. 47), while for *Bastien's Invitation to*

Music (1993 & 1994), they indicated, “all the books have attractive and meaningful artwork” (p. 48). The authors of this authoritative pedagogical text graded the format and illustration of *Sing and Play* (1981 & 1987) as “plain and colorless, but the layout is readable and uncluttered” (p. 49) and commented on the same aspects of *Prep Course for the Young Beginner* (1988) with “the graphics are entertaining as well as instructive” (p. 52).

In general, the visual presentation of the book should be readable and uncluttered (Bastien, 1995; Collins, 1996), the illustrations attractive, entertaining, and supportive of the given concept that is intended for learning (Uszler, Gordon, & Smith, 2000), and the size of type and music large enough for differentiating line notes and space notes (Bastien, 1995; Collins, 1996). Specifically what constitutes a readable and uncluttered visual design is not detailed, however. Bastien (1995) recommended a non-cluttered placement of the marginal material. Richards (1996) indicated that a larger print enhances success in music reading. Collins (1996) advised not to offer “too much clutter of symbols” (or complex visual and text presentation) “that are not absolutely necessary for the immediate task” and this could be distracting (p. 43). Simple illustrations that reflect the immediate task may serve the attention of preschool children better than complicated ones; and illustrations alone may transmit meanings more directly to these youngsters than will text explanations (Pohlmann, 1994/95). Considering preschoolers’ difficulty in maintaining visual focus on one certain place on the page with their underdeveloped eyes (Bredekamp & Copple, 1997), recommendations mentioned appear to demonstrate developmentally appropriate considerations. The choice of color for illustrations differs from method to method and may evoke deeper-rooted feelings than one might imagine.

On the one hand, Wolf (1988), the great photographer and art director, believed that the combination of color and imagery can speak its own language. To him, “cool colors like blue and green recede, while reds and yellows come forward.” (p. 87). Pohlmann (1994/95) suggested using black-and-white schemes in order to let children color and allow them “to develop their small muscle coordination while personalizing the book” (p. 11).

None of the piano pedagogical writings have described the reasons for the graphic design and color decisions, or more importantly, information regarding the effects of these attributes on children’s attitudes or attention during piano study. Related literature from fields of study such as art education or children’s book publication and illustration might provide insights that could be applicable here. Reviews of these bodies of literature are outside the scope of the current study, however.

SUMMARY

In this section about preschool piano methods, detailed information on the topic of the definition of method, the historical overview of piano method books, the rise of preschool piano methods, the influential music teaching theories on preschool piano instruction, the derivation of preschool piano methods, characteristics of preschool piano methods, and essential elements of beginning piano methods were discussed. This section provided an overview and general ideas regarding various aspects of the current preschool piano methods with which this study is concerned. Because preschool piano methods were derived primarily from the regular beginner curriculum, questions arise as to age appropriateness with respect to developmental characteristics of young children. This will be addressed in the next section of the literature review.

DEVELOPMENTAL CHARACTERISTICS OF PRESCHOOL CHILDREN

Teachers must understand the developmental characteristics of their pupils in order to achieve success in teaching and learning. This section will address literature primarily from the fields of early childhood education and developmental psychology that are relevant for and applicable to preschool beginning piano students.

The Origin of Developmentally Appropriate Practice

Young children have met many developmental milestones by the time they are preschoolers with in the areas of language ability, motor skills, and social behaviors. The focus of this section of the literature review will be characteristics of these young that meet the widely held expectations of experts in early childhood education and child development. These expectations are outlined in the *Developmentally Appropriate Practice in Early Childhood Programs* (Bredekamp, 1987; Bredekamp & Copple, 1997) as guidelines for Developmentally Appropriate Practice (DAP), created in response to concerns about formalized practices in early childhood programs. The development of DAP guidelines by the National Association for Education of Young Children (NAEYC) resulted from a growing demand for high quality preschool education during the last two decades of the 20th century, with evidence of an the increased number of children enrolled in institutionalized child care, and with growing awareness and understanding among professionals and parents of the importance of early educational experiences (Andress, 1986; Berk, 2000; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; Gordon, 1990; Katz, 1988; McDonald & Simons, 1989; Palmer, 1993; Shonkoff & Phillips, c2000; Willer, Hofferth, Kisker, Divine-Hawkins, Farquhar, & Glantz, 1991). Consequently, the formalized structure of early childhood education that

resulted in “next-grade” (Bredekamp & Copple, 1997) or “watered-down” and “pushed-down” (Katz, 1988) kindergarten or elementary school expectations were imposed on preschoolers. Labelled as “miseducation” by Elkin (1987) the curriculum that was implemented did not account for the young children’s specific interests, needs, and competencies. Although debates on the soundness of DAP may remain (Charlesworth, 1998; Lubeck, 1998), the DAP publication (Bredekamp & Copple, 1997), which promoted the ideal practice in early childhood programs that are dedicated to “contribute to children’s development” (p. 8), continues to be one of the most influential publications in the field of early childhood education.

Definition of Developmentally Appropriate Practice

By definition, Developmentally Appropriate Practice (DAP) is based on applying knowledge of how children develop and learn, individual characteristics of children, and children’s social and cultural contexts, to early childhood educational settings, in an effort to promote the development and enhance the learning of each individual child (Bredekamp & Copple, 1997; Hart, Burts, & Charlesworth, 1997; Jordan-DeCarbo & Nelson, 2002). As a multifaceted set of guidelines, DAP reflects various developmental learning theories about how young children think and learn (Bredekamp & Rosegrant, 1992; Miranda, 2000, 2002, & 2004) and has contributed to a body of information in journal articles, conference presentations, and early childhood textbooks (Hart, Burts, & Charlesworth, 1997; Kostelink, Soderman, & Whiren, 1993; Perry & Duru, 2000). The term “DAP” has become a sort of “shorthand” way to refer to this set of guidelines, commonly believed to represent the best educational practices for young children from birth through eight years of age.

The DAP publication advocates three dimensions of knowledge—human development and learning, individual characteristics, and social and cultural context—as the foundation for developmentally appropriate decision making in every profession. In particular, developmental characteristics (or the common developmental expectations) of preschoolers are elucidated in DAP by descriptions of physical, language and communication, cognitive, and social and emotional development. There are no specific guidelines for musical development provided in the original DAP materials. However, based on related literature and the guidelines of DAP, it is possible to make appropriate connections within and among four developmental domains that have implications for beginning piano students; physical, intellectual, social, and musical maturity. Related literature for each of these four domains will be discussed below.

Developmental Characteristics

Physical Maturity

Physically, preschoolers demonstrate features differently from those attached to the toddler's image, such as size and body proportion (Berk, 2000; Bredekamp & Copple, 1997; Howe, 1993). The most remarkable physical milestones are evidenced in gross-motor development.

Gross-Motor Development

DAP emphasizes the importance of gross-motor development because preschoolers are genetically predetermined to explore functional use of their limbs (Monsour, 1996). Already-mastered skills such as crawling, walking, and new ones such as jumping, running, climbing, and standing on one foot, are natural movements for children of ages 3 through 6 that simultaneously boost the development of perceptual

awareness and conceptual judgment such as height, speed, or distance. However, these young children still need to learn how to move in a given space when others are present, due to a lack of motor-skill control and planning (Bredekamp & Copple, 1997). In the profile of the characteristics of five-year-old children, educators reported that early childhood teachers should recognize the very physical nature of these preschoolers and regard movement as a necessity for effective teaching and learning (Howe, 1993; Ignico, 1994). Indeed, DAP authors endorse the urgency to reflect on the physical development of three- through six-year-olds throughout the learning environment and across the curriculum. The guidelines of DAP portray the typical mode of learning of young children as through activities such as "moving [to music], exploring, and acting on objects" (Bredekamp & Copple, 1997, p. 103).

In addition, children of this age range enjoy being engaged in role-playing activities and short dramas that allow ample exploration and development of their gross-motor skills. As a result, gross motor movements are the most ideal tool with which to learn about music and specific instrumental playing skills (Heyge, 2002; Jordan-DeCarbo, 1999; Miller, 1986 & 1987; Orsmond & Miller, 1999; Sims, 1990), whereas the length of time of spent sitting at the piano should be considered carefully for young children (Bredekamp & Copple, 1997; Pohlmann, 1994/95).

Fine-Motor Development

Unlike the development of gross-motor skills, young children's fine-motor capacity is more constrained because (a) development of gross-motor skills are obtained more easily and faster than those of small-motor skills (Howe, 1993); and (b) wrist cartilages will not mature into bone until the age of six (Berk, 2000). Related literature

DAP principles reveal the natural pathway of physical development of children from ages 3 through 6, such as preschoolers enjoying manipulating play objects that have fine parts, practicing an activity many times to gain mastery, or a kindergartener printing letters that are crude but still recognizable to an adult. The highest level of fine-motor development in physical maturity these young children could have attained does not include sophisticated manual dexterity. Questions have been posed about the value of performing tasks involving "precise control of the hand muscles, careful perceptual judgment involving eye-hand coordination, and refined movements requiring steadiness and patience" (Bredekamp & Copple, 1997, pp. 103-104) for preschool children, because possible difficulty, failure, and frustration could overshadow their initial interest and confidence.

Early childhood educators advocate that children of preschool age should be given opportunities to develop hand muscles and fine-motor skills through activities such as drawing, painting, counting small play objects, stringing beads, working with playdough, constructing with Legos, or even practicing pouring milk (Bredekamp & Copple, 1997). With these types of activities, teachers of young children can ensure that fine-motor skills develop healthily. Musically speaking, finger plays and action songs may serve as preparation exercises for strengthening fine hand muscles of young children.

Sensation and Perception

Preschoolers also mature in the development of sensation and perception. The sense of hearing in very young children is a marvel of nature that not only enables the earliest ability to discover the direction (Cohen & Comiskey, 1977) and tone colors of various sound sources, including the timbre of musical instruments (Moorehead & Pond,

1977), but also later to discriminate phonetic sounds (Chen-Haftek, 1997; Mills, 1995), for the purpose of language acquisition. Unlike Bredekamp and Copple's (1997) report that the abilities of young children to distinguish subtle phonological linguistic sounds will not develop until the age of six, Chen-Haftek's (1997) research of music and language development in early childhood indicated that linguistic phonetic discrimination is innate; in addition to linguistic perception, Chen-Haftek cited studies that took into account the work of Chang and Trehub (1997a; 1997b) and Trehub, Bull, and Thorpe (1984) and demonstrated that infants already possess the musical perceptive ability to detect changes in melodic contour and rhythmic patterns, and pitch ranges of melodies.

Noy (1968) also found that infants demonstrate the capability to attend to preferred stimuli and "shut out" other selected stimuli at any given time (p. 430). A similar finding was reported by Fassbender (1996) who indicated that infants at seven months have the ability to extract the pitch of complex tones. The investigations cited above pointed out the remarkably well-developed sense of hearing among very young children. Zimmerman (1971) reported that by the age of four children demonstrate the ability to accurately judge relative loudness and become skilled at this type of discrimination with increased daily experience and growing vocabularies. The recognition of aural perception as a learning tool supports the importance of ear training as a developmentally appropriate practice. Consequently, it should be an indispensable element in preschool piano lessons.

Although at the preschool age children already are equipped with well-developed aural perception, their coordination of binocular vision is still poor and underdeveloped (Yang & Kapoula, 2003; Bucci & Kapoula, 2005). As a result, preschoolers are

farsighted (Bredekamp & Copple, 1997), so large and uncluttered print should be used with this age group (Bastien, 1995). Also, during this age range, children begin to identify visual patterns that then inspire much of their own designs in areas such as art, puzzles, construction, letters, and words (Bredekamp & Copple, 1997, p. 101). Still, confusion with letter reversals (e.g. p with q, b with d) continues to trouble even kindergarteners. According to Bredekamp and Copple, this confusion "is a natural one because in the physical world an object has the same function and name regardless of its directional orientation" (p. 101). This statement evokes thoughts about the direction of stemmed notes. From my personal experience, preschool piano students have often expressed confusion about the direction of up-stemmed and down-stemmed quarter notes. To them, all quarter notes should face one direction no matter upon which line and space they are placed.

Perceptual development, while dependent on brain and central nervous-system development, is further influenced by experience. Consequently, the editors of the DAP book (Bredekamp & Copple, 1997) recommend that young children be exposed daily to an array of objects and events that they can explore and learn about through their senses. This is particularly applicable in music, for music is a subject matter known for its simultaneous involvement of multi-sensory tasks governed by both hemispheres of the brain (Campbell & Scott-Kassner, 1995 & 2006).

With knowledge about children's psychomotor development, teachers will understand what types of physical activities are most appropriate for young children involved in the piano study. Activities used in piano lessons may need to be adapted to ensure that the physical requirements are developmentally appropriate.

Intellectual Maturity

The discussion of intellectual development in this study recognizes the "inextricable" nature of language, communication, and cognition (Bredekamp & Copple, 1997, p. 104). For the purposed of this study, intellectual development is defined as the level of development in language, communication, and cognitive domains at the appropriate developmental stage of preschool children.

Language and Communication Development

Children of this age group demonstrate verbal and articulated linguistic abilities and skills. Bredekamp and Copple (1997) described the language acquisition of preschoolers as the moment of language explosion, during which 50 new words per month will be added to the young child's vocabulary. Outfitted with this superior linguistic understanding, these young children naturally turn their attention to endless story readings and retellings. The commonly accepted maturity levels illustrated in DAP guidelines indicate that a three-year-old child is attracted to simple finger plays and songs that have much repetition in rhymes and words, and that older preschool children will learn "new vocabulary quickly if related to their own experience" (Bredekamp & Copple, 1997, p. 108). At some stage in the process of language and communication development, a significant linguistic move to mental representation or "verbal mediation" (Vygotsky, 1978) in children makes possible the ability to attach labels to objects and processes. According to the authors of the DAP guidelines (Bredekamp & Copple, 1997), this ability to use language serves as such a crucial mediator for concept development, generalization, and thought that it "enables children to solve new problems without relying solely on trial and error" (p. 107). With the help of private speech, the advanced

form of language in thought, young children not only can talk to themselves while working on a task and plan actions beforehand, they can also learn to cope with emotions such as stress, sadness, and frustration. Skilled preschool teachers will take advantage of children's private speech, building upon relevant dialogues in order to engage and to encourage children to express themselves through other modes of representation. In addition, preschool piano teachers may encourage children to use language in thought to facilitate rehearsals of hearing or actions before singing or playing.

Still, teachers of young children need to respect the aspects of children's speech that do not need correcting, or may need enriching through learning experiences, because they are developmental and will be self-corrected at a later stage (Bredekamp & Copple, 1997, p. 109). The current working model of preschoolers' development calls for teachers' to consider errors as clues into the realm of the child's thinking (Bredekamp & Copple, p. 128). Thus, developmental constraints of young children are respected and future learning can be stimulated.

From Language to Play. Increasing ability in linguistic development and communication skills stimulates preschoolers' social development. One of the new social strategies that evolves is make-believe play. Early childhood educators endorse the value of play and pretending for children's linguistic, cognitive, and social development (Bredekamp & Copple, 1997; Fröbel, 1826; Ignico, 1994; Katz, 1988; Piaget, 1952; Sawyers, 1994; Smilansky & Shefatya, 1990). Many reports indicate that the use of make-believe play not only enhances preschoolers' competence in symbolic thought, but also supports their "memory, language, logical reasoning, imagination, and creativity" (Bredekamp & Copple, 1997, p. 112).

Likewise, the potential of such play in music study to enhance social development is well established by various early childhood authors (Andress, 1986, Berger & Cooper, 2003; Campbell, 1998; Guilmartin, 2002; Hicky, 2002; Jordan-DeCarbo & Nelson, 2002; Kenney, 1997; Littleton, 1989; Moorehead & Pond, 1978; Palmer, 1993). The creative spirit sparked from play and pretending also takes place in music, including the use of musical instruments for exploration, discovery, and improvisation (Jordan-DeCarbo & Nelson, 2002; Kiehn, 2003). Issues regarding creative development in early childhood music education will be discussed in the section of the literature review on creative development.

From Language to Music. The early childhood years represent an optimal time to acquire various skills that also include learning a second language. As noted by the editors of DAP (Bredekamp & Copple, 1997), the fluency in a second language thrives "within the context of a trusting, ongoing relationship with a fluent speaker of that language" (p. 104). Through the manipulation of sound, pitch, duration, and timbre, both the development of language and growth in music find a common origin. Furthermore, both domains "exist in time, and are linear in their formal organization" (Welsbacher, 1992, p. 97). The acquisition of general language and that of the language of music has been compared and discussed based on the concept that children become acculturated to music in much the same way as they do language, and that the more language they hear, the sooner they learn to speak and understand (Gordon, 1990). From the "mother tongue" approach validated by the Hungarian and the Japanese early childhood music educators (Kodály, 1974; Suzuki, 1969) to the music learning theory for newborn and young children by Gordon (1990), many corollaries between language and music have been

identified (Azzara, 2002; Chen-Haftek, 1997; Fassbender, 1996; Gordon, 1971; Grunow, 1999; McCoy, 1979; Papoušek, 1982; Turner, 2004; Welsbacher, 1992).

Welsbacher (1992) pondered the use of music for developing language skills among young at-risk children. She compared the relationships between music and language and identified a type of learning model—the expanded play experience model—that is suitable for both domains. In language, this model employs a simple sentence such as, “I catch a ball” so that children learn to alter one linguistic element at a time. If the teacher asks, “what else can we do with the ball?” children then can reply with actions such as throwing or rolling (p. 98). The linguistic element being changed can be the ball.

In music, Welsbacher suggested starting with a melody moving upwards serving as the model. The one musical element to be changed can refer to moving the melody down, moving faster or slow, repeating the melody, or altering the dynamics. Welsbacher also included the instrumentalized version of the model melody, in which children explore various ways of playing the melody on instruments. Each change expands the experience, and thus fortifies domain-based knowledge. Notwithstanding that many parallels exist between music and language, music may be considered to represent a language that is free of the meaning load (Welsbacher, 1992). Music is the result of multi-sensory perception and reception, a nonverbal medium that operates far beyond the principles of a language (Reimer, 1989). Hence, words or texts to a song are only the linguistic part of music. Changing words to a song in fact supports the linguistic element but also partially musical development.

The same effect appears in cases of associating musical alphabet letters with apple, bee, cat, and dog for ABCD, or staff lines with the slogan “every good boy does fine” for

staff positions EGBDF, as commonly used in music instruction. Chances are that students remember and recite those words and slogans well, but still cannot relate them to the keyboard and the staff system due to experiences with meaningful intention, but wrongfully oriented toward linguistic exercises. The statements of both Welsbacher and Reimer remind music educators that although similarities between language and music do exist, only musical elements influence how music evokes feelings and meanings. Special consideration should be exercised as to whether only words or text should be manipulated during a musical activity.

Cognitive Development

Based on language acquisition and the development of mental representation, cognition in children between the ages of 3 and 6 undergoes a profound change (Brainerd, 1978; Bredekamp & Copple, 1997; Piaget, 1968). In order to engage preschoolers in learning tasks, early childhood educators must understand the developmental cognitive capacities of these young children, such as how they think, reason, remember, or solve problems. Only with this knowledge can educators then devise adequate strategies for assessing what children know and how they think (Bredekamp & Copple, 1997).

In addition to the perspectives of cognitive theories (e.g. Piaget's stage theory, 1952; Vygotsky's sociocultural theory, 1978; and information-processing theories) that the DAP editors addressed, I also reviewed literature related to other cognitive and developmental theories (e.g. Bruner's modes of representation theory, 1960; Gagne's events of instruction, 1977; & Gordon's music learning theory) to profile young children's characteristics of thought and cognitive capacities during the preschool and

kindergarten years. Applicable theoretical standpoints of music learning and teaching that are consistent with scope of the current study will be investigated as well.

Major Perspectives of Learning Theories

The work of the eminent Swiss psychologist Piaget (1952) provided a theory of cognitive development that has made an important contribution to our understanding of children's intellectual growth. As the best known cognitive theory, Piaget's theory is anchored in the idea of biological predisposition, which explains the development of human cognition in four stages: sensorimotor (birth to approximately 2 years of age), preoperational (2 to 7 years), concrete operational (7 to 11 years), and formal operational (11 to 15 years). Piaget's stage-dependent theory has been of interest to music researchers, and a number of studies have attempted to discover the relevance of the theories to musical development (Crowther, Durkin, Shire, & Hargreaves, 1985; Hargreaves, 1986; Hargreaves & Zimmerman, 1992; Hildebrandt, 1987; Matter, 1982; McDonald & Simons, 1989; Pflederer, 1964 & 1966; Serafine, 1980; Sims, 1990, 1991, 1995a, & 2005; Zimmerman, 1971). The age group of 3 through 6 (or before entering elementary school) in the current inquiry corresponds with the age range in the preoperational stage of Piaget's theory, which represents intellectual processing dominated by immediate perceptions (Zimmerman, 1971). Characteristics of age- and perception-related cognitive learning in preoperational-stage children include egocentrism, centration, irreversibility, and conservation.

Egocentrism. The interest of these young children, centers on themselves—from where they feel secure and ready to explore the world, construct concepts, and acquire skills of mental operations through their own visions and perspectives (Brainerd, 1978).

Parallel playing, commonly known as side-by-side playing amongst younger preschoolers, is a manifestation of *egocentrism*. Based on their reactions to sensory stimuli, preschool children can enthusiastically construct knowledge (Taetle & Cutietta, 2002). Toward the end of the preoperational stage, young children may be engaged in group activities with the teacher's help, but they still have difficulty understanding and assuming other people's points of view. Egocentrism strongly influences the way children acquire knowledge and may distort the cognitive product during the assimilation process. Consequently, preoperational egocentrism could delay young children's learning from peers and other more experienced models. This type of learning mode represents a key element to Vygotsky's (1978) sociocultural theory.

According to Vygotsky, children's cognitive understanding is initially displayed in communication with other people, then transforms into private speech, and "eventually is internalized as thought" (Bredekamp & Copple, 1997, p. 112). Due to an increased ability for verbal mediation (mental representation, in Vygotsky's term), preschoolers not only can make plans beforehand and anticipate the consequences of their physical actions, but will also improve in their capacity for symbolic thought without relying on trial-and-error. In order to help these young children outgrow their egocentric world, the major task of the preschool teacher is to encourage decentration and to capture the readiness moment critical for learning.

A number of musical games offer aid in this category. McDonald and Simons (1989) adapted from Kamii and DeVries (1980) a hiding game "Cuckoo" (p. 27) to help decentering. In the "Cuckoo" game, one child plays the mother cuckoo, who will cover her eyes while the other children hide. As the mother cuckoo sings "Cuckoo, where are

you?" (set in pitches sol-mi) to call out for the hidden birds, all baby birds will answer "cuckoo" also employing the sol-mi interval. The descending interval sol-mi is not only commonly known as the playground tune, but also "an omni-present, immeasurably ancient, and socially oriented vocal structure" according to Pond (1992, p. 41). Certainly, the choice of singing this minor third facilitates success in the activity and simultaneously creates a familiar environment for participating children. One by one, the mother bird finds her babies; and the last bird located becomes the new mother (or father) cuckoo. According to McDonald and Simons (1989), this type of game exercises the versatility of ability adjustment in children. Each time a variety of clues is given, the children learn to adjust their corresponding actions.

The similar effect can be found in a greeting song ("hello" or "goodbye") used in a music class, especially when these songs offer the possibility for inserting names. Not only is the usage of these two songs advantageous in that they enclose the lesson from the start to the end, but also because they highlight each participant in the course of song, during which children will notice who the others are. Furthermore, the feature of a greeting song settles the class down for a formal learning session.

Beyond bringing together the attention (Gagné, 1977; Gagné, Briggs, & Wager, 1992) of all class members, the function of a greeting song that conveys a sense of order and security has been reported by educators of various fields such as in music education (MENC, n.d.; Pincushion Community News, 2005), physical education (Satchwell, 1994), language education (Bertrand, n.d.), English as second language (Desorcy, 2005), and music therapy (Blue Cap New Music Therapy Program, n.d.; Lagorce, 2003; Llanos-Butler, 2006). Likewise, a goodbye song sends the class members away with a sense of

accomplishment or “closure” (Satchwell, 1994, p. 36) that reminds the children of their real enthusiasm for the class.

Centration. This aspect of preoperational theory denotes preschool children’s tendency to center perceptions on one part or dominating aspects of a complex perceptual field (Zimmerman, 1971). With regard to music, this means that young children can only attend to one particular musical element at a time (Crowther, Durkin, Shire, & Hargreaves, 1985; Hargreaves, 1986; Hargreaves & Zimmerman, 1992; Pflederer, 1964 & 1966; Sims, 1990, 1991, 1995a, & 2005). Simultaneously attending to two or more elements, such as dynamics and tempo, or both melodic and harmonic aspects of a song, is difficult for these children. Due to limitations of centration, dominating rhythm patterns will be more readily perceived as compared with timbre by young children under the age of eight (Moorehead & Pond, 1977; Zimmermnan, 1971).

In a typical scenario of the piano lesson, reading (visual-response) and finding the correct fingering to play with (kinesthetic-response) require so much concentration that young children tend to neglect the aural attention necessary for listening and the cognitive understanding of pitch and rhythm discrimination. When young children are centering their perceptions, asking the child to perform two or more tasks simultaneously, such as reading and fingering, seems to fall into the category of Developmentally Inappropriate Practice (DIP). Therefore, finding ways to balance learning between the multi-sensory tasks involved in piano playing is an important aspect in the undertaking of instruction. Musical elements should be studied both in isolation and within a total musical context in order to overcome the tendency to listen to only one aspect of the music at a time (Zimmerman, 1971).

Mental Reversibility. A third characteristic of the preoperational child is cognitive difficulty in mentally undoing an operation that has been carried out (Psychologypress, n.d.). Counting backwards, for example, represents a typical cognitive constraint of preschool children. Hence, following through on a repeated pitch or rhythm pattern can be demanding given that the initial stage of that pattern is momentarily missing in the young child's memory due to immature operation of mental reversibility (McDonald & Simons, 1989). The nature of piano playing frequently requires multi-sensory faculties of young children. Reading, playing, listening, and remembering elements such as fingering, pitch and rhythm patterns necessary for making music at the piano create a tremendous challenge to preschool children.

Time and again after the teacher has practiced chanting finger numbers, counting rhythms, and singing pitches with the young pupil, the readiness to play the song using all these resources just is not there. As a result, there is a good chance that preschool students and their teachers will experience frustration.

Conservation. The tendencies for *egocentrism*, *centration*, and limited *mental reversibility* also affect another preoperational characteristic – conservation. Conservation connotes the ability to comprehend the invariance, or the defining quality (Cohen & Comiskey, 1977) of an object while its appearance alters. In music, the inability to recognize steady beats within changing rhythms or the identical tune played by different instruments has been characterized as due to the inability to conserve (Crowther, Durkin, Shire, & Hargreaves, 1985; Hildebrandt, 1987; McDonald & Simons, 1989; Serafine, 1980).

Following the same logic, children may not recognize a rhythmic pattern that stays the same even when its assigned major tonality changes to minor, or detect a major chord that remains major no matter what the designated dynamic. Both of the abovementioned scenarios are examples of conservation challenges that preschool pupils have to face with their teachers' assistance.

Considering the DAP learning scenario of preoperational children, many of the tasks described above should not be imposed simultaneously. Children in the Piagetian preoperational level should be given "sorting, classifying, and ordering tasks that are simplified and highly relevant to their experience" so they will be successful (Bredekamp & Copple, 1997, p. 112). In accordance, early childhood music educator Zimmerman (1971) emphasized the need for "hands-on" activities during the preschool years. Translating the idea of "hands-on" in music, a sound-before-symbol approach in music instruction derived from Piagetian theory has been widely advocated and accepted (Campbell & Scott-Kassner, 1995 & 2006; Pohlmann, 1994/95).

Campbell and Scott-Kassner (1995 & 2006) suggested that younger children be given ample opportunities to listen, sing, play, and move to music in order to build a foundation of preliminary experiences; only thereafter should the introduction of staff notation occur. Regarding the matter of note values and time signatures in music study, DAP guidelines indicate that concepts like time, space, and age are very abstract. Because these young children are easily distracted and have difficulty focusing on details, DAP guidelines specify avoiding involving preschoolers in passive listening or prescribed tasks. "Listlike information that is not embedded in meaningful contexts" (Bredekamp & Copple, 1997, p. 113) will actually not be retained because of young

children's egocentrism and limited mental reversibility ability (Istomina, 1975; Murphy & Brown, 1975). Learning in the preoperational stage should engage "the manipulation of objects, noting the consequences, and internalizing them for the future, thus transforming stimuli to symbols" (Campbell & Scott-Kassner, 2006, p. 19). In doing so, these young children discover and construct knowledge through firsthand and meaningful experiences. As a result, the guiding principle for music teachers of preschool children should focus on *doing* music (Elliot, 1995) rather than talking about music.

Influenced by Piaget, Jerome Bruner (1960) observed how people select, retain, and transform information inductively and claimed to have found a type of stage progression dependent on maturation. He proposed three developmental modes of assimilating knowledge: enactive (learning through a set of actions), iconic (learning through visual or mental pictures), and symbolic (learning beyond relying on immediate perceptions, such as learning language, mathematics, or musical notation). Campbell and Scott-Kassner (1995 & 2006) offered a music-reading sequence based on Bruner's model. First in the enactive phase, the instruction begins with gross motor movement to capture melodic contours. In the iconic phase, children may use line graphs to trace the contours. Last, reading and writing notations on the staff may follow in the symbolic phase. According to Campbell and Scott-Kassner, this model sequence is an entry-level representation of Bruner's (1966) spiral curriculum, in which any subject, no matter how complex, may be introduced at appropriate levels and returned to periodically with higher levels of complexity.

Fascinated by the steps of the cognitive process, Gagné (1977) and his colleagues developed the conditions of learning named "events of instruction" (Gagné, Briggs, &

Wager, 1992, p. 187). The events or conditions comprise a series of sensory information from perception to concept information. In their review of learning theories, Taetle and Cutietta (2002) recounted Gagné's belief in the hierarchy of instruction, that "simpler (behavioral) principles are taught first and then lead to the development of higher order (cognitive) principles" (p. 282). More about the application of Bruner's and Gagné's instructional theories in music education will be discussed in the review section of curriculum planning and instructional strategies, below.

Other Influential Learning Theories in Cognition Development

The significance of Piagetian cognitive and developmental learning theories also impacted Gardner, who in 1983 recognized music as one of his seven multiple intelligences. The vision of Gardner's *Frames of Mind* (1983) indicates that "of all gifts with which individuals may be endowed, none emerges earlier than musical talent" (p. 99). Gardner's recognition of this natural proclivity impels a redefinition of educational goals and methods in the music profession (Uszler, Gordon, & Smith, 2000). The mission to explain how the mind works has categorized information-processing as an ally of cognitive theories (Seifert, 1993; Siegler, 1993). Information-processing theories utilize metaphors derived from comparisons of the human mind with the computer and emphasize the examination of the operations and functions of memory. At the heart of this theory is a loop of information processing and transforming cycles (Uszler et al., 2000), with which the learner will be guided and cued throughout the various phases of learning. The emergence of information-processing generates new aspects for the nature of instruction.

The development and learning of children are integrated. DAP principles recommend that preschool teachers offer a variety of activities and materials to promote children's learning and intellectual development. In the DAP environment, these teachers assume both a facilitating and an active role according to the nature of activities with which the children are involved.

Intellectual maturity reflects the level of full development in language, communication, and cognitive domains within the appropriate developmental stage of preschool children. Assessing children based on their linguistic and communicative development, or stages in the cognition theories of Piaget, Bruner, Gagné, and other influential educators, can reveal preschool children's intellectual capacity, and this information may then be used to diagnose their readiness for formal instrumental study. Although music making does not totally rely on communication and may be achieved with physical demonstration and imitation, at some point during piano study, the engagement of cognitive understanding must be present for meaningful study to continue. Understanding the level and ability of preschool students in given domains aids in the understanding and respect of children's limitations in certain situations and responses.

Social Maturity

Social maturity can be defined as the level of full development or the "ability to manage one's own feelings, knowledge about other people, interpersonal skills, friendships, intimate relationships, and moral reasoning and behavior" (Berk, 2000, pp. 4-5). The earliest stage of social emotional development, for example, during the preschool years, relates to the child's developing self-concept (Berk, 2000; Bredekamp & Copple, 1997). Parents and teachers represent the primary influence on young children's

development of self-concept and sense of positive self-esteem during the socialization process (Peery & Peery, 1987; Pohlmann, 1994/95; Vygotsky, 1978). DAP guidelines characterize three-year-olds as deriving enjoyment from “pleasing adults,” thus behaving more “cooperatively” than do toddlers (Bredekamp & Copple, 1997, p. 117). Furthermore, young preschoolers take pleasure in being initiators of action and competent actors, especially while playing and being involved in art-related activities. The process allowing children opportunities for initiating actions supports children’s self-concepts as noted by Garbarino, Dubrow, Kostelny, and Pardo (1992), to “reinstate their sense of inner control, reestablish self-worth and self-esteem, and develop relationships of trust” (p. 204).

The social maturity of young children is related to learning. Campbell and Scott-Kassner (1995 & 2006) indicated that children, according to Bandura’s social learning theory, observe and listen to their parents and teachers, whose behaviors they later emulate. The process of social learning begins with children’s observations of these adult models. Through this observation, children obtain, organize, memorize, and recall information that can be transferred to similar situations. Much of typical music/piano lessons contain modeling that not only “is critical to the student’s watching, listening, and then performing the music in the manner and style of the teacher” (Campbell & Scott-Kassner, 1995, p. 24), but also stimulates children to digest responses applicable to future challenges.

The opportunity of learning about music/piano playing is often for the young child the first experience without parents, and their insecure feeling towards unknown expectations of both the teacher and their parents can be overwhelming (Leeke, 1985). Hence, developing confidence in young beginners becomes one of the important tasks of

the piano teacher, to promote children's personal and social competence, and thus foster their self-esteem to a higher level (Leeke, 1985; Peery & Peery, 1987). In cases where children do not reach the appropriate level of social maturity, they may attend the lesson but be oblivious to much of what is going on, and not learn to listen to or imitate their models.

Musical Maturity & Characteristics

Findings of the literature review pertaining to the musical characteristics of preschool children point to a sequential progression of musical development. For instance, results of studies by Greenberg (1979) and Romanek (1974) indicate that concepts of beat, tempo, and dynamics may develop before those of pitch, melody, harmony, and form. The inseparable nature of rhythm and movement helps prioritize the order of detailed discussion of these areas, below. Musical characteristics addressed after rhythm development and movement are pitch development, functional and performance skills, concept development and notation, affective development, and creative development. Children's development in each of these areas is a natural part of, and integrated within, young children's musical growth.

Rhythm Development and Movement

Rhythm originates from movement, which in turn nurtures the development of rhythm. This notion is not only embedded in the music teaching philosophies of Dalcroze, Orff, Kodály, and Suzuki, but is also consistent with the learning theories of both Piaget and Bruner, who agreed that preschool children conceptualize initially through motor behaviors. Many of the spontaneous music experiences initiated by preschoolers are manifested through rhythmic connections with movement. Chanting rhymes while taking

a walk, high and loud calling while running, and humming or indulging in rhythmic speech while quietly playing are for these young children daily activities inseparable from music (Moorehead & Pond, 1977). This engagement often displays rhythmic structures that include strong metric tendencies and recurring patterns (Campbell & Scott-Kassner, 1995 & 2006). Scott-Kassner (1993) indicated that by the age of three, children already demonstrated the ability to clap or stamp rhythm patterns with great accuracy and that the eye-hand coordination of these children develops with the introduction of playing mallet and percussion instruments.

Another spontaneous form of rhythmic experiences can be witnessed in the expressive movements called dance. Zimmerman (1971) characterized spontaneous dance as “movement for movement’s sake” (p. 25). She noticed that three- and four-year-olds can gallop, jump, and run in time to music. According to her, by the age of 5, children have obtained a repertoire of the basic locomotor rhythms of the human body. This rhythmic knowledge about the body serves as material with which elementary school aged children create organized dance forms.

Increased exposure to nursery rhymes, chants, folk and popular songs enculturizes sophisticated rhythmic patterns into the spontaneous songs of preschool children (Campbell & Scott-Kassner, 1995 & 2006). As a result, rhythmic perception may have progressed developmentally in most young children even before they receive formal music lessons. Consequently, the challenge in teaching rhythm to young children points at developing the link between already-obtained spontaneous rhythmic perception and its more regulated forms, perhaps in notational representation. This link may help the teacher to identify what the child already knows and to skillfully channel those previous

natural rhythms into understanding and transfer of musical concepts. Children may be guided to discover "how their physical energy can be ordered, regularized, and combined with others in rhythmic chant, song, and movement" (Campbell & Scott-Kassner, 2006, p. 188) and learn to understand rhythm through their own physical commands and responses. Developmental issues should not deprive preschool children of the versatility and fun experienced during rhythmic activities.

Steady Pulse. Hierarchically, rhythmic experiences in music should move from free responses to more teacher-directed responses (Zimmerman, 1971). During early spontaneous rhythmic experiences, young children may have gained familiarity with steady pulses; nonetheless, "beat competence," or keeping a steady pulse, appears to be developmental, dependent upon physical maturation and coordination (McDonald & Simons, 1989; Moorehead & Pond, 1978), unlike comprehension of dynamics, that tends to develop early and without formal training (Zimmerman, 1971). In their longitudinal observation of children's musical behaviors, Moorehead and Pond (1978) reported that beat competence is marked as a general ability mastered by the first grade. Still, some children will likely need extra training or reinforcement of the skill in order to maintain a steady beat (Campbell & Scott-Kassner, 1995 & 2006; Moorehead & Pond, 1978).

The typical tool to feel the steady beat as advocated in piano pedagogy is clapping with the hands (Bastien, 1995; Uszler, Gordon, & Smith, 2000). Furthermore, clapping, counting, and chanting denote the most frequent devices for learning the concept of rhythm (Rainbow, 1981).Uszler et al. (2000), however, expressed regret that these techniques were being overemphasized compared with other rhythm teaching strategies. According to Rainbow (1981), clapping rhythm while walking simultaneously

represented the most difficult skill in preschool children's rhythmic responses, thus should be avoided as a method of assessment. Young children can demonstrate their understanding of concepts related to rhythm in ways that better match their level of physical maturity.

Similarly, researchers have warned educators not to equate the inability to keep time with poor perception (McDonald & Ramsey, 1992; Scott-Kassner, 1993). During the formative years, preschool children have a faster metabolism that affects the regular, unaccented pulsation to which they move, so they tend to move in a quite fast tempo (McDonald & Ramsey, 1992; Scott-Kassner, 1993), ranging from a quarter-note equaling 120-176 bpm for a steady beat. Therefore, the inability to keep a steady beat is developmental, and does not warrant any concern as for most children it will be "self-corrected," as DAP guidelines suggest (Bredekamp & Copple, 1997, p. 109).

Children also encounter rhythms in spoken language. Of the four cited music teaching philosophies, the Orff approach utilizes chanting most frequently for developing rhythmic understanding, in conjunction with clapping, tapping, snapping, and stamping. The Orff style of rhythmic speech transfers easily to reading and writing of rhythmic notation, thus successfully aids in the development of music literacy (Campbell & Scott-Kassner, 1995 & 2006). Findings of research by Feierabend, Saunders, Holahan, and Getnick (1998) not only endorsed the use of rhythmic speech, but also demonstrated that song texts enhance young children's melodic recognition. Examples of the relationship between speech rhythm and musical rhythm can be found in piano method books that contain song lyrics supporting the concepts to be learned. Piano teachers can use

language as a means for helping children develop skills and concepts related to duration, accent, and temporal units.

Duration and Pattern in Rhythm. One concept young musicians must learn is that rhythmic durations can be longer or shorter, and faster or slower, than the underlying pulse. Together with regulated placements of accents, the variety of rhythmic durations embellishes and invigorates music (Campbell & Scott-Kassner, 1995 & 2006). These rhythmic durations are best learned when introduced together in patterns rather than treated individually in a mathematical manner. According to Campbell and Scott-Kassner, patterns of durations and pitches should be first perceived by senses other than sight. This statement endorses the rule of "experience before symbol" and is particularly important for determining the timing and the approach of introducing rhythm patterns in preschool piano methods. Uszler, Gordon, and Smith (2000) suggested involving large muscles or total-body movement and listening skills to develop the rhythmic sense.

The belief that music is an aural art also affects the method of teaching rhythm. Mnemonics representing rhythm syllables, such as word chants similar to the Orff-Schulwerk, Kodály, and Gordon syllables, are used to transmit the rhythm directly and aurally to the students without the assistance of notation, graphs, or other visual aids.

The ability of young children to replicate rhythmic patterns adheres to a developmental progression from toddler through kindergarten age. Campbell and Scott-Kassner (1995 & 2006) reported that readiness for learning about tempo, duration, and metric groupings becomes evident by elementary school. Before the age of 6, it is developmentally appropriate to reinforce children's rhythmic comprehension by moving, tapping, clapping, and patting in time to a regular set pulse, by imitating short rhythmic

patterns vocally and playing on mallet instruments, as well as by chanting mnemonics of rhythmic patterns. Furthermore, for easy clarification, researchers recommend that rhythmic patterns and melodic patterns be introduced in isolation (Zimmerman, 1971), with the establishment of rhythmic sense prior to that of pitch sense as cited previously (Greenberg, 1979; Romanek, 1974). It is surprising to find that not all piano pedagogical writings isolate rhythm as a teaching concept. On the contrary, rhythm learning often is embedded with pitch materials, reading, and playing in accompaniment. The teaching steps developed by Bastien (1995) reminded the teacher to have the child count rhythm before playing. Frequently, however, as children play more in piano lessons, explicit rhythm instruction vanishes. Perhaps there is an assumption that piano teachers will incorporate other rhythm teaching strategies and isolate rhythm from other concepts during the lessons. For novice teachers working with preschool piano beginners, however, this type of assumption may not be fulfilled.

Meter. The metric comprehension of young children develops, according to Campbell and Scott-Kassner (1995), “through attentive listening and through kinesthetic responses that follow the musical flow of stronger and weaker sounds” (p. 83). The same authors also reported that preschool children at the age of 3 or 4 can listen and respond to music in duple and triple meters, and to a quick-paced compound meter like 6/8. While metric perception of young children is noticeable at an early age, developmentally, they may note be ready to understand the actual sign of the time signature found in music notation (Campbell & Scott-Kassner, 1995 & 2006). Young children need to experience, speech rhythms accompanied by rhythmic ostinatos in conjunction physical involvement, such as patting, clapping, snapping, and stamping, to develop metric understanding.

Rhythmic notation. With regard to teaching rhythmic notation to children, adage of “sound before symbols” is highly applicable. Rhythmic patterns provided by means of sound can be understood by children through movement, as they reenact patterns by coordinating their muscles to step, clap, or chant. The physical realization of those patterns helps children internalize the sound of the rhythms and creates a schema of rhythmic vocabulary sufficient to prepare the child to learn the corresponding notational representation. Either by use of the Dalcrozian “dash-a-note” or Kodaly’s note stems without note heads, preschool children can experience reading rhythm patterns (Campbell & Scott-Kassner, 1995 & 2006). Some piano method books spend time on pre-reading that is close to “dash-a-note”, while others use off-staff rhythmic values to present their pre-reading system. Regularly, the system representing rhythm durations also moves up and down on the page according to pitch levels of the given tune. Researchers also recommend experiential notation devices such as the use of sticks of various lengths (Zimmerman, 1971) to portray durations of sounds, to be played within game-like activities. Rogers (1996) investigated the use of colored rhythmic notation and found that this increased the level of affective involvement in students, but not their rhythm reading success. Bamberger (1991) encouraged teachers not to shy away from innovative rhythm notation.

No matter what representational method one chooses to guide young children to read and write music, it must be preceded with extensive experiences of singing, chanting, and movement. Early rhythmic perception, according to Campbell & Scott-Kassner (2006), necessitates careful guidance to uncover the capacity of young children to “perform it, code it through notation, and decode it by reading the notation” (p. 158).

Pitch Development

In a manner similar to the development of rhythmic perception, young children develop their perception of pitch through various informal musical experiences prior to formal music instruction. Likewise, the growth of pitch perception and understanding is dependent on age and development. Campbell and Scott-Kassner (1995 & 2006) specified that pitch development follows both linear and vertical structures. Understanding pitch structure requires pitch discrimination, the basic level of the tasks involved in pitch development.

Linear Pitch Development

At the early level of linear pitch development, the general awareness of the sameness of or the difference between two given pitches as well as pitch patterns and contours of pitch groups begins to take shape (Campbell & Scott-Kassner, 1995 & 2006). Zimmerman (1971) also acknowledged that the root of melodic understanding resides in pitch discrimination. It is commonly agreed that pitch discrimination is the foundation to understanding of both linear and vertical pitch structures. This ability to discriminate represents the key indicator for piano readiness and should be fostered during the preschool years. Campbell and Scott-Kassner (1995 & 2006) listed aspects of melody about which children develop understanding, including pitch relationships and melodic motion such as pitch register (high, low, and middle), pitch direction (moving up, down, staying the same), pitch motion (by steps, leaps or repeats), and interval size (large leap, medium, or small). The more challenging linear pitch concepts that follow include tonality (emphasis on the focal point of the melody), melodic phrase, scale, and major and minor modes.

Pitch Discrimination and Melodic Contour. Pitch discrimination is the prerequisite of melodic understanding. Its importance is reflected in the process of determining piano readiness. During the readiness interview, the piano teacher is advised to present same-different pitches and pitch groups for prospective students to discriminate aurally and orally in order to determine the stage of the children's musical learning (Gordon, 1990). Researchers have reported that children at the preschool age already demonstrate recognition of familiar songs to which they enjoy singing along (Campbell & Scott-Kassner, 1995 & 2006). Contour recognition begins to develop around this age to the extent that some preschool children can identify the same melodic shape shared by the "Alphabet Song" and "Twinkle, Twinkle Little Star." As preschool children grow toward the age of 7, they show more confidence in describing contour movement and relationships among different pitches.

Campbell and Scott-Kassner (1995 & 2006) suggested that teachers engage children in multiple activities like singing, moving, listening, playing, and creating in order to strengthen the development of pitch understanding. For instance, the use of Curwen hand signs with singing is recommended by Campbell and Scott-Kassner as one of the multiple modes appropriate for facilitating pitch development. Whether or not to they use the hand sign system in the piano lesson, piano teachers should develop young children's understanding of pitch by applying multiple approaches instead of only relying on "association of lines and spaces of the staff system with the keyboard" and "note values with finger movements" without aural responses (Moorehead & Pond, 1977, p. 67). Zimmerman (1971) indicated that the capacity of tonal memory affects the ability for pitch discrimination and that both skills improve with age. Through a lesson presented

with multiple approaches, piano teachers not only can facilitate the development of pitch discrimination in young children, but also simultaneously strengthen their capacity for tonal memory.

Pitch Relations and Melodic Motion. Much of the teaching content of beginning piano methods overlaps with the concepts related to melody. As already described in the section related to elements of preschool piano methods, concepts of pitch relations and melodic motion relating specifically to the keyboard, such as register, direction, reference notes, keyboard topography, and musical alphabet letters, represent the core content to orient young beginners to the keyboard (Chronister, 1996; Richards, 1996). Chronister even recommended introducing some of these materials to the young children during the first lesson. Nevertheless, terms like “high” and “low” or “up” and “down,” when applied in music study, convey to preschool children messages that are confusing and oftentimes inconsistent with the conventional meanings of daily life. White, Dale, and Carlsen (1990) reported that children of 5 years old demonstrated marked ability in discriminating pitch direction. Nevertheless, sentences like “Turn down the volume, it is too loud!” or listening to ascending pitches while watching keys of a horizontal keyboard being pressed down seem to create more confusion than facilitate the actual concept building (Alvarez, 1993; Campbell & Scott-Kassner, 1995 & 2006; Pohlmann, 1994/95). Zimmerman (1971) accounted that visual experiences can influence aural perceptions of three-year-old children in a dramatic way. Zimmerman cited Hitchcock’s investigation on the pitch conceptualization of young children and indicated that children of age three matched the picture of a small airplane high in the sky with low pitch “because that airplane looked little or low to them” (p. 7). Hence, teachers must carefully select visual

cues to be associated with pitches and melodic phrases when the terms high and low are presented. Zimmerman (1971) proposed to employ the same-different comparison as an alternative "to overcome the difficulties of the high-low comparison" (p. 7).

The understanding of pitch relationships resides upon the understanding of intervallic movement of pitches. It is commonly verified that wider intervals (e.g., octaves, sixths) are easier to perceive than narrower ones, "with the percentage of correct discriminations increasing with both the size of the interval and the age of the children," (Zimmerman, 1971, p. 8). In regards to intervallic direction, Ramsey (1983) discovered that three- to five-year-olds demonstrated more success in matching descending intervals than ascending. Furthermore, Ramsey identified intervals of unison, major second, and minor third to be readily matched by singing with success in comparison with other intervals.

In practice, step bells, slide whistles, and vertically oriented xylophones serve as appropriate teaching tools (Campbell & Scott-Kassner, 1995 & 2006) for interval and high-low concept learning. Similarly, singing and playing these types of melody instruments "give a concrete representation to pitches that are otherwise abstract" (Zimmerman, 1971, p. 11). Once again, Campbell and Scott-Kassner recommended that teachers involve children in singing, moving, and playing instruments to enhance the understanding of pitch relations.

Advanced Pitch Concepts. Scales and major-minor modes represent the key elements of advanced pitch concepts. According to Campbell and Scott-Kassner (1995), children of the age of six and seven start to develop "a clear sense of tonality" (p. 116). This "sense of tonality" may not mature until the age of eight (Zimmerman, p. 10). In

other words, children before the age of six may experience difficulty in understanding and recognizing that music is built around a tonal center. The scale, as discussed in the with respect to the elements of preschool piano methods, is established as a concept long before introduced as a technical issue involving thumb-crossing (Uszler, Gordon, & Smith, 2000). Its appearance within the beginning piano method varies from book to book. While some authors choose to expose children to the sound of a scale, others may use whole-half steps or tetrachords to teach the building of a scale. Similarly, method books achieve the goal of major-minor association by introducing five-finger positions. Beyond the simple association, methods using five-finger positions and multikey approaches also name their positions as C-position, G-position, F-position, or A-position in preparation for the future C-major, G-major, F-major, or A-minor. While children progress through the beginning method books, sounds of scale and major-minor tonal patterns serve as the aural enculturation apparatus that precedes the introduction of symbols.

Vertical Pitch Development

Harmony and Accompaniment. Harmony, simultaneous musical sounds occuring typically as chords, is usually perceived as accompaniment to melodies. Indeed, beginning piano methods frequently present harmonic materials in form of one, two, or three stacked pitches serving as accompaniment. This type of accompaniment challenges young children's cognition, perception, and coordination in such a manner that before the age of eight, false accompaniments can not be readily detected (Zimmerman, 1971). Like in all other characteristics of preschool children, the awareness of vertical pitch structure is dependent upon child development (Campbell & Scott-Kassner, 1995 & 2006), and the

enculturation of “harmonic clichés of the common practice period of Western music” (Zimmerman, p. 9) helps condition young children’s expected musical responses and their ideas about what sounds agreeable. Campbell and Scott-Kassner (1995 & 2006) recommended using various approaches to teach harmony to preschool children. Unlike the typical designation of the left hand to play harmonic accompaniment in beginning piano study, Campbell and Scott-Kassner focused on developing children’s sensitivity to “harmonic fit” with various opportunities for singing, moving, playing, and listening to realize the timing of chord changes appropriate for a given melody. According to the same authors, the relation between melody and harmony is best internalized and reinforced before the age of 6. Zimmerman (1971) discussed the age-related issue of harmonic understanding and noted that ages between 6 and 8 represent the window of the rapid development in melodic perception. She added that serious development of harmonic perception will not take place until the age of 8.

The ultimate goal in teaching pitch understanding is to “develop sensitivities to pitch structure as a natural part of responding cognitively to the music that surrounds [children]” (Campbell & Scott-Kassner, 2006, p. 117). Consequently, the transformation from percepts to concepts again becomes the challenge for all teachers.

Functional and Performance Skills

Listening, singing, moving, playing, and creating are important and functional performance skills used in making music. Each skill will be discussed briefly, below.

Aural Development & Listening Skills

The essence of musical intelligence begins with auditory attentiveness to musical sounds (Kenney, 1997; McDonald & Simons, 1989). As Zimmerman (1971) stated, “In

no other field does aural perception play such a paramount role" (p. 6). Children are naturally born music listeners and with this innate characteristic, develop perceptive listening. While all musical elements, such as melody, rhythmic pattern, harmonic texture, or structure of form, can be heard and perceived aurally, preschool children experience some limitations due to *centration* as proposed in the Piagetian theory, and thus display the tendency to center on one attribute of sound stimuli to the exclusion of others (Zimmerman, 1971). Investigations on listening behaviors of young children reveal that the auditory perception of music appears to follow an age-related sequence (Jordan-DeCarbo, 1989; Peery & Peery, 1987), which interferes with the order of certain elements of music listening to be presented to young children (McDonald & Simons, 1989; Miller, 1986).

As a general rule, response to and discrimination of dynamics and timbre characterize the earliest elements of perceptive listening (Campbell & Scott-Kassner, 1995 & 2006; McDonald & Simons, 1989; Moorehead & Pond, 1977; Zimmerman, 1971). The development of pitch and rhythm understanding follows, and that of harmony appears to be acquired latest in the age-related music learning sequence (Campbell & Scott-Kassner, 1995 & 2006; Greenberg, 1979; Moog, 1976; McDonald & Simons, 1989; Romanek, 1974; Zimmerman, 1971 & 1978). The challenge for teachers is not only to transform the existing listening ability of young children into perceptive listening, but also to help foster their active and reflective listening during instrument playing.

Vocal Development & Singing

Vocal capabilities occur early during infancy. Exploring and playing with vocal sounds bring joy and satisfaction to young children who later discover singing as a very

personal musical expression of their own interests, experiences, and feelings (Campbell & Scott-Kassner, 1995 & 2006). This discovery of singing ability appears by the age of three. From this age onwards, young children begin "to develop the periodic accents of regular rhythmic patterns in their spontaneous songs" (Campbell & Scott-Kassner, 1995, p. 127) and to notice differences between speaking and singing voices. Studies on vocal development indicated that the most comfortable singing register of preschool children includes a four to five-note range within c-a (Campbell & Scott-Kassner, 1995 & 2006; Kim, 2000; McDonald & Simons, 1989; Miller, 1987; Scott-Kassner, 1993; Ramsey, 1983; Sims, 1993; Smith, 1963). Hence, selections of repertoire for young children to sing and to match must take the vocal range into consideration. The pattern of melodic intervals within songs also affects children's singing skill. Because the *sol-mi-la* pattern permeates children's familiar songs and nursery chants (Campbell & Scott-Kassner, 1995 & 2006; McDonald & Simons, 1989; Moorehead & Pond, 1977; Pond, 1992) and includes the descending minor third interval most easily recognized (Ramsey, 1983), it has become the most commonly used melodic pattern in early music lessons.

In addition to natural vocal development, adequate training can aid vocal skills of young children significantly. Preschool children's mastery of a new song progresses through several stages (Campbell & Scott-Kassner, 1995 & 2006; Davidson, 1985; Gardner, 1992; Kenney, 1997; McDonald & Simons, 1989; Moog, 1976; Sims, 1990). First, the meaning of the words in the new song attracts children's attention, and thus are learned quickly. Shortly afterwards, the surface rhythm of the song is captured because it is "closely yoked to the actual linguistic phrases" as Gardner (1992, p. 36) described. Mastery of the pitch contour of songs develops next, while the sense the direction of

pitches going up or down and the approximate size of the leaps develop over time with repetition. Once a childe masters interval size and direction, the sense of tonality of songs emerges. In the beginning, young children learn by imitation, as illustrated in the section above related to cognition development. A child's mastery of singing songs accurately, however, often relies on guidance and feedback from the teacher. Researchers verified that group vocal training for three- and four-year-old children is effective in achieving results of vocal accuracy (Boardman, 1964; Campbell & Scott-Kassner, 1995 & 2006; Kenney, 1997; Smith, 1963; Zimmerman, 1971). Other factors such as cumulative musical experiences and maturation also play important roles in the development of tuneful singing (Kenney, 1997; McDonald & Ramsey, 1992; McDonald & Simons, 1989; Zimmerman, 1971). Furthermore, educators pointed out the importance of young singers "maintaining the tonal center rather than [focusing] on the exact reproduction of each specific interval" at the early stage of vocal development (Zimmerman, 1971, p. 26).

Like in all musical endeavors, vocal development relies on the maturity of listening skills. The integration of listening and singing skills within piano study should not be neglected. Notwithstanding that vocal development is not the major consideration in the piano study, the percentage of singing and pitch matching tasks is noticeably high during the interview for piano readiness. The close examination of these particular skills seems to support that if children can sing accurately they are more likely to discriminate musically (Campbell & Scott-Kassner, 1995 & 2006; Davidson, Scripp, & Welsh, 1988; McLean, 1999), although results of some studies have indicated that the ability to match pitch does not necessarily translate to the ability to discriminate pitch (Geringer, 1983; Seashore, 1967).

The findings of these studies suggested that children who can discriminate pitch aurally but experience failures in pitch matching vocally may lack maturation and training. In the investigation of children's ability to recognize pitch and to produce pitch vocally after an instrument sound, Pedersen and Pedersen (1970) reported that musical understanding was more related to vocal pitch production than to pitch discrimination. In other words, the ability to match pitch accurately greatly enhances the total musical understanding. This notion is verified by Yang (1994), whose finding demonstrated a clear relationship between vocal accuracy and children's ability to play back melodic patterns in piano.

The skills of vocal production can serve as the best mediator in piano study for the purpose of converting children's perceptual experiences into conceptual knowledge. On condition that vocal technique begins with the earliest song and is guided by the knowledgeable teacher who understands the physiology and capabilities of the young voice, children who learn to sing and match well will benefit greatly from listening to their own voices in relation to other musical sound sources (Zimmerman, 1971).

Motor Development

Much has been illustrated about the inseparability of musical movement, rhythmic development, and child development in previous sections. Especially for young children, music movement activities represent the means for total music learning that involves aural, visual, cognitive, perceptive, and kinesthetic senses in open-ended, non-threatening experiences (Aronoff, 1992; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985). In this section, however, the discussion of motor development will focus on its relation to music making and preparation for playing an instrument.

Movement to Music

The profile of children's motor development in relation to music making reveals that synchronizing the performance of beat with music for a controlled duration of time may begin at the age of 3 (McDonald & Ramsey, 1992). Children of this age not only enjoy repeating known movements, but also like inventing and imitating new movements of action and game songs that primarily involve large motor muscles. By age 5, children demonstrate motor maturity in rhythmic marching, clapping, and simple dances. These young children move at relatively fast tempi that govern accurate motor responses. Zimmerman (1971) suggested that "nursery school children" should learn "to keep time with fast tempi rather than with slow tempi" (p. 26). As these young children become accustomed to synchronizing their movements with the music, moving to slower tempi will become easier. From the age of 5 onwards, children develop greater small and large muscle coordination and control. In addition, their fine-motor skills for drawing and printing become more and more precise (Campbell & Scott-Kassner, 1995 & 2006; Scott-Kassner, 1993). Consistent with the profile provided by the DAP guidelines, it may be concluded that maturation, not training, is the major factor for improving these skills significantly (Campbell & Scott-Kassner, 1995 & 2006; Scott-Kassner, 1993; Zimmerman, 1971). The same developmental sequence applies to eye-hand coordination as well.

Preschool children improve the quality of movement responses by learning from tactile modeling (Miller, 1987; Scott-Kassner, 1993; Sims, 1990 & 1993). The motor development of these young children appears to grow from independent imitation of more sophisticated movements of older children or teachers. Reports on implementing

movement instruction also demonstrate effective results for nurturing young children's motor development and music conceptualization (Campbell & Scott-Kassner, 1995 & 2006; Sims, 1990 & 1993). When natural and creative movements are encouraged to express musical perceptions, musical sensitivity leads young children to the discovery and reinforcement of features and components of music (Campbell & Scott-Kassner, 1995 & 2006), which in turn channels children toward "developing concepts about the body in relation to space, exploring concepts related to rhythm, and providing a nonverbal method for children to respond to the expressive characteristics of music" (Sims, 1993, p. 21).

Instrument Playing

The correlation between children's abilities to play instruments and the maturity level of their physical development is obvious. Already by the age of 3, young children discover "the muscle control that goes with playing and silencing the rattle at will" (Campbell & Scott-Kassner, 2006, p. 192). Their coordination and perceptiveness to keep the steady pulse and to copy basic rhythmic patterns using instruments will also mature with age. Sound production is a physical activity. The human body has an innate drive to strike things in order to produce sounds (Moorehead & Pond, 1977). In a short time, the baby finds pleasure in hearing the sounds he has made. The discovery of this pleasure inspires children to explore sounds of various sources and thus nurtures their motor development (Campbell & Scott-Kassner, 1995 & 2006; Scott-Kassner, 1993; Sims, 1990 & 1993; Zimmerman, 1971). The variety of sounds soon takes shape in rhythmic combinations.

Children translate the sensations of musical rhythm into kinesthetic action (Moorehead & Pond, 1977). Analogous to playing techniques that follow a developmental sequence and require practice for refinement at any given age, experiences of playing should also be obtained from musical instruments chosen to match children's developmental abilities.

Of all musical instruments, the human body is the most natural one to young children. The variety of body sounds, such as clapping, snapping, and patting the shoulders, head, elbows, knees, and stomach, amazes children. The rhythmic experience of body percussion prepares young children for playing non-pitched instruments, followed by pitched instruments (Campbell & Scott-Kassner, 1995 & 2006). Through discovery and imitation, preschool children first learn to produce rhythms with non-pitched instruments like maracas, triangles, and drums, and later become skilled at playing melodies and accompaniments on xylophones, tone bells, and keyboards. Such delight of sound exploration will be maximized if the introduction of playing techniques and instruments is based on DAP considerations.

Keyboard playing can be developed to prepare for piano study with teachers' careful guidance. For nursery school children, the development of accurate performing gestures is stressed (Zimmerman, 1971). Children of this group learn to play instruments mostly by exploration (Scott-Kassner, 1993), by ear, and by imitation (Landers & Landers, 1973; Miller, 1986 & 1987). As early childhood music educators have suggested that instrument playing is the extension of the child's body (Andress, Heimann, Rinehart, & Talbert, 1973), the kinesthetic sense supporting this extension of sounds will not mature until about age seven (Zimmerman, 1971). Before then, children benefit to a great

extent from the use of large muscles in mallet playing, movement to music, and musical games, as well as the use of small muscles in finger-plays and action songs as the preparation for piano playing (Campbell & Scott-Kassner, 1995 & 2006; McDonald & Ramsey, 1992). According to Campbell and Scott-Kassner (1995), action songs and singing games facilitate coordination of "synchronized rhythmic movement and the singing voice" (p. 194). Such a process helps channel children's energies toward meaningful movements, and various aural experiences and songs that children already can sing by rote are DAP materials relevant to engage young children in task learning (Zimmerman, 1971). Children's development of aural acuity skills sets the groundwork and the preparation of playing techniques (Campbell & Scott-Kassner, 1995 & 2006; Moorehead & Pond, 1977; Zimmerman, 1971).

Learning to play an instrument boosts the development of musical understanding. Performance skills of young children can build up quite rapidly "when they are developmentally ready, that is, when they have arrived at the motoric and perceptual stages required for successful performance" (Campbell & Scott-Kassner, 2006, p. 219). A cause of frustration and failure in piano study for young children may lie in the lack of preparatory experiences and physical skills that they can transfer to playing with rhythmic accuracy. Should the prospective young student demonstrate the lack of preparatory skills and method books not provide for the preparatory experiences, teachers will have to use various music teaching approaches to bridge the gap and engage young children in the kind of transitional lessons (Azzara, 2002; Grunow, 1999; Hannagan, 1999; Tarr, 1999) mentioned previously in the literature review component related to preschool piano methods.

Concept Development and Notation

For preschool children, the development of concepts requires many experiences, or even "more of the same" experiences (Palmer, 1993, p. 5), rather than direct instruction (Alvarez, 1993; Bredekamp & Copple, 1997; Hart, Burts, & Charlesworth, 1997; McDonald & Simons, 1989; Miller, 1987; Nye, 1983; Uszler, 2003). Concept learning for this age group relates to seeing, touching, hearing, and feeling involving a variety of sensory modes. Translating this idea into music, children, explore, discriminate, manipulate, and categorize the sound sources in their environments (Scott-Kassner, 1993). The more first-hand sound experiences children obtain, the better their ability to develop music concepts. Although the nature of many music concepts is complex, all elements of music are suitable to experience in the prekindergarten years with DAP considerations (Alvarez, 1993; Bruner, 1960). Timbre, dynamics, rhythm, tempo, melody, texture (harmony), and form are believed to be the DAP relevant concepts that should be experienced as a whole (Alvarez, 1993; McDonald & Simons, 1989).

Once a child demonstrates perception of musical elements, labeling these concepts is the next, natural step to continue concept development. Given that preschool children know much more than their verbal ability can demonstrate (Bredekamp & Copple, 1997; Flowers1984; Hair, 1981 & 1987; Zimmerman, 1981), teachers should start with children's own words and expressions (Zimmerman, 1971) to facilitate bringing "meaning *to* the terms rather than trying to extract meaning *from* abstract verbal labels" (Alvarez, 1993, p. 31). Hair (1981) added that sound-descriptive terms are more appropriate for preschool children to use than the traditional terminology. Furthermore, music concept vocabulary should be introduced in conjunction with musical examples of

the concepts. Clearly in this matter, “experience before symbol” rules. Zimmerman (1971) suggested to guide and to encourage children “in their spontaneous music-making before the cognitive aspects of musical learning are emphasized” (p. 15). She also believed that prior to the introduction of conventional notation, young children should be given opportunities to notate sound using their own notating devices. Studies on the effectiveness of children’s created notation in their understanding and creation of music support Zimmerman’s statement (Bamberger, 1991; Fassbender, 1996; Gromko, 1994 & 1996; Levi, 1991; Smith, Cuddy, & Upitis, 1994; Wilson & Wales, 1995).

Affective Development

Music is known for its power to evoke feeling and emotion. The affect evokes influences children’s appreciation, attitudes, interests, and musical taste (Zimmerman, 1971), which in turn shapes affective development of human behavior (McDonald & Simons, 1989). Unsurprisingly, affective development is related to levels of cognitive and perceptual development. According to Zimmerman (1971), “Increased knowledge and understanding lead to increased appreciation and interest” (p. 21). This type of affective response, or music preference, has inspired a specialized line of research. Investigations reveal that children are more tolerant of unfamiliar or unconventional types of music than adults (Gembris, 2002; LeBlanc, 1981; Scott, 1989; Scott-Kassner, 1993). Factors such as performing medium and tempo have been reported to increase music preference (LeBlanc, 1981). In his investigation on connections between teacher approval and disapproval of music and performance familiarity on middle school students’ music preferences, Droe (2005) pointed to repetition being the effective factor to increase preference without

meeting resistance. Similar findings about repeated exposure to a variety of music a have also been recorded by Peery and Peery's (1987).

Hence, the period of the preschool years is critical to the affective development of children. Affective development in early childhood relies on intelligent discrimination that must be nourished. Exposure to a variety of music styles is critical to the shaping of music taste (Peery & Peery, 1987; Scott, 1989; Scott-Kassner, 1993; Zimmerman, 1971). While verbal descriptions of musical responses are of great importance in affective development, Zimmerman reminded teachers to emphasize the musical element rather than the reaction to the music. Subsequently, early affective music experiences should emphasize children's performance-based musical responses rather than their verbal answers (Miller, 1986 &1987; Scott-Kassner, 1993; Webster & Schlentrich, 1982).

Creative Development

Young children are natural creators whose inventive musical behaviors manifest themselves long before their abilities of reading or writing music are developed. Creative thinking is not only generative (Achilles, 1992), but is also a process that involves associating "previously unrelated things" and producing out of them "something that is new and satisfying" (Cox , 1966, p. 13). Qualities of creative thinking embrace three dimensions. According to Campbell & Scott-Kassner (2006), the three dimensions are: (a) "musical extensiveness"—the number of ideas generated, (b) "flexibility"—the effortlessness of shifting within parameters such as fast/slow or loud/soft, and (c) "originality"—the uniqueness and quality of the musical ideas (p. 250). Descriptive characteristics of children's creative moments reveal that their excitement of discovering, testing, and comparing instrumental sounds can often generate creativity; and that during

spontaneous play activities, creative singing emerges in form of chants (Scott-Kassner, 1993; McDonald & Simons, 1989). Most importantly, Moorehead and Pond (1977) indicated in their landmark research *Music of Young Children* that improvisation is the means to creative development and innate musicality.

Studies displayed above support the vision of Moorehead and Pond (1977) and advocate exploration and discovery of sounds as the first stage in the process of children's creative improvisation (Campbell & Scott-Kassner, 1995 & 2006; Gowan, Demos, & Torrance, 1967; McDonald & Simons, 1989; Scott-Kassner, 1993; Sims, 1993). Pace (1999) even suggested that this creative improvisation be made a daily event for children, to develop creative problem solving. The goal of sound exploration and discovery is to develop ease and flexibility for young children to manipulate the language of music (Campbell & Scott-Kassner, 1995 & 2006). In the course of free exploration, preschool children absorb an inventory of sound possibilities and techniques— in most cases also containing a collection of music elements (Burton, 1989)—that later serves as the building blocks for improvisatory decisions. A Kodály approach to the improvisational techniques described by Campbell and Scott-Kassner proposes to produce a four-beat rhythm or pitch patterns for echo clapping or singing. Both rhythm and pitch materials should be designated for this four-beat pattern. After echo imitation, other rhythm and pitch materials can follow or be added to the internalized rhythm and pitch patterns. As a result, children experience improvising a longer melody or creating the "answer" to a model "question" (Campbell & Scott-Kassner, 2006, p. 254). Such creative improvisations can be achieved through singing, moving, and instrumental playing. Sims (1993) suggested engaging children in a musical conversation by using two

different instruments. This process inspires creation of musical dialogues that are full of children's improvisatory ideas.

The next level of the creative process is the act of composition, which some children do entirely for the sake of aural and physical pleasures, while others realize their musical creations by writing. The opportunity to notate a piece offers young children the chance for reflection and revision. Young children who have not learned to read and write may generate their own notational devices in order to write their creations. Researchers have found that invented notation and the process of composition increase children's ability to self-express and to read music (Gromko, 1994 & 1996; Gromko & Poorman, 1998a; Levi, 1991).

Teachers are facilitators in the development of creative thinking (Pace, 1999). Achilles (1992) indicated that "opportunities for children to respond at their own discretion rather than on command" are the soul to creative teaching strategies (p. 70). This statement coincides with the theories of Piaget and Bruner; that children obtain knowledge through acting upon it. Guided by the teacher's open-ended questions, young children conduct their own playing business in an environment for creative behaviors. While children decide how much time they will spend on certain activities, the teacher should try to enter into the same spirit of play as well. Observable creative musical behaviors include changing words to a song or making up new lyrics. In addition, unusual physical responses such as "twisting, flapping arms, or clapping elbows together" are also early creative sprouts (Sims, 1993, p. 26). Any made up songs provide the essential ingredient for creative thinking.

As in all growth, the process of development is more important than the end result product. Through the experience of creative development, young children "show us their uniqueness and their individuality" (McDonald & Simons, 1989, p. 52). This uniqueness and children's different musical growth patterns must be understood and respected; every sincere effort should be accredited and praised, especially during the formative years. Although creative activity was not specifically mentioned in the piano texts by pedagogues (Bastien, 1995; Lyke, Enoch, & Haydon, 1996; Uszler, Gordon, & Smith, 2000), preschool piano teachers should not shy away from "continuous opportunity and proper encouragement" in shaping children's creative thinking (Pace, 1999, p. 1).

SUMMARY

The overview of this literature review indicates that development of preschool children in various domains follows an age-related sequence (Campbell & Scott-Kassner, 1995 & 2006; Jordan-DeCarbo, 1989; Greenberg, 1979; McDonald & Ramsey, 1992; Peery & Peery, 1987; Romanek, 1974). The origin and definition of developmentally appropriate practice are described because both piano teachers and students can benefit once decisions based on DAP knowledge are applied in piano study.

Developmental characteristics of young children discussed included maturity of physical, intellectual, social and musical domains. Profiles of young children's developmental characteristics reveal that gross-motor skills develop before the growth of fine-motor skills. The physical maturity of preschool children also leads to development of sensations and perceptions such as touch and acute listening skills; however, finger dexterity is not designated as the ultimate goal for the preschool years. Manipulation of fine objects such as building blocks helps prepare preschool children's small muscles for

future challenges of fine-motor skills, thus representing a more DAP learning condition than spending time drilling on the children's fine motor piano performance skills.

Much of children's intellectual maturity develops from physical maturity in combination with language and cognitive development. When translating research findings and theories into practice, it becomes apparent that children's play facilitates the integration of these maturities. Not only does play offer opportunities for children to act upon objects, but the process of play also sparks linguistic inspiration that in turn furnishes cognitive comprehension. Another bonus of children's play is that participating in this process creates excitement for joyful outbursts that often come in the form of spontaneous singing, or even *musicing, alone or with others* (Elliott, 1995). In addition, young children fulfill various social needs during play, and develop a sense of belonging and self-esteem.

The development of musical behaviors also follows an age-related sequence. Elements at fundamental levels represent the best materials for young children to conceptualize. According to research and theories, movement is inseparable from rhythm; the establishment of rhythmic sense should precede pitch sense. Linear pitch development (pitch direction) grows before vertical pitch development (harmony). Listening ability must be engaged in order to develop musical comprehension. Patterns of rhythm and pitch are easier for young children to understand than a single rhythm value or pitch tone. To experience music, young children sing, move, listen, play, imitate, and create.

The overall abilities and capabilities of preschool children, in regard to both musical and non-musical characteristics, may best be understood through the extensive

reviews of literature in all developmental maturities. Approaches of how to teach musical elements vary between the culture of preschool piano teaching and appropriate practice as defined by DAP-related findings. These discrepancies, either philosophical or instructional in nature, can be investigated through the information projected directly from the piano method book and its teacher's manual. In the course of this procedure, the content delivery of piano teachers during the lesson becomes a matter of interest to be scrutinized. Hence, philosophical and instructional issues related to curricular planning, as may be relevant to preschool piano method books, will be discussed in the next section of the literature review.

ISSUES OF CURRICULUM PLANNING & INSTRUCTIONAL STRATEGIES

The creation of a preschool piano method encompasses a multi-dimensional endeavor. Given review of the literature of fields representing the tradition, history, goals, elements, and design of the preschool piano method, as well as the child-appropriate development and maturities of several natural domains, the next and last area to consider relates to issues of curriculum planning and instructional strategies.

Definition of Curriculum

The word *curriculum* is defined in the dictionary as "a set of courses constituting an area of specialization" (Merriam-Webster online). Campbell and Scott-Kassner (1995) translated this definition into general music teaching as "the activities that occur in the classroom" (p. 268). Following this vein, it is appropriate to consider that the preschool piano method is a curriculum for preschool-aged piano students, featuring a set of activities suitable for implementation by the individual music teacher who chooses a certain methodology to guide students of a particular age level. This type of curriculum is

coined by Campbell and Scott-Kassner (1995) as the "operational" curriculum and represents the product of a committee of authors and publishers that is filled with activities to promote significant musical learning. While being "actually implemented," this operational curriculum has a dynamic nature that is "subject to many influences" (Campbell & Scott-Kassner, 2006, p. 302)—such as experienced teacher versus novice teacher. As a rule, a curriculum is designed to "provoke thought about . . . the philosophy, goals, objectives, lessons, activities, and assessment measures so that each part is directly related to and reflective of every other part of the document" (Gordon, n.d., p. 1. from the MENC website document).

From the logical sequence of concepts, skills, and repertoire, the ready-to-use curriculum is highly structured and draws upon a broad scope of music knowledge to be learned. The established curricula for preschool piano teaching offer the teacher all possible information such as teaching philosophy, guidelines on how to use the manual, studio set-up, the interview process, instructional ideas, and even lesson plans. Hence, the concerns of the preschool piano teacher relate not so much about how to develop a curriculum, but to understand how a curriculum is created and how to implement the chosen curriculum. Bredekamp and Copple (1997) regarded the usage of these validated curriculum models as DAP friendly and benefiting "from the evidence of its effectiveness and the accumulated wisdom and experience of others" (p. 20). In line with the view of the DAP authors, Campbell and Scott-Kassner (1995 & 2006) indicated that the key to effective implementation of a curriculum lies in knowing and activating children's prior knowledge, consolidating their developmental and learning needs, and familiarity with elements of the given curriculum. This point of view bears significance in selecting the

appropriate piano curriculum for the preschool-aged beginner. According to DAP principles, curriculum that is “watered-down” (Katz, 1988) or oversimplified cannot challenge and motivate children, whereas curriculum stuffed with “next-grade expectations” (Bredekamp & Copple, 1997) often frustrates children by routinely engaging them in the mastery of skills that may be too challenging. Neither curriculum is appropriate by the DAP standards. In case that an established curriculum does not function well, Campbell and Scott-Kassner (2006) recommended to “use state or national goals in music education as a guide” (p. 305).

Curriculum Planning and Implementation

Philosophy

When writing a music curriculum, the first aspect to address should be philosophy, as recommended by the music education profession (Gordon, n.d., from the MENC website document). McDonald and Simons (1989) also indicated that the music education philosophy “held by the administrators, teachers, and staff of a school” must be taken into account prior to any program planning (p. 57). Following the definition of philosophy in McDonald and Simons’ terms, a preschool piano instructional philosophy can mean a set of beliefs about what piano teachers should and should not value, what they should teach, and how they should teach. The underlying principle for planning and delivering curriculum is ultimately and entirely reflected in the design of the preschool piano method book, the sequence of concepts, the repertoire choices, the instructional strategies, and the suggested music learning experiences such as singing, moving, listening, or playing. An intact piano teaching philosophy creates “meaningful learning experiences” that are “requisites for life-long skills to accrue” (Gordon, p. 1).

Nevertheless, Uszler, Gordon, and Smith (2000) wrote that American piano teachers on the average envisage the first two years of study as general preparation for elementary-level pupils to read music, count rhythm, acquire basic technical skills, and to become familiar with essential points of music theory. The rationale for this vision is for the pupil to avoid struggles associated with related functional and performance skills while learning to play classic literature. Despite the fact that the individual student has his or her own learning pace, the content of the general preparation aforementioned by Uszler and her co-authors is ultimately geared to elementary beginners, not to preschool-aged children. Hence, borrowing the appropriate teaching philosophy from other early childhood-related professions to guide the piano pedagogy curriculum seems to be a logical course to pursue; especially since Collins (1996) and Pohlmann (1994/95) specified that thoughtful curriculum planning is more critical to lesson success with preschoolers than with older students.

In light of understanding early childhood music teaching philosophy, piano teachers can benefit greatly from *The National Standards for Arts Education* (MENC, 1994a) created by MENC and from model curricula and additional publications related to those standards such as *Opportunity-To-Learn Standards for Music Instruction* (MENC, 1994b), *The School Music Program: A New Vision* (MENC, 1994c), and *Performance Standards for Music: Grade PreK-12* (MENC, 1996). Specific instructional strategies and lesson planning ideas for preschool music teaching are included in *Strategies for Teaching Prekindergarten Music* (Sims, 1995b). These books represent the best guides for appreciating and formulating a philosophy for the preschool music profession. On the whole, all curricula listed above support the belief the MENC position statement on

music in early childhood (1991) stood for; that all children have musical potential and that every young child possesses the right to develop this musical potential. Belief in DAP implementation and student-centered learning, along with acknowledgement of issues of developmental maturity and diverse backgrounds of young children, are also central components of the MENC curricula. Consequently, these essential values should be accounted for in every early childhood music curriculum (Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; Gordon, n.d.; McDonald & Simons, 1989).

Goals and Objectives

The second element for understanding the curriculum is the goal setting, or the statement of outcomes of accomplishment to be achieved by the learner at the end of the curriculum. Attainable goals must emanate from the philosophy and be based on principles of growth and development. In addition, Katz (1988) believed that "the goals of an educational program are set primarily by the clients to be served" (p. 9). This view requires that the curriculum developers understand where the children are starting and envisage what basic skills preschool children need to learn or obtain as the result of music study (Andress, 1992; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; McDonald & Simons, 1989; Rennick, 2000; Sanders, 1994).

Unlike the focus on developing singing and music reading skills in the 19th century general music room, broader musical goals representing the result of the accumulating body of research are in demand (McDonald &Simons, 1989). Musical skills like listening, singing, moving, playing instruments, development of age-appropriate concepts, repertoire including self-satisfying musical creations, and attitudes such as respecting and valuing music as a part of everyday life can all be regarded as suitable

program goals for young children (Campbell & Scott-Kassner, 1995 & 2006; McDonald & Simons, 1989). Program goals set direction and steer the objectives of the ongoing course of instruction. A consistent program will then emerge based on the integral connection between the objectives, the goals, and the philosophy (Gordon, n.d.).

Implementation of the Curriculum—Lesson Planning

After the establishment of goals and objectives, implementing the curriculum is the next step. Throughout the process of curriculum implementation and when planning for effective lessons, teachers are not only challenged but also simultaneously satisfied by the enormous demands of their musicianship, creativity, and insight into what children need (Campbell & Scott-Kassner, 1995 & 2006). In the document for developing a music curriculum on the MENC website, Gordon (n.d.) offered a basic "rule of thumb" in designing lesson plans for preschool children. A temporal formula of "one minute of time per activity" for every "one year of age of the children" is suggested (Gordon, p. 1). Based on her formula, children at the age of five can be expected to concentrate for five minutes on one musical experience (such as singing) before they become distracted. In order to maximize children's learning success, the preschool music teacher should change activities five times in a 25-minute music class.

In regard to lesson planning, Campbell and Scott-Kassner (1995 & 2006) proposed a "three-legged model" that begins with "objectives," continues with "strategies," and then culminates with "evaluation." Derived directly from curriculum goals and outcomes, "objectives" specify what growth or competencies in music the student should obtain as a result of the given lesson. According to Campbell and Scott-Kassner, *multiple objectives* concerning concepts, skills, and attitudes are common in

music lessons. The objective statement on a lesson plan should focus on specific musical skills and concepts such as “children will respond to music through gross motor movement, reflecting the music’s style, …” (Sims, 1995b, p. 59) instead of only “to learn the song” (Campbell & Scott-Kassner, 1995, p. 275).

The second “leg”—strategies—is where the teacher’s personal touch comes in. Strategies refer to all the procedures, materials, and activities designed in a logical sequence to facilitate students’ achievement of the objectives. Detailed sequential information describing how to proceed with the lesson is regarded as “threading” (Gordon, n.d., p. 3), which aims at concept reinforcement and is stylistically influenced by teachers’ instructional choices. The most productive way to immerse students in learning a concept is very similar to the way we acquire language skills (Azzara, 2002; Gordon, 1990; Grunow, 1999). In addition, educators reported that active learning involving multiple senses is effective, efficient, and long-lasting (Campbell & Scott-Kassner, 1995 & 2006; Gordon, n.d; Kenney, 1997; Neelly, 2001; McDonald & Simons, 1989; MENC Position Statement, 1991; Palmer & Sims, 1993).

The third “leg”—evaluation—is used to reflect on whether the objectives were realistic and whether the strategies were effective. The close connection between effective evaluation and the goals and objectives of music education is manifested by Flowers (1993) who further interpreted the meaning of evaluation as “valuing” or “caring” by teachers and parents (p. 37). Concern about children’s comprehension and related skills must be included in the evaluative section of every lesson. Evaluating young children is a challenging task because children of their limited verbal skills (Bredekamp & Copple, 1997; Flowers, 1984; Hair, 1981 & 1987; Zimmerman, 1986).

To maintain the objectivity in the process of evaluation, preschool music teachers need to employ a variety of assessment measures that will provide accurate and comprehensive evaluations of each student (Bredekamp & Rosegrant, 1992; Campbell & Scott-Kassner, 1995 & 2006; Flowers, 2003). Regardless of evaluative tools, teachers should constantly assess and determine the musical development and learning of their students, both formally and informally (Walker, 1992). Observable musical behaviors (e.g., singing, moving, playing, or reading) and internalized musical behaviors (e.g., listening, conceptualizing, perceiving, discriminating, or feeling) of young children are equally important and should be documented in order to measure the effectiveness of instruction. Concepts and skills developed through the lesson plan are best evaluated if students are allowed to accomplish authentic, performance-based tasks visually, aurally, physically, cognitively, and non-verbally (Bredekamp & Rosegrant, 1992; Flowers, 1993 & 2003; Gordon, n.d.; Webster & Schlentrich, 1982). "Indicators of success" found in *Strategies for Teaching Prekindergarten Music* (Sims, 1995b) and "description of response" used in *Performance Standards for Music: grades PreK-12* (MENC, 1996) represent benchmarks for assessing progress toward the national standards through multi-sensory modes.

Both assessment benchmarks offer detailed descriptions of how to assess children's musical growth. For example, for Early Childhood National Music Standard 4B: "children sing, play instruments, move, or verbalize to demonstrate awareness of the elements of music and changes in their usage," the expected responses recorded on the lesson plan specify that the teacher should monitor children's movements that demonstrate the ability to discriminate between changes in loudness, tempo, or pitch level.

The utilization of such descriptors for evaluative purposes not only facilitates tracing a detailed picture of each child's learning, but also refines and improves the efforts of consecutive lesson planning.

Instructional Strategies

This segment of the literature review bears significance in regards to preparing readers to investigate the teaching strategies offered in preschool piano method books. Although related information is limited within the piano pedagogical texts (Collins, 1996), writings from the music education can provide substantial theories and information applicable to preschool piano pedagogy.

Tradition versus New Vision

For generations, many piano teachers have tended to "follow a charismatic leader in piano pedagogy" and have felt secure to "use one series year after year and not have to search for other books or develop one's own set of criteria to guide the musical progress of a young pianist" (Lyke, 1996c, p. 52). Not only does this scenario fulfill all descriptions of the adage that "teachers teach as they were taught," but also implies some truth about the apprenticeship industry of piano pedagogy. To Lyke, piano methods with an "outdated middle-C series" (p. 52) still used throughout the world are the evidence for this phenomenon. Time has changed the way that teachers teach and students learn. In response to this notion, Katz (1988) indicated that the primary goals of an educational program are set to serve its clients. Only with an intact knowledge of child development and the principles of pedagogy can teachers "answer the questions about *how* the goals of an educational program can best be achieved" (p. 9).

The vision for the future advocates a need for much adjustment and changing from the teacher's perspective. In her keynote address at the National Conference on Piano Pedagogy, Maris (2000) talked about teacher training preparation for the 21st-century pianist. She proclaimed that "we need to help students learn how to deal with change" (p. 33), from "accumulating and regurgitating" to responding, searching for, and applying information. Consequently, the adjustment and change from the teacher's perspective points directly to the flexibility in the teaching philosophy and attitude of teachers who are guiding the prosperous musical generation. In his investigation of the emerging trends in the music profession and their impact on the individual teacher, Lowry (2004) philosophized, "Adaptability enables cultures to endure and also is a forming agent in its evolution. . .Species, including art forms, that don't adapt, die off" (p. 24). To better serve the evolving needs in the music profession, Lowry called out to teachers to "figure out new ways to captivate, to engage, to refresh, and to make the experience of making music special" (p. 27).

Furthermore, all independent teachers are invited to attend professional seminars and training programs to address the need for information about specific topics (George & Drew, 2000). By doing so, independent teachers may stay attuned to new developments, can learn new ways to appropriately respond to students' reactions (Wristen, 2002), become aware of developmental issues (Hammel, 2002), and also become specialists, who will make their discoveries accessible to others in order to strengthen instructional effectiveness (Maris, 2000). Among these specialists, many will have the honor and privilege to teach young children, to start them out with a respect and love for the piano (Lee, 2002). These specialist teachers of very-young children turn their

attention toward understanding early childhood education and developmental learning styles, which in turn they use to tailor instruction for each student.

The attitude and philosophy in teaching very young children should shift from an "instruction orientation" to a "developmental orientation" (Guilmartin, 2002), and the lesson planning emphasis from "curriculum-centered" to "student-centered." Guilmartin's recognition and acknowledgement of developmental issues among young children is consistent with the views of the world-renowned music educator Grace Nash, who was among the very first to combine Orff, Kodaly, and Laban music teaching theories. In an interview with Droe (2004), Nash asserted that teacher education had to change because of the awareness that the nature of children should be considered ahead of teaching content and subject matter.

With the movement towards acknowledging and implementing child development and learning theories into early childhood education, music educators have begun to synchronize their thinking into DAP-oriented philosophy by first observing the natural abilities of young children as revealed in their spontaneous music-making activities. According to Zimmerman (1971), early childhood music educators should take cues from children, "encourage, extend, and help develop children's skills through an organized plan rather than trusting that a variety of activities and songs will accomplish our goals" (p. 6). Based on the appropriate developmental knowledge about young children, for example, music teachers will plan lessons to improve pitch and rhythm discrimination instead of dynamics, because the perception of loudness develops without formal training (Campbell & Scott-Kassner, 1995 & 2006; McDonald & Simons, 1989; Moorehead & Pond, 1977; Zimmerman, 1971).

Profile and Qualifications of The Preschool Piano Teacher

A line of questions on why to teach preschool piano proposed by Collins (1996) can generate thoughts regarding the teacher profile. Within these questions, Collins brought attention to the teacher's willingness to learn and seek new teaching techniques and materials as well as to the teacher's awareness of the child's concentration abilities. Similarly, the position statement of MENC (1991) also specified these two aspects as the major characteristics of the preschool music teacher. On the whole, the qualities of the preschool teacher, as provided by MENC, include to love and respect young children, be able to communicate with this age level, understand stages of development, be confident with ones own musicianship, acquire appropriate music resources, as well as to value music and recognize that an early introduction to music is important in the lives of children (Collins, 1996; De Yarman, 1975; Gordon, 1990; MENC position statement, 1991). In addition, the preschool piano teacher should have attended to the technical and musical demands of piano performance for laying the proper foundation for future pianistic development (Collins, 1996).

Nonetheless, writings concerning preschool piano teaching are limited. In regard to teaching strategies, various texts of other professions provide the "picture" of what it takes to be a preschool music teacher. For example, the MENC position statement (1991) advocates that the preschool teacher use DAP materials and techniques to create appropriate music learning environments and be sensitive and flexible should children's interest divert from the original plan. Furthermore, educators agree on positive results from workshops and extension courses during which piano teachers can obtain firsthand experiences from skilled preschool music teachers (Collins, 1996; George & Drew, 2000;

Lowry 2004; Maris, 2000). For individuals who receive this type of training in early childhood music education, guiding musical experiences of the young child is not only desirable but effective, because they become adequate models for the early childhood musical endeavor; hence, these preschool piano teachers have a greater chance to create learning success than those teachers who have not specifically learned about instructional strategies of early childhood music. Ultimately, the specific profile and qualifications of the preschool piano teacher make a difference in achieving success in teaching.

Instructional Theories Revisited

In this segment of the literature review, issues related to curriculum planning and implementation, as well as instructional theories and strategies, are discussed. Although not directly from the piano pedagogical writing, much of the information can be located in literature about child-appropriate learning and teaching theories, as well as in the related profession of early childhood music education. These elements can readily be transferred to piano teaching for preschool children who, according to Collins (1996), demand a thoughtful curriculum even more than their older counterparts.

Direct Instruction versus Rote Teaching

Specific attention must be directed to the role of the student and that of the teacher. In his theory of meaningful reception, instructional psychologist David Ausubel (1968) deemed the role of the student as a receiver of ideas and information. Attention and compliance are both named as the core duties of the student, whereas the term “advanced organizer” is used to identify the role of the teacher as lecturer or explainer. A similar description of the teacher’s role is provided by Zimmerman (1979) as the important model taking responsibility in guiding children through musical learning.

The principle of Ausubel's (1968) theory emphasizes direct instruction, portraying the child-student as the innocent sponge that comes into the learning situation with natural abilities, a unique background, a fine interest in the subject matter, and absorption of every bit of knowledge structured by the teacher in advance. The blank-paper-like image of the child-student instills the immense responsibility on the teacher's side in such a way that it seems to prescribe direct instruction to teach young children. The strategy of direct instruction applicable at the preschool level is rote teaching, and the child-student absorbs the advanced information by rote learning or imitation.

Imitation is closely linked to sensory motor development. Piaget (1968) indicated that "until a definite form of language is acquired, interpersonal relations are limited to the imitation of corporal and other external gestures and to a global affective relationship without differentiated itself can be communicated" (p. 19). This mode of learning is applicable to other fields of knowledge for preoperational children. Uszler, Gordon, and Smith (2000) reported that rote teaching and learning occupies a great percentage of instrumental teaching methods. This notion is also evident in my own teaching experiences and permeates reported firsthand experiences of the online piano teacher community. Although not officially prescribed as an instructional strategy, rote teaching and imitation are justified primarily because they represent the closest mode to how children are conditioned in language learning. Looking from a different angle, rote learning partially fulfills the rule of "experience before symbol" as the teacher demonstrates how to do certain tasks. Campbell and Scott-Kassner (1995 & 2006) reported that modeling of music behaviors is far more effective than verbal explanations. Then again, the fact that rote learning is not overwhelmingly emphasized throughout

music teaching texts may be to avoid too much time spent on instruction of narrowly defined skills, musical or intellectual, at the expense of active and experiential learning approaches in a meaningful context as recommended in DAP guidelines (Bredekamp & Copple, 1997). This statement is in a total accordance with Campbell and Scott-Kassner's (1995 & 2006) vision that calls for children's performance not to be absolute mimicry as the result of a teacher's musical demonstrations. Indeed, the balance between the roles of child-student and teacher goes beyond their simple roles of provider and receiver. In the era of child-centered education, the issue of preschool-aged children in piano study demands more sophistication than the previously mentioned Ausubel's (1968) model of instruction.

From Theories to Practice

Instructional strategies directly applied to music teaching expand beyond the view of Bruner's learning theory. As illustrated previously in the section of developmental learning theories, Bruner (1966) proposed a theory of development of children's cognition that is dependent upon maturation. The theory of cognitive stage progression however, can be applied to all ages and intellectual stages. Campbell and Scott-Kassner (1995) verified the applicability of Bruner's model of "enactive, iconic, and symbolic" phases to music teaching and concluded that Bruner's modes of representation "are useful in providing increasingly sophisticated instructional sequences for any concept" (p. 20). The key to the success of implementing the Brunerian model is the discovery method that requires the learner to manipulate materials and to develop their problem solving skills. Before labeling any concept, children gain sufficient understanding about certain concepts to be learned and those experiences will lead to the formal naming of those

concepts (Campbell & Scott-Kassner, 1995 & 2006). Proponents of Bruner's concept of learning advocate a spiral curriculum for teaching any subject to children at any age with developmentally appropriate intellectual challenges.

While Bruner offered his broad framework of instructional practices, Gagné's (1977) events of instruction profiled a progression of sensory information from perception to concept information. In Gagné's events, the role of the teacher is to engage children's interest for knowledge acquisition from the very beginning. This role outgrows the image of the advanced knowledge organizer proposed by Ausubel (1968), and the teacher gradually gains importance as the multifaceted process of problem solving sets in. A close examination of the events reveals that Gagné's model of instruction contains clear-cut steps that can be readily applied to music. Gordon's (1990) music learning theory appears to be influenced by Gagné's theory and his early work is viewed as a direct application of Gagné's events to music (Campbell & Scott-Kassner, 1995 & 2006; Runfola & Swanwick, 2002). Certainly, Gordon supports Gagné's belief that simpler (behavior) principles are introduced before higher order (cognitive) principles (Taetle & Cutietta, 2002) with his comparison of learning music to mastering a spoken language that indicates a learning progression "from first simply perceiving and responding to sounds to the advanced levels of problem solving and conceptual understanding" (Campbell & Scott-Kassner, 1995, p. 33). The instructional route from simple to sophisticate appears to be in accordance with Bruner's theory.

Adapted from steps of events of instruction (Gagné, 1977), Campbell and Scott-Kassner (1995) proposed an eight-step events of instruction hierarchy (p. 34) applicable to early childhood music. The first two steps aim at capturing students' attention and

preparing them for daily instruction. The middle four steps carry out the actual cycle of lesson delivery, such as presenting the material, guiding learning, and providing conditions for response and feedback. The last two steps of the adapted events of instruction designate the evaluative and transfer procedure from both the students' and the teacher's perspectives. The middle portion of Gagné's events can be distilled into the acronym "TST" (Campbell & Scott-Kassner, 2006, p. 41) —with the T standing for the teacher's presentation of material, the S for students' response to that material, and the last T for the teacher's specific feedback to the response. In the view of Campbell and Scott-Kassner (2006), not only does the TST represent an interactive instructional "kernel" (p. 41) of the teaching and learning process, but it also serves as the model instructional strategy employed frequently by music educators. Derived from the Skinnerian stimulus-response-stimulus sequence, the TST produces a model of effective instruction with multiple cycles of TST progressing from one to the next.

Yarbrough and Price (1989) utilized a three-component teaching cycle (TSR) similar to the TST model in a study on sequential patterns of instruction in music. The only difference between the two instructional sequences is the last component that is titled "reinforcement," with either approval or disapproval serving as the teacher's feedback. Yarbrough and Price (1989) concluded in their investigation that in terms of time spent on each component for its own purpose, reinforcement is comparatively neglected. Speer (1994) has examined the applicability of TST/TSR to piano lessons. Time spent on each component as well as frequencies were analyzed from audio taped lessons. An analysis revealed that the "typical" piano lesson was filled with student performance, and that the predominant method of teacher presentation was not modeling

or coaching, but teacher talk. With only 6% of the total lesson time found for the teacher's verbal reinforcement, Speer discovered as many incomplete teaching cycles of TST/TSR as the findings revealed by Yarbrough and Price (1989). The conclusion from both studies implies that teaching effectiveness can be affected by the issue of how to balance the three components of the TST/TSR instructional cycle.

Within sequences of TST cycles, the task content must include both "LOTS" (lower-order thinking skills) and "HOTS" (higher-order thinking skills) to engage the students to comprehend a concept or simple facts and tasks on the one hand, and on the other hand to challenge students "to apply their knowledge of music, to analyze and self-correct, to synthesize information. . ., and to evaluate their overall performance in the study" (Gordon, n.d., p. 3, from MENC website document,).

For the preschool level, the "LOTS" learning often occupies much of the TST instructional cycle that has been reduced to drill-type exercises and worksheet tasks and takes time from the manipulative and creative musical experiences essential to the development of young minds (Gordon, n.d.). In order to prevent the "HOTS" learning from being neglected, Gordon reminded teachers to analyze one's own teaching sequences in order to integrate appropriate "HOTS" learning in terms of singing, moving, playing, listening, improvising, performing, and reading music. A lesson plan fortified with instructional strategies involving children in multi-sensory modes of learning helps children learn best. A child whose whole being is immersed in learning has the greatest likelihood of success.

CONCLUSIONS

This chapter has included discussions of developmentally appropriate practice as related to music pedagogy for young children, particularly focusing on issues related to beginning piano study. A survey of the related literature from the fields of piano pedagogy, music education, child development, early childhood education, and learning psychology was carried out. The findings of this literature survey will provide the standards and criteria against which the preschool methods will be assessed and compared.

CHAPTER III

METHODLOGY

The current inquiry was designed to analyze preschool piano method books and to uncover features that are, or are not, consistent with the guidelines of *Developmentally Appropriate Practices in Early Childhood Programs* (Bredekamp & Copple, 1997). Based on this analysis, and related research findings regarding musical characteristics of preschool children, I hope to identify and explain elements and gain insights related to the most effective ways to approach piano study with preschool aged students. The organization of this chapter encompasses the following segments of discussion: (a) research design, (b) data collection and analysis, (c) trustworthiness, and (d) data presentation and analysis.

Research Design

Mode of Inquiry

Upon evaluating the current undertaking, I decided in favor of a qualitative, multi-case content analysis. The qualitative method, based on its unique characteristics, is "sensitive to and adaptable to the mutually shaping influences and value patterns that may be encountered" (Lincoln & Guba, 1985, p. 40), thus permitting an in-depth and detailed study on the selected topic (Patton, 1990). According to Lincoln and Guba (1985), "the nature of the transaction between investigator and respondent (or object)" (p. 40) oftentimes reflects multiple realities. Accumulating knowledge through a naturalistic lens helps retain the "context" of the direct source of data (Bodgan & Bilken, 1998). By nature, the decision-making and the application of the guidelines of developmentally

appropriate practices are context-dependent. In the final step of data analysis in this study, the data accumulated from preschool piano method books, the guidelines of developmentally appropriate practices (DAP), and findings of related research will be considered simultaneously for cross examination. Consequently, the qualitative approach represents the appropriate mode to systematically and holistically appreciate and comprehend the data. An overview facilitates the understanding of the organization in this methodology chapter (Please see Figure 2 on page 120).

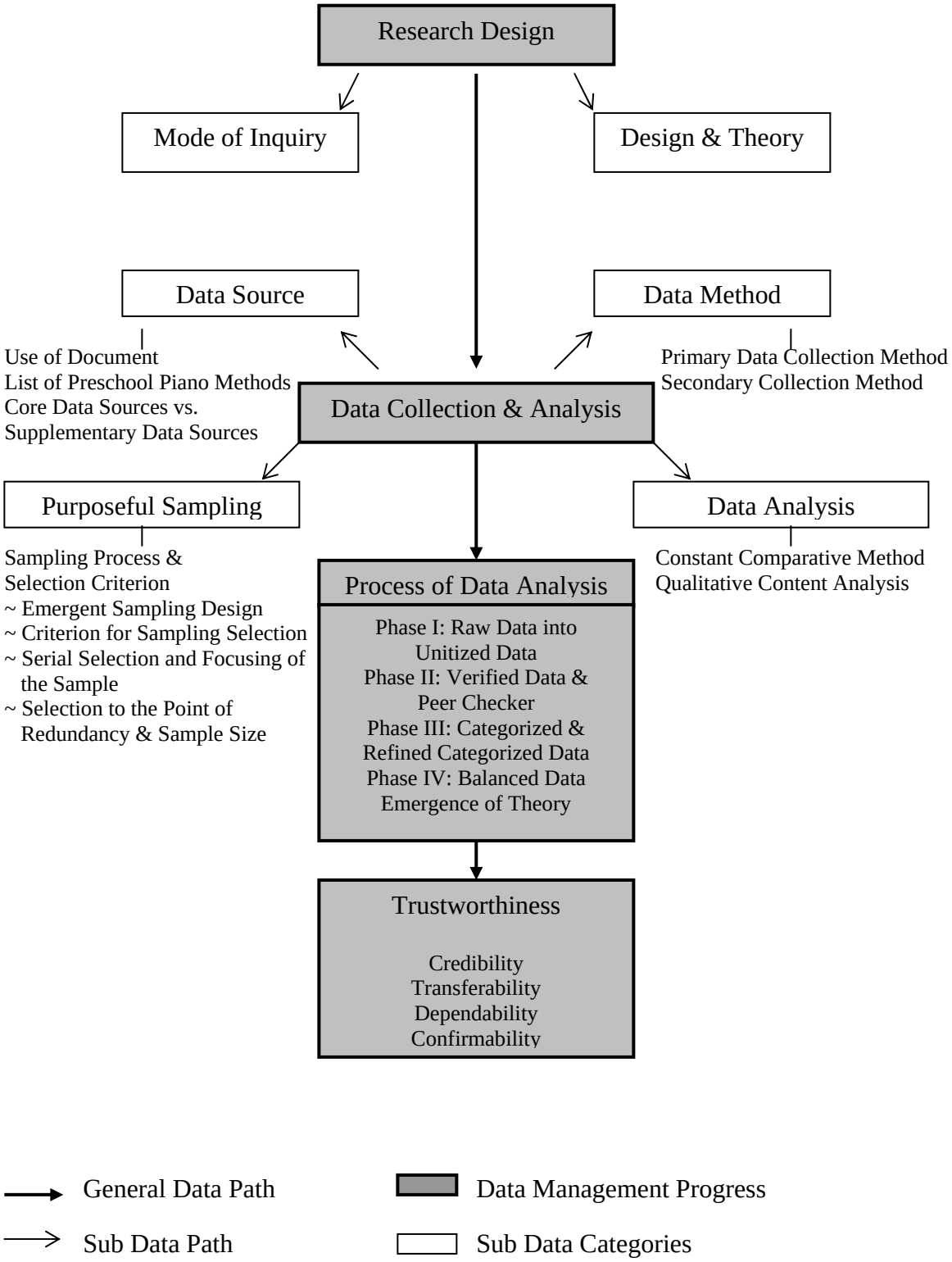
Design and Theory

Neither the design nor the theory of naturalistic research can be articulated completely *a priori*; they exist, but are flexible in nature (Bodgan & Bilken, 1998; Denzin, 1970; Glesne & Peshkin, 1992; Marshall & Rossman, 1989). Qualitative researchers Lincoln and Guba (1985) suggested that because the product of the interaction between inquirer and phenomenon is largely unpredictable in advance, the research design emerges as the investigation proceeds and the theory surfaces from the inquiry. In reality, the emergent design resembles a “constant flux” (Guba & Lincoln, 1981, p. 73) where new information nourishes fresh insights in an incessant mode. The same naturalistic experts added that, “if the methodologist must be resonant with the theory, methods can be clarified only as theory emerges” (Lincoln & Guba, 1985, p. 224).

In the current study, the researcher presupposed an encounter of multiple realities evolving directly from a database of multiple cases. The same source of the database will serve as the soil where the potential theory is not merely borne of the investigator’s values but “grounded” within them. The spirit of grounded theory embraces contextual values, demanding constant decision-making regarding the design throughout the process

Figure 2

METHODOLOGY OUTLINE



of data collection and analysis (Bodgan & Bilken, 1998; Denzin, 1970; Glaser, 1978; Glaser & Strauss, 1967; Glesne & Peshkin, 1992; Guba & Lincoln, 1981; Lincoln & Guba, 1985; Merriam, 1988). The technique for decision-making in the multiple case study is commonly known as "the constant comparative method" (Glaser & Strauss, 1967, p. 161), which will be addressed in depth below.

Data Collection and Analysis

In principle, data collection and analysis are inseparable in qualitative research (Bodgan & Bilken, 1998; Glaser, 1978; Glaser & Strauss, 1967; Glesne & Peshkin, 1992; Guba & Lincoln, 1981; Lincoln & Guba, 1985; Marshall & Rossman, 1989; Merriam, 1988). It is not only "a process of systematically searching and arranging" the data accumulated to increase the ability of the inquirer to understand them (Bodgan & Bilken, 1998, p. 157), but also "an interactive process throughout which the investigator is concerned with producing believable and trustworthy findings" (Merriam, 1988, pp. 119-120). Although devoting separate sections to data collection and analysis can be "misleading" (Merriam, 1988, p. 119), it is necessary for the reader to understand the meticulous attention to detail of data collection and data analysis. Thus, descriptions of components essential to data management will be found below, in sections related to (a) data sources, (b) purposeful sampling, (c) data collection, and (d) data analysis.

Data Sources

Use of Documents

The current multi-case study utilized nonhuman sources, or sources "other than those obtained through interviews and observations" (Merriam, 1998, p. 104), These sources, such as documents, records, written texts, songs, and artifacts (Bodgan & Bilken,

1998; Glaser & Strauss, 1967; LeCompte & Goetz, 1984; Guba & Lincoln, 1981; Hodder, 2000; Holsti, 1969; Lincoln & Guba, 1985; Patton, 1990), broaden the scope of the qualitative data for generating theory. Merriam (1988) stated that there is no reason not to use a data source if it contains information and insights relevant to the research question and can be acquired in a systematic manner.

Although limitations on the use of documents have stirred up concerns (Glaser & Strauss, 1967; Patton, 1990), many researchers have greatly endorsed the value of text-based data sources. Guba and Lincoln (1981) recalled Cartwright's (1953) comments on the use of documents as a form of communication "mediated by verbal and other symbolic behavior" that entitle "a crucial part of the investigation of man and his social behavior" (p. 228). Hodder (2000) termed the source of written documents and texts as "the mute evidence," which "unlike the spoken word, endures physically and thus can be separated across space and time from its author, producer, or user" (p. 703)

In the present study, the data sources were preschool piano teaching methods, containing both written texts and musical symbols, in lesson books, correlated books, the teacher's manual, and supplementary teaching aids from each method. Using these "nonhuman" sources seems reasonable and realistic, because these are the formats in which piano teachers typically encounter curricular and pedagogical resources.

List of Preschool Piano Methods

A list of eight preschool piano method books identified by Uszler, Gordon, and Smith (2000), described by those authors as "readiness courses for piano playing," served as the initial set of sources to be examined. Of the eight preschool piano method books, six were American: *Music for Little Mozarts* (1999) by Barden, Kowalchyk, and

Lancaster, Alfred Publishing; *Bastien's Invitation to Music: Piano Party* (1993-1994) by Bastien, Bastien, and Bastien, Kjos Publishing; *Sing and Play* (1981 & 1987) by Collins and Clary, Stipes Publishing; *Music Readiness Series* (1984) by Glover, Carr, Glasscock, and Stewart, CPP/Belwin Publishing; *Music for Moppets* (1971) by Pace and Pace, Lee Roberts/Hal Leonard Publshing; *Prep Course for the Young Beginner* (1988) by Palmer, Morton, and Lethco, Alfred Publishing.

Because the teacher's manual (defined in the current study as the core data source) of the *Music Readiness Series* by Glover et al. was found to be "out of print," this series was omitted from this study. Other "preschool-like" piano methods published since 2000 were found, but they did not specify the appropriate target age for their methods (e.g. four- to six-years-old) nor include a teacher's manual, so they were also excluded from the analysis.

The remaining two methods of the list originated in Japan: the Suzuki Piano School and Yamaha Music Education System. Both methods require instructors to go through their training program in order to become a certified teacher. Although Suzuki method books are sold in most music bookstores, materials of this series do not offer a teacher's manual to reveal related information about their teaching philosophy and instructional strategies. Due to the nature of training requirements and constraints on time and business, I was not able to neither obtain Yamaha copies nor undergo teacher training of both methods; therefore had to eliminate both of those methods from this study.

Core Data Sources and Supplementary Data Sources

The lesson book and the teacher's manual (or teacher's guide) of each preschool piano method represented the core data sources for the current investigation. Other books

such as workbooks, theory books, ear training books, discovery books, CDs, flash cards, and the like were viewed as supplementary data sources. The first reason behind this decision was based on the book count of each preschool piano method. Some method books concentrated on only one lesson book in company with the use of teacher's manual, while others included correlated books and emphasized the overlapped usage of books ranging from two or three to five. The second reason for this decision pointed at the degree of potential information that each book could offer. The place to collect data was where most of the written texts and musical symbols were cited. In this study, those were the lesson books and the teacher's manuals. Following the same logic, the scarcity of text print and musical symbols assigned the other materials that may or may not be included in a given series as additional supplementary sources of data.

Beside *The Well-Tempered Keyboard Teacher* (Uszler et al., 2000) and *Developmentally Appropriate Practices in Early Childhood Programs* (Bredekamp & Copple, 1997), a number of qualitative and quantitative journal articles as discussed in the literature review, and related pedagogical publications such as *Creative Piano Teaching* (Lyke, Enoch, & Haydon, 1996), *Music in Prekindergarten* (Palmer & Sims, 1993), *Promising practices: Prekindergarten Music Education* (Andress, 1989), *Psychology of Music*, *Readings in Early Childhood Music Education* (Andress & Walker, 1992), *Strategies for Teaching Prekindergarten Music* (Sims, 1995b), were used as aids for guiding, contextualizing, analyzing, and interpreting data.

Purposeful Sampling

Sampling in qualitative research is rather purposive than random (Bodgan & Bilken, 1998; Glaser & Strauss, 1967; Guba & Lincoln, 1981; Lincoln & Guba, 1985;

Merriam, 1988; Patton, 1990). It is commonly agreed that the approach of purposive sampling maximizes the inquirer's ability to focus on cases most relevant to the research questions.

Sampling Process and Selection Criterion

The sampling process underwent the following four stages (adapted from Lincoln et al., 1985, pp. 199-202; Bodgan & Bilken, 1998, p. 67):

1. Emergent sampling design. The researcher identified particular subjects of the phenomenal group with the certainty that they would support the developing theory. The nature of the current multi-case study resulted in the preschool piano methods serving as "the intensive sample" (Patton, 1990, p. 171). According to Patton, an "intensive sample" represents information-rich cases for in-depth study and "manifests the phenomenon of interest intensely" (p. 171). To determine the intensive sample, the researcher consulted the foremost authority in the piano pedagogy field on the subject matter, the text by Uszler, Gordon, & Smith, 2000.

2. The criterion of sample selection. Of each set of the preschool piano methods, the core books for data analysis contained a lesson book and a teacher's manual. Other books and teaching materials were regarded as supplementary sources. Given that the focus of this research is the initial period of piano study, only books from the first level of each preschool piano method were designated for investigation.

3. Serial selection and focusing of the sample. In this third stage of the sampling process, the researcher viewed each of the five preschool piano method sets as a case and assigned a number to each of them by random (to avoid confusion during the process of analysis) and started gathering important information from case number one to five, one

after the other. With close-up inspection and case-by-case scrutiny, emerging patterns facilitated the development of the research design.

4. Selection to the point of redundancy and sample size. Peters and Waterman (1982) explained that the information-richness of the cases selected and the observational/analytical capabilities of the researcher are more important to the establishment of the validity, meaningfulness, and insights of a qualitative inquiry than the size of sample. Patton (1990) stated that "*minimum samples*" are based on "expected reasonable coverage of the phenomenon given the purpose of the study and stakeholder interests" (p. 186). Because only five potential cases fitted the criteria for this study, and all were included in the sample, coverage included represented all available materials. It is the premise of this study that provided a sufficient amount of data for a meaningful analysis.

Data Collection

Primary Data Collection Method

The method of data collection in naturalistic inquiry appoints the investigator as the major instrument. Thus, in this study, I represented the primary instrument to collect raw data from both the primary data sources and supplementary sources. Pre-assigned case numbers allowed the researcher to independently collect data case by case without unnecessary confusion. After collecting the raw data of each case, I unitized data across all cases based on key issues, recurrent events, or activities (Glaser, 1978). The subsequent process of data coding can succeed only when the researcher maintains data collection and data analysis in equilibrium. Various phases with regard to the data collecting and processing will be discussed below.

Secondary Data Collection Method

The secondary instrument of data collection for this study was two peer checkers. These two "disinterested" colleagues commented on the emerging findings "in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquirer that might otherwise remain only implicit within the inquirer's mind" (Lincoln & Guba, 1985, p. 308). Consequently, the function of peer checking resembled that of peer examination (Merriam, 1988) or peer debriefing (Lincoln & Guba, 1985) and represented an ideal data method for verifying unitized data produced by the researcher.

Two colleagues of the researcher participated in the peer check. At the time of the checking process, one peer checker had just earned the Ph.D. degree in music education, and the other one was beginning her second year of doctoral study in music education. Both peer checkers have experience in piano pedagogy and teaching piano to young children.

The assistance of the two peer checkers not only permitted the triangulation of data methods, but also enhanced credibility of the current inquiry. Comments produced by peer checkers further inspired reflexive analysis by the researcher, thus achieving the stage of prolonged engagement with the data required for qualitative analyses. All of the abovementioned steps helped ensure the trustworthiness of the data.

Data Analysis

Constant Comparative Method and Qualitative Content Analysis

Typically, naturalistic data analysis is open-ended, inductive, and processed in a manner called by its creators, the "constant comparative method" (Glaser & Strauss, 1967, p. 161). The development and on-going process of coding, categorizing, theorizing, and

hypothesizing characterizes the core undertaking of the constant comparative analysis technique. The constant comparative method was the mode of analysis in the current multi-case study. This was carried out through document analysis, because the documents served as the sole data source in this study.

The efficacy of qualitative content analysis on documents has been explained by Guba and Lincoln (1981):

> In document [analysis], content is generally not specifically under the inquirer's control; and as a result of this, the "specified characteristics" of the messages may need to emerge from the material itself rather than imposed a priori by a theoretical construct. From our perspective, this is a most fortuitous circumstance, since it virtually guarantees that the categories will be grounded in the data, hence, in the context. (p. 240)

In addition, Altheide's (1987) offered his vision on qualitative content analysis:

> Ethnographic content analysis is used to document and understand the communication of meaning, as well as to verify theoretical relationships. Its distinctive characteristic is the reflexive and highly interactive nature of the investigator, concepts, data collection and analysis. … Although categories and 'variables' initially guide the study, other are allowed and expected to emerge throughout the study. (p. 68)

Similarly, Merriam (1988) explained qualitative content analysis as a systematic procedure that "involves the simultaneous coding of raw data and constructing categories that capture relevant characteristics of the document's content" (p. 117).

All of the statements illustrated above implied the use of documents in a manner akin to a "behind-the-scenes look" (Patton, 1990, p. 234) at the multiple realities they represent. This, in turn, facilitates the emergence of a substantial theory; this is true to the current inquiry. In other words, the theory resulting from the current multi-case study should be grounded in the data, within the format of the qualitative content analysis.

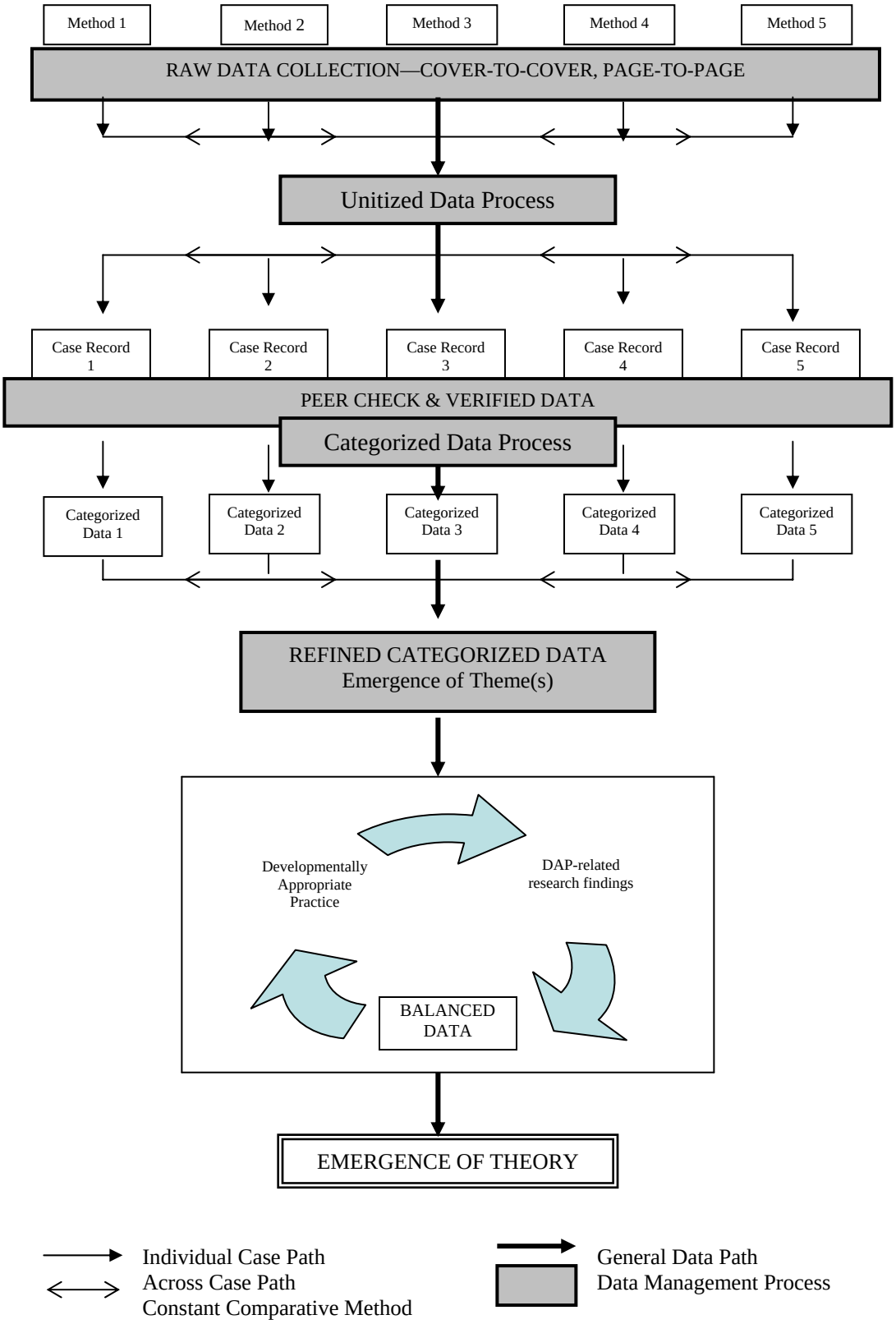
Process of Data Analysis

The process of data analysis began the first day data was collected and concluded at the time of writing completion. In the process of analysis, the major responsibility of the qualitative researcher was "bringing order, structure, and meaning to the mass of collected data" (Marshall & Rossman, 1989, p. 112). Phases in the process of data analysis of this multi-case study are described, below. Please refer to Figure 3 on page 130 for an overview outline.

Phase I: Raw Data into Unitized Data. Raw data were mined from the primary data source and then appended by the supplementary data sources for a complete perspective of each case. A cover-to-cover and page-by-page investigation was conducted on each individual case by taking down notes either describing or summarizing the realities as reflected. These notes, often inserted with original quotes, thick descriptions, page numbers, and personal thoughts, resembled *field notes* that can be transcribed into Microsoft Word files. At the end of the individual investigation process, five sets of raw data were collected along with personal thoughts set in green italic fonts. The organization of the afore-mentioned raw data differed from one another at this point of time due to individual organizational designs. Very often, the raw data organization followed page numbers of each given method (see Appendix A, Example 1: Raw Data/WB2). Within and between cases, the constant comparative method was used to look for "regularities and patterns as well as topics" (Bodgan & Bilken, 1998, p. 171) that could be coded as units of information in the form of words, phrases, or even an extended paragraph. This process of coding is described as unitizing when "data are systematically

Figure 3

THE PROCESS OF DATA ANALYSIS



transformed and aggregated into units which permit precise description of relevant content characteristics" (Glaser & Strauss, 1967, p. 203). Each unit represents a piece of distinct information that can be physically separated from other data. For the current study, the resulting product at this stage was five individual sets of unitized data with cohesive codes, which were "internally consistent but distinct from one another" (Marshall & Rossman, 1989, p. 116); and based on recurrent activities from all data cases, the organization of each unitized data now resembled one another.

By either merging or reducing the occurrences within each case database, the unitized data represented a ready-to-read case record (Merriam, 1988; Patton, 1990) that included all the key information necessary for the upcoming cross-case analysis. Each ready-to-read case record, "first treated as a comprehensive case in and of itself" (Merriam, 1988, p. 154), symbolized one preschool piano method case. By performing a cross-case analysis, the researcher augmented the power of generalization beyond one single case.

Phase II: Verified Data and Peer Check. This verification process resembled an audit check and was succinct and not time consuming. Before the start of the review process, the researcher sent out instructions with a protocol to orient both peer checkers (See Appendix A, Example 2: Peer Check Protocol). To ensure the quality of the checking process and to facilitate the rotation of peer check materials, the researcher predetermined the order of analysis for both reviewers.

The first peer checker completed her examination of the first set of materials, and then they were passed on to the second peer checker. The second peer checker analyzed the materials in the same order as the first checker. The simultaneous or one-after-another

peer checking is unlikely to have been a factor affecting the quality and the product of the peer check, since each reviewer worked in isolation; no interaction between the two peer checkers was necessary.

In reality, the identical checking order assisted the data analysis and comparison in phase III that ran parallel with phase II. Upon receiving the first set of unitized data in the form of a ready-to-read case record (Microsoft Word document file), both peer checkers followed the defined checking procedure to speed browse through the designated preschool piano method books and to obtain a basic initial opinion about the particular method. While reading the ready-to-read case record, the peer checkers began to agree or disagree with relevant issues and "jots down notes, comments, observations, queries" (Merriam, 1988, p. 131) onto the ready-to-read file with yellow highlighting. Also, peer checkers were encouraged to add new information anytime or anywhere as needed.

To monitor the time spent on each check case, an ideal time frame of four days was recommended for each check. At the end of each check case, the peer checkers returned the file with yellow highlighted comments and saved a copy for future confirmation. The yellow highlighted feedback produced by the peer checkers became the verified data distinct from the unitized file generated by the researcher. Beyond observing biases the researcher may have demonstrated and locating undetected interesting threads, the device of peer check and standardized check-procedure serve as an audit instrument that enhances the dependability and the confirmability of this study in terms of qualitative trustworthiness.

Phase III: Categorized Data & Refined Categorized Data. For productive, relevant and parsimonious data management (Merriam, 1988), Phase III and Phase II were conducted simultaneously. While the peer checkers were the major instruments for producing the verified data in phase II, the researcher worked on organizing "previously unitized data into categories" (Glaser and Strauss, 1967, p. 203) with the help of the peer checkers' verified data in phase III. According to the definition of categorizing by Glaser & Strauss (1967), the process in phase III allowed the researcher to "provide descriptive or inferential information about the context or setting from which the units were derived" (p. 203). Indeed, Merriam (1988) discerned the effort in category construction as a form of content analysis and explained that "one is, after all, looking at the content of the data in developing categories" (p. 136).

In the current study, individual unitized data across all five cases were compared, refined, and evaluated with the additional information of the verified data from peer checkers throughout Phase III in order to be transformed into five sets of *categorized data*. The application of "particular coding schemes" (Bodgan & Bilken, 1998, p. 171) transformed the final product of phases II and III together into refined categorized data across all five cases with categories, or higher level, overriding and integrating conceptualizations (Glaser & Strauss, 1967). As a result of the afore-mentioned comparing and coding process, the *refined categorized data* represented then the emerging theme(s) across all five *categorized data* cases.

Phase IV: Balanced Data. In this final phase of data analysis, the researcher examined the theme(s) of refined categorized data, the guidelines of *Developmentally Appropriate Practice in Early Childhood Programs* (Bredekamp & Copple, 1997), and

other research findings regarding early childhood music education simultaneously, to facilitate investigation of the relationships between DAP features and the preschool piano methods. The outcome of this phase was recognized as the balanced data; the completion of the data analysis coincided with the completion of the writing up process from which the theory was to surface.

Trustworthiness

All researchers must respond to issues of trustworthiness. Questions such as "how truthful are the findings of the particular study, are they applicable to another setting, replicable with the same participants in the same context, and reflective when removed from the researcher's bias and prejudices?" are used as criteria for researchers to establish "truth value," "applicability," "consistency," and "neutrality" (Lincoln & Guba, 1985, p. 290; Marshall & Rossman, 1989, p. 145). Based on the philosophical differences between qualitative and quantitative approaches, the four criteria denote different strategies of assessing each type of research. In response to those questions posed above, the four criteria have evolved into "internal validity," "external validity," "reliability," and objectivity" within the quantitative paradigm (Lincoln & Guba, 1985, p. 300). Nevertheless, Lincoln and Guba (1985) confirmed the "inappropriateness of the conventional criteria" (p. 301) for the naturalistic inquiry and proposed four alternative terms that can more accurately reflect the assumptions of the qualitative paradigm: credibility, transferability, dependability, and confirmability.

Individual sections devoted to each of the alternative criteria for establishing trustworthiness in qualitative research are discussed below. "Strategies important for researchers in designing and increasing the rigor" (Krefting, 1999, p. 174) of the

qualitative study are provided under each criterion as well. Some strategies for assessing the rigor of the current study have been addressed in the study design stage, while some others were applied during and after data collection and analysis.

Credibility

With the intention of demonstrating *truth value*, Marshall and Rossman (1989) subsequently summarized Lincoln and Guba's (1985) vision about credibility criterion: the naturalist must demonstrate that "the inquiry was constructed in such a manner as to ensure that the subject was accurately identified and described" (Marshall & Rossman, p. 145). Beyond addressing the role of the inquirer as true and accurate, Merriam (1988) placed great importance on the authority of the researcher as he wrote, "Unlike experimental designs, rigor in qualitative case study derives from the researcher's presence, the nature of the interaction between researcher and participants, the triangulation of data, the interpretation of perceptions and rich, thick description" (p. 120). Discussions of strategies strengthening the possibility of credibility in qualitative research will ensue below, and adapt the proposed order by Merriam (1988).

Authority of the Researcher

Clarifying the researcher's presence and background is necessary, as it discloses the author's personal bias to the audience (Bodgan & Bilken, 1998, Glaser & Strauss, 1967; Johnson, 1999; Krefting, 1999; LeCompte & Goetz, 1982; Lincoln & Guba, 1985, Merriam, 1988; Patton, 1990) The uniqueness of this "I was there" element (Krefting, 1999, p. 179) not only illuminates the overall awareness of the author's own subjectivity, but also strengthens the credibility of the inquiry. To evaluate the trustworthiness of the

human instrument in qualitative inquiry, it is common to address the researcher's "degree of familiarity with the phenomenon and the setting under study" (Krefting, 1999, p. 179).

At the stage of writing this multi-case report, I was a doctoral candidate in Music Education at the University of Missouri–Columbia with a support area in early childhood education and piano pedagogy. Before this, I had earned a master's degree in piano performance at the Indiana University–Bloomington. During 15 years of experience in piano performance and teaching students of all ages and levels, I worked as a graduate instructor and accompanist at both universities, coached pre-college pianists at the Indiana--Bloomington piano summer camp, presented solo and chamber concerts, taught piano at an independent studio, and was appointed as a keyboard evaluation adjudicator in Jefferson City, Missouri. Nonetheless, my true passion has remained piano teaching of preschool-level students, where I find the rewards to be greater than the challenges, as the students and I grow together both musically and mutually. My level of familiarity with teaching materials such as the Bastien, Alfred, and *Music for Little Mozarts* series is relatively high, not only because those methods represent the current mainstream in beginning piano teaching, but also because I have used them in teaching preschool children.

Three concerns arise from the experience with the abovementioned methods. First, the dividing line between the preschool level and the elementary level tends to be vague among the existing piano methods. My personal experiences recall that often almost identical content coverage can be found within both the elementary- and preschool-level materials of the mainstream series. Second, the format of the well-known methods has a tendency to portray the piano as a typing machine for deciphering symbols rather than a

real musical instrument that produces sounds to which people listen. Third, issues of rhythmic values, bar lines, and meters seem so irrelevant and foreign to very young pianists. The acquaintance with the discipline of music education and DAP guidelines have reinforced my view about the teaching arrangement in existing methods, thus led me to believe that a connection should exist between the disciplines of early childhood music education and preschool piano pedagogy in order to attain successful learning experiences for children. Therefore, I believe that the solid awareness of conceptual and theoretical knowledge in all three fields (e.g. piano performance, piano pedagogy, and early childhood music education) will enable me to judge "the subject under investigation from a number of different theoretical perspectives" (Krefting, 1999, p. 179).

Furthermore, I developed sensitivity and analytical skills through the extensive literature review process. Coursework in qualitative inquiry methods helped prepare me with techniques for conceptualizing the great amount of qualitative data. Ultimately, I took advantage of a multi-disciplinary approach to enhance the credibility of the current inquiry.

The Nature of the Interaction Between Researcher and Multiple Realties

Other strategies employed to strengthen the credibility issue in qualitative inquiry are discussed by a number of expert naturalists (Bodgan & Bilken, 1998, Glaser & Strauss, 1967; Johnson, 1999; Krefting, 1999; LeCompte & Goetz, 1982; Lincoln & Guba, 1985, Marshall & Rossman, 1989; Merriam, 1988; Patton, 1990). The five applicable strategies used in this study are (a) prolonged engagement, (b) reflexive analysis, (c) the field journal, (d) negative case analysis, and (e) peer check. With the

exception of peer check, which has already been discussed, each of these strategies will be described, below.

Prolonged Engagement. The function of prolonged engagement (Lincoln & Guba, 1985; Krefting, 1999) resembles that of extended fieldwork suggested by Johnson (1999). The implementation of this strategy allows the researcher adequate time to become accustomed to the setting, the informants, and the collected data. The investment of sufficient time aids in detecting potential distortion of the multiple realities and to "guard against the closeness of the relationship between the researcher and informants that can develop" during the process (Krefting, 1999, p. 177). In the current study, I revisited each individual case database (e.g. the raw and unitized data) in and between each phase of data analysis. Either during the case analysis or at the stage of writing, I took the time and patience to conceptualize the amount of data required in order to avoid misinterpretation of any piece of information and to maintain the essential objectivity.

Reflexive Analysis. Reflexive analysis (Krefting, 1999) labeled by Lincoln & Guba (1985) as *reflexivity*, refers to guarding against the overinvolvement mentioned in prolonged engagement. To avoid losing my objectivity due to the closeness with the data, I made use of color codes to orient the unitized data in each case record. For example, the color green was assigned to indicate personal thoughts and comments; and the colored memo text was placed directly behind the data phrases or paragraphs that evoked concerns. Red underlines signaled discrepancies found between a series author's claim and the design of the method. Yellow highlighted texts represented thoughts and comments produced by the peer checkers in the verified data. Pink highlighted action verbs offered in lesson plans of preschool piano methods. The framework of utilizing

color codes not only facilitated the organization and analysis of the current inquiry, it also represented an essential component for the stepwise replication technique to increase the possibility of meeting the dependability criterion that will be discussed later.

Field Journal. A field journal (Krefting, 1999), named the "reflexive journal" by Lincoln and Guba (1985), communicates three types of information: (a) working schedule on a daily basis or as needed; (b) "a methodological log" recording methodological decisions and accompanying rationales; and (c) "a personal diary" reflecting the researcher's thoughts and hunches (Lincoln & Guba, p. 327). With respect to method, I recorded a variety of information about myself, as the human instrument (Lincoln & Guba, 1985), and marked down the methodological decisions and logistics of the study. Reflections of personal bias and preconceived assumptions were also written in the journal.

Negative Case Analysis. According to Patton (1990), negative case analysis refers to "the testing of alternative constructs" (p. 463) However, no guidelines seem to give instructions as to how, how long, and where to find negative cases (Glaser & Strauss, 1967). Patton (1990) wrote:

> Where patterns and trends have been identified, our understanding of those patterns and trends is increased by considering the instances and cases that do not fit within the pattern. These [negative cases] may be exceptions that prove the rule…. They may also broaden the "rule," change the "rule," or cast doubt on the "rule" altogether. (p. 463)

Within the five preschool piano method cases examined in the current study, this process came to happen naturally on its own, without the researcher's arrangement of negative case sampling. I identified three similar cases against two divergent cases. The

two alternative cases aided in understanding the existing patterns and in broadening the "rule" in the end.

Triangulation of Data

The triangulation of data has become a powerful strategy to enhance credibility (Bodgan & Bilken, 1998; Denzin, 1970; Glaser & Strauss, 1967; Johnson, 1999; Krefting, 1999; LeCompte & Goetz, 1982; Lincoln & Guba, 1985; Marshall & Rossman, 1989; Merriam, 1988; Patton, 1990). The term triangulation refers to "cross-checking information and conclusions" (Johnson, 1999) through the use of multiple investigators, sources of data, or methods. The purpose of this implementation aims at "overcoming the intrinsic bias that comes from single methods, single observer, or single-theory studies" (Denzin, 1970, p. 313) and achieving corroboration (Johnson, 1999) when procedures and sources come into agreement.

Accordingly, the validity of the case study can be established "through pooled judgment" from independent investigators (Foreman, in Merriam, 1988, p. 169), the emerging findings then confirmed via multiple outside sources and materials. Two types of data triangulation applicable in this study are triangulation of data methods and triangulation of data sources. For the former category, the current inquiry appointed two different data collection instruments – the researcher and peer checkers. This application supported the notion of Merriam (1988) to strengthen the research of the case study.

Both data collection instruments used the same case materials. The data produced from both data methods were compared, analyzed, and formulated. For the latter triangulation category, the core sources and supplementary sources of each preschool piano method case were used to check for consistency (Lincoln & Guba, 1985) and to

"maximize the range of data that might contribute to complete understanding of the concept" (Krefting, 1999, p. 178).

Transferability

Transferability, the naturalistic counterpart of external validity in quantitative research, denotes the generalization of findings of a particular study to other settings (Krefting, 1999; Lincoln & Guba, 1985; Marshall & Rossman, 1989). In reality, human behavior is never static and cannot be isolated from the context. From this perspective, qualitative inquiry "seeks to describe and explain the world as those in the world interpret it" (Merriam, 1988, p. 170), instead of making precise statements about the generalizability of the study (Lincoln & Guba, 1985). To enhance the possibility of the transferability in a case study, the investigator has to provide dense background information or "thick description" (Geertz, 1973, p. 412; Guba & Lincoln, 1981, p. 119) about the research context and setting to allow interested readers to assess how transferable the findings are (Glaser & Strauss, 1967; Johnson, 1999; Krefting, 1999; Lincoln & Guba, 1985; Marshall & Rossman, 1989; Merriam, 1988; Patton, 1990). From time to time, direct quotations, or low inference descriptors (Johnson, 1999), are used to substantiate the statements the inquirer made. In addition, strategies used to strengthen the transferability in this particular study included the implementation of multiple data sources as mentioned in triangulation of data sources (Marshall & Rossman, 1989) and the cross-case analysis (Merriam, 1988).

Overall, the goal of all strategies for establishing the possibility of transferability is to provide "literal description of the entity being studied, the circumstances under which it is used, the characteristics of the people involved in it, and so forth, and

interpreting the meaning of such demographic and descriptive data in terms of cultural norms and mores, community values, deep-seated attitudes and motives, and the like" (Guba & Lincoln, 1981, p. 119). In this manner, any audience interested in transferability can obtain "a base of information appropriate to the judgment." (Lincoln & Guba, 1985, pp. 124-125).

Dependability

Dependability, the counterpart of reliability in the quantitative method of research, defines the extent to which findings of a particular study can be replicated (Krefting, 1999; Guba, 1981; Lincoln & Guba, 1985; Marshall & Rossman, 1989; Merriam, 1988). However, the notion of reliability with regard to human instrumentation in qualitative research dictates a rather different philosophy. According to Merriam (1988), the goal of naturalistic inquiry is not "seeking to isolate laws of human behavior" (p. 170) but trying to describe and explain the multiple realities as they are. While reliability in the conventional approach refers to achieving the same result by outsiders, dependability of the qualitative method succeeds when interpretations produced by outsiders are consistent and dependable and make sense based on the same given data (Lincoln & Guba, 1985; Merriam, 1988). I used the following techniques to establish the possibility of dependability: (a) the stepwise replication technique, (b) the code-recode procedure, and (c) repeated observations of the same events.

The Stepwise Replication Technique

According to Guba (1981), dependable is auditable. The function of the stepwise replication technique assists readers to follow "the decision trail used by the investigator in the study" (Krefting, 1999, p. 180). The replication steps in the current study can be

found in phases of the data management section where thick description was provided. The color codes and verbatim check-procedure also represented other types of stepwise replication serving the purpose of peer examination.

The Code-Re-Code Procedure

During the analysis process of the study, Krefting (1999) proposed coding a segment of data, waiting at least two weeks, then returning and recoding the same data, and comparing the results. Adapting Krefting's suggestion, I carried out the coding process during the phase of data collection and analysis with one to two weeks for each case in Phase I data management. Within each single case, coding words were chosen based on suitable words found in the database. After all cases were investigated and individual codes chosen, I compared codes across cases. Emergent patterns and recurrent codes dictated that certain initial cross-case codes be used to represent meaningful incidents and new codes modified from the original ones implemented to cover events of a wider range in order to fit cross-case needs.

In the current study, the waiting period for recoding turned out to be almost a year due to personal life events. Upon codes revisiting, as well as the time required to prepare the unitized data for peer checking, I restudied each single case to regain the necessary familiarity following the steps as described above in the section of data management. Only few of the codes underwent reconstruction. The fact that most codes from Phase I endured over time aided greatly in strengthening the criterion of dependability.

Repeated Observation of the Same Event

Krefting (1999) claimed that repeated observation of the same event could enhance stability. Strategies, such as prolonged engagement and extended fieldwork,

similar to those establishing credibility, also effectively serve dependability. In this study, I returned to the core and supplementary data sources constantly during, between, and after each phase of data processing, not to mention during the time of writing the report. The power of dependability is self-evident by the nature of repeated observation.

Confirmability

Confirmability represents the traditional concept of objectivity (Marshall & Rossman, 1989). The major technique to establish confirmability is the audit strategy (Guba, 1981; Lincoln & Guba, 1985, Marshall & Rossman, 1989). According to Guba (1981), a single audit can enhance both dependability and confirmability. The audit strategies involved in the current study are the peer check and external auditors. Details about the peer check were described above. The members of my doctoral committee represented the external auditors for this particular study. In assuming the role of auditors, the members of the doctoral committee examined and challenged the data, findings, and interpretations in this study based on this written report (Krefting, 1999), and revisions to the final document were made accordingly.

Data Presentation and Analysis

The purpose of the current multi-case study is to identify salient features of existing preschool piano method books and assess the extent to which they are or are not consistent with principles and guidelines of Developmentally Appropriate Practice (DAP; Bredekamp & Copple, 1997) and other musical characteristics as reviewed in the literature. Guided by these questions, data presentation and interpretation will take the form of two components. First, characteristics of the examined preschool piano methods will be illuminated, followed by a discussion of emerging themes and patterns across

cases. Based on my review as well as comments produced by the two peer checkers, comparisons will be made among similar and dissimilar cases, and the findings scrutinized through the lens of DAP, and related research findings.

Trends in Characteristics of Preschool Piano Methods

Early in my raw data gathering process, it became quite clear that each of the preschool piano methods I was investigating represented characteristics that were consistent with one of the following two pedagogical approaches: (a) the "traditional" approach and (b) the "whole-body" approach (Uszler et al., 2000, p. 46). Characteristics of the traditional approach represent the belief that mastering reading proficiency or music literacy makes playing and enjoying music possible, with a tendency to refer to involving students in music concept learning as the main objective of piano study.

The whole body approach reflects the belief that a total music experience should be initiated through a combination of the aural, visual, physical, and mental domains of the child's development to nurture musical thinking, proper coordination for sound production, and freedom to utilize musical materials, as well as to achieve genuine personal expression and satisfaction. This trend advocates involving students in music making and enjoyment rather than concept learning.

Thus, all further analyses will consider the five methods examined as representing one of these two classifications of methods books, as portrayed in Table 1, below. The order of method books is determined by the initial of the publishers' names and the published year in case produced by the same music company. The abbreviations, such as TA1 for the Traditional Approach case 1 and WB1 for the Whole-Body Approach case 1, will be used to facilitate the process data analysis and interpretation.

Table 1.

Categorization of the method books examined into the two pedagogical approaches.

The Traditional Approach

Title of Method Book	Year	Author(s)	Publisher	Abbrev.
Prep Course for the Young Beginner	1988	Palmer, Morton, and Lethco	Alfred Publishing	TA1
Music for Little Mozarts	1999	Barden, Kowalchyk, and Lancaster	Alfred Publishing	TA2
Bastien's Invitation to Music: Piano Party	1993 1994	Bastien, Bastien, and Bastien,	Kjos Publishing	TA3

The Whole-Body Approach

Title of Method Book	Year	Author(s)	Publisher	Abbrev.
Music for Moppets	1971	Pace and Pace.	Lee Roberts/Hal Leonard Publishing	WB1
Sing and Play	1987	Collins and Clary	Stipes Publishing	WB2

In the process of transcribing field notes, recurrent components were generated by codes across cases. They were (a) the basic information of the method, (b) authors' note or words to either teachers or parents, (c) the feature of interview or readiness test, (d) the body of musical content, (e) the way authors suggested delivering the musical content, (f) my personal thoughts and overall impression of the design of the method.

Under the recurrence (a), basic information of the method such as the full name of the method, the published year, names of writers and publishers, its abbreviation in this investigation, targeted age of students, and intended lesson setting (e.g. private or group) were regarded as codes. The recurrence (b) included note to teachers and/or parents and text materials, such as information regarding the characteristics of young children, the benefit for early commencement of a piano lesson, and parental involvement, intended

for its audiences to read. Although some methods addressed this informative text in the teacher's manual and others in the lesson book, the amount of this information varied from method to method and may be regarded as a result of authors' belief in what a method should convey to its users. Component (c) took in the guideline or procedure for conducting an interview with a prospectus student as codes. All cases but TA1 provided detailed information regarding this matter. The amount of detailed interview content revealed soon its orientation to address various domains of ability and maturity in children. For example, asking the child to provide personal immediate information like name, date of birth, home phone number, and the process of the interview itself, pointed at the observation of social maturity of the child; asking the child to write down names or the alphabet revealed both the child's intellectual and physical maturity; and the musical content within the interview testing the child's pitch or rhythm discrimination by singing or clapping back uncovered the child's musical maturity supported by his physical maturity.

Component (d) attended the body of musical content page by page. An overview of musical content was displayed in the table of contents in all three traditional cases, no equivalent feature of musical content outline was found in the two whole-body cases. The outline of the musical content certainly was a user-friendly feature that facilitated observing the flow of musical concepts presented in the given method. Interesting regularities surfaced as codes, such as sitting at the piano, teaching in the first lesson, shaping the round hand form, producing the tone at the piano, singing and moving to music, counting or singing rhythm values and finger numbers, introducing alphabet letters, reading pitch in connection with keyboard diagram and rhythm values, playing

with accompaniment, and understanding concepts like high-low and soft-loud. Other recurrences recognized codes such as singing hello and goodbye songs for the lesson, utilizing non-musical material for teaching, exercising rhythms, and creating sounds at the piano. In this component, the way how authors describe the actual piano teaching emerged and was reflected in the recurrence (e)—the delivery of musical content. While all three traditional cases utilized the lesson plan to organize teaching, the whole-body cases relied on a quasi-prose style writing simulating the real lesson situation. Here, teacher delivery became another interesting issue to be investigated. My own personal thoughts and impression of the method were included in the component (f) set in green italic font or with green underlines. Apart from component (a), the item/code count of key issues from (b) to (f) reached over 60 on average.

Codes evolved from the above-listed realities are unitized and aggregated to 26 recurrences. These then served as to facilitate organizing *unitized data* and to guide the formation of the *ready-to-read case record* for peer checking. An example of *ready-to-read case record* can be located in Appendix A, Example 3, with the title of "Analysis of Preschool Piano Method/Readiness Course Method Book/TA2."

Comparing with the *verified data*, my observations of five cases documented in the *ready-to-read case record* were positively reviewed and endorsed by peer checkers. It is then I began to categorize and refine all data within and across five cases by looking for detailed and overriding regularities in order to transform all individual *ready-to-read case records* into *categorized data*. In other words, a *categorized data* contained both my and peer checkers' observations simultaneously and was organized under categories of higher level, overriding, and integrating conceptualizations (Glaser & Strauss, 1967). As

a result, 19 categories derived from the unitized and verified data enriched the understanding of all *categorized data* that "provide descriptive or inferential information about the context or setting" (Glaser & Strauss, 1967, p. 203).

Categories inclined to address the words, information, and belief that method authors provided were (a) general teaching philosophies—overall impression of the philosophy conveyed by the method, (b) main emphases as reflected in the contents, (c) pedagogical approaches, (d) interview/readiness test, (e) parental involvement, (f) information regarding the very young beginner, and (g) teacher characteristics.

Characteristics that echo what concepts the authors of all cases value and how to present these concepts to the young children were categorized into (a) sequence of concepts—the logic of the content sequence such as the introduction of two-black-key group before that of three-black-key group and the introduction of rhythm values with clapping or with/without pitch information, (b) presentation of concepts—suggestions that authors offered for teaching each concept, (c) reinforcement of concepts—the method of reinforcement, often addressed in the lesson plan and/or exercised in the supplementary books.

The coverage of musical content was scrutinized under subsequent categories: (a) vocal technic, (b) piano technique, (c) rhythm reading, (d) pitch reading, (e) repertoire collection, (f) creativity, and (g) opening and closing songs for the lessons. Also, my overall impression of each preschool piano method gradually gained interest and attention in issues of (a) illustration and page layout, and (c) the format of book completion.

In fact, many of these categories were ready to be refined and grouped together based on their specifically oriented characteristics to form the *refined categorized data*

across all five cases (Appendix A, Example 4: Data Interpretation & Discussion/WB). It is then when themes emerged. Categories aggregated to what the authors hold as important for creating the method are grouped under the theme of the teaching philosophy reflected in the methods. Characteristics regarding concepts that authors of all cases value and the method to present these concepts to the young children contributed to the theme of curriculum design logic. The next theme—musical development of the methods took in musical skills and knowledge the authors consider as essential and indispensable for the preschool-level piano beginner. The emergence of the non-musical aspects of the method design theme primarily found its support in non-musically related data realities.

In an overview, the four emerging themes of the *refined categorized data* were displayed subsequently:

1. Teaching philosophies reflected in the methods.
2. Curriculum design logic.
3. Musical development of the methods
4. Non-musical aspects of the method design

To facilitate the organization of data presentation and interpretation, Chapters IV, V, VI, and VII will be dedicated to a scrutinized discussion of each of the four emerging themes. Under each chapter, the common tendency within traditional and whole-body approaches will be illustrated first to shape one particular emerging theme in sequence under *Traditional Approach* and *Whole-Body Approach*, followed by comparisons of similar and dissimilar traits under *Analysis and Interpretation* with supporting facts, comments of both peer checkers, and illuminations contrasting DAP-relevant research

findings. Each discussion featured in *Analysis and Interpretation* is to be recognized as the *balanced data*.

To streamline the entire process, abbreviations of each method will be used throughout this chapter. Likewise, the neutral “he” will represent the pronoun for both peer checkers should the occasion arise, and “his” the possessive. Please also refer to the Appendix B for the glossary of abbreviations of other related elements.

CHAPTER IV

TEACHING PHILOSOPHIES REFLECTED IN THE METHODS

To understand the principles underlying the practices within each methodology, it was important to determine the philosophical basis of each method. Using the analysis procedures described in Chapter 3, I scrutinized the texts for explicit statements of the authors' philosophies, as well as for statements that addressed issues that were considered to reflect philosophy implicitly.

Based on this analysis, seven related categories emerged. They were (a) general teaching philosophies, (b) main emphases of the philosophies as reflected in the contents, (c) pedagogical approaches, (d) interview/readiness test, (e) parental involvement, (f) information regarding the very young beginner, and (g) teacher characteristics. Cases representing both the traditional and whole-body approaches bore several similar characteristics under the theme of philosophy.

The similarities and divergences found between the philosophies of the two approaches, however, strengthen the case for the segregation of the two. Data encountered in the first three categories demonstrated information compatible to be aligned with elements of a curriculum: namely, philosophy, goals, and implementation of curriculum (Campbell & Scott-Kassner, 1995; Gordon, n.d.). Interestingly, typical characteristics of the traditional preschool piano curricula "pooled" together significantly in the first three categories listed above, whereas the uniqueness of each traditional case tended to emerge in the latter three categories.

General Teaching Philosophies

During the process of data management, the general teaching philosophy concerning very young beginners emerged from analysis of the text's materials, such as "Notes to Parents," or "Notes to the Teacher." Text material generated by the authors such as forwards, prefaces, and introductions were also used. In some cases the method's promotional materials provided information relevant to its philosophical approach.

Traditional Approach

The general philosophy of teaching as declared by the authors of all three traditional methods (e.g. TA1, TA2, & TA3) mentioned the advantage of the early commencement of piano lessons. This belief is supported by many other early childhood music educators and researchers (Alvarez, 1993; Andress, 1986; Bastien, 1995; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985; De Yarman, 1975; Gordon, 1990; McDonald & Simons, 1989; Palmer, 1995; Pohlmann, 1994/95; Rauscher, 1999; Rauscher, Shaw & Ky, 1993; Zimmerman, 1971). Results indicated that the traditional teaching philosophy appears to build on premises advocating that: (a) starting piano at a young age will increase the quality of the child's early life experiences (TA2.TH(1), 1999); (2) children who begin at an early age develop faster and obtain more essential musical skills than those who begin later (TA1.L(A), 1988); and (3) habits and skills developed at a young age "will carry over into every aspect of a child's life as he or she matures" (TA3.TG(A), inside cover). The development of reasoning ability, methodical learning, multi-sensory coordination and skills, patience and concentration, enjoyment and friendship, as well as self-respect and satisfaction also were cited in TA2 and TA3 as benefits of learning piano. Authors of the traditional teaching approach appeared to

believe that the early instigation of piano lessons would lead very young beginners to better musical growth, or as one particular method predicted, “a stronger sense of rhythm, musical understanding, and confidence in performance skills” (TA2.TH(1), p. 9).

Another noteworthy element found in TA2 and TA3 is that both brought up specific, obtainable skills for their users. Statements like “singing and listening skills are developed simultaneously with an appreciation for a variety of musical styles” (TA2.TH(1), p. 4) and “students who follow *Bastien’s Invitation to Music* will learn to be critical listeners as well as readers and performers of music” (TA3.A, inside front cover) displayed a tendency to promise possible outcomes from the use of these methods. Unlike TA2 and TA3, TA1 did not offer related information in this matter. A plausible explanation for not including this material can be rooted in its older publishing date.

Whole-Body Approach

The general teaching philosophy of the whole-body cases (e.g. WB1 & WB2) revealed a type of preschool piano curriculum encompassing a fine balance between the learning of musical concepts and the development of musical skills through various modes of learning. This result completely subscribed to the whole-body trend of piano readiness courses as described by Uszler, Gordon, and Smith (2000), and demonstrated their teaching philosophies to be in line with the combined emphasis on musical elements, musical activities such as singing, listening, and creating, as well as whole-body movement instruction.

In “To the parents,” WB2 specified “listening to music, performing music, and creating music” as the key components of its preschool piano program, to “develop musical concepts through a variety of songs, games, and activities” (WB2.Ch(1), p. 2).

Although musical activities like singing definitely play a role in the WB1 curriculum, the authors of WB1 questioned the soundness of the common use of the singing voice as the "musical learning vehicle" (WB1.TM, p. 8) for children at this age level. Based on the dependent fact that control of the singing voice depends on physical maturation, WB1 authors designated the piano keyboard as the better music learning tool for preschool students; because these young children can hear, see, and feel the changes of precise pitches, and no matter how many simultaneous sounds there are to produce, all pitches are at the preschool children's command on the keyboard. Besides the justification aforementioned, WB1 declared its book design to "provide certain activities and ideas to spark the student's natural musical imagination" (WB1.TM, p. 9). In other words, this whole-body case strived to introduce young children "to the joys of creating music" (WB1.TM, inside cover) and the ability to individually think in music and create music.

In addition to the element of music and movement, the whole-body approach also supported the advantage of the early commencement of piano study. While WB2 authors expressed that "the child who is also given the gift of learning music skills at a young age will continue to find joy in making music throughout his adult life" (WB2.Ch(1), p. 2), WB1 authors measured the achievement of young children according to the course objectives at the end of the method. Notions like building up "physical coordination necessary for good musical performance," developing "the eye, ear and finger coordination basic to reading notation at the piano," and nurturing "the eagerness for music as a means of real personal satisfaction" (WB1.TM, p. 68) were manifested for supporting the benefit of that starting piano study early is important for children's later musical development.

Analysis and Interpretation

The result of the comparison between the traditional approach and the whole-body approach revealed a similar degree of stress on the aspect of the advantage of preschool piano study. However, there was a differentiation in the level of actual involvement when comparing the aspects of learning modes or musical activities, such as singing, listening, performing, and creating. While the traditional cases mentioned that skills like singing, listening, reading, and performing could be part of the curriculum, the whole-body cases utilized musical activities engaging all possible learning modes to aid in total music comprehension and skill development. The use of movement, musical games, and creative activity surfaced as differences from the comparison between the traditional and whole-body approaches. These aspects may be better scrutinized and the validity of statements made by authors examined when subsequent categories are discussed below.

On the whole, the general teaching philosophy found in both traditional and whole-body approaches endorsed theories advocated by early childhood professionals (Alvarez, 1993; Andress, 1986; Bastien, 1995; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985; De Yarman, 1975; Gordon, 1990; McDonald & Simons, 1989; Palmer, 1995; Pohlmann, 1994/95; Rauscher, 1999; Rauscher, Shaw & Ky, 1993; Zimmerman, 1971). Promoting the early starting of piano lessons takes advantage of the optimum period for intellectual development that are believed to occur in the early years of a child's life (Berk, 1999; Bredekamp & Copple, 1997; Cohen & Comisky, 1977; De Yarman, 1975; Gordon, 1990; Katz, 1988; Shonkoff & Phillips, c2000; Willer, Hofferth, Kisker, Divine-Hawkins, Farquhar, & Glantz, 1991). The message that the effects of meaningful learning experiences obtained during the preschool years can be valuable to

the future life of young children (Andress, 1986; Bastien, 1995; Campbell & Scott-Kassner, 1995 & 2006; D. Gordon, n.d.; E. Gordon, 1990; Palmer, 1995; Pohlmann, 1994/95; Zimmerman, 1971) is particularly manifested in the cases of two traditional methods, TA2 and TA3, and one whole-body method, WB2.

While recognizing the advantage of early instigation of piano study and speaking of various benefits from keyboard lessons, the philosophies of both the traditional and whole-body approaches did not overtly subscribe to the belief held among early childhood music educators, that all children have musical potential and that every young child possesses the right to attend to the development of this musical potential (Campbell & Scott-Kassner, 1995; Choksy, Abramson, Gillespie, Woods, & York, 2001; Kodály, 1974; MENC position statement, 1991). Nonetheless, the existence of explicit philosophical beliefs within each preschool piano method does fulfill the requirement for good curriculum design, as suggested by Gordon (n.d.) on the MENC website.

The investigation revealed that a broader range of beliefs was covered in the general philosophy of whole-body teaching than its traditional counterpart. It appears that authors of the traditional teaching approach consider their methods to be suitable for young children who show skills and talents compatible enough for continuing piano study in the future. It is not clear how effective this would be for piano beginners who struggle during the preschool years. Such a finding may in turn affect goal setting and implementation of the two different-style curricula.

Main Emphases of the Philosophies as Reflected in the Contents

During the process of analysis, data concerning how the authors of method books envisioned the initial contact for a four- or five-year-old beginner, and what related skills

to focus upon, appeared crucial to understanding the implementation of their philosophies. By examining the musical content and concepts covered in the core books, one can sense the overall emphasis that the authors of the given teaching approach chose. In other words, by investigating a set of beliefs about what piano teachers should value, what they should teach, and how they should teach one is able to pinpoint the main emphases of the given philosophy (McDonald & Simons, 1989).

Traditional Approach

Two common traits surfaced to symbolize the teaching philosophy of traditional preschool piano methods; (a) the emphasis on reading proficiency/music literacy, and (b) the emphasis on playing technique. These two traits are identical to the trademark of the traditional approach, to "get right down to the business of developing playing and reading skills" (Uszler, Gordon, & Smith, 2000, p. 46).

The Emphasis on Reading Proficiency/Music Literacy

In both TA1 and TA2, the stress on reading proficiency is especially prominent. TA2 offered the concepts of the bar line, and full range of rhythm values and rests (e.g. quarter note, half note, whole note; quarter rest, half rest, & whole rest) to strengthen the reading ability of the very young child; the last song of TA2 Book 1 utilized note names inside moving note-head rhythmic values and rests cast within bar lines (TA2.L(1), pp. 46-47). Although not hurrying to introduce the very young beginner to all the rests, TA1 actually aimed that children accomplishing the first book (TA1.L(A), pp. 46-47) would play from music printed on the grand staff notation with a time signature and employing alternating hands.

In comparison with TA1 and TA2, TA3's ending repertoire of the first book was not loaded with many concepts; its use of a pre-reading system gave the impression that music literacy was the focus of the method in a slightly different fashion. TA3 introduced the very young pianist to a type of pre-reading system that involved a keyboard diagram with colored triangle codes. To better understand the topic just mentioned, one should look at the example (Illustration 1, please note that all music illustrations are organized under Appendix C). According to the authors of TA3, different colors and sizes of the triangles represent different meanings. For instance, red is right hand, blue the left hand, the dashed arched lines and arrows—either red or blue—depict "the arch motion recommended to move to the next position" (TA3.A, p. 45), and the gray dotted line and arrow denote where to continue the song. Soon after, the idea of colored triangle coded keyboard diagrams further evolved into combinations with inscribed alphabet letters, finger numbers, and rhythmic values. The message behind the effort in the series of colorful instructions highlighted the determination of the authors to direct the child to the habit of reading printed music and following it at the keyboard. Yet, the learning result may not be guaranteed because placements and clutters of symbols can be very distracting to young children's visual perception (Bastien, 1995; Collins, 1996).

The Emphasis on Playing Technique

In this aspect, authors of TA3 showed the most interest in cultivating good technique by introducing "Loose fist technic" & "First joint technic" (TA3.TG(A), pp. 7A-7B & pp. 9A-9B) besides the traditional focus on good sitting posture and hand forms. Although not to the same extent on the issue of playing technique, both TA1 and TA2 did promote the fundamentals of posture and tone production at the piano, using terms such

as “freedom of movement” (TA2.TH(1), TA3. 12-13), “curve fingers” and “hold the bubble gently” (TA1.TG(A), p. 4). In TA1, not only can one observe the physical function of playing technique in the following manner: “For first efforts, have student play slowly in order to “feel” the difference in dropping into the key with a little weight and then with more weight,” but one can also encounter the aural function in evaluating tone quality: “Before you play any key, decide how you want it to sound. Do the tones sound as intended?” (TA1.TG(A), p. 5). Furthermore, pictures of good sitting posture and hand shapes are illustrated in either the children’s or teachers’ book for users’ information. Both aspects just mentioned represent the basic elements for the formation of good playing technique; evidently, playing technique is well emphasized in all three method books.

Whole-Body Approach

Consistent with the given teaching philosophy, the main emphasis of the whole-body approach denoted whole-body music understanding through the development of aural, performing, and creative skills that support individual expression and musical growth. Throughout the investigation on the content coverage of the whole-body cases, total music understanding started with emphasis on the child’s ability to keep the steady beat. Both WB1 and WB2 strived for the establishment of steady beat competency through body movements. WB1 authors specified to introduce “the basic ingredient of music – the beat” (WB1.TM, p. 10) in the first lesson, whereas WB2 authors considered the sense of rhythm to be “best gained by feeling rhythmic flow with the whole body,” thus “much work in movement is recommended” (WB2.TM(1), p. 3). According to the

authors of both methods, whole-body movements such as walking, marching, swaying, clapping, or tapping represent the ideal tool for feeling and learning about steady beat.

The aspect of aural development supporting the whole-body approach is rooted in the application of rhythmic patterns and treated considerably earlier in the whole-body cases than the traditional cases. The short-short-long rhythm pattern is the very first pattern introduced for preschool children to listen and clap to in both WB1 and WB2. Eventually, these young children will learn to clap the long-short rhythm patterns while walking, "until it is literally second nature" (WB1.TM, p. 15).

In addition, rhythmic exercises are offered via rhythm charts (WB2.TM(1), pp. 11-12) and emphasized frequently in separate rhythmic activities (WB1.TM, p. 18 & p. 26); both types of rhythmic exercises can be applied with a combination of aural and physical responses. In both methods, the initial symbolic presentation of the rhythmic pattern takes the form of long-short horizontal lines, excluding pitch information (WB1.TM, p. 15; WB2.TM(1), p. 8).

Performance and creative skills play other important roles in the whole-body music approach. While WB2 discussed initial playing techniques and recommended the use of "whole hand" (WB2.TM(1), p. 17), "the closed hand position" (WB2.Ch(1), p.12), and finger games to prepare the playing muscles, WB1 offered chances for ensemble performance by allowing children to use one finger, two or more fingers, or even a fist to produce a layer of *ostinato* tone patterns that enriched the sonority of the performance (WB1.TM, p. 18). With the aforementioned performing skills, both cases of the whole-body approach strongly encouraged young children to explore and create sound images at the keyboard to describe "Play-A-Story" (in WB1) and "Play-A-Picture" (in WB2). Both

titles of creative activities are self-explanatory. WB1 authors, in particular, provided detailed steps for creative thinking, expressing the belief in creativity as “the core of the learning experience” and the mission to foster “a wide latitude for individuality and self expression” (WB1.TM, p. 8).

Analysis and Interpretation

The comparison between the emphases of the two approaches supports the conclusion that there are important differences between them. In addition to the differences already discussed in the *general teaching philosophies*, the emphases found in the instructional materials that reflect the philosophies diverge as well.

The emphasis on reading skill under the traditional teaching philosophy gave an impression of stressing intellectual endeavors, concept learning in particular. This inclination to the achievement of reading proficiency has its historical root in advocating *memorizing* the musical basics prior to playing the instrument (Uszler, Gordon, & Smith, 2000). Yet, the traditional cases did not specify in terms of time how long the achievement of reading proficiency for preschool aged children should take. Common sense would indicate that the first two years of study be considered as the preparatory phase (Uszler et al., 2000), but this may have to be altered if the client is of the preschool age. While serving as a crucial element in rote learning, the skill of memory seemed to be designated as the key learning tool of the traditional approach for preschool children. However, the ability to remember how to read or recite a symbol does not equal the ability to understand its meaning. This example denotes a scenario often encountered with preschool piano students who upon the completion of book one still are puzzled by the relationship between the quarter note and the half note. Similar results with meter and staff notation also seems to exist.

From the Piagetian perspective, young children's imitation skills may be fueled by sensory motor development; their cognitive development however is constrained by preoperational limitations. The abstractness of the notational symbols requires more complex physical and cognitive operations than seeing a triangle printed on the paper, holding a triangular-shaped object, and labeling that as a triangle. In actuality, music reading requires seeing the symbols, deciphering the symbols, calculating and transferring the relevant physical signals, and realizing the sounds, as well as evaluating the tonal outcomes (Richards, 1996). During the entire procedure of music reading, the skill of memory plays an important role not only to overcome the four preoperational constraints—egocentrism, centration, reversibility, and conservation (Piaget, 1946 & 1952)—but also to reconstitute the music in its original form. Consequently, music reading should be appropriately channeled developmentally with meaningful rote and hands-on experiences to facilitate successful comprehension by all senses (Bredekamp & Copple, 1997; Campbell and Scott-Kassner, 1995 & 2006; Pohlmann, 1994/95; Zimmerman, 1971).

Also, hands-on than reading activities are recommended for young children because their eyes are farsighted during the preschool years (Bredekamp & Copple, 1997; Bucci & Kapoula, 2005; Yang & Kapoula, 2003). Comparing this farsightedness with the development of young children's other perceptions such as the sense of hearing and touch, DAP guidelines advocate aural or multi-sensory learning over heavily loaded reading tasks. Especially for the preschool children who do not yet read, DAP musical experiences seem to recommend enriching children's learning with singing, moving, listening, and rote playing rather than reading music (Chronister, 1996). Even should the DAP suggestions not be

considered, the emphasis on music reading of the traditional teaching approach may signal to preschool children that playing the piano means fixating their vision on the music and deciphering the notation. Chances are that when the visual function is dominant, other senses cannot be attended to simultaneously due to the developmental limitation of centration.

Hence, constructive activities like “sorting, classifying, and ordering tasks” (Bredekamp & Copple, 1997, p. 111) or opportunities to listen, sing, play, and move to music (Campbell & Scott-Kassner, 1995 & 2006; music teaching theories of Dalcroze and Orff; Kenney, 1996; Neelly, 2001) are DAP-friendly tasks designed to build a foundation of preliminary musical experiences prior to learning about reading. Following the same vein, preschool piano methods oriented toward the whole-body approach seemed to pursue the DAP recommendations well and engage children in hands-on learning of multi-sensory modes (Aronoff, 1992; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985; Miller, 1987; Sims, 1990 & 1993).

In reality, the non-emphasis on reading found in the whole-body cases allows children a relatively significant time to use their other senses to learn about music. Authors of the whole-body methods seemed to take the advantage of that non-reading-emphasis and create a versatile program.

Besides reading skills, the emphasis on playing technique represents the other trademark of the traditional piano teaching approach (Uszler, Gordon, & Smith, 2000). In reality, comparisons across all methods showed a common focus on small-muscle activities such as TA3’s technique of loose fist and first joint, TA2’s and TA1’s round hand shapes and curved fingers, WB1’s one finger or fist, and WB2’s open and closed hand positions. Nevertheless, the emphasis on the performing skills found in the whole-body approach

seemed to reflect a broader interpretation of “technique.” Instead of worrying about “perfectly curved fingers,” authors of WB1 specified the use of more of the large muscles as children experiment. The rationale that a child “will gradually strengthen his finger muscles and gain necessary control” (WB1.TM, p. 54) is also evident in WB2 as its authors emphasized fine motor preparation with finger plays and other action song activities.

Under such a rationale, the finger numbers were not intensively stressed in the whole-body cases. Furthermore, while the belief in developing performing skill led WB2 authors to cultivate the idea of control of hand muscles in a rhythmic context, WB1 authors offered children frequent experiences of ensemble performance via *ostinato* patterns. As a result, the whole-body approach developed rhythmic performing skills furnished by the exploration and application of large muscles. This is consistent with the idea that playing should be physical because it fulfills preschool children’s genetic determination to explore (Berk, 2000; Bredekamp & Copple, 1997; Howe, 1993; Monsour, 1996; Pohlmann, 1994/95; Scott-Kassner, 1993). This natural determination results in the sensation of sound making (Campbell & Scott-Kassner, 1995 & 2006; Moorehead & Pond, 1977) and thus translates in DAP terms to joy and excitement for preschool children.

While notions of sitting posture and freedom of movement mentioned in the traditional cases are considered to be information relating to the development of large muscles, there is limited content addressing gross-motor development. On the contrary, the whole-body methods are consistent with DAP guidelines in advocating the development of large motor muscles during the preschool years.

In contrast to the traditional emphasis on reading and playing technique, the whole-body approach focused on a total musical understanding derived from the establishment of

the steady beat. The attitude of regarding the beat as “the basic ingredient of music” (WB1.TM, p. 10) faithfully pursues the teaching philosophy of various early childhood music educators (Campbell & Scott-Kassner, 1995 & 2006; Choksy, Abramson, Gillespie, Woods, & York, 2001; Music teaching theories of Dalcroze, Orff, and Kodály; McDonald & Simons, 1989; Moorehead & Pond, 1977; Pohlmann, 1994/95; Zimmerman, 1971) and justifies the initial use of short-short-long patterns, the existence of rhythm charts, and the number of rhythmic activities devoted in the whole-body cases.

In reality, rhythmic patterns of long-short sounds represent the ideal DAP learning block for music study, based on the notion that children learn songs by rhythmic and melodic patterns in phrases—an instructional sequence endorsing the philosophy of meeting where the child is developmentally (Andress, 1992; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995; Hart, Burts, & Charlesworth, 1997; Katz, 1988; Kenney, 1997; Kostelink, Soderman, & Whiren, 1993; McDoncald, 1977; McDonald & Simons, 1989; Neelly, 2001; Sanders, 1994). Moreover, the fact that both whole-body cases advocated the employment of rhythm charts and activities in conjunction with the application of movement and aural skills also coincides with the teaching philosophies of Dalcroze, Orff, Kodaly, and Suzuki, and Campbell and Scott-Kassner (1995 & 2006) regarding the matter of capturing the rhythmic sense.

The development of creative thinking as found in whole-body cases is also DAP-pertinent for the reason that creative skills work together with aural and performing skill to contribute naturally to the whole-body music understanding (Sims, 1993; Pohlmann, 1994/95). The whole-body devotion to the development of creativity is so obviously integrated into the whole-body lesson planning that teacher users will not be able to easily

neglect it. The segment of creative development is absent in all traditional cases, supporting again the segregation of the two different trends.

One noteworthy finding directed my attention to the listening function involved in technique, as TA1 authors asked “do the tones sound as intended?” (TA1.TG(A), p. 5). Despite the fact that the authors of the other traditional cases gave no indication to value incorporating aural function with playing technique, TA1’s question not only ties the production of sounds with staff notation by physical actions (Richards, 1996), it channels the musical mind to the musical ear of children (Davidson, Scripp, & Welsh, 1988; Gordon, 1990; McLean 1999), and recognizes the significant role in differentiating playing the piano as a musical endeavor instead of an intellectual challenge (Grunow, 1999).

On the whole, emphases of the preschool piano teaching philosophies function in effect as the *goals* of the given curricula. These goals were not printed as clear-cut sentences or paragraphs in the materials; rather, they emerged directly from the descriptive data analysis, and coincided with statements encountered previously in the literature review (Chronister, 1996; Uszler, Gordon, & Smith, 2000) to differentiate between the two methodologies. While findings that the traditional cases supported music reading as the primary goal and responsibility of the piano teacher, and playing technique as the “business” of piano study, the whole-body cases indicated that whole-body music understanding be obtained through “music and movement instruction” encompassing the development of aural, performing, and creative skills centered on the keyboard.

Pedagogical Approaches

To understand an educational philosophy, it is important to observe how it is turned into practice. Analysis of the data gathered to illuminate the teaching philosophy

of the preschool piano methods resulted in sub-categorizations related to pedagogical approaches. The two related categories that emerged were (a) the usage of lesson plan, (b) the issue of rote teaching, and (c) the modes of instruction.

Lesson Planning

One way to learn about the authors' philosophies is to examine the instructions provided to the teachers for implementing their methods. The usage of lesson plans, including their organization, style and contents, emerged as relevant to this discussion.

Traditional Approach

Unlike the typical three-legged lesson plan (Campbell & Scott-Kassner, 1995 & 2006) encountered in the literature reviewed, where the first element to be formulated denotes "objectives" and is followed by "strategies" and "evaluation, all three traditional cases utilized a type of guide similar to a lesson plan, in outline format. The following excerpt from TA1 best portrays this format:

> **Goals**
> - Preparation to ensure success in first efforts at playing by helping student learn to call each finger into play at will.
> - To make student aware of loud and soft tones and how they are produced.
> - To teach the student to LISTEN.
> - To continue building a rounded hand.
>
> **Emphasis** Moving fingers in the air in response to numbers asked for. This skill will make first efforts at playing easier.
> **Important** A little time here may save much time later.
> **Keywords** Drop into key. Little weight = soft tone. More weight = louder tone. (Fort first efforts, have student play slowly in order to "feel" the difference in droTA3ing into the key with a little weight and then with more weight.
> **Listen** Before you play any key, decide how you want it to sound. Do the tones sound as intended?
> **Suggestion** Let student observe hammer striking strings as you play a key (if construction of piano permits).

Interaction Student and teacher take turns calling out some fingers to wiggle. Student makes some soft tones on random keys, then some louder tones. (TA1.TG(A), p. 5)

Interestingly, words such as "goal" was found together with "emphasis," "suggestion," "important," and "interaction" in TA1 (TA1.TG(A), p.1 & p. 4). The meanings of "goal" based on the MENC curriculum document are not strictly followed here, but rather are used as headings suggesting what to focus on or teach during the given lesson. As a result, the appearance and order of each of these words may vary in each lesson. Teachers would use their own discretion to judge the relative importance of each portion.

Another traditional lesson plan is displayed below:

Objectives

- To reinforce the "loose Fist" and "First Joint" techniques learned previously.

Suggestions for Teaching

- Teach the song and the words to the student by rote.
- Have the student "play" the song directly on the keyboard diagram in the book prior to playing on the piano.
- Show the parents how to follow the diagram so that they may help their child remember and practice the piece at home.
- Point out illustration and discuss the relationship between the picture, where Pete climbs up and down the ladder and the song, where the student plays up and down on the piano.

Technical and Musical Ideas

- If you feel the student is ready, you might consider having the student experiment with **simple dynamics**. Have the student play the whole piece either soft or loud. Emphasize listening.

  Sink **slowly** into the keys and listen for a **softer** tone.
  Sink **quickly** into the keys and listen for a **louder** tone.

Reinforcing Pages (Appropriate now or in the weeks to follow.)

- Theory and Ear Training Party, Book A Page 15 – "Three Black Keys Down and Up"
- Performance Party, Book A Page 7 – "What's For Lunch" (TA3.TG, p. 13)

The feature of this lesson plan – "Objectives," "Suggestions for Teaching," and "Reinforcing Pages" seemed to follow the three-legged lesson plan model (Campbell & Scott-Kassner, 1995 & 2006) at first reading. The evaluation part of this traditional lesson plan, however, did not specify details about what aspects of children's achievement to assess. Closer investigation of this particular case will be presented in the analysis and interpretation section, below.

The lesson plan outlines offered in TA2 employed self-evident and uniform words like "new concepts," "review concepts," "new and review materials," "board activities," and "assignment" (TA2.TH(1), p. 35) for every lesson. This type of outline is so predictable that the authors of TA2 simplified their lesson descriptions under each outline word to short concepts (e.g. bar lines or three-black keys) and page numbers. The how-to-teach part of TA2 teaching strategies is unveiled in two separate sections preceding the introduction of the lesson plan format. With titles of "the curriculum" and "pacing of a well-balanced lesson (45-60 minutes)" the authors of TA2 attempted to convey the lesson procedure they envisioned, in a spreadsheet style (TA2.TH(1), p. 32) (Appendix D Sample Pacing of Lesson Plan/TA2). This spreadsheet, however, is only a sample format suggestion; the actual teaching sequences and details need to be written down by the teacher user.

Whole-Body Approach

The writing style of the whole-body lesson planning took yet another format – a quasi-prose treatise. WB1 always offered materials and information for class preparation. For example, under "First Unit", teachers will see:

1. Set up room to allow space for marching.
2. Lay out claves, sticks, bells, etc.

3. Art work to include clouds, elephants.
4. Other art work for bulletin board.
5. Colored scarves. (WB1.TM, p. 10)

Following these bullet points, WB1 authors shared with the teacher paragraph-by-paragraph details of what and how to teach within the two 45-minute lessons of the first unit for the first week. The following excerpt clearly describes the class situation:

> Orient the children to their new surroundings. This will involve such basics as showing them where to put their sweaters and coats and establishing a general seating arrangement appropriate to the equipment and room. The equipment of the studio will be new to most of the children. Some may not yet have pianos in their homes. Therefore, just getting acquainted with this instrument will be an important new experience for them. […]
> At this first lesson, involve the children in simple activities which will help demonstrate how to move about the room and to establish a necessary "traffic pattern." All children may not feel free to participate immediately in this new environment, but a traffic patterns will soon help them to move smoothly to and from their seats without bumping into each other or getting confused as to what is expected. Perhaps you will even want to have a traffic game, using red and green construction paper for stop and go. Do not rush or "pressure" the children in participation. Get their confidence and trust in you as their friend. Usually a tone of voice which is well modulated and gentle, but not hurried facilitates confidence. Above all, get to know each child as a unique individual.
> Following the brief orientation, the class should be introduced to the basic ingredient of music – the beat. You might simply begin by clapping as you step at a moderate tempo. Be sure to demonstrate what to do and how to do it. After they have gotten the idea of clapping the rhythm, let them march in place a few minutes. Now let them follow you as you clap and lead them around in a circle. Next, set up an ostinato as the piano such as: [staff notation for left hand triads offered]. See if the children can march and/or clap as they listen to your ostinato. You may give further help by chanting "step-step-step-step" etc. as they march in circle. If most seem to be able to follow the general beat, you may let them pause in place for a few moments as you add claves or sticks to help them feel the beat as they march. […]. (WB1.TM, pp. 10-11)
>
> HIGH-LOW (STRETCHING)
> Next we have an introduction to the basic and important concept of high and low in music. Play the highs, then lows on the piano as you dramatize high by reaching up and low by bending down to touch the floor – really get down there!! [Illustration of graphic human figures reaching high and bending down offered by the authors]. Have the children make body

> gestures and motions for reaching from the floor and their toes gradually, slowly upwards – stretching up, up, up on their tip toes as they try to touch the sky. Then slowly back down to touch their toes for the low, then back up to the sky for the high, and so on. […]. (WB1.TM, p. 15)

Similar prose writing style is also evident in WB2, whose authors organized the lesson plan into units called "concept blocks" (WB2.TM(1), p. 7). Each concept block typically encompasses several new concepts and skills "to be worked on and mastered before proceeding to the next block" (WB2.TM(1), p. 7). Activities involved in lessons prescribed reading, playing, listening, moving, supporting the lesson book (*Sing and play*) and the work book (*Write and listen*). Additional exercises are included under "Supplementary songs and games." The following excerpt depicts how the authors of WB2 envisioned the lesson situation:

> **SING AND PLAY SONGS**
> *Bears*: Using the picture cards of the three bears, place papa bear behind low keys, mama bear behind middle keys and baby bear behind high keys. Tell the story of Goldilocks and the three bears and let the children play sounds representing each bear. For example, when papa bear says, "Who's been eating my porridge?" the children may play that speech pattern on the low keys. Finish this story with a descending glissando as Goldilocks runs home. Allow each child to tell his own three bears story and to "illustrate" it on the piano. Encourage them to make up original stories as well as retelling the traditional one.
> *High and Low*: Once the children have discovered that the black keys are arranged in groups, have them find all the groups of two black keys on the piano. Find twos that are high, middle, and low. Play twos with steady beat. Find twos with eyes closed. Have the children stand on groups of twos on the floor keyboard, if available. Have them march up and down on the floor keyboard and stand on a group of twos when the music stops. Play a group of high twos and chant, "Birds sing oh so high" and play a group of low twos and chant, "Tugboats sound so low." […]
> **LISTENING AND MOVING ACTIVITIES**
> The "stretch and bend" game will help you determine how well the child is recognizing high and low sounds. Play very high and very low sounds on the piano (for example: the C major pattern up and down several times). When you play high, the class should stretch their arms up as far as they can and stand on tiptoes. When you play low, they should crouch down low to the floor. Keep alternating high and low and watch the children. […].

> **SUPPLEMENTARY SONGS**
> […] The songs in this block concentrate on the "so-mi" playground chant pitches that are the easiest for the uncertain singer to match. Be sure to pitch the songs correctly, giving yourself the starting pitch on the piano so that you always sing each song in the same key from week to week. It is very important for the children who have had little singing experience that whenever they hear a particular song repeated, it is always sung on the same pitches. […]. (WB2.TM(1), pp. 16-18)

Analysis and Interpretation

Manifestly, the style of lesson plan used in both approaches differed substantially from one another. While the traditional methods' lesson plans took the shape of an outline format, the whole-body lesson plans favored the quasi-prose writing. In at least some aspects, all designs will undergo contrasts with DAP principles and lesson-plan-related research findings.

As encountered previously, all three traditional preschool piano methods offered a type of lesson plan with outline words. As revealed, the usage of "goal" and "objective" is not strictly aligned with the use offered by the MENC curriculum document that emphasizes the direct linkage between goals, objectives, and the philosophy (Gordon, n.d.). This type of lesson plan in particular revealed a vague division between objectives and goals (in TA1) that appears to be driven by the demand of concept teaching, and not in connection with a philosophy that recognizes the value of children's formative years.

Goals in TA1 that specified "to identify 3 black-key groups" (TA1.TG(A), p. 7) or "to introduce the half notes" (TA1.TG(A), p. 10), generated thoughts about the true meaning of goal setting. The articulation of goals within a curriculum facilitates the correspondence of objectives with the philosophy, that in turn maintains the evaluation of lesson delivery and regulates teaching consistency (Gordon, n.d.). Furthermore, goals of an intact educational curriculum should adhere to State or National curriculum standards or envision the

achievement of the students (Campbell & Scott-Kassner, 1995 & 2006), and thus are to be set by the clients to be served (Katz, 1988), not solely by what the instructor values to teach. In fact, goal statements such as “to identify 3 black-key groups” or “to teach the student to LISTEN” (TA1.TG(A), p. 5) in TA1 resembled the style of an objective that is too broad, such as “to learn the song,” that Campbell and Scott-Kassner (1995) labeled as not geared enough toward building “a foundation of musical skills and concepts children can carry through their lives” (p. 275) and which are not recommended. Similar broad statements of objectives, such as “to reinforce the techniques learned previously” (TA3.TG, p. 13) and “to practice reading finger numbers” (TA3.TG, p. 22) encountered in TA3, were neither outcome based nor did they describe what children will be able to do after the lesson is over. A better version of an objective should reflect more generalizable skills and content, in the style suggested by Sims (1995) such as, “children will respond to music through gross motor movement, reflecting the music’s style, […]” (p. 59).

Either way, it may be assumed that the authors may have had some misunderstanding about the nature of goals and objectives as typically used in educational settings, which in turn unintentionally resulted in word choices being incorrectly chosen or misplaced. Anchored in this possible reasoning, Peer Checker 2 described the lesson plan in TA1 as especially “difficult” (Peer Checker 2, Verified Data, All Five Comment/TA1, p. 1), whereas Peer Checker 1’s comments corresponded to my observations (in the ready-to-read case report) that confusion may result from non-prioritized orders of headings, thus influencing teaching and learning effects.

Perhaps, the “loose treatment” of goal and objective has indeed affected the formation of the lesson plan in the traditional cases. When reflecting upon the three-legged lesson plan

model (Campbell & Scott-Kassner, 1995 & 2006), the correspondence between all three elements must be evident. Should goals and objectives not differentiate from one another and not envision what skill and ability children will achieve at the end of the lesson, as was the case with the traditional methods, “strategies” may not translate into proper instructional sequences to enhance the progress of learning. The headings used in TA1, such as “emphasis,” “important,” “keywords,” “interaction,” and “optional,” whose relative importance reflects different meanings for individual teachers, and are spread throughout the lesson plan without a priority order, attest to the previous assumption. The nature of these heading words subscribes to the TA1 authors’ view of suggested procedure; simultaneously however, the suggested manner fails to “guarantee” or “nurture” a systematic outcome due to its free-style plan. This same argument was also provided by Peer Checker 1. In TA3’s case, “Suggestions for Teaching” contained related information and instruction for the teacher, thus representing the closest element to a three-legged lesson plan (Campbell & Scott-Kassner, 1995 & 2006). Accounts like “explain the new symbol” (TA3.TG, p. 14) without previous experience or “demonstrate that the way we walk on the ground is by shifting our weight from one foot to the other” (TA3.TG, p. 25) conveyed different approaches to teaching. The investigation on experience before signs will be discussed more in details under the theme of curriculum design logic.

Upon comparison, the whole-body approach seemed to be spared in regard to mistaking goals for objectives. The nature of the quasi-prose lesson plan not surprisingly, excluded the heading words *goal* or *objective* at the top of the lesson plan, but started any given lesson period with descriptions concerning the desired whole-body music understanding. Certainly the lack of headings such as “objectives,” “strategies,” and

“evaluation” has a disadvantage when compared with the format of lesson plan as Campbell and Scott-Kassner (1995 & 2006) suggested. The greater detail in preparing the whole-body teacher-user for the actual teaching situation, nevertheless, compensates for that potential shortcoming.

To a novice piano teacher who desires to choose a method for teaching preschool children, a method book with the whole-body style of lesson plan may be more appropriate teaching material to pursue, for it immerses valuable, thoughtful, and practical information throughout the method. Evidence from the data analysis of the whole-body cases showed that they included: (a) information regarding learning characteristics of very young beginners, (b) relevant strategies for class management, and (c) suggested evaluation strategies. Related examples for each piece of evidence are provided below.

Information regarding learning characteristics included: “Do not rush or “pressure” the children in participation. Get their confidence and trust in you as their friend” (WB1.TM, p. 10) and the use of playground chant pitches “so-mi” for developmentally appropriate pitch matching (WB2.TM(1), p. 18). Examples of relevant strategies for class management included “Continue to work … activities for rhythmic coordination and beat awareness for the benefit of children. …. Do not indicate which children need this extra help, but rather do the activities with the entire class until they are no longer needed by anyone” (WB2.TM(1), p. 30) and setting up “traffic pattern” (WB1.TM, p. 10) to guide young children to move around the classroom with their classmates. The following were suggested evaluation strategies: “The ‘stretch and bend’ game will help you determine how well the child is recognizing high and low sounds” (WB2.TM(1), p. 18) and “See if the children can march and/or clap as they listen to your ostinato” (WB1.TM, p. 11).

All these examples show how the material provided by these texts not only enriched the teaching preparation and thought process, but also directed teaching delivery to a DAP-relevant standard (Peer Checker 1, Verified Data, Comment WB1 & Comment WB2).

However, long paragraphs of the quasi-prose style demand an intensive devotion on the part of the teacher to digest the information provided. Should the teacher not have had a music education background, this teacher,

> might find this method [WB1 for example] more complicated than Alfred's and Bastien's due to the fact that this method seems to require classroom teacher's qualities such as interaction, classroom management, effective change of activities or use of transitions, understanding of DAP and be able to adapt to each individual student, etc. (Peer Checker 1, Verified Data, Comment WB1, p. 1)

While Peer Checker 1 strongly endorsed the quality of both whole-body lesson plans, Peer Checker 2 in particular described the WB1 style of lesson plan as "in detail" but like "reference material" (Peer Checker 2, Verified Data, All Comment/WB1, pp. 7-8) that is vast and unclear and should be cast in block format (e.g., the concept block in WB2) for more lucid organization.

Conversely, a method book with the traditional style of lesson plan can be easy to scan just before the lesson because of those bold outline headings. This point has been particularly attested to by Peer Checker 2 especially in TA2 (Peer Checker 2, Verified Data, All Comment/TA2, pp. 5-6), while Peer Checker 1 praised TA1 for its versatility and applicability as its main selling point, simply because "teachers from all levels of experience can get started with this method with a considerable amount of guideline and preparation" (Peer Checker 1, Verified Data, Comment TA1, p. 5).

Nevertheless, these traditional style lesson plans can be difficult to follow because everything seems to be equally important but without an internal continuation. A relevant

example may be located in TA1 with the goal of the lesson aiming at developing left-hand finger responses. The first heading after “Goals” is “Emphasize” (TA1.TG(A), p. 12). While the authors wrote under “Emphasize: Playing indicated finger number is EASY. Neighboring fingers play neighboring keys. Repeated finger numbers play repeating keys” (TA1.TG(A), p. 12), they wrote with the next outline heading “Point Out: Page on LEFT SIDE of book is played with LH [left hand]. Boy in the boat is pointing with his left hand [describing the illustration]” (from the same source). It is still difficult to see the strategy and connection between these two outline headings after the objective-like goal statement. The same lesson is then followed by “Important,” with “Student should clap the rhythm with loose, free gestures, keeping a steady beat” (TA1.TG(A), p.12)—a suggestion still not touching the issue of developing left-hand finger responses. Finally under “Interaction,” the student is asked to play the song in the air, using the correct fingers and rhythm, while “Concluding” suggests “play the duet” (TA1.TG(A), p. 12).

Within this lesson plan, the amount of “to-do” actions such as “Student points to *piano* sign and defines it” (TA1.TG(A), p.14) or “the student plays the finger numbers in rhythm on a book or table. Gradually increase the speed on each repetition of the piece” (TA1.TG(A), p.21) dominate the entire lesson plan. Similar style of “to-do” list can be observed in TA3’s teaching strategies: “Explain that the piece will be played with the left hand…” and “have the student find the hand position by looking at the keyboard picture inside the blue left hand” (TA3.TG, p. 32). This “to-do” feature gives the impression that once all outline headings and steps are checked and executed, no adequate evaluative apparatus is offered to observe or to suggest assessing the achievement of the preschool children. The closest evaluative apparatus may be sentences starting with “check,” in the

form of a directive such as “check for rounded hand when student plays white keys” (TA1.TG(A), p.18) or “ask the student to point to things on the score that have been in other pieces. Can the student define the familiar elements? Perhaps the teacher will need to help” (TA1.TG(A), p.21). Both types of evaluative sentences occur less than five times in a 47-page method book, and with the tendency to ask preschool children to verbalize learned knowledge when most children are developmentally not equipped for it (Bredekamp & Copple, 1997; Flowers, 1984, Hair, 1981, 1987; Zimmerman, 1986). Interestingly, the evaluative apparatus was not found in TA3’s “Reinforcing Pages” but in its “Helpful Hints.” Accounts such as “to be sure that student understands these concepts” (TA3.TG, p. 40) and “it is helpful for students to visualize the length of the notes” (TA3.TG, p. 30) contributed to an evaluation reminder for the teacher. This might not be the “official” evaluation designed to assess learning when compared to the three-legged lesson plan model, but still served as an “evaluative check” more frequently than that found in TA1’s case.

Perhaps the authors of traditional cases neglected the evaluation portion of the lesson plan due to the assumption of both formal and informal evaluations constantly conducted by teachers (Walker, 1992). This may be the case in TA2 as no hint of evaluation is found throughout the method. Should the existing evaluative apparatus provided by TA1 undergo DAP scrutiny and related child-friendly teaching theories (Music teaching theories of Dalcroze, Orff, Kodály, & Suzuki), one can notice that observable musical behaviors (e.g., singing, moving, playing or reading) and internalized musical behaviors (e.g., listening, conceptualizing, perceiving, discriminating or feeling) of young children (Campbell & Scott-Kassner, 1995; Gordon, n.d.) were not employed in the assessment process.

The significance of the inclusion of *evaluation* in a lesson plan reflects not on whether the objectives were realistic and whether the strategies were effective, but on the achievement of children's comprehension and acquisition of related skills (Andress, 1995; Bredekamp & Copple, 1997; Bredekamp & Rosegrant, 1992; Campbell & Scott-Kassner, 1995 & 2006; Flowers, 1993 & 2003; Walker, 1992). Furthermore, the DAP guidelines are specified in the dimension of assessing children's learning and development with the following words:

> The result of assessment are used to benefit children—in adapting curriculum and teaching to meet the developmental and learning needs of children, communicating with the child's family, and evaluating the program's effectiveness for the purpose of improving the program (Bredekamp & Copple, 1997, p. 21)

The lack of "official" evaluation within the traditional preschool piano cases leaves the curriculum, the lesson plan, and the instructional strategy "TST" – the teacher's presentation of information, the student's response to that information, the teacher's feedback to the response (Campbell & Scott-Kassner, 2006, p. 41) incomplete. Although without a clear heading for evaluation, as mentioned above, the instructional cycle of TST seems to permeate throughout both whole-body cases in comparison. Sentences or success indicators remind teachers to maintain TST and assess students' achievement are abundant within each lesson:

> Again, walk the beat as you tap or clap the rhythm. [T]. At first some may not seem to pick out the change of this rhythm, but don't worry -- they are beginning to keep a beat going as they respond to a very basic rhythm. [S]. Be sure they feel the "long" and "short." [T]. (WB1.TM, p. 15)

> At the end of this first unit, allow time to go back over ideas most recently introduced. [T]. The children may reach high, reach down low, have a quick review of rhythms, point to the clouds in the sky, recreate the elephant's song [S] – anything to reinforce and briefly recall all these points. [T]" (WB1.TM, p. 21)

> "[TS]… Be sure that the children understand and are correctly using the terms "same" and "different" before doing the same and different listening pages. [T]." (WB2.TM(1), p. 29)

> Take just a few minutes of class to listen to a portion of the recording each week. [T]. Discuss each instrument and each style as it is introduced [S], reviewing what was heard previous week. [T]. (WB2.TM(1), p. 46)

The above comparison may demonstrate the incomplete use of the three-legged lesson plan as a weakness among the traditional preschool piano method books. This may play a role in the issue of student success.

In regards to the use of time, the average time span for TA2 lesson activities coincided with the temporal formula of "one minute of time per activity" equaling "one year of age of the children," as suggested by Gordon (n.d.) in the MENC curriculum planning document (p. 1). Surprisingly, no time specification can be located within other traditional and whole-body cases despite the usefulness of this information to the novice teacher. The most relevant descriptors relating to the use of time may be "few minutes" (WB1.TM, p. 11), "to cover all material as far as page 11 in the first lesson" (TA1.TG(A), p. 3), or "cover enough material to capture the interest of the child" (TA3.TG(A), p. vii). However, the authors of WB2 specified that ten to 12 activities are ideal for a class time of 45 to 60 minutes.

Taking this suggested class time divided by 10 or 12, the approximate length for each activity denotes a range between four minutes 30 seconds to six minutes. This result per activity can be regarded as fairly safe within the normal range of preschool children's attention span according to Gordon's (n.d.) guidelines, as some activities may be extended due to intensive interests.

One interesting sub-finding emerged from the analysis while comparing the comments of both Peer Checkers. Evidently, peer check 2 seemed to favor the traditional approach more as he used “comprehensive” (Peer Checker 2, Verified Data, All Comment/TA1, p. 2), “attractive” (Peer Checker 2, Verified Data, All Comment/TA3, p. 4), and “scholastic” (Peer Checker 2, Verified Data, All Comment/TA2, p. 6) to describe the traditional cases, but “reference material” especially for the whole-body case WB1 (Peer Checker 2, Verified Data, All Comment/WB1, p. 8). Accustomed to the traditional teaching approach in piano, the analyses of Peer Checker 2 naturally inclined to support his compatible experiences. On the other hand, Peer Checker 1 (who has more experience in music education) contemplated with less bias over details such as recognizing the method design of “not too much and not too less” style (Peer Checker 1, Verified Data, Comment TA1, p. 5) as the reason for TA1’s best-seller standing, discussing many weaknesses in TA2 (Peer Checker 1, Verified Data, Comment TA2), describing TA3 as well-designed, applauding WB1 for its “exceptionally well-thought-out quality” (Peer Checker 1, Verified Data, Comment WB1, p. 1), and accrediting WB2 for its “child-friendly features and applications” (Peer Checker 1, Verified Data, Comment WB2, p. 5). Understanding such discrepancies in Peer Checkers’ opinions may owe to their different educational experiences both in the fields of music education and piano pedagogy. Despite individual backgrounds of Peer Checkers that influenced the vision of their analysis, the usage of peer checking did permit the triangulation of data methods (Bodgan & Bilken, 1998; Glaser & Strauss, 1967; Johnson, 1999; Krefting, 1999; Lincoln & Guba, 1985; Marshall & Rossman, 1989; Merriam, 1988), and helped increase the credibility level (Guba, 1981; Guba & Lincoln, 1981; Merriam, 1988) of the current study.

Rote Teaching

Based on principles of instructional psychology, rote teaching in piano study is preschool-age appropriate based on the fact that imitation is rooted in motor sensory development and enables social-emotional development before the acquisition of a definite language (Piaget, 1968). Evidence pointing at the issue of rote teaching or rote learning came from the data of one traditional case and both whole-body cases. Word choices like "demonstrate," "imitate," "teach," or sentences implying that teachers should show the student what to do all bore witness to the existence of rote teaching and learning within the cases.

Traditional Approach

TA3 is the only traditional method whose technique for teaching the very young beginner evidently points at rote teaching. The authors of TA3 stated more than one time in the teaching steps: "teach the song and the words to the student by rote" (TA3.TG(A), p. 9). In the teacher's note of the lesson book, they wrote: "teach the piece by rote and then show the parents how to follow the diagram […]" (TA3.A, p. 45). Both events revealed the degree to which TA3's authors integrated rote teaching into their teaching philosophy.

Compared with TA3, the application of rote teaching in TA2 can only be assumed. For instance, the authors of TA2 declared in the teacher's manual that learning greatly depends on imitation and that "demonstration is very important in the lesson." (TA2.TH(1), p. 10). Also, they advocated that "children . . . learn best from listening to the compact disc or to the teacher singing in the lesson" (TA2.TH(1), p. 20). However, the TA2 authors did not specifically mention the term "rote teaching" in lesson plans. This may be the result of the over-simplified lesson plan (that is reduced to only concepts to be learned plus page numbers)

being separated from the pacing sequences on another extra format. What is lost between the lines and formats cannot verify its existence and consequently is not useful to users who do not recognize its non-existence.

Similarly, no evidence of rote teaching or any demonstration such as "teacher shows or plays" has been cited in TA1; instead many more action verbs relating to the student's behavior, such as "student points, tells, plays, counts," were recorded.

Whole-Body Approach

To a certain extent, rote teaching translates in whole-body terms into the synonyms of "demonstration" and "experience before symbols." In one concept block, the authors of WB2 demonstrated this in the following manner: "Play shorts [rhythms] on the piano while saying, 'short, short, short, short' and ask the child to imitate" (WB2.TM(1), p. 17). Similar approaches are applied to the concept of up and down: "Play all black keys going up as the children watch, saying 'up, up, up, up.' Let them imitate" (WB2.TM(1), p. 17) and the activity involving sing and moving: "Sing the song and do the motions rhythmically for the child to imitate. . . . If you, and the parents, exaggerate the gestures rhythmically, the child will imitate them in the same manner to the best of his coordination ability." (WB2.TM(1), p.18). The procedure of demonstration and experience before symbol can be found in WB1 as well; as portions of the second unit revealed:

> **THE FARMER IN THE DELL**
> You may move directly to this new song or you may repeat a former activity to use something which the children already know. "The Farmer in the Dell" should be easy for most children since the melody will be somewhat familiar. First sing the song with them, then do it again as you all clap the rhythm, "The Farmer in the Dell." [rhythm pattern of short-long short-long short-long]. Now clap the rhythm and sing the song while all of you march around the room. You may need to repeat this several times so that each child can begin to feel the "swing" of this song. Then, have the children look at their books and find the bottom key of the "Triplets" in the middle of

> the piano. The children can play the rhythm for "Farmer in the Dell" on this tone (Gb). Some may play it almost immediately, while others will need to clap it or do the best they can – perhaps just sing it for the moment. (WB1.TM, p. 28)

Nevertheless, WB1 authors cautioned against the temptation of turning piano teaching into a total rote-learning session. Their argument indicated that the total music understanding is "a process of maturation" that should not be filled only with "exhibitionism and technique at the expense of understanding and creative thinking" (WB1.TM, p. 8) during this early development stage.

Analysis and Interpretation

To a certain degree, rote teaching or rote learning in preschool piano study is developmentally appropriate because the teacher in actuality is the "active advanced organizer," in comparison to the preschool piano beginner who comes to piano study to passively "absorb" the organized knowledge (Ausubel, 1968; Uszler, 2003). This scenario is especially vivid as one encounters TA3's emphasis on rote teaching. Evidently, the authors of TA3 honored the adage advocating that "actions speak louder than words." Looking from a different angle, rote teaching partially fulfills the instructional rule of "experience before symbol," as the TA3 teacher rote teaches or models what and how to do certain tasks. This observation is without a doubt supported by Peer Checker 1 with the following comment: "Rote learning was clearly suggested to use in the lesson, which is a nice implication for the 'sound before sign' notion" (Peer Checker 1, Verified Data, Comment TA3, p. 5).

Unlike the overt usage of rote teaching in TA3, the assumption of TA2 teachers pursuing "experiences before symbol" can only be attested to because nothing like "demonstration" or "rote teaching" is mentioned in the lesson plans provided. Due to the

over-simplified lesson plan model that lists only page numbers in correlated books under new and review concepts and materials without accounts of goals, objectives, strategies, and evaluation, the extent of "experiences before symbol" can be either justified or neglected from teacher to teacher. Likewise, no evidence of rote teaching has been located within TA1, but the assumption of its existence within TA1 and TA2 remains. The rationalization of this assumption is supported by the pedagogical tradition (Uszler, 2003; Uszler, Gordon, & Smith, 2000) and common practice in the profession (personal teaching experiences; experiences of online pianist-teacher community). Logically, the execution of the instructional kernel TST—Teacher's presentation, student's response, teacher's feedback (Campbell & Scott-Kassner, 1995 & 2006) can also be assumed and justified; except that high percentages of incomplete cycles of TST may be predicted, to resemble findings of relevant studies by Yarbrough and Price (1989) and Speer (1994). This may be due to a great deal of lesson time being spent on compensating for unclear lesson objectives and strategies, with no time left for evaluation and feedback.

As a matter of fact, a novice teacher who teaches the piano by method books like TA1 and TA2 may overlook the importance of fostering experience before symbol and completing the TST cycle, just because such information is not printed explicitly in the method book. In an actual lesson situation where keeping everything under control may be challenging enough, the pacing of the lesson may be simply determined by those designated pages from the lesson plan and by the prescribed reminder or suggested sentences. Once a certain page is located, the likelihood for conducting activities via experience before symbol tends to be diminished for the reason that the function of reading visually what is printed on the page already is taking place.

To prevent this, it may be wise for authors of preschool piano methods to write pedagogical elements such as “rote teaching,” “demonstrate,” “assess,” or “check” into the lesson plan, as opposed to leaving it to the teacher’s own discretion and common sense or traditions of the profession.

The above-illustrated class situation may have no chance to appear should the novice teacher teach in the whole-body style. Not only did the quasi-prose style of lesson plan clarify how to proceed with DAP relevant instructions, it also developed the use of rote teaching into demonstrations enabling the necessity of various experiences (from oral, aural over visual, to physical) before symbols. In addition, the WB1 authors recognized young children’s learning characteristics of trial and error and encouraged children to experiment, to create, and to succeed many times through exploration and discovery. This sequence is consistent with the discovery theory of Bruner (1966). The same attitude can be encountered within the WB2 philosophy: “Remember that preschoolers learn through a great deal of repetition” (WB2.TM(1), p. 7). As long as the teacher read and followed the long-paragraphed lesson plan, the result would be a versatile musical learning experience in which children respond to sound and experience before using and responding to symbols.

Then again, the issue of rote teaching in the traditional preschool piano methods deserved examination in a different context. While these methods do fit into Ausubel’s theory of “direct instruction,” no evidence of child-directed learning is recorded across the traditional cases. A dominant role of rote teaching and learning conflicts with DAP principles that advocate neither to spend too much time on “instruction of narrowly defined skills” (Bredekamp & Copple, 1997, p. v) at the expense of active and experiential learning approaches in a meaningful context, nor to rely on “copying the

adult's model" as the goal of rote teaching (Bredekmap & Copple, 1997, p. 127). Although not specified, the danger that absolute mimicry seems to be the key element in shaping the final achievement of the traditional methods may exist. This again disagrees with Campbell and Scott-Kassner's (1995 & 2006) vision of the teacher's duty being to enrich children's musical growth through multi-sensory tasks. In other words, teachers should be wary of fostering a copycat (imitator) in the child-student. Traditionally, the role balance between the child-student and the teacher portrays a simple picture of provider-and-receiver. Given what is known today about how children learn, it may be better to depart from the adage of "teaching as I was taught" (Lyke, 1996c, p. 21) and transform in order to serve the new needs of child-centered education (Guilmartin, 2002; Hammel, 2002; Lowry, 2004; Maris, 2000; Wristen, 2002). In contrast, the whole-body rote learning with various experiences engaging oral, aural over visual, to physical domains before symbols, allowing children to experiment, to create, and to succeed many times through trial and error exploration and discovery, may transform the old rote teaching into a more DAP-friendly application for the preschool piano teaching.

Modes of Instruction

Mode of instruction is used here to refer to the settings of lessons, whether a child attends private, group, or both private plus group lessons. Specifications on the mode of instruction were found in all five preschool piano methods.

Traditional Approach

All traditional cases indicated that their method is adaptable to either private, group, or both teaching situations. TA1 authors wrote that "lesson books in ALFRED'S BASIC PIANO LIBRARY are not divided into units. This allows the teacher to proceed

at the pace most perfectly suited each individual student or of the group of students in a class lesson" (TA1.TG, p. 1). TA2's authors indicated that its method is "equally effective in either group or private lessons" (TA2.TH(1), p. 6). Similar evidence is found in TA3: "this course may be used in private lessons, group lessons, or a private/group combination (TA3.TG, p. i). Besides specifications of the age of the targeted beginner children and use of the interview test to assign group lessons, additional details on the mode of instruction can only be located in TA2:

> Historically, pre-school music instruction has been conducted in groups often with parents attending and assisting students in the lessons. This approach is very effective as young students enjoy the interaction with peers. Parents enjoy the opportunity to share these experiences with their children…. When teaching young children privately, it is very important that the lessons include a variety of activities that get the student away from the keyboard. The listening movement activities contained in the Music Discovery Books should not be neglected in private lessons. (TA2.TH(1), p. 13)

TA2 method also indicated that a class between 45-60 minutes of four to six students serves as the most effective group without parents. Class assignment of students is suggested in this traditional case by age, as the authors said that: "grouping by ability level is less important with preschoolers than with average-age beginners because young students change and mature quickly" (TA2.TH(1), p. 15). Once groups are determined, goals should be set for developing the weekly lessons. Items necessary to each lesson are: (a) a variety of activities both at and away from the keyboard, (b) assigned student involvement either as a performer or as a listener, (c) controlled teaching pace for learning success, and (d) verbal cues for beginning and ending activities. Class management tips were also provided, as were advantages of group instruction for preschoolers, such as confidence in playing for and with others, increased attention span,

learning from peers, conveying a friendly and encouraging atmosphere, better motivation by the sense of belonging and dynamics, and chance to broaden musical experiences (TA2.TH(1), p. 14).

Whole-Body Approach

WB1 specified that their method is designed for group use only. According to its authors, a functional class requires 45 minutes and may include six to 12 children who will meet twice a week for 16 weeks for two semesters (WB1.TM, pp. 7-8). Although suitable for private one-to-one lessons, WB2 authors expressed that its method is best used for six children in a group meeting 45-60 minutes twice a week (WB2.TM, p. 10). In addition, benefits of group piano study were discussed by WB2 authors:

> Through the weekly class, the shy child can be encouraged to extend himself more creatively, the uncertain child can watch his peers and learn more easily, and the momentarily obstinate preschooler can simply watch and listen while the rest of the class proceeds. Learning to work as a group, and the development of social skills are additional growing experiences in the preschool piano class. (WB2.TM, p. 5)

Both whole-body cases incorporated information regarding class management throughout lesson plans. WB1 even offered a graphic presentation of traffic patterns for moving in the classroom (WB1.TM, pp. 14-15). Group assignment in the whole-body approach appeared to rely on the state of the child's readiness. While WB1 authors recommended to look for "obvious patterns regarding general maturity, physical coordination, aural awareness" and to group six to twelve children based on their "common background characteristics" (WB1.TM, p. 6), WB2 authors specified not to "automatically group according to the calendar age, but rather by the social, intellectual, and musical maturity of the child" (WB2.TM, p. 9). In addition, "class sizes of even numbers seem to work better than those of uneven numbers" (WB2.TM, p. 10).

Analysis and Interpretation

While two of the three traditional cases employed the “either-or” and “combined” mode of both private and group teaching, they did not specify whether to approach the two modes of instruction differently. Information shared on the mode of instruction in the two traditional cases may not be as DAP-relevant as that encountered in the remaining traditional case TA2, where comprehensive information is offered. TA2’s feature of detailed information regarding private and group teaching supports the traditional mode of teaching within preschool piano methods (Lyke, 1996b; Uszler, 2003). It is consistent with the guidelines of DAP that advocate “creating a caring community of learners” and “teaching to enhance development and learning” for the preschool children (Bredekamp & Copple, 1997). Moreover, the setting of group teaching promotes the children’s sense of belonging and security, thus facilitating social development of the children and increasing their motivation for better learning.

In contrast to the “either-or” and “combined” mode of teaching in the traditional approach, authors of both whole-body cases prefer the group lessons over private lessons. Comprehensive musicianship appeared to occupy the entire class time, during which solo-and ensemble performances were encouraged, class management implemented, lesson plans carefully developed, and learning from the teacher and peers took place. In addition, the whole-body feature of assigning group lessons by the state of the child’s maturity is more consistent with the DAP principles than the traditional grouping by the actual age. Because the whole-body approach follows the educational belief of understanding where the child stands developmentally and musically (Andress, 1992; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; McDonald &

Simons, 1989; McDonald, 1979; Rennick, 2000; Sanders, 1994), it is consistent with DAP.

The conclusion here is not to judge one mode of instruction as preferable to the other. How the teacher decides to teach, using either one of the preschool piano methods, depends entirely on his or her own discretion. It should be noted that different pedagogical approaches lead to distinctly different modes of instructions. Comparisons revealed that the choice of the whole-body mode of group teaching aligns better with DAP considerations. The exceptional value of the information regarding group teaching offered by one traditional case, however, should be recognized and its format serve as the model for preschool piano methods across approaches.

Interview/Readiness Test

Data regarding the interview or readiness test were included in each case except TA1. A separate section devoted to this topic was common way in which authors of the preschool piano methods addressed criteria for piano readiness. The foci of such an interview/test separate into four categories, represented by the level of a child's social, intellectual, physical, and musical maturities. Thus, the rationale of the interview/readiness test should emphasize finding out the child's levels according to the four developmental maturities.

The element of "social maturity" of the child found in the readiness tests was in accordance with Berk's (2000) definition, which specified this as the child's ability to manage his/her own feelings, knowledge about other people, interpersonal responses with the teacher, and moral reasoning and behavior. Ideally, most of these social traits can be observed throughout the entire interview process. "Intellectual maturity" referred to the

child's knowledge about personal information, alphabet letters, or counting and cognitive ability such as short-term memory aTA3licable in the "clap back" activities. "Physical maturity" denoted observation of "penmanship," (TA3.TG(A), p. iii) or the freedom of the child to use his or her small muscles, in either a self-directed or imitated manner. "Musical maturity" represented abilities such as aural perception, basic pitch discrimination, vocal range, and sense of rhythm.

Traditional Approach

Drawn from the traditional cases, the function of the interview test is to determine "interest and readiness" (TA2.TH(1), p. 14), to identify "the child's current functioning" (TA3.TG(A), p. iii), and to facilitate the assigning process for group classes (TA2.TH(1), p. 14). In a typical scenario as proposed by TA3's authors, the child is the spotlight during the 30-minute interview; in the meantime the parents may wait outside or stay in the same room with the child should the child not feel comfortable talking to a stranger (TA3.TG(A), p. iii). How the child behaves during these 30 minutes may indicate his or her level of social maturity, for the most part.

On the whole, the authors of TA3 provided a readiness test detecting all maturities in a balanced manner. The assessment of writing ability was included both for detecting capabilities of small muscles and intellectual maturity such as the knowledge of the alphabet and numbers. Although in the form of bullet outlines, TA3 certainly gave a well-thought-out test on *musical maturity* in addition to questions to the child and parents, and asking the child to write down names. This notion is attested to by both Peer Checkers with descriptions such as "on details, full preparation" (Peer Checker 2, Verified Data, All Comment/TA3, p. 3). To diagnose the level of the child's musical maturity, teachers

utilizing the TA3 method use a familiar song to evaluate the child's ability to sing on pitch, an ear training game to detect pitch discrimination skill, and a rhythm game to diagnose the child's sense of rhythm (TA3.TG(A), pp. iii-iv). Interview elements found in TA3 were consistent with writings of Bastien (1995) and Enoch (1996a) in regards to the readiness test. Examples and detailed interview procedures were provided with all musical tests to facilitate the realization of an interview situation.

In comparison to TA3, the authors of TA2 focused more on *social* and *intellectual maturity*, and less on *musical* and *physical* maturity. Evidence found in TA2 revealed that the component "Questions for parents" (11 counts) during the interview process outnumbered the component "Questions for the child" (8 counts), and thus gave the impression of valuing the opinions of parents more than the responses of the child. The justification behind these questions could be that parents represent the easier source from whom the teacher may obtain information about the child's background and social ability. Nonetheless, the average question count (9.5) of both "Questions for parents" and "Questions for the child" is still larger than the number of questions displayed in "Musical activities to do with the child" (4 counts). Of course, the nature of questions must also undergo scrutiny. In "Questions for parents," concerns are directed to the interests, social, and musical backgrounds of the child and the parents, as well as developmental issues of the child. Questions like "Does your child enjoy listening to music?" "Is the child's attention span long enough to practice 10-15 minutes a day?" or "Do parents play musical instruments or sing?" supported the authors' concerns about readiness behaviors, (TA2.TH(1), pp. 14-15), whereas "Questions for the child" were skill assessments, asking the child to answer with his/her name, age, and birthday, to

identify the letters A-G, to write the his/her name or draw a picture of himself/herself (TA2.TH(1), p.15). In addition to those questions, TA2 authors also suggested that the teacher show Beethoven Bear and Mozart Mouse (e.g., the plush animals of the series designed to be the learning companions of the student) to spark the child's imagination (TA2.TH(1), p.15). The characteristics of this interview leads to the speculation that social and intellectual maturities of the child are explored to a greater extent during the interview; whereas activities relating to musical maturity like "sing a familiar song to determine pitch matching skills" and physical maturity such as "move to music" (TA2.TH(1), p. 15) are accompanied with only brief and general descriptions without actual performance samples.

Whole-Body Approach

Like the lesson plan in whole-body style, the interview evaluations of WB1 and WB2 were cast in a thoughtful format for easy and prompt score-checks. The authors of WB1 entitled their evaluation sheet "Can you do this" (WB1.TM, p. 3). The test format shown in the teacher's manual contained a success scale from two minuses for difficulty in completing the task to two pluses for each correct response on the first attempt. Spaces for remarks were provided throughout the test. Likewise, the WB2 authors called their readiness test the "Sing and play development assessment profile" (WB2.TM(1), p. 13). Here, the success scale took the form of checking spaces for excellent, average, and hesitant. Details of both readiness tests revealed that rhythmic response, singing ability, and pitch information occupied most of the interview. Hands-on activities were evident within the interview; both cases assessed the preschooler's ability to match pitch and to find high and low pitches on the keyboard, to walk or echo-tap a rhythm, and to sing a

song transposed to higher or lower registers in order to find the singing range (esp. in WB1.TM, p. 5). Writing appeared only in WB2 for the child to print his or her own name. The physical maturity was predominantly observed through musical activities, especially games at the keyboard. Albeit detecting musical maturity represented the majority of attention during the interview, both whole-body cases also devoted time to assessing social and intellectual maturities of the young children. While both cases offered spaces for immediate personal information, WB2 also provided games for the child to demonstrate recognition of the ABCs and 123s. Furthermore, both cases regarded their interview as an informal testing apparatus (WB1.TM, p. 2; WB2.TM(1), p. 9), administered to inform "the present state of the child's maturity" (WB1.TM, p. 2) and to facilitate "grouping together children who are likely to need the same pacing" (WB2.TM(1), p. 9).

Analysis and Interpretation

The existence and the function of the readiness test among the scrutinized cases concurred with the pedagogical writings of Bastien (1995) and Enoch (1996a). Although differences in presenting the interview process exist between the traditional and the whole-body cases, the four interview criteria of social, intellectual, physical, and musical maturities remained in agreement with the qualities important to the prospective piano student as summarized by Bastien (1995) and Kaesler (2002).

According to Kaesler's survey, designed to uncover the portraits of the ideal beginning piano students, categories of "ability and skill" and "attitude and involvement" were prominent. Of these two categories, the interview process of both types of cases usually starts with the second, "attitude and involvement." This is likely based on the

rationale that it is desirable to get to establish a friendly and comfortable rapport in order to get to know the prospective student and his or her parents. Nonetheless, in comparison, authors of the traditional series tended to prioritize discovering the child's social maturity via questioning the child or parents, whereas the whole-body cases stressed the interest in the child's other maturities. In reality, an interview starting with questions concentrating heavily on "attitude and involvement" may escalate the relaxed atmosphere to an examination-like tension that may scare or bore the child, and thus has the least likelihood of reflecting the true level of the child's eagerness and the support of the family (Kaesler, 2002). Following Kaesler's conclusion, the eagerness of the child designates a "social maturity" that not only encompasses the student's attitude, curiosity, and interest to explore the world of music, but also helps the teacher detect the child's ability to "pay attention, follow directions, and be comfortable with the teacher" (p. 24). Should the child feel uncomfortable talking to the teacher without the parents being present, the teacher will need the parents' help to find out the reason for initiating the piano lesson and information related to the child and family background. If this is the case, the level of the child's social maturity demands time and effort to improve, but by no means explains the level of the child's other maturities. The issue of concentration must be considered as well, because fun and interesting interview contents may prolong children's ability to concentrate as in the whole-body hands-on informal testing, compared with the situation of informative conversation that dominates the traditional cases.

Between the second category "attitude and involvement" and the first category "ability and skill," levels of intellectual maturity can be observed as the teachers have the

child write or copy alphabet letters (in TA3) or print their name (in TA2, TA3, & WB2). By means of the writing function, the level of physical maturity can be assessed. This part signals the beginning of the category “ability and skill.” To be specific, asking the child to write or copy letters or numbers offers the opportunity for the teacher not only to evaluate the child’s small-muscle development, but also to observe the child’s eye-hand coordination (Kaesler, 2002, ability and skill #6). Although writing may not be the most DAP-friendly format for detecting the child’s intellectual maturity, it was common across cases. Because wrist cartilage of the preschool child will not mature into bone until the age of six (Berk, 2000), tasks involving “precise control of the hand muscles” (Bredekamp & Copple, 1997, pp. 103-104) such as writing may be difficult. This could result in failure and frustration, and DAP guidelines do not recommend engaging preschool children in too much fine-motor activity. Chances are that writing difficulties may overshadow the initial interest and confidence of these preschool children in learning. A more DAP-relevant way to uncover the child’s intellectual maturity might be to play a recognition game of ABCs and 123s with the young children, as suggested in whole-body cases, to determine the child’s competency in symbol reading (Kaesler, ability and skill #3).

Continuing with the typical interview process, the teacher usually now directs the child’s attention to game-like activities such as singing a familiar song to determine musical maturity. Hearing the child’s singing voice allows the teacher to determine the child’s competency in singing, pitch matching, and listening skills (Kaesler, 2002, ability and skill #2). While a more sophisticated ear training game is designed in TA3, WB1, and WB2 to detect both the sense of pitch and the sense of high/low (ability and skill #4),

TA2 authors encourage teachers to “teach high and low on the piano and watch the child’s response” (TA2.TH(1), p. 15) in the company of both Beethoven Bear and Mozart Mouse. The promotion of the plush-animal product is obvious, but may be justified if the context is to facilitate evaluation based on the logic of the interview to determine where the child stands musically and developmentally.

The rhythm segment of the readiness test is consistent with the conclusion of Kaesler (2002) to determine the child’s competency of steady beat and sense of rhythm (ability and skill #1). Comparing both the interview outlines of TA2 and those of the other three methods, readers will find that the other methods furnish a rhythm game encompassing three steps. These three steps specified (a) demonstrating a simple rhythm, perhaps one-measure; (b) having the child clap back; and (c) upon successful rhythm echoing, extending the rhythm pattern to two measures or longer (TA3.TG(A), p. iv), to a reversed pattern (WB1.TM, p. 4), or to be performed with other body parts (WB2.TM(1), p. 13). Clearly, while TA3, WB1, and WB2 provided details as to the interview procedures, TA2, under Peer Checker 2’s description of “rich resource” (Peer Checker 2, Verified Data, All Comment/TA2, p. 5), seemed to give a surface impression and replaced the heart of the interview test with “Questions for parents” and “Explanation of the program to the parents” in the form of seven bullet points (TA2.TH(1), p. 14) which did not fit well with the purpose of the readiness test. Albeit that the TA2 authors specified equal importance for “Questions for parents,” “Questions for the child,” and “Explanation of the program to the parents” with “Musical activities to do with the child” for the reason that all are essential elements to an interview, the true essence of a readiness test should emphasize finding out where the child stands musically and

developmentally. The talk with parents or the promotion of a particular preschool piano series may be conducted after, instead of before, a determination of the child's overall maturity has been established, to avoid occupying the time of the "official" interview. A similar observation was offered by Peer Checker 1 (Peer Checker 1, Verified Data, comment TA2, p.1), whereas Peer Checker 2 did not make any comments on this issue.

While mapping with Kaesler's (2002) qualities of the ideal prospective student, each maturity deserves further scrutiny with the DAP lens. According to the guidelines of DAP, three-year-olds enjoy pleasing adults, thus behaving "more cooperatively" than do toddlers (Bredekamp & Copple, 1997, p. 117). The cooperative manner among these young children facilitates the development of their self-concept (Berk, 2000; Bredekamp & Copple, 1997). During the socialization process (Vygotsky, 1978), this early form of social maturity is nurtured by parents and teachers. If we regard piano study as one socialization process that the child faces without the parents for the first time, we must recognize the value of the social maturity in this matter. Immediate corrections may not be appropriate, as phrased by TA3's authors: "It is more important for the student to know when he or she is correct or incorrect than to match your tone right away" (TA3.TG(A), p. iv). On the contrary, the interview process should be kept positive. In addition, DAP principles (Bredekamp & Copple, 1997) advocate that the child's answers to the musical activities should be taken as "clues" to their mind (p. 128) and that many of the "wrongs" will self-correct with age (p. 109). Although direct questions in the interview may yield relevant answers to reveal the child's social maturity level, the piano teacher should respect the child's self-concept and carry out the readiness test

accordingly with extra portions of thoughtfulness in observation. Under the atmosphere of trust, the teacher will be in a better position to help form the child's self-concept.

The tendency in the interview involving the determination of the child's intellectual maturity basically centers on the child's knowledge of his or her immediate surroundings, such as age, date of birth, family members, or active music-makers whom they know. In addition to this immediate information, the determination also focuses on the child's knowledge about alphabet letters and numbers both through verbalization and writing. The verbalization of alphabet letters and numbers alone is within the DAP range, but the writing as encountered in the traditional cases may not be consistent with DAP guidelines. Looking from the angle of physical maturity, the development of small muscles is just beginning for children of the early preschool age (Berk, 2000; Bredekamp &Copple, 1997; Scott-Kassner, 1993). While TA2, TA3, and WB2 proposed to have children write, copy alphabet letters, and write their name, one should keep in mind that the dexterity of children's fine-motor muscles only becomes readily observable at the later preschool stage (e.g., age 5 and up for the current study) as does the coordination of their binocular vision which improves about the same time (Bredekamp& Copple, 1997). Thus, the test of writing and eye-hand coordination that are reported in Kaesler's (2002) survey as one of the six wish-list qualities for the prospective piano student should only serve as an evaluative tool, not a decision-making criteria.

In regards to evaluating physical maturity of preschool children, walking, clapping, or tapping can be more DAP-relevant than writing. All cases suggested that during the interview, the teacher should observe children's ability to use their larger limbs in relation to rhythmic patterns. Although not as close as functional uses such as

climbing or jumping (Bredeakmp & Copple, 1997; Monsour, 1996), children daily discover that most rhythm-related physical actions including walking, waving, clapping, and tapping. These are DAP not only because of their natural development and children's genetic tendency to move with large muscles, but also because of the effectiveness that the employment of these physical movements often yields (Howe, 1993). Hence, the use of large muscles during rhythmic games in the interview, also recorded in Kaesler's (2002) survey as the "beat competence quality" of the dream student, is developmentally appropriate for preschool children. Other DAP-friendly music activities within the interview are singing and listening, because both modes represent natural behaviors from children's daily life, and observing natural behaviors is the best evaluation apparatus (Campbell & Scott-Kassner, 1995 & 2006; Gordon from MENC website document, n.d.).

Nevertheless, certain procedures in the interview may be regarded as developmentally *inappropriate* practice (DIP). First, as noticed by Peer Checker 1, the evidence showed that only TA2 specified pitches of the D4-A4 range, which represent the relevant vocal range for preschool children (Campbell & Scott-Kassner, 1995 & 2006; Kim, 2000; McDonald & Simons, 1989; Miller, 1986, 1987; Scott-Kassner, 1993; Ramsey, 1983; Sims, 1993; Smith, 1963), as the starting point for singing or pitch matching. A child-appropriate starting register can play a significant role in simple song singing, especially for those youngsters who demand extra social-emotional support. Second, while listening skills are adequately observable throughout the musical activities of the interview, some issues surfaced from TA3's and WB1's ear-training games. Both authors utilized the grouping of black keys and tended to have the children listen and play back one correct black key that matched one of the three black keys. The choice of the

black key group may be justified because of the color black that stands out as a visible marker on the keyboard. However, the close intervals between these black keys can cause differentiation difficulty in children's aural perception based on findings of the previous study by Zimmerman (1971) that concluded a perception among young children of wider intervals (e.g., octaves, sixths) rather than narrower ones. In contrast to Zimmermnan, Ramsey (1982) identified that unisons, major seconds, and minor thirds are the easy intervals for children of three to five to detect. Therefore, the content of both TA3's and WB1's ear training game may be considered as appropriate in the context of the interview for piano study, but may need to undergo alterations in order to validly "test" children's aural ability and discrimination skill in terms of ear-training. Should the child's aural perception not properly function, the memory skill governed by the intellectual domain will not function to remind the child which tone of the three black keys was sounded as the model.

On the whole, the readiness test offered by the traditional cases fits the norm of the piano pedagogical profession as portrayed by Kaesler (2002), but its standard and method of evaluation appear not to align well with the average working level of most preschool children according to the DAP guidelines of "assessing children's learning and development" (Bredekamp & Copple, 1997, p. 21). This finding attests again that there may be a lag between the reality of preschool children's previous musical experiences and the rather sophisticated requirement for instrumental readiness from the teacher's perspective. In order to be more developmentally appropriate, the piano teacher may need to remedy the interview standards and prepare a readiness assessment that captures the desire of the children to learn music while making connections to their previous

experiences. In this matter, the DAP guidelines propose “tailored” assessment activities (Bredekamp & Copple, p. 21) for preschool children, based on research demonstrating that they know more they can verbalize (Bredekamp & Copple, 1997; Flowers, 1984; Hair, 1981 & 1987; Zimmerman, 1981).

Parental Involvement

All cases under scrutiny except for TA1 affirmed the significance of parental involvement in the piano study of the very young child.

Traditional Approach

TA3’s authors appeared to value the importance of parental involvement, as they displayed in the form of questions to the parents during the interview (e.g., “Can you attend your child’s private lesson on a regular basis?” or “Can you commit to helping your child practice 10-15 minutes everyday?”) (TA3.TG(A), p. iv). In addition, TA3 authors included within “Suggestions for Teaching” of the lesson plans earlier than page 27 only one identical message to the parent: “show the parents how to follow the diagram so that they may help their child remember and practice the piece at home” (for example, TA3.TG(A), p. 25). Starting with page 27, the message to the parent in “Suggestions for Teaching” changed to “ask the parents to observe and reinforce the child’s hand position, rhythm, and legato touch when practicing at home” (TA3.TG(A), p. 27).

TA2 authors addressed the role of parents in a separate section inside the method book. This section is called “The triangle for success in music study” (TA2.TH(1), pp. 11-12) and includes seven extensive bullet points describing the role of the parents. This amount of information on parental involvement clearly outlined the expectation of TA2 authors (Peer Checker 1, Verified Data, Comment TA2). Either in the

form of questions or written descriptions, both traditional cases portrayed the role of parents as supportive partners in the entire music study and responsible guides for regular lesson attendance and practice at home (TA2.TH(1); TA3.TG(A)).

Whole-Body Approach

Both whole-body cases greatly interwove parental involvement within their methods. WB1 designated that home practice be "informal play sessions," in which parents act as the music play-date of their child, and sometimes even "pretend" to let the child teach them (WB1.TM, p. 6). To equip parents with the appropriate skills for home practice, the WB1 method specified monthly meetings for parents to become familiar with songs, games, and strategies.

A similar amount of parental involvement is also evident in WB2: "Your degree of consistency, patience and teaching skill along with your shared enthusiasm for music and for learning will strongly affect the degree of success that your child will have in this program" (WB2.Ch(1), p. 2). Remarkably, WB2 dedicated each left-hand page of the entire book to suggestions for at-home practice. Parents, even without previous musical knowledge, as proclaimed by WB2 authors, will be able to follow the instructions on the left-hand pages and make use of them easily. In addition, parents were encouraged to ask the teacher to make tape recordings for home practice. Because many of the songs contain repeated phrases, memorization can also be a reliable source to enhance parents' home teaching repertoire and strategies. On the whole, "*Sing and Play* parents function as teachers and most parents are good teachers if they are informed about what is to be accomplished and guided in procedures for helping their child at home" (WB2.TM(1), p.5).

Analysis and Interpretation

It is not clear why the TA1 method did not include information regarding parental involvement. Comparing the remaining four methods, a slight shift within the roles of parents with home practice still appeared between the traditional and the whole-body cases. While TA2 and TA3 focused on scheduled home practices with parental supervision and guidance as Bastien (1995) and Collins (1996) suggested, WB1 and WB2 especially valued the active participation of parents through pleasant, play-like practice sessions, in which parents serve not only as the teacher but also the playmate of their child.

Overall, these findings are consistent with the pedagogical writings of Bastien (1995) and Collins (1996). The belief in the role of parents in piano study evident in these four cases coincide with findings that positive parental involvement affects the musical outcomes of the students (Berger & Cooper, 2003; Carsen, 1994; Zdzinski, 1992a, 1992b, & 1996). They also fit well with the guidelines of DAP to "establish reciprocal relationships with families" (Bredekamp & Copple, 1997, p. 22), by providing opportunities for parents to participate and be involved "in ways that are comfortable for them, such as observing, reading to children, or sharing a skill or hobby" (Bredekamp & Copple, p. 134).

Information Regarding the Characteristics of the Very Young Beginner

This category emerged directly out of analysis of the data. Although not encountered in the pedagogical writings (Bastien, 1995; Collins, 1996; Uszler, Gordon, & Smith, 2000) as a key element of the preschool piano method, the emergence of this

information seemed to reflect an obligation that authors of preschool piano methods may hold and value to share with every user.

Of the five data cases of preschool piano methods, three described related information regarding the characteristics of the very young beginner. TA3's declaration "the essential information regarding the very young beginner" is in fact an explanation of the benefit of the early commencement of piano lessons (TA3.TG(A), p. ii) despite the label. Upon investigating sentences like "Piano lessons help young children to develop reasoning processes and methodical learning," "One-to-one structured learning between teacher and student helps the young child focus on learning and develops concentration," or "The variety of skills learned through piano lessons and practice are easily translated to other areas of academic endeavor" (all from TA3.TG, pp. ii-iii), one can conclude that the information provided under the given heading does not concern the characteristics of the young child's learning. Thus, TA3 will not be considered in this category.

Traditional Approach

Of all three conventional cases, only TA2 dedicated sections in the teacher's manual to complete issues of "characteristics of four-, five- and six-year olds" and "special considerations in teaching piano to young children" (TA2.TH(1), p. 10). Its goal is to offer the teacher users the appropriate information should they consider teaching preschool pianists. Characteristics of the preschool children are portrayed in eighteen descriptions of traits, from which some of the most vital include:

> "Attention span is limited and curiosity is high." (#3)
> "Demonstration is very important in the lesson. 'Hands-on' experiences are more important than verbal explanations." (#4)
> "Physical activity (moving and responding to music) is an important part of learning." (#5)

> "Memory is quick, but things are soon forgotten, too. Consequently, repetition is important to the learning process." (#7)
> "They [children] are more attentive learners if the sense of touch, sight and sound are used in instruction." (#15, all bullet numbers from TA2.TH(1), p. 10)

Whole-Body Approach

As displayed in Chapter III, information regarding the characteristics of the very young beginner permeated the lesson plans of both whole-body cases. More evidence is illustrated in the following statements:

> Repetition and review of the songs will not only be interesting to the children but will be an obvious part of the reinforcement of their previous learning, from which they will build new skills and understanding. (WB1.TM, p. 8)

> Alternate passive and active games and work for lots of variety of moods. Children like simple props, such as traffic lights for the traffic game moving around the room. (WB1.TM, p. 22)

> Remember that children have shorter legs and a faster metabolism, and move at a faster walking tempo than do adults. […] Being able to identify and isolate parts of the body is requisite to muscular control development. Songs with actions involving body parts are very good to do at this stage and can be found in many books. Be sure to do the motions rhythmically. (WB2.TM(1), p. 25)

Analysis and Interpretation

The inclusion of this type of information is advocated in the guidelines for decision making in a DAP environment, under the dimension of teaching to enhance development and learning. Not only should teachers "accept responsibilities for actively supporting children's development and provide occasions for children to acquire important knowledge and skills," but teachers should also "use their knowledge of child development and learning to identify the range of activities, materials, and learning experiences that are appropriate for a group or individual child" (Bredekamp & Copple,

1997, p. 17). By recognizing the DAP responsibilities for supporting preschool children's education, the authors with a new vision for the future of piano education advocate much adjustment and changing of the teacher's attitude (Droe, 2004; Lowry, 2004; Maris, 2000). Attending professional seminars and training programs (George & Drew, 2000) as well as staying informed with developmental issues of young children (Hammel, 2002; Wristen, 2003) aid teachers in shaping new attitudes.

In the real teaching situation, information regarding the characteristics of the very young beginner may be more useful than information regarding the benefits of early commencement of piano study. At a time when inadequate teacher preparation and insufficient knowledge of early childhood education (Uszler, Gordon, & Smith, 2000) may work together against success, preschool piano methods offering relevant information regarding the characteristics of the young learner not only can help remediate for the inexperience of some teachers in the area of preschool behaviors, but also can help novice teachers achieve an easier start with a DAP-friendly preschool piano teaching environment.

Teacher Characteristics

The quality and characteristics of preschool piano teachers was addressed by one traditional case and two whole-body series. This information is valuable because preschool piano instruction is a pedagogical specialty area in the profession that many teachers will have the honor and privilege to start out young children with a respect and love for the piano (Lee, 2002). These preschool piano teachers not only should model an interest in and use of music in the daily life, and recognize the significance of early

commencement of piano lessons in the lives of children, but also should be confident in their own musicianship and skills (MENC Position Statement, 1991).

Traditional Approach

Information regarding teacher characteristics was located in one traditional case. Authors of TA2 addressed the role of the teacher in a section called "The triangle for success in music study" (TA2.TH(1), pp. 11-12). The following paragraphs quoted from TA2's teacher's handbook can best illustrate:

> The teacher is an important role model for the child during the early years. The relaxed atmosphere of the lesson helps the child from a long-term memory of the pleasure associated with music and piano. Teaching young children can be very rewarding and requires a special interest and commitment to this age group.
> In addition to a special interest in this age group, the teacher needs patience and a willing ness to plan carefully for each lesson (both short- and long-range goals). The relationship with the child should come before the method. If the child likes the teacher, he/she will like music. In each individual lesson, the teacher must demonstrate first and explain later. The lesson should be simple, advance slowly and leave the student eager for more.
> Teachers will find that as the number of students with early childhood experiences in music increases, the overall quality of the studio improves. Parents who enroll young children in piano lessons are serious about the child's education and tend to be supportive of continues music instruction. (TA2.TH(1), p. 11)

Whole-Body Approach

Both whole-body cases addressed to the quality and characteristics of the preschool piano teacher. Some recommended attributes include "the same abilities and understandings" of the teacher of the average-age beginner (WB2.TM(1), p. 5), with "a good foundation in early childhood education and experience in group piano instruction" (WB1.TM, inside front cover) and "study of the developmental stages and characteristics of the preschool child" (WB2.TM(1), p. 5).

In addition, WB2 authors indicated that "the teacher must learn to communicate easily with children of this age and to be clear and precise in planning and presentation… A good singing voice, creativity in activity planning, and the ability to improvise at the piano are also important assets" (WB2.TM(1), p. 5).

Analysis and Interpretation

Understanding the characteristics of the preschool piano teacher can be discerned by comparing with the quality described in MENC position statement (1991). Descriptions of the teacher's role and characteristics in traditional case TA2 endorsed four of MENC's teacher qualities: (a) love and respect young children—the relationship with the child over the method and the willingness to plan lessons carefully, (b) value music and recognize that an early introduction to music is important in the lives of children—a special interest and commitment to this age group, (c) model an interest in and use of music in daily life—teacher as role model, and (d) interact with children and music in a playful manner—relaxed atmosphere for creating pleasant association with music and piano. While TA2 authors recognized that early musical experiences are essential to learning success, they did not specify the timing and type of these experiences. Whether or not to offer such experiences using DAP-friendly applications in the piano lesson was not clear.

Contrary to TA2, teacher characteristic found in both whole-body cases pointed at other teacher qualities, as suggested by MENC. They are (a) confidence in one's own musicianship—possessing the same abilities and understandings as the teacher of average-age piano students, (b) the willingness to enrich and seek improvement of personal musical and communicative skills—clear and precise communication with

young children, (c) utilizing developmentally appropriate musical materials and teaching techniques—obtaining training in early childhood education (WB1) and familiarity with the developmental stages and characteristics of young children, and (d) obtaining assistance in acquiring and using appropriate music resources—WB2's note to offering a good singing voice, creativity in activity planning, and improvisation during the lesson.

The comparison between the traditional and whole-body cases revealed that the traditional approach regarding the role or the responsibility of the piano teacher remained the "traditional" way of thinking, serving as the model to love and respect students, as well as to create the pleasant atmosphere for immediate lessons and future lives of young children. The whole-body approach, on the contrary, was more concerned with specific training of the teacher and his willingness to seek professional improvements in order to maintain the quality in instruction.

The whole-body teacher profile is consistent with the new pedagogical vision to "change" and "adjust" teacher's attitude for the future (Maris, 2000), and to "adapt" new ways to captivate, to engage, to refresh, and to create the experiences of making music special (Lowry, 2004). These refreshing characteristics of the teacher also include attending professional seminars and training programs to nurture the need for specific topics individually (George & Drew, 2000), being aware of developmental issues (Hammel, 2002), staying attuned and appropriately responding to students' reactions (Wristen, 2002), and becoming a specialist in the preschool piano area to make one's teaching discoveries accessible to others in order to strengthen instructional effectiveness (Maris, 2000).

Although the result of this category recognizes the effort of the traditional approach in including the "traditional" image of what a preschool piano teacher should be, it emphasizes, however, on the future "trend" of on-going improvement in specific professional area for every teacher. Following the same vein, teacher characteristics featured in whole-body cases are more DAP-oriented than those of the traditional approach.

SUMMARY

A chart summarizing all previously displayed realities and facts can facilitate understanding about the teaching *philosophy* of the authors concerning very young beginners. Notice that the symbol ☺ represents DAP-friendly applications and features.

TABLE 2: *Summary Chart—Teaching Philosophy Reflected in the Methods*

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
General Teaching Philosophies	
☺ The advantage of preschool piano study. ▪ Primary learning modes involving singing, listening, reading, and performing. ▪ "All children have musical potential and right to learn music" not included.	☺ The advantage of preschool piano study. ☺ All musical learning modes include moving, games, and creating. ☺ Music and movement class approach centered around the keyboard. ▪ "All children have musical potential and right to learn music" not included.
Main Emphases of the Philosophies as Reflected in the Contents	
▪ Reading and Playing Technique. ▪ Focus on the development of small muscles.	☺ Whole-body music understanding through development of aural, performing, and creative skills that aids to individual expression. ☺ Balanced development of large and small muscles.
Pedagogical Approaches (Lesson Planning, Rote Teaching, & Mode of Instruction)	
▪ Lesson plan in outline format. ▪ Rote teaching dominating in TA3. ▪ Misunderstanding about goal and objective setting.	▪ Lesson plan in quasi-prose style. ☺ Demonstrates the necessity of experiences before symbols. ☺ WB1: group teaching only details

▪ Missing evaluation apparatus affected the quality of "TST" cycle. ▪ "Either-or" and "combined" mode of teaching without guidance. ☺ TA2: comprehensive information regarding private/group teaching. ☺ TA3: contains evaluative suggestions in lesson plans.	interwoven in lesson plans; ☺ WB2: best in group teaching, details interwoven in lesson plans.
Interview/Readiness Test	
▪ Test in question format. ☺ Well-balanced test in TA3 in terms of all maturities. ☺ Use of small intervals on the three-black-key group for pitch game. ▪ Excessive focus on social and intellectual maturities in TA2.	☺ Test in the actual administrated format with score scale. ☺ Well-balanced test in terms of all maturities, including musical games. ☺ Use of small intervals on the three-black-key group for pitch game.
Parental Involvement	
☺ Parents as schedule arranger and practice supervisor. ▪ Identical reminders to the parents throughout TA3.	☺ Parents as teacher at home and musical playmates of their child.
Information Regarding Characteristics of the Very Young Beginner	
☺ Only TA2 provided relevant information in this regard.	☺ Information immersed in lesson plans.
Teacher Characteristics	
▪ Only "traditional" teacher qualities described in TA2.	☺ Describes quality and characteristics of preschool piano teachers.

The comparison chart illustrated above reveals a greater number of DAP-friendly applications and features in the whole-body approach than in the traditional approach. While both approaches acknowledge the advantage of the early commencement of piano lessons, the whole-body method to engage children in multi-sensory modes is more consistent with principles of DAP than the traditional way of focusing on the development of music reading and playing technique. Regarding the issue of curriculum and lesson planning, the misuse of goals and objectives and the missing evaluation segment within the lesson plan found in the traditional approaches appears to affect the

teaching delivery, and result in many incomplete TST cycles. The whole-body interview features a well-balanced test in regards to social, intellectual, physical, and musical maturities of the child, whereas the traditional interview put too much weight on the child's social development, thus neglecting the musical maturity. Valuable information regarding parental involvement, the characteristics of the very young beginner, and the quality and characteristics of preschool piano teachers was also found in some methods. Not surprisingly, the one traditional case that addressed the role of the piano teacher reflected "traditional" qualities, while the whole body cases emphasized the role of preschool teachers more specifically.

As we move to the next theme concerning the logic of the structural design, many realities reflected from the data will shed light on the understanding of the two different approaches.

CHAPTER V

CURRICULUM DESIGN LOGIC

The purpose of the current multi-case study is to uncover salient characteristics within existing preschool piano method books and to compare the consistency of these uncovered characteristics with the guidelines of Developmentally Appropriate Practice (Bredekamp & Copple, 1997) and DAP-related research findings. Characteristics that represent direct structural frameworks of the preschool piano methods' curricula were collected under the theme of design logic.

Categories that emerged related to the logic theme are (a) sequence of concepts, (b) presentation of concepts, and (c) reinforcement of concepts. For each category, characteristics of the design logic will be described first, followed by analysis and interpretation. Page numbers will be provided to facilitate readers in locating the origins of the examples illustrated and discussed, even when there are no direct quotations being cited.

Sequence of Concepts

Investigations of the tables of contents, and analysis of concept coverage and its order unveiled to some extent the logic with which the authors constructed their methods. These help to inform the importance placed on the various concepts and their prioritization.

Traditional Approach

All three traditional methods (e.g., TA1, TA2, & TA3) addressed concepts related to sitting posture, distinguishing right hand from left hand, finger numbers, high/low sounds,

black key groups, white key alphabets, and various rhythm values. Very minor dissimilarities in the concept sequencing were found among the three.

All three traditional methods first established knowledge about sitting posture, right hand, left hand, and finger numbers before approaching the keyboard. When working at the keyboard, TA3 introduced the group of three black keys before the group of two. The use of alternating hands appeared with black-key groups in various registers (Illustration 1, please note that all music illustrations are included under Appendix C). This feature also introduced the concept of high and low, and represented the common practice within the traditional approach.

White keys were introduced with a two-row block-chart of the alphabet with the instruction for the children to “circle the letters below to match the color of each letter above” (Illustration 2, TA3.A, p. 20). A similar information-style chart was applicable to rhythm values (Illustration 3, TA3.A, p. 23; Illustration 4, TA3.A, p. 29). A unique rhythmic exercise in TA3 featured green bars for the duration of words. In this activity, rhythm patterns were cast in words like “What’s your name?” (Illustration 5, TA3.A, p. 14) for chanting, and finger numbers provided for playing on the fallboard of the instrument. The final song of TA3’s first book accomplishes the goal of pre-staff reading with upward stems of moving quarter and half notes for the right hand to play, and downward stems of the same note values for the left hand. No knowledge of bar lines or time signatures is required at the conclusion of first book.

Slightly different than in TA3, the arrangement of sequence in the other two traditional cases (TA1 and TA2) designated the recognition of three black keys after the introduction of the groups of two’s. The most noteworthy sequence occurred soon after both

TA1 and TA2 introduced groups of black keys—the appearance of the quarter note and bar line. In both series, the use of positions such as black-key groups and alphabet letters is always accompanied with rhythm-related matters; for instance, two black keys are exercised alternatively in quarter notes (Illustration 6, TA1.L(A), p. 8; Illustration 7, TA2.L(1), p. 16). In reality, the authors of TA1 and TA2 juxtaposed the two concepts (positions vs. rhythm values) throughout the methods. As a new concept introduced a new rhythm value, pitches of a position previously learned were cast in a rhythm pattern using that new rhythm value and practiced with designated finger numbers accordingly (Illustration 8, TA1.L(A), p. 10; Illustration 9, TA2.L(1), p. 31). The rhythm values covered introduced the quarter note, then the half note (also the half dotted note in TA1), and the whole note. According to TA1 authors, this particular sequence of rhythm concept "moves from small to larger note values" and "eliminates thinking in fractions" (TA1.TG(A), p. 8). The TA1 introduction of the musical alphabet displayed all letters on the same page. On the neighboring page, keyboard diagrams with indication of letters are placed in associations with illustrations such as A for "apple," B for "Boy," and C for "cat" (Illustration 10, TA1.L(A), p. 17).

The use of alternating hands revealed a tendency to focus on one localized register (Illustration 11, TA2.L(1), pp. 20-21), in that two short three-measure pieces are set in one middle three-black-key group, and each time played only by one single hand. A similar arrangement set in the four-measure format can also be found in TA1 (TA1.L(A), pp. 12-13). While TA2 authors also introduced the concept of rest values, TA1 authors pioneered a pre-staff reading organized by bar lines with time signature. This leads to the introduction of clef signs, line and space notes, and grand staff reading. Upon the completion of book one, TA2 children will have achieved the ability to play single-handed songs in a pre-staff system cast

in moving notes with rests and repeat signs; whereas TA1 students will have accomplished the final song with reading skills that prepare the children for reading regular notation.

Whole-body Approach

In the whole-body approach, the introduction of sitting posture demonstrated discrepancy. While WB2 displayed an illustration of sitting posture in the teacher's manual, WB1 did not address this issue. Both cases emphasized whole-body rhythmic experiences from the beginning and introduced patterns in long-short horizontal lines—"rhythm line" (WB1.TM, p. 31) or "line notation" (WB2.Ch(1), p. 8)—as rhythm pre-reading. At a later stage, line rhythm was aligned with rhythmic values (Illustration 12, WB1.Ch, p. 14; Illustration 13, WB2.Ch(1), p. 24) such as quarter notes and half notes for the process of assimilation. Rhythmic exercises were built into the lesson plans with titles such as "Reading Line Notation" (WB2.Ch(1), p. 8), "Reading Rhythm Notation" (WB2.Ch(1), p. 24), and "Rhythmic Activity" (WB1.TM, p. 18).

With regard to pitch materials, both whole-body cases presented the concept of the group of two black keys before the group of three. Then, WB1 emphasized the concept of "melodic contour" and its ascending and descending directions (WB1.TM, p. 31). Three-note patterns were used to enhance listening skills in the context of "Listening Games" (WB1.Ch, p. 14 & p. 19). After the introduction to black keys, WB2 referred to "between two black keys" (WB2.Ch, p. 20) to assist with finding the note D. Exercises with groups of white keys, such as CDE, CDEF, and CDEFG then followed naturally.

In both cases, students used their large muscles first, and related these gross-motor experiences to the small-muscle actions. In a typical whole-body scenario concerning the concept of high-low indicated that children were asked to reach high for

high sounds and bend low to the floor for low sounds (WB1.TM, p. 15; WB2.TM(1), p. 17). This gross-motor experience is then refined into loco-gross-motor activities such as swinging “clasped hands” imitating an elephant’s trunk (WB1.TM, p. 20) and using opened and closed palms for the action song “Open, Shut Them” (WB2.Ch(1), p. 11). The actual keyboard playing involved palm, fist, a number of fingers, and the “closed hand position” (WB2.Ch(1), p. 12), commonly known as the *braced finger*, to reinforce the use of large muscles and avoid involving “finger manipulation” too soon at this early stage of piano study (WB1.TM, p. 18). As a result, the issue of finger numbers seemed to be unnecessary in the whole-body preschool stage. Technically speaking, WB2 favored single-handed playing centered on the middle register, whereas WB1 engaged children in experiences of alternating hands and cross hands across the keyboard (WB1.TM, p. 30 for high register, p. 32 for low register, & p. 56 for cross hands). Toward the end of the first book, WB1 children may have experienced reading on the staff, but may not be able to read as solidly as WB2 children. This appears to reflect a difference in emphasis regarding the value of exposure to notation versus the importance of learning to read from notation in the preschool years.

Analysis and Interpretation

Five issues related to the sequencing of the conceptual components were addressed in these methods books. These are: (a) sitting posture, (b) concept learning, (c) concept of rhythm, (d) concept of pitch, and (e) piano technique.

Sitting Posture

While a display of sitting posture seemed to announce the formal start of the piano study in four of the methods, only one whole-body case appears to exclude this

feature based on the belief not to “stifle” the healthy growth of the children in music (WB1.TM, p. 9). This notion coincides with the advice of DAP guidelines to avoid long periods of time for children to “sit down, watch, be quiet, or do rote tasks” (Bredekamp & Copple, 1997, p. 127), and supports Pohlmann’s (1994/95) writings that acknowledges that sitting down at the keyboard “for even a short period of time may be less than successful” (p. 9).

Concept Learning

Upon investigating the variety of rhythm and rest values and their relationship to the staff notation system, an issue was raised by Peer Checker 1 as to how much specific concept learning is appropriate, versus time spent on music making (Peer Checker 1, Verified Data, Comment WB2). In fact, concepts (including time signature and grand staff system) are so prominent within the first book of TA1, that Peer Checker 2 described it as “no musical fun” (Peer Checker 2, Verified Data, All Comment/TA1, p. 1) and to some extent implied that this made it seem like piano study was serious business. The sequence described above set up the student as a reader and performer from the beginning, thus emphasizing the traditional notion of “get right down to the business of developing playing and reading skills” (Uszler, Gordon, & Smith, 2000, p. 46). In comparison, the whole-body cases were inclined to emphasize exposure to notation within the musical learning environment, thus *music reading* becomes a result of that “step-by-step” process, rather than a process in and of itself (Peer Checker 2, Verified Data, All Comment/WB1, p.7). This emphasis translates to the application of learning based on experiences before symbols or signs (Bruner, 1960, 1966; Campbell & Scott-Kassner, 1995; Collins, 1985; Hart, Burts, & Charlesworth, 1997; Kenney, 1997;

Kostelink, Soderman, & Whiren, 1993; Jordan-DeCarbo & Nelson, 2002; McDonald & Simons, 1989; Neelly, 2001; Piaget, 1952; Pohlmann, 1994/95; Zimmerman, 1971), whereby the children can see "a 'picture' of how those notes that he has [already] played, 'look' on the staff" (WB2.TM(1), p. 43). This finding is consistent with the theory of Chronister (1996) who advocated that "music notation is something that reminds us of what we already know" (p. 72). Hence, the sequence of concept learning within the whole-body approach seemed to be aligned with DAP principles more than does that of the traditional approach.

Concept of Rhythm

Authors of both whole-body cases introduced various patterns to stimulate young children's sense of rhythm. Evidently, in the whole-body approach, a priority for the WB2 authors is for rhythmic sense to be secured in young children before the sense of pitch. Although not addressing this aspect overtly, the amount and variety of rhythmic activities found in WB1 seems consistent with this idea. The significance of establishing the sense of a steady beat can be found in the reminder of WB2 authors that young children should "independently and comfortably walk to the beat of music" (WB2.TM(1), p. 18) prior to learning rhythmic patterns. This emphasis of rhythmic sense before pitch sense aligns with the suggestions of early childhood music educators (Campbell & Scott-Kassner, 1995 & 2006; Theories of Dalcroze, Orff, & Kodaly; Greenberg, 1979; Romanek, 1974). The norm in the traditional approach, however, differs, as indicated by either the juxtaposition of two lines of concepts found in TA1 and TA2, or the green bar rhythm lines experience (Illustration 5) offered in TA3, that not only demonstrate designated durations, but also move up and down with pitch materials and finger numbers. The traditional methods' sequences

seldom exercise rhythm without pitch material or finger numbers present. This finding was generally noticed by Peer Checker 1, as well.

The juxtaposition of pitch concepts and rhythm concepts encountered in TA1 and TA2 seems to be logical within their framework, because both methods did not offer any type of pre-reading system such as TA3's. Under the system designed by TA1 and TA2, young children may be naturally drawn to learn the note values based on the experiences with which they are provided.

Analysis of the aforementioned traditional method logic of rhythmic instruction for preschool children results in a number of concerns as they may represent developmentally inappropriate practice (DIP). Although the fact that rhythm is always in accompaniment with finger numbers and pitch materials follows the tradition as pedagogues have described (Chronister, 1996; Richards, 1996; Uszler, Gordon, & Smith, 2000), rhythm that is not exercised in isolation does not support suggestions from the early childhood music teaching theory (McDonald & Ramsey, 1993; Zimmerman, 1971) and is counter to the centration tendencies (Piaget, 1946, 1952, & 1968) of preschool-aged children. Additionally, not establishing a sense of rhythm prior to establishing a sense of pitch may be problematic (Theories of Dalcroze, Orff, & Kodály, Greenberg, 1979; Romanek, 1974).

Finally, achieving a sense of rhythm not through whole-body movements (Campbell & Scott-Kassner, 1995 & 2006; Kenney, 1997; Neelly, 2001; Miller, 1987; Sims, 1990; Theories of Dalcroze, Orff, & Kodály; Uszler, Gordon, & Smith, 2000), but by drill-like counting practice, does not engage "children's problem-solving and other higher-order thinking skills" according to DAP guidelines (Bredekamp & Copple, 1997, p. 126).

Concept of Pitch

The reading sequence from black keys to white keys, as found in both approaches is consistent with reading theories of keyboard topography by Chronister (1996) and Richards (1996), and is consistent with pitch development of pitch relations and melodic motion, as suggested by Campbell and Scott-Kassner (1995 & 2006). However, Chronister and Richards preferred the introduction of the two-black-key group before that of the three-black-key group specifically for the reason that this order of black-key groups can serve as the reference mark to the white-key groups, namely the three-white-key group (CDE) and four-white-key group (FGAB). The authors of TA3 *did not* follow the aforementioned order, nor provide any plausible explanation for their choice. One can only assume that the group of three black keys is visually a larger entity than that of two black keys, and is thus easier for preschool children to locate. Besides, the first white keys introduced in TA3 were the ABC as a group, which does not seem to follow the reference-mark logic of black key groups suggested by Chronister (1996) and Richards (1996). However, the three-note group of ABC in TA3 coincided with Collins' (1985) suggestion to enhance success in pitch learning.

While the remaining four cases supported the order of the two-black-key group before the three-black-key group, and black-key groups before white-key groups, the logic of introducing the white keys by referring to groups of black keys differs. TA2 established the knowledge of alphabet letters individually, first by starting with D, then C, and finally E. The method of finding D is clarified in WB2 as the "white key between the two black keys" (Peer Checker 1, Verified Data, Comment WB2, p. 2). While WB2 was consistent with the theories of Chronister (1996) and Richards (1996) by introducing groups of white keys with reference marks, TA2 introduced the mirroring keys starting from C, going down to B and A.

Developmentally, the execution of *note naming* (Richards, 1996) instead of *music reading* is questionable. Furthermore, the TA2's approach described above does not support the music teaching theories of Dalcroze, Orff, & Kodály, Suzuki, and writings of early childhood music educators (Andress, 1992; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; Kenney, 1997; McDonald & Simons, 1989; Neelly, 2001) that prefer the introduction of pitch notation in the form of rhythmic and melodic patterns, even in a group of three notes (Collins, 1985), over single rhythm values or pitch tones.

Unlike TA2's approach to white keys, the treatment in TA1 resembled that of TA3. Both TA1 and TA3 displayed all alphabet letters on one page. This list-like format may result in an undesirable consequence of poor recall, because most preschool children cannot digest information well without a meaningful context (Istomina, 1975; Murphy & Brown, 1975). In addition, letter associations with certain items such as A for "apple" in TA1 reflects an exercise of a more linguistic than musical origin (Reimer, 1989; Welsbacher, 1992), which does not engage enough of the aural registry of a related sound to be a meaningful musical activity. Spending time on learning items not embedded in a context can be pointless. A similar problem is found in the case of rhythm values displayed twice as a list in TA3's student book (Illustrations 3 & 4). Both TA1 and TA3 started the repertoire with the note group of ABC, later continuing with CDE. Interestingly, the rationale for this choice is located in WB1, for its authors wrote: "Through certain educational TV programs for very young children, many are familiar with the alphabet" (WB1.TM, p. 37). The choice of three-tone groups did support Collins' (1985) theory to gain success in pitch learning, however.

Actually, WB1 children practice the alphabet letters ABCDEFG during a note-finding game. The actual white-key knowledge is then exercised through three-tone patterns in a listening game, which reflects the theory of Collins (1985). Consequently, in WB1, the first three tones of any key can serve as appropriate material. However, the multi-key approach in WB1 that encompassed musical signs such as flats and sharps in notation can be considered problematic. The following sentence expressed the concern of Peer Checker 2: “There are some problems on reading, because some difficult concepts are covered. When children question them, it will slow down the learning process” (Peer Checker 2, Verified Data, All Comment/WB1, p. 7). Indeed, without a comprehensive digest of the teacher’s manual, the musical notation in the children’s book can be difficult both for the teacher and the child.

On the whole, the white key introduction of the traditional cases does not correspond to the referencing theory proposed by Chronister (1996) and Richards (1996), but rather to the practice of using the Middle C position (Thompson, 1936a & 1936b), where the middle C key is shared by the thumbs, and exercises by the first three fingers of both hands seem to permeate. In comparison, the whole-body cases seemed to place more value on the DAP-relevant features, such as the recommended reference point to orient at the keyboard in WB2 and the use of three-pitch patterns in WB1.

Piano Technique

Descriptive data concerning the emphasis on piano playing techniques in the traditional cases revealed that visual aids (e.g. pictures or graphics of correct sitting posture and hand forms) were used in combination with text. Similar graphic depictions of hand form can be found in the whole-body case WB2 as well. In contrast to text or musical notation, the

inclusion of visual graphic presentations has been cited in the vein of engaging preschool children in multi-sensory and perceptive tasks to enhance learning results (Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; Kenney, 1997; Jordan-DeCarbo & Nelson, 2002; Neelly, 2001; Scott-Kassner, 1993).

Knowledge about sitting posture, recognition between right hand and left hand, finger numbers, and alternating or crossing hands can be categorized into concepts that are technically oriented. The evidence revealed that traditional cases emphasized the development of smaller muscles from the beginning, and that manipulating localized muscles such as hands and fingers was practiced intensively, approached from the foundation of correct sitting posture.

In comparison, the whole-body cases, which first fostered the muscle development with large movements (reaching high, bending low, marching, and swaying) and later moved to develop fine motor skills, seemed to align well with preschool children's natural development. The above finding is consistent with Howe's (1993), Scott-Kassner's (1993), and Miller's (1986 & 1987) research, as well as DAP guidelines that emphasize learning through activity such as "moving [to music], exploring, and acting on objects" (Bredekamp & Copple, 1997, p. 103) which portray the typical characteristic modes of young children's learning. Most notably, the DAP guidelines specify that too much sitting for long periods of time "is at odds with young children's characteristic mode of learning through activity" (Bredekamp & Copple, 1997, p. 103). The guided applications from gross- to fine-motor engagement within whole-body cases appear to be developmentally appropriate way to proceed at the preschool level.

Presentation of Concepts

Analysis of teaching steps of the lesson plans, which reflect the nature of the instructional procedures, resulted in the category "presentation of concept." Once again, the data in this category reflect the disparity of the philosophical positions of the two preschool piano approaches. Some analysis and interpretation will be interwoven into the presentation of characteristics, because reporting these findings and their interpretation in close proximity in this category seems to be the most effective way to explain these data. The section of *Analysis and Interpretation* will encompass the comparison between the two preschool piano approaches and a short summary.

Traditional Approach

In order to understand the traditional presentation of concept, several excerpts from the traditional cases are presented. The text introducing the quarter note in the TA1 lesson book offered this narrative for the teacher: "Music is made up of **short** tones and **long** tones. We write these tones in **notes**, and we measure their lengths by **counting**" (TA1.L(A), p. 8). While the quarter note is printed in a catchy dialogue box with information about bar lines and measures beside it (Illustration 6, TA1.L(A), p. 8), the teacher's guide offered correlated procedures such as, "show student that 4 *new* things are being learned: bar line, measure, quarter note, and counting" and "**Key Words**: Bar lines divide equal measures of 4 quarter's in this piece" (TA1.TG(A), p. 8). The printed text in the child's book denotes a label or name of the concept to be learned, preceding experience with it. A similar presentation of concepts was prevalent throughout the narratives inside the TA2 lesson book. Each of the following examples confirmed the use of labels before sound experience. In these examples, I underlined the words or sentences that represent the label and the abstract symbol:

> The next time they entered the Music Room, Beethoven Bear ran to the piano bench first. He climbed up and sat on the left side of the bench. "Oh, I do *so* like playing LOW sounds!" he said, knowing the LOW sounds are on the left side of the keyboard. (TA2.L(1), p. 6)
>
> In the Magical Music Book on the piano Beethoven Bear discovered the musical name for LOUD: *forte*. He shouted: "I can play a forte anywhere on the keyboard." (TA2.L(1), p. 10)
>
> Beethoven Bear wanted to use his hand to play low sounds. But he wasn't sure which fingers he should use. "Look!" said Mozart Mouse. "The Magical Music Book says that the THUMB is the first finger of each hand!" (TA2.L(1), p. 12)
>
> "What should we do with the 2 black key groups?" Mozart Mouse asked. "Let's play quarter notes on them!" suggested Beethoven Bear. "I learned about them in the Magical Music Book." (TA2.L(1), p. 15)

For the preschool child, the TA2 lesson book can serve as a storybook, with plush animals as attractive reading buddies. Nevertheless, the subject matter in the piano studio should be the music learning itself, not the story. Narratives like "after reading about bar lines in the Magical Music Book, …" (TA2.L(1), p. 16) convey abstract labels for concept after concept and leave no space for the "teacher to demonstrate first, and explain later, " as TA2 authors stated in the "Triangle for Success in Music Study" (TA2.TH(1), p. 11). In addition, the fundamental value of a piano method book seems to be misplaced. Peer Checker 1 wrote in agreement with my observation: "I personally feel that the lesson book is totally Not following DAP." (Peer Checker 1, Verified Data, Comment TA2, p. 2).

TA2 demonstrated its method emphasis on reading readiness, while failing to distinguish between memorizing concepts and registering the sound of those concepts. This notion was supported by Peer Checker 1 as he said: "Reading readiness doesn't have to mean how much they can memorize the signs and symbols. It has to do with audiation. Minimum

amount of ear-training is presented in the [TA2] method." (Peer Checker 1, Verified Data, Comment TA2, p. 2).

Compared to TA1's and TA2's usage of label before experience, TA3's method revealed the most complications in the traditional presentation of concepts. These issues include: (a) inconsistency in task presentation, (b) confusion of *pre-reading*, and (c) discrepancies in teaching delivery, and will be discussed individually.

Inconsistency in Task Presentation

Oftentimes, more than two elements are incorporated into one task. While a concept denoted recognition of numbers, for instance, the authors of TA3 asked the four-year-old child also to *color* balloons of different shapes to match *colors* of those numbered balloons (Illustration 14, TA1.A, p. 3). For the preschool child, addressing three items at once, the *shape* of the balloon, the *color* of the balloon, and the *number* of the balloon, can be stressful.

As a result, learning may not be successful due to the preoperational tendency of centration in children that limits the cognitive ability of these youngsters to fixate on one dominating part of a complex perceptual task (Bredekamp & Copple, 1997; Brainerd, 1978; Campbell & Scott-Kassner, 1995 & 2006; Crowther, Durkin, Shire, & Hargreaves, 1985; Hargreaves, 1986; Hargreaves & Zimmerman, 1992; Hildebrandt, 1987; McDonald & Simons, 1989; Pflederer, 1964 & 1966; Piaget, 1946, 1952, & 1968; Serafine, 1980; Sims, 1990, 1991, 1995a, & 2005; Zimmerman, 1971). Thus, attending to more than one feature of the learning situation at a time may be very challenging and potentially frustrating for them.

Confusion of Pre-Reading

As one looks at the music presented on the keyboard diagram (Illustration 15, TA3.Perf(A), p. 6; Illustration 16, TA3.Perf(A), pp. 8-9), one can not discern how the music should sound. For these examples the different meanings of colored triangles will be revisited. The color red stood for the right hand, blue for the left hand, and the arrows—either red or blue—depicted "the arch motion recommended to move to the next position" (TA3.A, p. 45); in addition, the wide triangles indicated the use of the hand to play clusters on the black-key groups, the small triangles referred to the use of individual fingers, and the green arrows designated the start of the musical piece.

Comparing what seems to be sounding in one's mind to Illustrations 15 and 16 with the music offered by TA3's author (Illustration 17, TA3.Perf(A), p. 23 & p. 24), we will realize how unpredictable and unreliable this pre-reading system turns out to be even with the rhythmic hint from the composed rhymes. Notwithstanding the fact that rote teaching compensates for the limitation of the keyboard diagram, the effort expanded in learning all colored symbols that not only cannot faithfully re-evoke the true sound of music, but also bear no essential meanings in the transition to real notation, may diminish children's interest in music reading.

Peer Checker 1 shared his point of view in this matter. He regarded the true value of a pre-reading system to be making connections between eyes, ears, and hands (Peer Checker 1, Verified Data, Comment TA3). As Peer Checker 1 wrote:

> I agree, at first I was trying to translate the visual representation into sound and then find out that what I interpreted was different from what the authors suggested in the teacher's guide. Well, I also think that, in reality, it is still ok for the teacher to misinterpret the symbolic representation as long as she doesn't make the student confused. The point of this pre-

> reading is to make connection between eyes, ears, and hands. (Verified Data I, Comment TA3, p. 3)

Should young children experience difficulty during this initial phase of music reading, they may develop frustration or lack of confidence that may lead to problems with notational symbols in the future and fail to become musically literate. Such confusion in TA3's pre-reading system is to be considered as DIP and will need certain amendments in regard to child development and instructional strategies to become DAP-relevant.

Discrepancies in Teaching Delivery

Within TA3, there was a discrepancy in the lessons with respect to the sequence of teaching delivery. The instructional issue pertaining to whether sound preceded symbol, or symbol preceded sound, was not treated consistently.

Lessons do not always employ aural experience before a label or symbol is presented. The following teaching sequences represented the typical scenario in TA3 (underlines are mine):

> 1) <u>Explain</u> the new symbol to both the parent and the student.
> 2) Help student <u>find</u> the middle C and <u>explain</u> that the left hand begins on the group of three black keys to the left of middle C.
> 3) Teach the song and the words to the student by rote.
> 4) Have the student play on the keyboard diagram in the book and say aloud the words. (TA3.TG(A), p. 9)

Clearly, action words underlined in steps 1 and 2 featured labels before experience. Albeit strategy 3 appeared to be "the closest application to the teaching approach of sound before sign" (Peer Checker 1, Verified Data, Comment TA3, p. 3), the amount of verbal instruction and explanation before actual hands-on keyboard playing seemed to dominate in this teaching sequence.

Mapping TA3's teaching sequences with the developmental modes of assimilating knowledge proposed by Bruner (1960), readers will soon notice that steps 3 and 4 in TA3 resembled learning through a set of actions, which denotes the "enactive" phase as the first Brunerian (1960) mode of learning; whereas steps 1 and 2 resembled the "iconic" preparation for "symbolic" learning that according to Bruner should be activated, once the enactive experience has been established.

Similarly, the Brunerian application in music (Campbell & Scott-Kassner, 1995 & 2006) also suggested that teachers pursue the rule of experience before symbol (Bruner, 1960, 1966; Campbell & Scott-Kassner, 1995; Collins, 1985; Hart, Burts, & Chalresworth, 1997; Kenney, 1997; Kostelink, Soderman, & Whiren, 1993; Jordan-DeCarbo & Nelson, 2002; McDonald & Simons, 1989; Neelly, 2001; Peery & Duru, 2000; Piaget, 1952; Pohlmann, 1994/95; Zimmerman, 1971). Hence, the style of concept presentation in TA3 may not be developmentally appropriate for the preschool-aged beginner.

In contrast, teaching sequences did seem to reflect the principle of experience before label or sign when dealing with technique. All italicized words in the example below represent the hands-on actions by the student. It is apparent that hands-on and sound experiences before explanation are plentiful in this teaching situation:

> 1) Choose a group of three black keys. Have the students *start* on the keys with his or her loose fist. Guide the student's hand to *produce* the tone cluster by sinking into keys with arm weight.
> 2) After the tones sound, guide the student's hand and wrist to *release* the weight *by rolling* forward and upward in a relaxed and gentle manner … [detailed steps to complete the technic].
> 3) *Listen* to the tones and *evaluate* the sound. A good tone sounds round and full, is neither thin nor harsh, and projects a singing quality that is pleasing to the ear. (TA3.TG(A), p. 7A)

Whole-Body Approach

Experience Before Symbol

The presentation of concept in the whole-body cases followed the principle of endorsement of experience before symbols ("symbols" here are used synonymously with, signs, labels, and so forth). This is demonstrated in the following lesson, about a song titled "Plip Plop":

> You might begin this song with:
>
> It's cloudy – I can't see the sun.
> If it rains today, how can we have fun?
>
> Make low, soft thunder on the lowest notes of the keyboard. Roll black and white keys with the palm of your hand. Show the children how you did it and let them try it. Next make louder thunder and again let the children experiment with intensity of sound – soft – louder and louder! Finally, make a few high "plips" at the keyboard for raindrops. Have the children join in producing raindrop sounds. As they try random notes, very high and very soft, all of you listen intently to the pleasant sound. Now you begin an ostinato on the keyboard and sing the song through, then repeat it several times until the children can join in. (WB1.TM, p. 34)

As encountered in WB1, contrasting sounds of *high–low* and *soft–loud* were interwoven with senses and imagination before all kinds of symbols to be introduced. While Peer Checker 1 also made notes of the experience before symbol approach, Peer Checker 2 specifically described WB1's presentation style as "clean and concise" (Peer Checker 2, Verified Data, All Comment/WB1, p. 7).

A similar scenario can be located within WB2. The following example demonstrates how sounds are experienced first without their labels (low, middle, & high):

> SING AND PLAY SONGS
>
> *Bears*: Using the picture cards of the three bears, place papa bear behind low keys, mama bear behind middle keys and baby bear behind high keys. Tell the story of Goldilocks and the three bears and let the children play sounds representing each bear. (WB2.TM(1), p. 17)

In another WB2 lesson, below, the experience of making same or different perceptions precedes the actual music discrimination to ensure children understand the concept in a familiar context before applying it to music:

> WRITE AND LISTEN
> Same or different: Introduce this concept by asking if two children in class look the same. No, they are different. Using two identical objects, such as chairs, ask the class if they look the same. Show the class pictures which are the same or different. Be sure that the children understand and are correctly using the terms "same" and "different" before doing the same and different listening pages. (WB2.TM(1), p. 29)

It is worth noting that both whole-body cases offered various ways for children to experience musical concepts in order to engage them in learning through multi-sensory modes. This feature of using many different ways to learn about the same thing follows the DAP recommendation that advocates offering a variety of activities and materials to promote children's learning and intellectual development (Alvarez, 1993; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995; Hart, Burts, & Charlesworth, 1997; Kenney, 1997; Kostelink, Soderman, & Whiren, 1993; Jordan-DeCarbo & Nelsons, 2002; McDonald & Simons, 1989; Miller, 1987; Neelly, 2001; Nye, 1983; Palmer, 1993; Peery Duru, 2000; Uszler, 2003). The excerpts that follow from the whole-body cases demonstrate this:

> "AUTUMN LEAVES"
> Here are some exploratory activities for this song:
> 1. How do the leaves "flutter" down?
> (Let the children experiment with arms, hands, and bodies)
> 2. Let's see a leaf floating softly, slowly down.
> 3. Now let's see lots of leaves flutter down in a nice breeze.
> 4. Let's pick up some leaves and let the wind take them away.
> 5. Now, let's try some of this on the Twins and Triplets [two-black keys and three-black keys]—i.e., from high to low, softly depress keys to flutter down, etc.

> Children may make up other melodies for the "Autumn Leaves" as they let them flutter down by depressing the Twins and Triplets across the keyboard….
>
> Next, review the low part of the keyboard (Twins and Triplets) and clap a rhythm or two just to bring all of the children to a definite point of attention. Then do "Scuba," page 6.
>
> The low sound of the "Scuba" (low triplets) is in contrast to the gentle sounds of the "Autumn Leaves." Also, it is in real contrast in terms of placement of the scale. (WB1.TM, p. 31)

In this WB1 lesson, the child's imagination is realized by exploration through all senses. Concepts like black-key groups, soft sounds, and higher/lower were experimented with first-hand explorations and treated in a developmentally appropriately manner, following the discovery method presented by enactive mode of learning (Bruner, 1960). The use of contrast not only retains the interest of the children, but also reinforces their knowledge of concepts being encountered.

The Use of Flashcards

In WB2 children's book**,** a game-like activity with flash cards placed its focus on familiarizing the children with the musical alphabet. Under "ALPHABETANTICS" of the parents' pages in the children's book (WB2.Ch(1), p. 4, p. 8, & p. 14), the exercise of the alphabet cards such as "sort out the alphabet letters from the deck of flashcards. Identify the letters of the alphabet and place the cards in order from left to right" (WB2.Ch(1), p. 4) appears to be an intellectual endeavor, employing visual and cognitive discrimination and assimilation functions. Throughout this process, the child learns to manipulate the order and the shape of ABCs before their official introduction in the diagram or on the keyboard.

This activity seemed not to follow the rule of experience before signs at first glance. However in the long run, it may be considered an experience for fortifying cognitive understanding and response; especially when dealing with ordering the alphabets backwards

as WB2 authors stated that “the ability to do this will be important in learning to read notes on the staff” (WB2.Ch(1), p. 36). This experience lays a foundation for the abstract association of alphabet letters with keys on the keyboard. In reality, the act of associating keys with letters can be regarded as a visual sign to be attached with a sound signal that will be recognized later.

To the advantage of the child’s learning stage, the teaching sequence of using the flash cards prior to the introduction of musical alphabet letters on the keyboard not only isolates the intended cognitive practice, but also allows time for mastering the targeted skill and knowledge. Finally, when the *sound* comes, the child is prepared for the addition of this extra stimulus. Therefore, the whole process of the flash card game may be considered an experience before sound signal. This was seconded by Peer Checker 1 as he shared the following comments:

> Agree. Since I believe that the learning of alphabets is tied to language learning and not necessary a sole musical concept, learning alphabets before experiencing the sound is neither going to interrupt the musical development nor conflict with the concept of “sound before sign.” (Peer Checker 1, Verified Data, Comment WB2, p. 2)

Analysis and Interpretation

Experience Before Symbol

The comparison of the style of concept presentation between the two approaches indicated that all of the traditional cases except for TA3’s technical teaching procedures do not follow the rule of experience before signs as suggested by early childhood music educators (Bruner, 1960, 1966; Campbell & Scott-Kassner, 1995; Collins, 1985; Theories of Dalcroze, Orff, & Kodály; Hart, Burts, & Charlesworth, 1997; Jordan-DeCarbo & Nelsons, 2002; Kenney, 1997; Kostelink, Soderman, & Whiren, 1993; McDonald &

Simons, 1989; Neelly, 2001; Piaget, 1952; Peery & Duru, 2000; Pohlmann, 1994/95; Zimmerman, 1971).

The traditional tendency to verbally explain what to do appears to require preschoolers "to listen passively or work prescribed tasks" (Bredekamp & Copple, 1997, p. 113), which DAP guidelines specify to avoid because these young children are easily distractible and have difficulty focusing on details. The concept presentation style of the whole-body cases is more consistent with DAP recommendation, and engaged "the manipulation of objects, noting the consequences, and internalizing them for the future, thus transforming stimuli to symbols" (Campbell & Scott-Kassner, 1995, p. 19). As a result, both whole-body authors seemed to focus on *doing* music (*musicing*, in Elliott's term, 1995) rather than *talking about* music. Piano teachers who work with preschool students should make note of this finding, as considering DAP when planning instruction may result in increased success for their students.

TA3's Inconsistency in Concept Presentation

The different types of task presentation neglected the effect of preoperational centration that is such a vital part of the cognitive development of preschool children (Bredekamp & Copple, 1997; Brainerd, 1978; Campbell & Scott-Kassner, 1995; Crowther, Durkin, Shire, & Hargreaves, 1985; Hargreaves, 1986; Hargreaves & Zimmerman, 1992; Matter, 1982; McDonald & Simons, 1989; Pflederer, 1964 & 1966; Piaget, 1946, 1952, & 1968; Sims, 1990, 1991, 1995a, & 2005; Zimmerman, 1971). Should the focus be placed on one task at a time, such as number recognition alone, the learning result may be better.

While the colorful pre-reading keyboard diagram system of colored triangles generates an attractive appeal, similar to Rogers' (1996) colored rhythmic notation, the extent to which this type of notation can also yield reading success should be the emphasis of any method writers. However, children may require a less complex, more readily interpretable reading system to maintain their interest and motivation for music literacy. Considering that music reading habits will be cultivated during the pre-reading stage, one cannot overlook the effect of children's possible difficulty with, or misinterpretation of, those abstract colored triangles.

The existence of discrepancies in TA3's teaching delivery may lie in the types of concepts presented. Technical skills, in comparison to musical concepts, are relatively concrete subject matter in music study that can be more easily demonstrated and observed. Students experience this more successfully with the teacher's demonstration. In addition, technique is not printed in the student's book in contrast to those concept pages filled with narrative texts, illustrations, and colored symbols, and therefore will not require the teacher to give extensive verbal instruction before any playing can happen.

The Use of Flashcards

The three traditional cases offered their own flashcards without explanations of how to use them. The use of flashcards is documented only in a sentence in TA2, or two in TA3: "Make flash cards for letters A through G and play letter recognition games. Use felt and magnetic boards if you have them for letter games." (TA3.A, p. 46). In WB2 however, not only did the authors provide information about how to incorporate flashcards into lessons, they also designed exercises in focusing on isolating concepts, which is good practice to address preschooler's centration tendencies and limitations.

Reinforcement of Concepts

The data comprising this category were the occurrences and recurrences of concepts in the lessons and lesson plans. In addition, the contents of books correlated to the core book, such as the workbook, theory book, performance book, Discovery Book, and CD, were all considered.

On the whole, all cases provided evidence for pursuing the spiral sequence of learning, with material returning across time with more depth at each recurrence (Bruner, 1960; Campbell & Scott-Kassner, 1995 & 2006). While the traditional cases achieved the spiral design through work and theory book lessons mostly relying mainly on drills of intellectual and cognitive manipulations (esp. in TA1 and TA2), the whole-body cases (particularly WB1 without any correlated books) tended to build this within the lesson plans, offering many different experiences of the same concept in the manner of multi-sensory reinforcement (Alvarez, 1993; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995; Hart, Burts, & Charlesworth, 1997; Kenney, 1997; Kostelink, Soderman, & Whiren, 1993; Jordan-DeCarbo & Nelsons, 2002; McDonald & Simons, 1989; Miller, 1987; Neelly, 2001; Nye, 1983; Palmer, 1993; Peery & Duru, 2000). Learning materials such as workbooks and theory books that "focus on drill and practice rather than engaging children's problem-solving and other higher-order thinking skills" (Bredekamp & Copple, 1997, p, 126) are inappropriate, according to the guidelines of DAP. The importance of incorporating more higher-order thinking tasks in lesson planning has been discussed in Gordon's (n.d.) report.

Of all the correlated books in the TA2 series, the Discovery Book and the CD of the series deserved the most attention. While Peer Checker 2 described it as "attractive"

(Peer Checker 2, Verified Data, All Comment/TA2, p. 5), Peer Checker 1 specified these subsequent thoughts:

> Activities in the Discovery Book seem to be more musically oriented. Some of the information and musical history is appropriate and useful. Singing the songs, both familiar and composed songs, can promote students music appreciation and making connection to music learning. (Peer Checker 1, Verified Data, Comment TA2, p. 4)

Why out of all the TA2 books, do only the Discovery Book and the CD stand out? Compared to the discipline and seriousness of the TA2 lesson book, the Discovery Book and its CD offered music experiences like dancing, singing, listening, moving to music, appreciating music history and musicians, and most of all *fun* to its piano beginners. Why couldn't the attractiveness and charm of this book and its CD also be applied to the correlated core book lesson book? Despite the positive reviews from all of us, drawbacks exist.

First, these two TA2 supplementary source items may offer children the whole-music experience "only as diversions or once-a-week activities" (Bredekmap & Copple, 1997, p. 132), should the teacher not use them or not assign daily CD listening for outside of lesson time. Moreover, the presentation style in the Discovery Book did not consistently follow the rule of experience before symbol. While at one point the Discovery Book instructed to "walk half notes using giant steps to feel the half note pulse" (TA2.TH(1), p. 26), at other points it asked the teacher to introduce the rhythm using a flash card [visual sign]: "Turn the card upside down to make another rhythm." (TA2.TH(1), p. 26).

SUMMARY

A chart summarizing the data and evaluation provided above can help facilitate understanding of the *logic* of the curriculum design. The symbol of ☺ represents DAP-friendly applications and features.

TABLE 3: *Summary Chart—Curriculum Design Logic*

	TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Issues	*Sequence of Concepts*	
Sitting Posture	▪ All cases.	▪ WB2, but not WB1.
Concept Learning	▪ Corresponding with the emphasis on music literacy. ▪ Groups of 2 black keys before groups of 3, but not TA3. ☺ TA3: Besides 3s before 2s, concepts meet the norm of preschooler's capacity. ▪ TA1: Many concepts like bar line, time signature, & grand staff reading. ▪ TA2: Introduction of all rest values, fast pacing.	☺ At the level of normal early childhood development, essential, and basic. ☺ Groups of 2 black keys before groups of 3. ☺ Exposure to music notation.
Concept of Rhythm	▪ Steady beat and rhythm exercised in combination with pitch and finger information. ▪ TA1 and TA2: juxtaposition of introduction of pitches and note values. ▪ All cases treated rhythm in combination with pitch and other materials.	☺ Whole body experience of steady beat before rhythm patterns ☺ Rhythm line notation before rhythm values. ☺ Rhythm patterns exercised in isolation. ☺ Rhythm security before pitch security.
Concept of Pitch	▪ Does not use reference marks from black key groups to white key groups. ▪ TA2: Finding D first, then introduce C, B, and A separately. Focus on *note naming*. ▪ TA1 & TA3: Display of all alphabet letters. ☺ TA1 & TA3: Introduction of ABC as a group.	☺ WB2: Includes reference marks from black key groups to white key groups; finding D (inside the 2s) before C; sound picture before notated picture. ☺ WB1: Introduce ABC as a group; melodic contour and directions before three-note pattern; aural and physical exercises in three-pitch patterns. ☺ Focus on *music reading*
Piano Technique	☺ Visual aids of sitting posture, hand shapes, and finger forms provided in all cases. ▪ Emphasis on the development of fine motor skills.	☺ Visual aids of sitting posture, hand shapes, finger forms provided in WB2. ☺ WB1: visual aids of class traffic and depiction provided instead. ☺ Gross-motor before fine motor development.

	Presentation of Concepts	
Experience before Symbol	▪ Label before experience found in all three's (abstract) concept teaching. ☺ Sound before symbol found in TA3's technique teaching.	☺ Evident in both cases with various different experiences for certain concepts.
TA3's Inconsistency in Concept Presentation	▪ More than one cognitive challenge in one task; ▪ Confusion in the usage of pre-reading keyboard diagram. ▪ Not always experience before symbol.	
Use of Flashcards	▪ Usage not specified in general. ▪ Usage parallels the introduction of musical alphabet letters to the keyboard and notation.	☺ Only WB2 specified the usage. ☺ Exercises of flashcards familiarize students with letters before introduction of use of musical alphabet letters to label the keyboard and notation.
	Reinforcement of Concepts	
	☺ Spiral sequence through correlated books. ▪ Rely on intellectual and cognitive more than aural manipulations. ☺ TA3: balanced reinforcement in correlated books. ☺ *TA2* series has the Discovery Book to enrich other kinds of music experience in addition to the disciplinary seriousness of the lesson book.	☺ Spiral sequenced curriculum with emphasis on whole-body and aural experiences. ☺ Multi-sensory reinforcement for the same concept.

In the theme of curriculum design logic, analysis resulted in categories related to (a) sequence of concepts, (b) interpretation of concepts, and (c) reinforcement of concepts. The observed number of DAP friendly applications and features within the whole-body cases indicates that the logic of the method design found in the whole-body approach aligns more naturally with principles of child's development than that proposed by the

traditional approach. Evidently, the authors of both whole-body cases believe in *doing* music rather than *talking about* music. Their whole-body way of sequencing and presenting concepts follows a route that progresses cognitively from simple to complicated and physically from gross-motor to fine-motor movements. Their method of reinforcement utilizes a DAP-friendly application involving multi-sensory activities.

As it happens, different philosophies lead to differences in logic, and therefore results in distinct choices of method design. Unfortunately, in some traditional cases, what the authors proclaimed did not align well with what they presented in the curriculum and lesson plans. Determining how and what the pedagogical implications of all of these findings are will be of immense value to piano teachers and their pupils.

An interesting sub-finding that emerged from the comparison between both Peer Checkers' comments sheds interesting light on the matter of design logic. Peer Checker 2, who praised the traditional cases for their comprehensive, attractive, and scholastic values initially, now started to find the sequence of concepts in TA1"no musical fun" (Verified Data II, All Comments/TA1, p. 1) and began to recognize WB1's style of concept presentation as "clean and concise" (Verified Data II, All Comment/WB1, p.7). As both types of methods underwent scrutiny, contrasting evidence between DIP versus DAP applications came into focus, perhaps even serving to help overcome of the Peer Checker's initial impression or bias.

CHAPTER VI

MUSICAL DEVELOPMENT OF THE METHODS

The purpose of this study is to identify the salient characteristics of the preschool piano method books and to examine the extent to which the identified characteristics are consistent with the guidelines of Developmentally Appropriate Practice and DAP-related research findings. This chapter centers on the appropriateness of the aspects of musical development incorporated into their texts by the authors of each preschool piano method.

The term *musical development* refers to musical skills and knowledge that the authors consider as essential and indispensable for the preschool-level piano beginner. The analysis of all musical contents across methods offered for this age group revealed (a) vocal technique, (b) piano technique, (c) rhythm reading, (d) pitch reading, (e) repertoire collection, (f) creativity, and (g) opening and closing songs for lessons as categories contributing to the theme of musical development.

Dissimilar philosophical values and design logics already encountered between the traditional and whole-body approaches result in similar differences between emphases of preschool-level musical development reflected by the two categories of methods. The term *DAP* refers to practices or features that respect child developmental characteristics in terms of physical, intellectual, socio-emotional, and musical domains. For this analysis, therefore, both DAP guidelines and musical characteristics distilled from related literature findings were compared with the methods' materials.

Vocal Technique

Singing is an important way that young children experience music and music making. Although vocal development is not the major consideration in the piano study, the number of vocal tasks is noticeably high for the piano readiness interview and evident in the data analysis concerning musical development.

Traditional Approach

Singing was mentioned in all three traditional cases, but only TA2 specified that singing be taught by listening and repetition, and that children will respond best to songs using D-A in the middle C register, listening several times before singing (TA2.TH(1), p. 13). Also, the TA2 Discovery Book mentioned that the teacher should note the difference between children's speaking voices and singing voices (TA2.TH(1), p. 21). Nonetheless, how much realization of singing, speaking, and listening actually happened in that text was difficult to observe if one examined the teaching steps offered in the lesson book. Evidence regarding singing found in TA2 generally indicated that students should "play" and "sing" the words (TA2.L(1), pp. 16-17 & pp. 24-25). Likewise, singing and playing were mentioned together in the other two traditional cases, when lessons called for chanting words or rhythm patterns and rhythm counting were used for reinforcing a pupil's rhythmic sense.

Whole-Body Approach

Vocal technique was specified in WB2 where authors emphasized developing the singing voice through chanting playground songs (e.g., songs using sol-mi, WB2.Ch(1), p. 4), and encouraging the child to use his/her singing voice as opposed to a speaking voice in responding to words set to sol-mi tones. In comparison, WB1 authors did not mention

vocal technique explicitly, but encouraged singing and changing words to melodies throughout the method. As a result, singing was prioritized for the joy of music, while vocal technique tended to rely on the distinction between the speaking and singing voice and children's previous natural and musical knowledge.

Analysis and Interpretation

The comparison of vocal technique between the two approaches revealed that singing was used as a learning tool in the traditional cases, but not for the sake of enjoying music. Although TA2 suggested that singing be taught by listening and repetition and supported what is generally considered the best singing register of D-A in the middle C register for young children (Campbell & Scott-Kassner, 1995 & 2006; Kim, 2000; McDonald & Simons, 1989; Miller, 1987; Scott-Kassner, 1993; Ramsey, 1983; Sims, 1993; Smith, 1963), evidence showed that singing was not used much differently from chanting rhythm, for both served the single purpose of learning about rhythm. Peer Checker 1 appeared to agree with my comment on this issue—"vocal technique in general has been focused on chanting certain words and rhythm patterns intended for counting rhythm, never for the joy of singing" (Refined Data I&D: Traditional Approach, p. 4), by stating: "a limited number of familiar songs have been used and the composed songs tends to be less musical appealing to the child" (Peer Checker 1, Verified Data, Comment TA3, p. 3). If the music is unfamiliar and unappealing, and singing not used for enjoying the music, the motivation for continuing piano study may decrease, as well. This observation implies the importance of incorporating DAP thinking within the preschool piano methods.

In contrast with the traditional cases, singing was encouraged throughout both whole-body methods. In particular, WB2 emphasized the use of the *sol-mi* pattern, consistent with the common melodic pattern of children's familiar songs and nursery chants (Campbell & Scott-Kassner, 1995 & 2006; McDonald & Simons, 1989; Moorehead & Pond, 1977; Pond, 1992). Furthermore, WB2 children were made aware of the distinction between the singing voice and the speaking voice (Campbell & Scott-Kassner, 1995 & 2006). Albeit not regarded as the major consideration in piano study, research findings have demonstrated that vocal maturity leads to better musical discrimination and achievement (Boardman, 1964; Campbell & Scott-Kassner, 1995 & 2006; Davidson, Scripp, & Welsh, 1988; Kenney, 1997; McLean, 1999; Pedersen and Pedersen, 1970; Smith, 1963) and that vocal accuracy may influence children's ability to play back melodic patterns on the piano (Yang, 1994). Recognition of vocal development and maturity within the whole-body piano study provides an appropriate beginning to children's development of adequate singing technique (Zimmerman, 1971) and reinforces the value of singing in music study, as well as constitutes a DAP-friendly feature within the preschool piano program.

Piano Technique

This category, piano technique, encompasses all relevant aspects that enable sound production. This includes on the one hand the externally observable and "visible" use of gross-motor and fine-motor muscles such as movements to music, dance, marching, sitting posture, hand form, motor development, and eye-hand coordination, and on the other hand, the internal attributes of technique such as the "invisible" but "audible" tone production assisted by touch and listening skills.

Based on the literature review presented in Chapter II, two aspects related to instrument playing technique, (in this case also piano playing technique), may be identified. These include (a) the knowledge of the body in connection with the instrument (sitting posture, gross- and fine-motor development, eye-hand coordination), and (b) the knowledge of the instrument through the body (touch, tone production, listening skills).

Knowledge of the Body in Connection with the Instrument

The observable components of the piano technique were the development of gross motor and fine motor skills. Motor applications were indicated mostly by references to (a) sitting posture, (b) gross- and fine-motor development, and (c) eye-hand coordination.

Traditional Approach

Sitting Posture

All three traditional cases offered extensive information with visual aids and detailed descriptions regarding the issue of sitting posture. Notably, in TA2, the message about sitting posture was reinforced by the two story characters, Beethoven Bear and Mozart Mouse, who directed a type of peer talk that children may favor over learning exclusively from what the teacher says. For small children, TA3 authors suggested that students “may need to stand due to their small size, in order to explore the full range of the keyboard” (TA3.TG(A), p. 6).

Gross- and Fine-Motor Development

Gross-motor related development, such as keyboard geography and performance choreography, was found in the traditional cases. Keyboard geography refers to knowledge about the keyboard (TA3.TG(A), pp. 8-9), whereas performance

choreography specifically denotes the use of hands such as single-hands, alternating hands at the keyboard, or playing “in the air” (TA1.TG(A), p. 8). With the exception of musical opportunities for dancing and moving to music in TA2’s Discovery Book, the gross motor development of all traditional cases did not emphasize large limb movements to music such as marching, stretching, swaying, or walking. Instead, ample use of small motor and fine motor development supported the traditional emphasis of enabling playing technique alongside reading ability at the early stage of study (Uszler, Gordon, & Smith, 2000). In TA3, “Loose Fist Technique,” “First Joint Technique,” (TA3.TG(A), pp. 7A&B & pp. 9A&B) and legato touch (TA3.TG(A), pp. 24-25) referred to small and fine motor development. Likewise in TA1, illustrations and texts indicating: “Curved fingers have the same lengths! Hold the bubble gently, so it doesn’t break.” (TA1.TG(A), p. 4) effectively aided teaching and learning.

With the introduction of black-key groups, it was assumed that traditional cases were inclined to produce legato sounds with finger numbers of 2, 3, and 4. In regards to motor development, TA2 offered statements such as, “movement should be seen as the precursor for performance at the piano. The technical development focuses on developing a good hand position and promoting freedom of movement over the keyboard” (TA2.TH(1), p. 13) in the teacher’s handbook, but failed to carry this through to the lesson plan. This may provide evidence that there is not enough preschool-level learning being facilitated by these methods.

Eye-Hand Coordination

The last element of piano technique is the coordination between the eyes and hands. This type of coordination is the bridge connecting the child’s abilities to view a

symbol, decipher that symbol, and transmit that information into a command for the hands and fingers to realize sound (Richards, 1996). The better the coordination is, the faster the transmission reacts and the shorter time used to travel through the channels. The requirement for children to develop the habit of "eyes on the music" seems to signal the early state of eye-hand coordination development and was evident in all three traditional cases. Reminders from TA1 vividly depicted what goes on in the traditional lesson regarding technique:

> **IMPORTANT!** At the first lesson, the following cannot be overemphasized:
> - Play with a rounded hand.
> - Count aloud.
> - Keep eyes ON MUSIC.
> - Listen!
>
> … Avoid the necessity for remedial teaching in later lessons, after poor habits are formed. (TA1.TG(A), p. 3)

Whole-Body Approach

Sitting Posture

WB2 offered the standard amount of information concerning the optimum height of the piano bench for elbows and "a good foot rest or stool" for balancing the weight (WB2.TM(1), p. 3). WB1 excluded the issue of sitting posture, possibly for the reasons that developing movements and manipulation of large limbs correspond more closely to preschool children's physical needs. The authors of WB1 even suggested playing while standing, as the traffic pattern for one of the listening games revealed (Illustration 18, WB1.TM, p. 44).

Gross- and Fine-Motor Development

The WB2 exploration of piano technique took on a slightly different form. Clapping, marching, and nodding the head were recommended by WB2 authors for

preschool children to use their large muscles musically. WB2 authors pointed out the connection between gross motor and fine motor development in the "closed hand position" (WB2.Ch(1), p. 12) and acknowledged the important support between both. Referred to as a common braced-finger position, the closed hand position uses the thumb to support the first joint of the second finger in order to maintain the high bridge. This in fact creates a solid finger form that WB2 authors described: "In this position the very young child can play with a good solid tone, using a large-muscle movement appropriate to his stage of physical development" (WB2.TM(1), p. 25). WB1 recommended not to "worry too much about perfectly curved fingers" as the child experiments, and if the teacher encourages the child to "pull gently as he depresses each key, he will gradually strengthen his finger muscles and gain necessary control" (WB1.TM, p. 54). The use of WB1's gross-motor exercise for preparing piano technique can be witnessed below:

> First, "glide" around the room with the children. Let them dance with their scarves to express a soaring sail plane moving silently and gracefully through the sky. Also, let their arms express the lightness of the glider playing in the breeze. They will soon feel the flow of the long line as you play the music and chant the words. (WB1.TM, p. 23)

Furthermore, WB1 authors introduced "Copy Cat" (WB1.TM, p. 57) for the child to observe and imitate how and what the teacher does technically. The Copy Cat exercise challenged the child's total ability in physical, aural, and cognitive domains.

Compared to the gradual fine-motor development found in WB1, WB2 offered systematic preparation for fine-motor dexterity. The "whole hand" position in WB2 is designed for preschool children to explore and make sounds at the keyboard with four fingers of each hand without using the thumb (WB2.TM(1), p. 17). According to the graphic illustration of the whole hand provided on the parent's page (Illustration 19,

WB2.Ch(1), p. 4), one can assume the use of a “palm” technique or an equivalent of “flat hand and fingers.” In addition, WB2 authors offered a song activity called “Open, Shut Them” for exercising open- and closed-hand movements. Later, WB2 pupils learned to use the supported index finger with the thumb to shape the arched hand and form a flexible wrist in the closed-hand position. Designated repertoire was succinct to allow children to focus on the common braced finger technique. WB2 authors guided children to play songs with black keys using both hand positions (Illustration 20, WB2.Ch(1), p. 16). Furthermore, control of WB2’s whole and closed hand positions and finger manipulations were achieved through finger play songs such as “Five Little Ducks.” The reliance of fine motor development on imitation in a rhythmic context is clear:

> Your goal is not simply for the child to sing the song and do the gestures, but to do them in rhythm. If you, and the parents, exaggerate the gestures rhythmically, the child will imitate them in the same manner to the best of his coordination ability. Do not “correct” the child who cannot do the gestures with the words, but rather keep setting a precise example for him to imitate and encourage him by saying “Can you do the motions exactly when I do?” (WB2.TM, p. 18)

From the evidence in WB2 Book I, the systematic development of hands and fingers is clearly dependent on rote teaching in a rhythmic context.

Eye-Hand Coordination

WB2 authors introduced the “open hand” (WB2.Ch(2), p. 2) position involving five notes later in Book 2; this is also where the issue of eye-hand coordination emerged. The relevant thread regarding the issue of eye-hand coordination surfaced with WB1 authors’ reminder as students play circled notes only (Illustration 21, WB1.Ch, p. 32):

> Remember to stress the “picture” of the notes (contour of the melody line) and encourage them to look at the music when they play this. There are “reading” patterns and configurations, so that later, when the more technical

> aspects of notation are introduced, there will be the necessary experience in eye movement across the page. (WB1.TM, p. 55)

The statement above suggested a type of eye-hand coordination that seemed to be fostered progressively without constant cues of "eyes on the music."

Analysis and Interpretation

Sitting Posture

Sitting posture, considered to be the piano technique that allows for complete freedom of muscles and movements while playing (Enoch, 1996b), is an important element of piano performance. Recommendations for the development of accurate performing gestures from the beginning are consistent with material in early childhood music education writing (Zimmerman, 1971) and piano pedagogy texts (Bastien, 1995; Lyke, Enoch, & Haydon, 1996; Uszler, Gordon, & Smith, 2000). Authors of all three traditional cases and one whole-body case recognized correct sitting posture as a basic piano technique for the preschool child. Instructions such as sitting at the edge of the piano bench with a straight spine, keeping knees slightly apart to maintain body balance, and resting feet on a foot stool are consistent with accounts found in pedagogical writings (Bastien, 1995; Enoch, 1996b; Lyke, Enoch, & Haydon, 1996; Uszler, Gordon, & Smith, 2000).

Nonetheless, while existing information about sitting posture was embellished with visual aids, and its value emphasized at the beginning of piano study, too much sitting for long periods of time violates the demand of the natural growth pattern in preschool children (Bredeakmp & Copple, 1997; Pohlmann, 1994/95) and is in contrast to characteristics of physical development at the preschool age. Given a caution such as

this, it is important that method writers recognize the value of incorporating a balanced variety of movements into lessons instead of having children only sit and play.

WB2 authors articulated: “Although many experiences will be centered around the piano keyboard, your child will not be assigned a great amount of actual piano practice” (WB2.Ch(1), p. 2), which is consistent with DAP. In contrast, WB1 did not introduce sitting posture. WB1 appears to emphasize the importance of the preschooler’s physical development and to allow these youngsters the maximum freedom of movement. This is also evident in TA3, where its authors suggested the standing position for small-size children. The possibility of playing while standing as found in WB1 and TA3 is consistent with Enoch’s (1996b) recommendation that small children should stand while playing in order to feel good balance and the connection between the shoulder, elbow, and hand. Therefore, even without the information about sitting posture, WB1 still offers a piano program that not only aligns well with the demands of preschool children’s physical development, but also may be considered DAP relevant. Likewise, TA3’s attention to the small children in regards of sitting posture appears to be consistent with DAP thinking.

Gross- and Fine-Motor Development

Analysis results favor the whole-body approach for its designated gross motor exercises geared toward a DAP-friendly physical development. The extensive use of large-limb movements such as gliding, marching, swaying, stretching, bending, and walking in both whole-body cases not only fulfills the need of these young children to move (Bredekamp & Copple, 1997; Howe, 1993; Monsour, 1996), but also is consistent with early childhood learning theories that state that preschool children conceptualize

music best through motor behaviors (Bruner, 1960, 1966; Campbell & Scott-Kassner, 1995 & 2006; Heyge, 2002; Jordan-DeCarbo, 1999; Miller, 1986 & 1987; Orsmond & Miller, 1999; Piaget, 1946 & 1952; Pohlmann, 1994/95; Sims, 1990 & 1993). Use of whole-body movements represents an important component of a total music learning experience that involves aural, visual, cognitive, perceptive, and kinesthetic senses within open-ended, non-threatening experiences (Aronoff, 1992; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985).

Although the Discovery Book of TA2 offered preschoolers opportunities to move, it is only a correlated book, not the main lesson book. Unless used differently by the teacher, the function of the Discovery Book remains peripheral, used a few minutes during the lesson and once a week, which involves too little multi-sensory experiences for children to be considered DAP (Bredekamp & Copple, 1997). Experience involving only sitting, reading, and playing cannot be recognized as developmentally appropriate for preschool children.

The development of small and fine motor skills represented the heart of the traditional approach, as indicated by experiences in exercising keyboard choreography such as alternating hands (in all three traditional cases) and playing in the air (esp. in TA1), the Loose Fist Technique and First Joint Technique from TA3, rounded hand shape and fingers from TA1 and TA2, and the usage of finger numbers 2, 3, and 4 in combination with black-key groups. This finding for the traditional cases coincided with Enoch's (1996b) statement that described the hand in a good arched position with knuckles as the highest point and established fine-motor development as another piano-pertinent feature.

Nonetheless, this piano pertinent feature may be in contrast to the descriptions and recommendations for preschool physical development. According to DAP guidelines, fine-motor capacity is constrained because of (a) the dominant development of gross-motor skills (Howe, 1993) and (b) wrist cartilages that will not mature into bone until the age of six (Berk, 2000). DAP-relevant recommendations for young children include manipulating play objects that have fine parts as well as practicing an activity many times to gain mastery, and denoted that the natural pathway in the physical development of children ages 3 through 6 should not aim at the types of sophisticated manual dexterity that "are likely to be unsuccessful or frustrating for children" (Bredekamp & Copple, 1997, p. 104). Questions as to the meaning of performing tasks involved in "precise control of the hand muscles, careful perceptual judgment involving eye-hand coordination, and refined movements requiring steadiness and patience" (Bredekamp & Copple, 1997, pp. 103-104) arise in the piano methods studied. This may result in difficulty, failure, and frustration, overshadowing the initial interest and developing confidence of these preschool children in learning piano.

When compared to the traditional cases' strenuous usage of fine motor muscles, the whole-body approach demonstrated a different way of preparation for developing the fine hand muscles of young children. The whole-body fine-motor approach respected the DAP profile of children of age 5 and onwards who experience the sound growth of small-large muscle coordination and control (Bredekamp & Copple, 1997; Miller, 1987; Scott-Kassner, 1993). This physical maturation enhances the kinesthetic sense to support the extension of an instrument's sounds through the player's body (Andress, Heimann, Rinehart, & Talbert, 1973; Zimmerman, 1971). While WB1 authors respected the natural

growth of young children and believed that they would “gradually strengthen his finger muscles and gain necessary control” (WB1.TM, p. 54), WB2 authors took advantage of finger plays and action songs as suggested by Campbell and Scott-Kassner (1995 & 2006) and McDonald and Ramsey (1992) to facilitate coordination of “synchronized rhythmic movement and the singing voice” (Campbell & Scott-Kassner, 1995, p. 194). The transitional preparation to the healthy mastery of fine motors is evident in both whole-body cases and therefore supports the advice of early childhood educators and DAP guidelines that maturation, not training, is the major factor for significantly improving these skills (Campbell & Scott-Kassner, 1995 & 2006; Scott-Kassner, 1993; Zimmerman, 1971). The same developmental sequence applies to eye-hand coordination as well.

Eye-Hand Coordination

The issue of eyes on the music was encountered from the beginning in all three traditional cases, as opposed to the whole-body cases. This traditional habit endorses Richard’s (1996) reading theory that a student will lose his place on the printed page should he look down at his hands while reading, and implies a descriptive image of pianists visually monitoring and navigating their physical actions (Udtaisuk, 2005). Consequently, this habit of eye-hand coordination development seems to represent a pertinent feature in preschool piano study. Nevertheless, the contrast between this piano-pertinent feature and DAP guidelines reveals that preschoolers are farsighted because of the still-to-come coordination of binocular vision (Bredekamp & Copple, 1997; Bucci & Kapoula, 2005; Yang & Kapoula, 2003) and therefore large and uncluttered print should be used with preschool children (Bastien, 1995). In particular, Scott-Kassner (1993) indicated that children develop the skill of eye-hand coordination with the introduction of

playing mallet and percussion instruments. Given that the manner of producing a nonlegato touch resembles mallet playing, this statement from Scott-Kassner seems to give credit to the whole-body approach for allowing the coordination of eye, hand, and aural skill to grow parallel one to another. Following the same logic, why not let preschool piano students enjoy music with their well developed aural functions (Chen-Haftek, 1997; Cohen & Comiskey, 1977; Fassbender, 1996; Moorehead & Pond, 1977; Noy, 1968; Papoušek, 1982; Zimmerman, 1971) instead of keeping their eyes on the music? According to Chronister (1996), small children who "cannot read the assignment and work alone each day" (p. 70) should wait to read music until versatile experiences such as singing, moving, listening, and playing by rote are established. In this manner, teachers can prevent the unwanted result of note-spelling or note-naming from happening (Richards, 1996) and prepare the young pupil to healthy eye-hand coordination that connects to sound registry (Davidson, Scripp, & Welsh, 1988; McLean, 1999; Richards, 1996).

Knowledge of the Instrument through the Body

Traditional Approach

Touch

In TA3, "Loose Fist Technique" and "First Joint Technique," (TA3.TG(A), pp. 7A&B & pp. 9A&B) were described in connection with tone production. A "lift" motion that releases the key "forward and upward" after the sound is made was required at the end of each technical gesture. Presumably, this produces a nonlegato touch that will be replaced by the legato touch (TA3.TG(A), pp. 24-25) in the same Book 1.

In TA1, illustrations and texts indicating: “Curved fingers have the same lengths! Hold the bubble gently, so it doesn’t break.” (TA1.TG(A), p. 4) effectively aided teaching and learning. With the introduction of black-key groups, it was assumed that traditional cases were inclined to produce legato sounds with finger numbers of 2, 3, and 4. Furthermore, TA1 specified in details that “fingers should drop into keys on tip of pads.” (TA1.TG(A), p. 29).

Tone Production

TA1 offered definitions of tone: “Key Words: Drop into key. Little weight = soft tone. More weight = louder tone.” (TA1.TG(A) p. 5). TA2, however, offered no evidence of addressing tone production. TA3 included material addressing a good tone that projects and uses controlled relaxation accompanied by graphic presentations and acknowledged the importance of tone production by citing Sandor’s writing: “As we know, the sound of the piano is produced by hammers striking strings. The volume of the sound depends exclusively on the speed with which the hammer hits the string” (TA3.TG(A), p. 7B). Steps to tone production were included in TA3’s teacher’s guide in combination with the TA3 trademark techniques—Loose Fist and First Joint Techniques. Descriptions similar to TA1’s definition of tone production, “sink quickly into the keys and listen for a loud sound” (TA3.TG(A), p. 7B), were also given.

Listening Skill

The internal component of tone production in playing technique requires good listening skills and habits. TA1 and TA3 addressed listening skill to evaluate tone production, such as the following sentence recommended: “Before you play any key, decide how you want it to sound. Do the tones sound as intended?” (TA1.TG(A), p. 4)

and “listen to the tones and evaluate the sound” (TA3.TG(A), p. 7A). TA2 described the same listening skill as the backbone of musical intelligence in the following words: “An effective approach to keyboard performance includes listening first, followed by experiencing and then reading notation” (TA2.TH(1), p. 12). This proclamation motivated me to match what TA2 authors declared with what the method in actuality contained in the lesson book.

Evidence indicated that “look” into the Magical Music Book (TA2.L(1), p. 12, p. 27, p. 31, p. 38, & p. 42) or “let’s see” (TA2.L(1), p. 18, p. 23, & p. 31) were the frequent word choices in the conversation between both Beethoven Bear and Mozart Mouse, whereas “listen”(TA2.L(1), p. 20) was mentioned only once throughout the book. The visual tool in music learning was used extensively the one time that Mozart Mouse added: “Look! Beethoven Bear, we can play a song using D!” From a linguistic grammar perspective, this sentence has no flaw. However, if one considers the situation within a music lesson, shouldn’t a song using D be listened to as well? This contradiction also was observed by Peer Checker 1, who said: “minimum amount of listening is presented” (Peer Checker 1, Verified Data, Comment TA2, p. 2).

Whole-Body Approach

Touch

WB2 advocated a solid finger form that its authors described: “In this position the very young child can play with a good solid tone, using a large-muscle movement appropriate to his stage of physical development” (WB2.TM(1), p. 25). WB1 recommended not to “worry too much about perfectly curved fingers” as the child experiments, and if the teacher encourages the child to “pull gently as he depresses each

key, he will gradually strengthen his finger muscles and gain necessary control" (WB1.TM, p. 54). Either use WB2's whole hand (the palm-like technique), closed hand positions (the braced index finger), or WB1's "one finger or a few" (WB1.TM, p. 52) to produce sounds at the keyboard, the nonlegato touch appears to be the natural technical outcome than the legato touch.

Tone Production

WB2 used "intensity, duration, pitch, and timbre" to describe tone (WB2.Ch(1), p. 2), where as WB1 did not define this matter in its method.

Listening Skills

Evidence for developing listening skills was apparent in both whole-body cases. WB1 exercised listening skills on a daily basis through various activities, such as listening games, whole-body movement, and question and answer improvisation. The WB1 authors indicated that, "student should be encouraged to make up 'Listening Games' (and later 'Question and Answer') each day, both in class and at home. The development of aural perception facilitates both improvisational and reading skills" (WB1.TM, p. 44). The exercise of listening skills was extended to another activity called "Tune Up" (WB1.TM, p. 53) that was intended for early application of transposition. WB1 authors explained to young children that songs can begin on any note and "Tune Up" will help them find the right notes to use in any key (WB1.TM, p. 53). Subsequent steps were proposed for engaging children in "Tune Up" (Illustration 22, WB1.Ch, p. 30):

1. Sing the melody with the children as you shape it in the air.
2. Sing it again and clap the rhythm as they walk the beat. A slight swaying from side to side emphasizes the rhythm and helps them feel the beat.
3. Let them play "Tune Up" first with pointer finger only, just to get the idea of pattern. Then let them try with 1, 2, and 3 of the right hand of 3, 2, and 1 of the left hand. If this is hard, encourage them to try it several

times each day, still using the pointer finger. Don't rush, but make certain that they keep the rhythm going by clapping the beat as they play.

4. Transpose to other keys – such as Gb, F, Db, Ab major etc. Make a game of this. See how many places they can "Tune Up" and let them play it in the high, middle and low registers of the keyboard. Select keys in sets such as D and A, Db and Ab, C, F and G (all similar) Eb and E, Bb and B (opposites), etc.
5. You should encourage them now to "Tune Up" before singing <u>any</u> song – make this part of their routine. (WB1.TM, p. 53)

Clearly, listening skills are the focus for "Tune Up" and children will have to rely on their aural memory to find the correct melody in transposition. This reliance on listening skills is also evident in WB2, whose authors realized the development of listening skill in lesson plans with the stated belief that "preschoolers should not play anything that they do not experience aurally. Ear-training should begin with the very first class and be continued throughout every week of piano study" (WB2.TM(1), p. 5).

Analysis and Interpretation

Touch

Using braced fingers such as found in WB2's Closed Hand Position and TA3's techniques of Loose Fist and First Joint acquired arm weight result in the <u>nonlegato</u> touch as Bastien (1995) and Uszler, Gordon, and Smith (2000) suggested. In particular, statements from WB2 authors such as, "in this [closed hand] position the very young child can play with a good solid tone, using a large-muscle movement appropriate to his stage of physical development" (p. 25) coincided with the vision from Uszler et al. (2000) that described the touch "in conjunction with forearm and/or causes the hand to be directed from the shoulder" (p. 345). The rationale for the nonlegato touch is apparent in that it resembles an initial physical movement used to strike objects in order to produce sounds (Moorehead & Pond, 1977) and from the beginning fosters the feeling of arm-

weight with the use of larger movements in the production of rich tones as in playing mallet instruments (Scott-Kassner, 1993). The aspect of using large movements in developing nonlegato touch, as used by TA3 and WB2, represents a DAP-friendly feature that should be emphasized more throughout all preschool piano methods.

TA3 also introduced legato touch after the acquisition of both playing techniques. Based on the analysis and DAP principles, the introduction of legato touch should follow the mastery of nonlegato touch according to the child's level of physical maturity, and therefore more temporal and psychological preparation might be needed before introducing this within the first book of the preschool piano method.

Tone Production

The quality of piano sound production is dependent on the speed of the hammer striking the string (Enoch, 1996b). Only one traditional case provided information that matches Enoch's description of the appropriate mechanical action. Accounts such as, "pull gently" (WB1.TM, p. 54), a tone quality pallet of intensity, duration, pitch, and timbre (in WB2), a good tone that projects and uses controlled relaxation (in TA3), or "Key Words: Drop into key. Little weight = soft tone. More weight = louder tone" (TA1.TG(A), p. 5) failed to convey the connection between the hammer striking speed and tone production. Nevertheless, the discrimination of dynamics is DAP because dynamics represent the earliest elements of perceptive listening (Campbell & Scott-Kassner, 1995 & 2006; McDonald & Simons, 1989; Moorehead & Pond, 1977; Zimmerman, 1971). Also, asking the child to decide how they want the sound to be produced represents the first hint applicable to mental representation (Bredekamp &

Copple, 1997) or “verbal mediation” (Vygotsky, 1978) that enables children to plan and practice actions beforehand without relying on trial-and-error.

On the whole, the discovery of how piano sounds are produced should be included in every preschool piano method, as in the case of TA3. This will inspire children to explore sounds of various sources and nurture their motoric development (Bruner, 1960; Campbell & Scott-Kassner, 1995 & 2006; Heyge, 2002; Jordan-DeCarbo, 1999; Miller, 1986 & 1987; Orsmond & Miller, 1999; Piaget, 1952; Sims, 1990 & 1993; Zimmerman, 1971) in connection with tone production.

Listening Skills

Both approaches emphasized the importance of aural development in studying the piano. This is consistent with the belief that musical intelligence begins with auditory attentiveness to musical sounds (Kenney, 1997; McDonald & Simons, 1989; Zimmerman, 1971).

While the whole-body cases dedicated listening sessions to strengthen aural skills, the traditional cases seemed to set their listening experiences within a limited context such as evaluating tone production, and did not reinforce aural ability in lesson plans to a broader extent. In particular, the focus of listening development in TA2 appeared to be so overshadowed by the narrative format of a storybook that both teachers and preschool children may simply read and look into the content more than listen to it. This can be inconsistent with the DAP principles because of children’s tendency towards centration (Bredekamp & Copple, 1997; Crowther, Durkin, Shire, & Hargreaves, 1985; Pflederer, 1964 & 1966; Piaget, 1952; Serafine, 1980; Sims, 1990, 1991, 1995a, & 2005). Preschool children who may display the tendency to center on the reading experience of the

storybook rather than on the targeted sound experience. Both the acquaintance with how tone can be produced or the qualities of tone rely on a well-developed aural perception of young children are an essential DAP experience within the study of piano, because children are able to detect changes in melodic contour and rhythmic patterns, and pitch ranges of melodies at an early age (Chen-Haftek, 1997; Papoušek, 1982).

Rhythm Reading

Two stages are involved in rhythm reading. The ultimate form of rhythm reading is to produce rhythms based on reading the traditional set of rhythm values from notation (e.g., quarter notes or half notes). For the purposes of this study, all other forms of rhythm reading prior to rhythm values are categorized as rhythm pre-reading. During the data analysis, techniques supporting rhythm pre-reading appeared most commonly in forms of maintaining the steady beat, and utilizing a system similar to rhythm line notation. Rhythm values not presented in isolation, but presented in pitch levels such as notes moving upward and downward, are considered in the category of pitch reading.

Traditional Approach

Rhythm Pre-Reading

Of all three traditional cases, only TA3 offered material that closely matched rhythm pre-reading. According to TA3's authors, "green bars indicate duration of words" (TA3.A, p. 45). In other words, green bars carried information of the short-long relationship of rhythm patterns, embellished with pitch information and finger numbers (Illustrations 5 & 23, TA3.A, p. 22). The real intention of this rhythm pre-reading may be to exercise pitch direction and its relation to finger movement, instead of the rhythm itself.

Teaching suggestions from the teacher's note seem to be consistent with this point of view:

> - Green bars indicate duration of words. No "formal" rhythm has yet been presented.
> - Close the fallboard over the keys. Sing and move fingers on the fallboard for the left hand question. [What's your name?] Students answer the same way with the right hand. [My name's ___]. **Have students keep eyes on their books while "playing" and singing**. (TA3.A, p. 45)

Instructional ideas as presented above were geared to overall practicing involving multiple senses. The rhythm as projected by the green bars remained the minor subject matter in contrast to counting aloud and chanting words and finger numbers while playing. The transfer from the green bar plus fingers on the fallboard to rhythm values (Illustration 3; Illustrations 5 & 23) was so abrupt and disrupted by the paperwork-like exercise of all types of color-coded rhythm values and their traditional names that this tended to replace the fun from the fallboard exercise. Despite the potentially valuable idea created by the green bars, the fact that their usage was only twice reinforced in the exercise of "playing and counting notes", where the authors offered "Help the student draw green lines under the notes to show duration. It is helpful for student to visualize the length of the notes in this way" (TA3.TG(A), p. 30 & p. 36). Continuous green-bar reinforcement was not applied in lesson book repertoire nor correlated books.

Rhythm Values

Except for the green bars, TA3's introduction of rhythm values was similar to that found in the other traditional cases. A full array of rhythm values was introduced to the students as signs, prior to experience. Although a transfer from the green bar to value names existed, TA3 authors listed more than two values on the same page (Illustrations 3

& 4). Some note values portrayed, such as dotted half note and eighth notes, were not used in music in Book 1, about which Peer Checker 1 commented: “What is the point here? Ineffective and inappropriate especially when the notes have not been used in a piece in the lesson.” (Peer Checker 1, Verified Data, Comment TA3, p. 4). It appears that the curriculum is excessively driven by concepts related to adult musical logic rather than “shaped by children’s developmental characteristics and the content and skills (including thinking skills) they need to acquire” (Bredekamp & Copple, 1997, p. 130).

In contrast, TA1 authors did immerse the dotted half note in the context of the repertoire, based on the need for a 3/4 meter, following its use in the meter of 4/4. The array of rhythm values extended to the rests in TA2, but the time signature was not used among the TA2 authors.

In traditional rhythm reading, each rhythm value has a verbal counting label attached. For instance, the quarter note is to be counted as “quarter” (TA1.L(A), p. 8; TA3.A, p. 23) or “one” (TA1.L(A), p. 8; TA2.L(1), 15), the half note as “half-note” (TA3.A, p. 23; TA1.L(A), p. 10) or “one-two” (TA1.L(A), p. 10; TA2.L(1), p. 31), and the whole-note as “hold-the-whole-note” (TA1.L(A), p. 13), “whole-note-hold-it” (TA3.A, p. 23), or “one-two-three-four” (TA2.L(1), p. 41). TA3 offered the rationale for using rhythm value counting instead of number counting: “We recommend counting note value names (instead of numerical counts) to avoid confusion with finger numbers” (TA3.TG(A), p. 23). In TA3’s everyday reminder, authors suggested playing three different ways: “1. Say finger numbers aloud. 2. Count note values aloud. 3. Sing the words in rhythm” (TA3.A, p. 32). Similar advice can be located in TA1: “1. Clap (or tap) & count. 2. Play & count. 3. Play & say the note names. 4. Play & sing the words. Follow

these steps for each new piece" (TA1.TG(A), p. 18). More steps were recorded in TA2, but the basic ideas were the same:

1. Place Beethoven Bear on 2 black keys.
2. Clap (or) tap *Left Hand Walking* and count aloud evenly.
3. Point to the quarter notes below and count aloud evenly.
4. Say the finger numbers aloud while playing them in the air.
5. Play one key at a time and say the finger numbers.
6. Play and sing the words. (TA2.L(1), p. 16)

The use of finger numbers became another favorite tool for chanting in the midst of rhythm value counting. The rationale behind this strategy may have been derived from the idea that "counting note values aloud helps students remember what type of note they are playing" (TA3.TG(A), p. 23).

Within the system of traditional rhythm value reading, rhythm patterns were generally employed to facilitate learning. Either one short rhythm pattern such as, "quarter-quarter-half-note" in the repertoire (TA3.A, p. 26), a longer rhythm phrase of "half-note-half-note-quarter-quarter-half-note" as repeated twice in both songs "The ABC Tune" and "CDE Fun" (TA3.A, TA3. 32 & 33), or one identical rhythm pattern for the entire song played by different hands (Illustration 24, TA1.L(A), p. 22; Illustration 25, TA2.L(1), p. 24), all provide evidence of the usage of rhythmic patterns within the traditional cases.

Whole-Body Approach

Rhythm Pre-Reading

Common traits of the whole-body cases pointed to developing children's ability to keep a steady beat as the most fundamental knowledge in rhythm reading. Both whole-body cases specified that the steady beat should be achieved through whole body movements. Both introduced preschool children to line rhythm reading. In other words,

the whole-body rhythm pre-reading is established first through the recognition of steady beat and then exercised with rhythm lines. The system of rhythm lines encompassed long and short horizontal lines representing and corresponding to relevant long and short sounds. Either called “Rhythm Lines” (WB1.Ch, p. 31) or “Line Notation” (WB2.Ch(1), p. 8), the system of rhythm lines is reinforced and followed through within both whole-body methods. Materials of rhythm pre-reading can be located in “rhythmic activity” (for instance, WB1.Ch, p. 18 & p. 26) and “rhythm chart” (WB2.TM(1), pp. 11-12) that are solely dedicated to rhythm exercises, following a path as suggested by WB2 authors: “Rhythmic reading is introduced durationally by hearing, reading, and playing short and long sounds.” (WB2.TM(1), p. 17). Of necessity, these rhythmic exercises took advantage of learning through patterns.

Rhythm Values

WB1 did not offer any formal rhythm value introduction to the preschool children. WB2 introduced quarter, half, dotted-half, and whole notes using numeric counting in the company of the rhythm lines (WB2.Ch(1), p. 24, p. 32, & p. 48, for instance). Illustration 26 (WB2.Ch(1), p. 32 & p. 48) demonstrates the transition from the horizontal lines to rhythm values, first without the inclusion of pitch information. The horizontal rhythm lines later combined with pitch material, and moved up and down to represent the melodic content.

Analysis and Interpretation

Rhythm Pre-Reading

The comparison between the traditional and whole-body approaches in dealing with rhythm reading demonstrates several divergences. The whole-body cases in general

recognized the sequence of rhythm development by establishing familiarity with steady pulses and encouraged preschool children to experience steady beats using their whole-bodies. Although this appears to be developmental, beat competence (or keeping a steady pulse) is dependent upon physical maturation and coordination (McDonald & Simons, 1989; Moorehead & Pond, 1978). In some cases, beat incompetence still occurs in elementary-grade children whose sense of maintaining steady beats has not been properly nurtured at a younger age (Campbell & Scott-Kassner, 1995 & 2006; Moorehead & Pond, 1978).

However, the inability to keep a steady beat is largely developmental, and with adequate guidance "will be self corrected at a later stage as the child's model is revised through better auditory perception, memory capacity, and experience" (Bredekamp & Copple, 1997, p. 109). Acknowledgement of this level of rhythm development within the whole-body approach endorses theories of early childhood music educators (Philosophies of Dalcroze & Orff; Campbell & Scott-Kassner, 1995 & 2006; Uszler, Gordon, & Smith, 2000; Zimmerman, 1971) who advocated capturing the beat as the very first essence of rhythm, and is one of the preschool piano method's DAP elements.

The whole-body rhythm pre-reading resembled the "dash-a-note" system used in the Dalcroze method (Campbell & Scott-Kassner, 1995 & 2006). Practicing rhythm in isolation from pitch, to avoid confusion, is consistent with theories of Dalcroze, Orff, and Zimmerman (1971). The green bars from TA3 simultaneously contained rhythm and pitch material, and were not used broadly after their introduction, thus failing to sustain this as an adequate rhythm pre-reading strategy. Nevertheless, TA3's effort in connecting

the duration of sounds with their symbols, even only for a little amount of the method book, should be applauded.

The result of rhythm pre-reading analysis between the two approaches clearly identifies the whole-body methods as DAP-friendly, for they featured a rhythm reading system aligned well with preschool-aged children's early rhythm and cognitive development.

Rhythm Values

In regards to rhythm value introduction, all traditional cases inclined to present too much information relating to rhythm at once. TA3 listed rhythm values that were not even included in the repertoire pieces, TA2 added related rests to the standard array of rhythm values, and TA1 introduced time signatures to these preschool pianists. However, the guidelines of DAP indicate that for young children, abstract concepts like "time, space, and age are difficult to use in organizing their experiences" (Bredekamp & Copple, 1997, p. 113). While metric perception of young children is noticeable at an early age, the actual numerical sign of the time signature may not be readily understood due to issues of cognitive development (Campbell & Scott-Kassner, 1995 & 2006). This is one of the reasons Uszler, Gordon, and Smith (2000) considered the TA1 Book 1 as "too advanced for younger students" in their review (p. 52). The rhythmic content of the traditional methods cannot be considered developmentally appropriate.

The traditional manner of introducing rhythm values to preschool children that appears to present signs before experiences is also problematic, and contrary to the statement that children should first perceive patterns of durations and pitches should be by senses other than by sight before learning their symbols (Campbell and Scott-Kassner,

1995 & 2006; Collins, 1985; theories of Dalcroze, Orff, Kodály, & Suzuki; Pohlmann, 1994/95). While, counting rhythm values or chanting finger numbers while playing, as encountered in the traditional rhythm reading, coincided with piano pedagogical writings (Uszler, Gordon, & Smith, 2000), this tradition was criticized by the same set of pedagogues to be overemphasized as compared to other teaching strategies. This dependence on drill-type rhythm practice tells children more often "what to do than facilitates back-and-forth exchanges" in a "one-way" speech of direct teaching (Bredekamp & Copple, 1997, p. 127), and thus falls into the description of developmentally inappropriate practice (DIP). Additionally, the traditional method of presenting rhythm values simultaneously with pitch symbols violates the centration principle (Piaget, 1946, 1952, & 1968) related to preschool-aged children's intellectual development, and may leave them with a misunderstanding about the true character of rhythm. Even when repertoire included rhythm patterns, these patterns were treated in company with counting rhythm values, chanting finger numbers, singing words, and visually deciphering symbols before adequate rhythmic experiences. This manner of practice cannot be regarded as DAP.

In contrast, the rhythm lines of the whole-body cases gradually lead the preschool children to rhythm values. This allows the youngsters to cognitively comprehend the durational idea of short-long lines and prepares them to transfer this to their note value form. A similar observation has been recorded in Peer Checker 1's comments as he agreed with my remark of this system helping the child in "seeing the relationship between two forms of notation." (Refined Data I&D: Whole-Body Approach, p. 6). The whole-body experiences of rhythm lines that are connected to rhythm patterns

are compatible with intellectual maturity resembling the “iconic” phase as proposed by Bruner (1960 & 1966). During the iconic process, preschool children learn to use symbols for rhythm that are not as abstract as the actual music notation, such as rhythm lines representing the duration of the sounds that children have directly experienced previously. This process is also consistent with Chronister’s (1996) theory that children should learn to read what they already have experienced in music. Developing children’s rhythm mastery in ways consistent with children’s intellectual development may therefore be regarded as DAP-friendly.

Pitch Reading

Four types of pitch reading emerged in the present study. The ultimate form of pitch reading is represented by traditional staff notation, including pitches and rhythm values, which for the purposes of the current study will be called “staff notation.” Another type, which will be called “pre-staff-reading notation” encompassed images of note values (quarter- or half-note for instance) that moved upwards or downwards to indicate pitch, but without placement on a staff. Other forms of pitch reading that did not use staff notation, such as keyboard diagrams or moving rhythm lines with pitch levels indicated, are grouped in the “pitch pre-reading system” category. The final type of pitch reading presented was the “exposure to staff notation.” This refers to music notation not intended for the preschool children to read, rather just to see and experience.

Traditional Approach

Pitch Pre-Reading

The most common design of pitch pre-reading in the traditional cases was the use of the big and long keyboard diagram. Generally, in all three traditional cases, the

keyboard diagram was first employed to orient the student to high-low direction, to acquaint them with black-key groups (TA1.TG(A), pp. 6-7; TA2.L(1), pp. 6-9 & pp. 14-15; TA3.A, pp. 6-7), and later for locating the alphabet letters either by individual note or by groups. The art of TA3's keyboard diagram evolved into a sophisticated form that was discussed previously in some of the analysis segments.

Five phases of keyboard diagram use were found from the data analysis. These included (a) Phase I: The standard big and long keyboard diagram (Illustration 27, TA3.A, pp. 6-7); (b) Phase II: Keyboard diagram with color codes in the form of triangles and dashed lines (Illustration 1, TA3.A, pp. 10-11); (c) Phase III: Keyboard diagram with finger numbers inside the colored triangles (Illustration 28, TA3.A, p. 16); (d) Phase IV: Replacement of triangles with alphabet letters on keyboard diagram (Illustration 29, TA3.A, p. 21); and (e) Phase V: No alphabet letters, only note values and finger numbers retained on the keyboard diagram (Illustration 30, TA3.A, p. 26). Repertoire using the pitch pre-reading keyboard diagram were compiled in *Performance Party Book A*, where, TA3's sophisticated keyboard diagram with colored triangles and dashed lines failed to accurately specify what pitch to play and when to play long, short, or even repeated pitches.

Another device of pitch pre-reading in TA3 was the usage of green bars, as discussed with respect to rhythm pre-reading. As noted, the green bar may contain information demanding multi-sensory responses which may not be appropriate for the level of preschool children.

Pre-Staff Reading Notation

With regard to pre-staff reading notation, all traditional cases utilized moving note values with stems (Illustration 6; Illustration 7; & Illustration 31, TA3.A, p. 33). Typically, these moving note values came with up stems and down stems specifying for the right hand and left hand to play, simultaneously demonstrating directions of notes going up and down. The association of stems up and down with right and left hand playing was so emphasized that titles of the song spoke for themselves: “Left Hand Walking” versus “Right Hand Marching” (TA2.L(1), pp. 16-17). In addition, the subsequent statement can also verify the stress placed on distinguishing left from right: “Left hand plays left page. The bears are holding up their left arms. Ask the student to hold up their left arm” (TA1.TG(A), p. 8).

Besides the association of stems and hand playing, both TA1 and TA2 added note names inside note heads (Illustration 32, TA1.L(A), p. 19; Illustration 9). Up to this stage of pitch reading, all three traditional cases retained small-sized keyboard diagrams on the page for the purpose of orientation.

Staff Notation

In the traditional cases, only TA1, the most musically advanced preschool piano method, extended its pitch reading to grand staff notation (Illustration 33, TA1.L(A), p. 43). This is also the place where TA1 discarded the usage of keyboard diagrams.

Exposure to Staff Notation

The pitch reading stage of exposure to staff notation bears great importance in presenting to preschool children what notated music looks like from the beginning. Exposure to this type of notation may enculturate their notational sense in a comfortable

way. Usually, small-sized staff notation for exposure is set in bass clef accompaniment within the lesson book, occasionally in treble clef and grand staff accompaniment, with the exception of the TA2 Discovery Book, which portrayed mostly the grand staff, and even an orchestral score of Beethoven's fifth symphony (TA2.D(1), p. 37).

Whole-Body Approach

Pitch Pre-Reading

As in the traditional approach, the whole-body methods' pitch pre-reading also utilized large and long keyboard diagrams for high-low orientation and introduction of black key groups. Pitch pre-reading in WB2 can be regarded as traditional, since alphabet letters were printed inside the large keyboard diagram. However, the application of the keyboard diagram appeared to emphasize groups of notes rather than individual tones in WB1. Given this pattern focus, WB1 pitch pre-reading soon guided students to become acquainted with moving rhythm lines—the so-called "melody rhythm line" (WB1.TM, p. 31) and to shape the melodic patterns by hands. Evidence revealed that pitch reading pursued the following sequence in WB1: black-key groups, scale a- and descending patterns, finding A, then ABCDEFG, and last exercises on three-note patterns and repeated notes. The keyboard diagram, melody rhythm line, and staff notation coexisted in WB1 with activities such as the Listening Game (Illustration 12), Tune Up (Illustration 22), and Question and Answer (Illustration 34, WB1.Ch, p. 38). The staff notation served as the exposure to staff notation, rather than a pitch reading feature to distress children.

Staff Notation

While no pre-staff reading notation can be located within the whole-body cases, WB2 managed to guide preschool children to reading staff notation with sufficient

preparation of experiences using keyboard diagrams with alphabet letters and rhythm lines. The finest example representing WB2's trademark of "from sound picture to notated picture" (WB2.Ch(1), p. 52) is the transition in repertoire "Engine Number 9" (Illustration 35, WB2.Ch(1), p. 23). The first encounter with "Engine Number 9" appeared when the alphabet letter C was introduced via the keyboard diagram. At that time, WB2 children learn to locate and play C set in eight quarter notes.

The design of this song demanded preschool children to focus only on playing C, and the remaining portion of the song that contains other pitch materials was intended for singing (Illustration 36, WB2.Ch(1), p. 22). This "C playing" experience was then reinforced with line notation reading that made the smooth transfer to the quarter note values (Illustration 13, WB2.Ch(1), p. 24). A complete sound picture of "Engine Number 9" awaited its transformation to the notated picture. Once the staff notation version of "Engine Number 9" (Illustration 37, WB2.Ch(1), p. 53) appeared, the connection was completed. WB2 authors recognized the connection and made their staff notation large and succinct.

Exposure to Staff Notation

On the whole, the exposure to staff notation as mentioned briefly in WB1 permeated both whole-body methods. Often, staff notation was interwoven within the whole-body book in larger size print than normal music notation would take (esp. in WB1, Illustration 38 & 39, WB1.Ch, p. 8 & p. 44). Considering in WB2 where one book encompassed the parent's pages and a supplementary collection of songs (please refer to Illustrations 21 & 36), the exposure to staff notation seemed to be a natural occurrence.

Analysis and Interpretation

Similar to the ways they develop rhythmic reading, young children develop their perception of pitch through various informal musical experiences prior to formal music instruction. Likewise, the growth of pitch perception and understanding is dependent on age and intellectual development (Campbell & Scott-Kassner, 1995 & 2006; Jordan DeCarbo, 1989; White, Dale, & Carlsen, 1990).

Pitch Pre-Reading

Comparisons of pitch pre-reading between the two approaches revealed that large and long keyboard diagrams appear to be the common beginning pitch-reading feature across all cases. This large and long keyboard diagram may differ in size as the method progresses but definitely serves its purpose of orienting aspects of pitch development—high-low direction (Campbell & Scott-Kassner, 1995 & 2006) and locating pitches at the keyboard either by individual note or by groups. Among all, it is interesting to find that WB1 is the only preschool piano method that did not print letter names on the keyboard diagram and successfully used moving rhythm lines to project the melodic sense within the music.

Issues of how TA3 extended the art of the keyboard diagram indicated that TA3's pitch-reading method may have a fundamental flaw beneath the sophisticated usage of the keyboard diagram. As discussed already in the "Confusion in pitch pre-reading" in Chapters V with Peer Checker 1's comments (Chapter V, pp. 230-231), the results of pitch reading will vary from individual to individual and from the player to the author's music. Considering TA3's color-coded triangles and dashed lines as a type of notation, the possible learning result may resemble that of colored rhythm notation investigated by

Rogers (1996) who reported that color-trained students did not scoring significantly higher on regular notation, in spite of their higher affective involvement. Consequently, the use of color in rhythm learning still requires further systematic explorations. The existence of TA3's pitch pre-reading system causes concerns related to the preschool children's formation of pitch reading habits, and may therefore not be regarded as a DAP-friendly feature within the preschool piano method.

Pre-Staff Reading Notation

This feature turns out to be one aspect available only in the traditional methods' pitch reading strategies. The extensive usage of moving note values and the association of note-stem to left or right hand (Illustrations 6, 7, & 31) throughout all traditional cases may generate a cognitive challenge to preschool children. Whether the above-mentioned features and printed note names inside the note heads (Illustration 9 & 32) yield successful learning results is an interesting matter to be investigated. The traditional material of moving note values not only encompasses both rhythm and pitch information, but also coexists with finger numbers. In contrast to WB1's "melody-rhythm line" (WB1.TM, p. 31) involved in listening games and shaping melodic contours, the execution of the traditional moving note material is no other than counting rhythm, chanting finger numbers, and singing words while playing. An awkward scenario similar to the one discussed previously in rhythm reading emerges and points at DIP applications. The emphasis on the association of stem up or down with left or right hand seems to be pointless, since it does not represent the ultimate manner of music reading. Considering that preschool children at the operational stage learn like a sponge, literally absorbing any organized information (Ausubel, 1968) from the teacher master (Uszler, 2003), what

would be the reason to introduce them to incorrect knowledge that will have to be altered later and confuse their intellectual development?

Note names that are printed inside note heads add one extra concern to the already complicated moving note values and makes multi-sensory responses even more of a challenge. In addition, the size of the print at this point is not large enough for still-farsighted preschool children (Bredekamp & Copple, 1997, Bucci & Kapoula, 2005; Yang & Kapoula, 2003) to focus on and read. Illustration 40 showed a song from TA2 (TA2.L, p. 47) with note names printed inside note heads. Deciphering all information as provided may be intellectually and developmentally confusing to preschool children. Peer Checker 1 made an interesting observation regarding the moving notes and note names inside note heads as he said:

> This is difficult to read and difficult to see the differences in the height of each note. I think if they have used different layer of colors from bottom to top as a background panel to help the readers (both teacher and students) easily differentiate and orientate the height of each note, it would be age-appropriate reading experience. I always have to draw some kinds of line(s) to help even older beginners to see the difference in the height of each note. Also, once students are associated with the pattern of upward and downward melody, I believe putting the note name in every single note of the piece creates confusion and could draw student's attention away from reading the note direction to spelling the notes. This might cause a malpractice that creates and even reinforces "Note-speller" instead of educating "music reader." (Peer Checker 1, Verified Data, Comment Alf, TA3. 3-4)

Indeed, looking into the following music notation (Illustration 41, TA2.L(1), p. 30) one may not notice the marginal difference in the height between quarter notes of the first measure and those of the second measure. Frustration may follow. This observation may provide a plausible explanation for the whole-body cases not to include any moving note values as pre-staff reading.

Staff Notation

Of all five cases, only TA1 and WB2 offered pitch reading on the staff at the end of the first book. The comparison between the two individual methods indicated that TA1, with time signature and grand staff reading, represents a more advanced level (Uszler, Gordon, & Smith, 2000) to preschool children than does WB2. The rationale to guide preschool children from the sound picture to the notated picture is consistent with the rule of experience before sign (Bruner, 1960, 1966; Campbell &Scott-Kassner, 1995 & 2006; Collins, 1985; Theories of Dalcroze, Orff, Kodály, & Suzuki; Hart, Burts, & Charlesworth, 1997; Kenney, 1997; Kostelink, Soderman, & Whiren, 1993; Jordan-DeCarbo & Nelson, 2002; Neelly, 2001; McDonald & Simons, 1989; Piaget, 1952; Pohlmann, 1994/95; Sims, 1990 & 1993; Zimmerman, 1971), and is so exceptionally well executed in WB2 that the transition from pre-reading to staff reading pursues a transparent path for all its users. Only in this manner can pitch reading be DAP.

Exposure to Staff Reading Notation

This feature was encountered in all five cases. While in all the traditional cases, the exposure was usually in the form of accompaniments and in a staff notation of fair size, both whole-body cases offered an all-music-exposure. The best example of staff-notation exposure can be found in WB1 (Illustration 39). The exposure to staff notation demonstrates how music can be notated and may have an influence on preschool children. Despite the fate of being a correlated book, the TA2 Discovery Book encompassed a variety of staff notation from song scores to symphony scores that gave preschool children a remarkable image of sound pictures, and should be regarded as the only DAP book from that series.

Repertoire Collection

In this category, data investigation will focus on the following two subcategories: (a) tunes used and (b) accompaniment and style. The term "tune" was chosen for its universal meaning that can represent for any of the following repertoires: traditional folk songs with original text, phrases of these songs or other familiar classic tunes partially included, tunes of songs set with different text, simplified versions of familiar classic music, and composed songs by method writers to suit specific teaching purpose. These tunes from the piano methods were intended for playing and served as the main data source for this segment of discussion. Styles of the repertoire collection and its accompaniment will be discussed below.

Traditional Approach

Tunes Used

The use of familiar tunes was limited in the traditional cases. A simple number count revealed that TA2 once partially utilized "E-I-E-I-O" of "Old McDonald Had A Farm" (TA2.L(1), pp. 22-23), TA3 contained one familiar song, "Bingo" (TA3.A, pp. 42-43), and TA1 included two familiar tunes ("Mary Has A Little Lamb" & an old English tune) with altered titles (TA1.L(A), pp. 12-13 & p. 34). The most familiar tunes were not included in the TA2 lesson book, but collected in the Discovery Book of the series. With "If You're Happy and You Know It," "Hickory, Dickory, Dock," "Frère Jacques," and many more, the use of familiar tunes was evident in the TA2's Discovery Book.

In contrast to the usage of limited familiar songs, composed songs by the method writers occupied most of the traditional methods' repertoire collection, in order to synchronize concept introduction and to develop finger dexterity. Composed music

served the purposes of teaching, learning theory, and playing well. The key of these composed tunes was often G-flat-major for the black-key groups and in C-major or a-minor for the white-key groups. While TA3's authors reminded teachers to always teach the melody and words to the child first, the word "melody" was not stated in the TA1 and TA2 lessons, but briefly mentioned as drawing directional lines "from note to note" (TA1.TG(A), p. 34) in order to create a "map" of the song (p. 38).

Accompaniment and Style

Given the limited style of the traditional music, the corresponding style of accompaniment can be expected. Typically, the traditional methods' accompaniments remained one-, two-voice, or two staff systems set in simple, non-intrusive walking bass style, contrapuntal to the student's part (mostly in TA3, for instance, Illustration 42.1, TA3.A, p. 33) and with occasional passing notes (for instance Illustration 42.2, TA1.L(A), p. 23). The sonorities were major and minor keys with classical sound and uniform style. However, the arranger of TA2's accompaniments took more liberties in keys and styles, and TA2's Discovery Book stands out from the others with respect to the accompaniments.

Whole-Body Approach

Tunes Used

Familiar tunes represented the essence of the whole-body repertoire collection. Not only were these tunes set in various keys, they were also interspersed with several composed tunes that WB2 authors designed to coordinate with concepts, and that WB1 authors used primarily to introduce tonal systems such as pentatone, whole-tone, major, and minor, for wider aural exposure. The focus on melody was evident in both methods,

as WB1 authors fostered a sense of melodic contour via melody-rhythm lines, and WB2 authors printed the melody of songs without accompaniment throughout the book.

Accompaniment and Style

The issue of the whole-body accompaniment is a subject matter worthy of discussion. For their collection of familiar and composed songs, WB1authors utilized only ostinato patterns as the accompaniment throughout the entire book. The ostinato patterns can be played by the teacher or the student with both hands at the piano, or on other instruments. The end result of this type of ensemble music making leads to a successful experience for most preschool children. The variety of styles of the whole-body music is mainly produced through the rhythm patterns and tonal organization.

In WB2, authors generally used one single voice or traditional chord-style to accompany the children's part. This decision may have been made for easier parent-child ensemble playing at home and for not overwhelming both the parent's and the child's aural capacities.

In spite of the simple and non-intrusive nature, the arrangement of WB2 accompaniments reflected a variety of styles, such as classical, jazz, waltz, march, and contemporary (Illustration 43, WB2.Ch(1), p. 20, p. 24, p. 34, p. 36, & p. 46, show a collection of styles in accompaniment). Notably, all supplementary song collections are printed without the accompaniment, based on the rationale: "Although you may want to add piano accompaniment at times, it is generally best to sing the songs unaccompanied, with the children matching your voice rather than the piano" (WB2.TM(1), p. 18).

Analysis and Interpretation

Tunes Used

The comparison between the two trends of repertoire collections revealed that the whole-body approach recognizes the value of songs familiar to children's everyday life more so than does the traditional approach. Similar observations can be located in Peer Checker 1's comment regarding one of the traditional method's repertoire collection:

> I believe that more folk tunes and familiar nursery songs should be helpful to young beginners. Using part of a familiar song as a pattern to play on a piano might create more meaningful learning experience to young learners than learning an uninteresting song that has nothing connected to their previous knowledge or attention. (Peer Checker 1, Verified Data, Comment TA1, p. 4)

As a result, the usage of familiar songs in the whole-body preschool piano method is consistent with the teaching theory of the mother-tongue approach (Choksy, Abramson, Gillespie, Woods, & York, 2001; Theories of Kodály & Suzuki), with the folk songs suitable as an early childhood learning vehicle for language and communication development, and the belief in taking cues from what children are doing musically in their daily life (Andress, 1992; Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; McDonald, 1979; McDonald & Simons, 1989; Rennick, 2000; Sanders, 1994). This idea of "starting where the child developmentally and musically stands" is consistent with the DAP guidelines to create "learning experiences with materials and people relevant to children's own life experiences and that promote their interest, engagement in learning, and conceptual development" (Bredekamp & Copple, 1997, p. 126; seconded by Peer Checker 2's observation, Peer Checker 2, Verified Data, All Comment/WB2) and translates into yet another valuable preschool piano DAP element.

In the analysis of composed repertoire, “the nature and quality of the music the student plays and hears” (Uszler, Gordon, & Smith, 2000, p. 21) and concerns related to the tastefulness and appeal level to children (Bastien, 1995) served as the main criteria for evaluation. In regards to music written to serve teaching purposes and theory, Peer Checker 1 specified that traditional method composed songs seemed to “overshadow the beauty of the music and the flow of the melody line” (Peer Checker 1, Verified Data, Comment TA3, p. 4). The use of unappealing composed melodies cast in limited key arrangements and styles fails to offer quality music; music that should not only be of the highest artistic value (Teaching theories of Dalcroze, Orff, Kodály, & Suzuki) but also be “worthwhile, motivating, and important in order to provide a general, fundamental base” involving singing, movement, listening, improvising, performing, and reading music (Gordon, n.d., in MENC website document, p. 3). Unlike the traditional methods’ composed songs, the whole-body method composed songs utilized a variety of keys set in simple and compound meters. While WB2 reflected a music collection that was “appealing” in melodies aligned with “well-chosen lyric” (Peer Checker 1, Verified Data, Comment WB2, p. 4), WB1 offered a composed repertoire filled with various sonorities to engage children aurally, visually, physically, and cognitively.

Given that the melody represents the most appealing element in music and also the first element of pitch development to be recognized (Campbell & Scott-Kassner, 1995 & 2006), it seems to be a puzzle as to why the word “melody” has not been mentioned more frequently in the traditional approach. Chances are that novice teachers may concentrate on working with moving the correct fingers and counting the correct note values and names and neglects the importance of listening to the sound of the melody.

Consequently, “association of lines and spaces of the staff system with the keyboard” and “note values with finger movements,” not with aural responses (Moorehead & Pond, 1977, p. 67), can misguide students to associate playing the piano with the technicalities and mistake a musical endeavor for an intellectual deciphering task (Grunow, 1999).

Accompaniment and Style

Both whole-body cases utilized non-intrusive devices of accompaniment such as WB1’s ostinato patterns and WB2’s one-voice or chord accompaniment to enhance melodic experiences in music making. This arrangement offered preschool children the necessary opportunity to focus on melody with ease while ensemble playing, acknowledged their learning capacity within the preoperational level, and also encouraged the initial step of the “decentration” process among preschool children (Kamii & DeVries, 1980; McDonald & Simons, 1989). Compared to the arrangement of whole-body accompaniments, the two-voice equivalent of the traditional approach seemed to “overshadow the melody” and “disturb the rhythmic differences” between the melody and the accompaniment should the student not be “a strong melody player” (Peer Checker 1, Verified Data, Comment TA1, p. 4). The remark by Peer Checker 1 implies a limitation in cognitive learning and vertical pitch development among preschool children (Campbell & Scott-Kassner, 1995 & 2006). Due to effects of egocentrism and centration (Brainerd, 1978; Crowther, Durkin, Shire, & Hargreaves, 1985; Hargreaves, 1986; Hargreave, & Zimmerman, 1992; Pflederer, 1964 & 1966; Piaget, 1946, 1952, & 1968;Kamii & DeVries, 1980; McDonald & Simons, 1989; Sims, 1990, 1991, & 1995a, 2005), attending to more than one task (listening, counting, and playing with the correct

fingerings) in a vertical tonal environment (e.g., harmony) presents a developmentally inappropriate challenge to preschool children.

With regard to style as projected by the music collections, findings from the traditional cases indicated a uniform style in classical sounds such as contrapuntal accompaniment in major or minor settings (TA1 and TA3 mostly) with occasional passing tone effects (TA1). On the contrary, the whole-body cases offered a variety of characters in music (e.g., jazz, march, waltz, etc.) and a palette of tonal organization such as pentatone and whole-tone scales. The style and character of a music collection can contribute to the affective development of preschool children. Research has shown that children are more tolerant of unfamiliar or unconventional types of music than adults (Gembris, 2002; LeBlanc, 1981; Scott, 1989; Scott-Kassner, 1993) and that "increased knowledge and understanding lead to increased appreciation and interest" (Zimmerman, 1971, p. 21).

The period of the preschool years is critical to the affective development of children. Repeated exposure to a variety of musical styles as encountered in the whole-body approach, offer the possibility of developing music preferences in early childhood that in turn may facilitates the shaping of musical taste in preschool children's affective development (Droe, 2005; Peery & Peery, 1987; Zimmerman, 1971).

Creativity

The establishment of the creativit*y* category in data presentation and analysis is based on two factors. It is a result of its strong appearance within the whole-body approach, as well as its representation in the literature review of early childhood music

education. Evidence from both approaches fell into two levels of creativity: (a) exploration and discovery of sound and (b) improvisation.

Traditional Approach

No adequate facts were located in the traditional cases to support the creative level of exploration and discovery of sound. Therefore, the discussion of traditional creativity will start with the other creative level: improvisation.

Improvisation

Of all three traditional cases, TA3's lesson book mentioned once to "have students make up their own tunes to nursery rhymes they know using only the three black keys" (TA3.A, p. 44). In the correlated books, however, TA2 authors proclaimed that their Discovery Book was "designed to develop creativity in the young child" (TA2.TH(1), p. 20). The content of the TA2 Discovery Book in general encompassed game-like drills, listening activities, and one picture per activity for discussion, coloring, or preparation for the activity. The most creative features of the Discovery Book revealed singing familiar folk songs with additional lyrics "made up" by parents and students (TA2.TH(1), p. 20), as well as making up "new motions" for composed lyrics (TA2.TH(1), p. 24).

Whole-Body Approach

Exploration and Discovery of Sound

The whole-body approach recognized the value of creativity within music study. The following statement by WB1 authors explained the significance of including creative thinking in piano lessons:

> In our approach, creativity is the very essence – the core of the learning experience. Students will have endless fun with "Play-A-Story," and no two

> stories need to be the same. Likewise, their response in "Question and Answer" activities will provide a never-ending flow of individualistic reactions. As they build melodic bits of their own, they will be developing the understanding and techniques for coping with the melodic and rhythmic patterns of others. In experimenting with various combinations of tones at the piano, they will be helped to discover and understand some of the basic harmonic structures of music." (WB1.TM, pp. 8-9)

Improvisation

In addition to the above-mentioned creative moments, WB1 not only encouraged the teacher to improvise melodies to learned music frequently, but also allowed students to create their own individual melodic and rhythmic ideas. Two excerpts provide support for this observation:

> During the next few lessons, you can use the same words with new melodic ideas to make up other "elephant marches" as they swing and sway around the room. Or change the words and create still other songs with children." (WB1.TM, p. 21)

> Students should be encouraged to make up "Listening Games" (and later "Question and Answer") each day, both in class and at home. The development of aural perception facilitates both improvisational and reading skills. Notice that within this three note pattern there are many possibilities for change. (WB1.TM, p. 44)

Similar creative suggestions can be found in WB2 combined with locating the notes C, D, and E on the keyboard:

> Practice finding C D and E on the keyboard. "If You're Happy and You know It" is just one of many activities that can be done to assure that each child is secure in the location of C D and E. (WB2.TM(1), p. 29)

Indeed, if set in C major, the ending pitch of each phrase of this familiar song is perfectly matched to the lyrics, "If you're happy and you know it play a D" or "play an E" (Illustration 44, WB2.Ch(1), p. 31). In this manner, this activity offered opportunities to engage humor and creativity in word alterations with both cognitive and physical execution.

Among all the creative moments in the whole-body approach, the height of creative thinking was denoted via "Play-A-Story" in WB1 (for instance, Illustration 45, WB1.Ch, p. 17) and "Play-A-Picture" in WB2 (for instance, Illustration 46, WB2.Ch(1), p. 58). Each WB2 picture is dedicated with a designated theme such as the farm and the parade (WB2.Ch, p. 18 & p. 42, for instance) so that the teacher will have to spend time and effort in guiding the students through this activity. Nonetheless, in contrast to WB2's five "Play-A-Picture" without specific instructions for procedure, WB1 offered detailed information about how to execute "Play-A-Story." Ideas for creating a WB1 story with a variety of sounds include:

> There are many possibilities for stories in sound, as you have discovered already. This type of activity affords unlimited opportunities for highly individualized self-expression. Most important, there is no "right or wrong" answer, but simply whatever the child wants to express. One way to introduce "Play-A-Story" is this:
>
> 1. With your index finger, right hand, play single notes at a walking tempo in the key of G (any note from G-D) – but key and exact notes are not important.
> 2. After a few seconds, play a sudden tone cluster with your left hand, then rapid notes in the right hand, running back to the home note (G).
>
> [music notation].
>
> As various members of the class to tell what they think the story is about. One interpretation might be that a boy was walking along, a dog jumped out and scared him, then the boy ran home. There are many other interpretations and possibilities. Try to get several responses before continuing.
>
> The teacher should make up one or two other brief stories in advance, just for the purpose of good illustration. One possibility would be to show how to portray two or more characters in a story such as:
>
> 1. Play a similar random pattern in the right hand then combine it with a steady beat in the left hand.
> 2. This finally fades away or comes to a definite halt. The story is that a child is going to meet his father. The two join hands and take a walk (or walk home together).
>
> [music notation]
>
> It is important that you keep your illustration short and insist that the children so the same. Long fantasy type stories fragment the attention and interest of others in the class. A few minutes of this activity at each lesson over the next six to right weeks can provide rich experiences in bringing forth creative ideas. (WB1.TM, TA3. 41-42)

Analysis and Interpretation

The extent to which creativity is fostered in music study represents the material worthy of investigation. Upon revisiting the discussion of creative development in Chapter II, the first stage found was exploration and discovery of sounds (Campbell & Scott-Kassner, 1995 & 2006; Gowan, Demos, & Torrance, 1967; McDonald & Simons, 1989; Sims, 1993), followed by improvisation as the second stage (Campbell & Scott-Kassner, 1995 & 2006).

Exploration and Discovery of Sound

Only "Play-A-Story" and "Play-A-Picture" of the whole-body approach provided well-matched opportunities for exploration and discovery of sounds and development of an ease and flexibility for young children to naturally manipulate the language of music (Campbell & Scott-Kassner, 1995 & 2006, Pohlmann, 1994/95). During the creative process, opportunities for children's exploration and discovery of sounds coincides with the learning theories of Bruner and Piaget, and the musical manipulation of an improvisatory nature becomes the means to creative development and innate musicality (Moorehead and Pond, 1977). In the course of free exploration, preschool children absorb an inventory of sound possibilities and techniques that later serve as the building blocks for satisfying improvisatory decisions (Cox, 1966).

Improvisation

The hierarchy of creative development is a sophisticated matter. An opportunity to change words or lyrics to a song may be regarded as a creative initiative; however, it constructs a linguistic creative moment (Reimer, 1989; Welsbacher, 1992) instead of a musical one, and basically fosters the children's development of language and

communication as opposed to particular musical growth. As a matter of fact, the same principle of altering one element at one time (Campbell and Scott-Kassner, 1995 & 2006; Kodály, 1974; Welsbacher, 1992) can be applied to music creativity. The most frequently applied improvisational technique uses four-beat rhythm or pitch patterns for echo clapping or singing. After echo imitation, new rhythm and pitch materials can follow or be created from the internalized rhythm and pitch patterns. Consequently, evidence such as making up tunes to nursery rhymes (in TA3), improvising a new melody to the same words or lyrics (in TA2), and adding new motions to composed lyrics (also in TA2) all constitute creditable features compatible with music creativity. This level of creative responses should be regarded as an early creative stage serving as the initial ingredient for creative musical thinking (Sims, 1993).

Nevertheless, creative thinking involves more than altering "one element at one time" (Welsbacher, 1992, p. 98). Creative thinking is not only generative (Achilles, 1992), but also a process in which "an individual relates things in his experience which were previously unrelated, and … produces something that is new and satisfying to him" (Cox, 1966). This statement defines the advanced level of creative development that seems to resemble creative activities as found especially in WB1 of the whole-body approach. Evidence demonstrated that WB1 children will learn to imitate and manipulate both melodic and rhythmic bits from Listening Game and Question and Answer. Provided with frequent, or "daily" (Pace, 1999), improvisatory opportunities, preschool children will connect unrelated bits (Burton, 1989) with newly explored sounds in order to generate a satisfying sound product for "Play-A-Story." In contrast to the traditional cases that did not offer opportunities for advanced creative development to preschool children,

creative activities found in WB2 suggest that the authors value the importance of nurturing advanced levels of creative thinking.

A possible and reasonable rationale for not offering any specific instructional procedures may be located within WB1's statement that creativity and imagination spark less and less often as children become more and more educated (WB1.TM, p. 9). The same statement is also evident in Peer Checker 1's observation on WB2's "Play-A-Picture":

> Yes, I agree that they did not explain about how to do it. However, another thought I want to share is, many literatures stated that a child's creativity is gradually minimized when he/she is guided or governed by social norms or rules, which usually occurs when the child enters school system. So I guess appropriate guidelines should be provided for creative activities, but not to the level of creating barrier for personal creative ability. These authors might want to allow total freedom to foster individual creativity. Again, it might be appropriate for one child, but not the others (Peer Checker 1, Verified Data, Comment WB2, p. 4)

Both whole-body cases allow time and effort to foster the creative expressions of preschool children. This whole-body feature is consistent with Pace's (1999) belief in the teacher serving as the facilitator to creative thinking and providing continuous opportunities and encouragement. Although creativity has been discussed in connection with harmonization in piano pedagogical writings, the creative demand of preschool children should not wait for their cognitive maturity. Young children should be allowed to maintain natural music creations of "aesthetic expressions" (Bredekamp & Copple, 1997, p. 132) before their abilities of reading or writing music have fully developed, and to express their individuality through any musical medium (McDonald & Simons, 1989). This can be DAP if the preschool piano method follows Bruner's (1966) belief that any subject can be taught to any child of any age by tailoring the curriculum according to the child's developmental stage.

Opening and Closing Songs for Lessons

Three of the five preschool piano method cases offered opening and closing songs for lessons. Of these three cases, one represented the traditional approach and two the whole-body approach.

Traditional Approach

The Discovery Book of TA2 contained both opening and closing songs for the lesson. Evidence supporting this feature could not be found in the other traditional lesson books. Opening and closing songs included were the "Hello Song (It's Music Time Today)" (TA2.D(1), pp. 6-7), the "Goodbye Song (It's Time To Say Goodbye)" (TA2.D(1), p. 48), and the authors' specification to sing both songs in each lesson accordingly. The composition of "Hello Song" encompassed various tempo changes and action song characteristics that represent an attractive opening overture cast in the miniature size. The lyrics basically announced the beginning of the music time and envisioned a fun time with both Beethoven Bear and Mozart Mouse. A written rationale for singing these types of songs offered by TA2 indicated to "create a happy musical atmosphere for the lesson" (TA2.TH(1), p. 24).

Whole-Body Approach

Both whole-body cases encouraged the use of opening and closing songs. By altering words, WB1 authors suggested using a familiar song such as the tune of "Where Is Thumbkin?" as a "theme song" to "help children focus their attention" (WB1.TM, p. 22) for the beginning of music lesson and ease the transition to the next one. Thus, the lyrics may be changed to "Hello Ellen [or other participant's name], Hello Ellen, How are you? How are you? Very well I thank you, we are glad to see you. Who is next? Who is

next?" (WB1.TM, p. 22). Interestingly, WB1 also proposed using different words to the same tune at the end of music lesson:

> The "Hello Song" may say hello to three or four of the children or may go around to all of them if there is time. It may be that you will want to use the "Hello Song" again as a "Goodbye Song" at the end of and use the names of any members of the group not greeted at the beginning. (WB1.TM, p. 30)

Just as the opening song signaled the beginning of the class, the goodbye song offered preschool children "a sense of accomplishment and a real enthusiasm for music" (WB1.TM, p. 33) to carry home.

In a slightly different style, WB2 authors composed a "Hello Song" and "Goodbye Song" based on the belief that this feature will give the class "a comfortable feeling of order and security" (WB2.TM(1), p. 18). The tonal organization of both songs utilized "sol-mi" playground chant pitches that are considered by WB2 authors as an easy match for the uncertain singers. The lyrics, however, did not allow name replacement for greeting each student.

Analysis and Interpretation

The use of opening and closing songs for lesson aligns well with DAP considerations to "support children's beginning friendships" and to "provide opportunities for children to learn from each other as well as adults" (Bredekamp & Copple, 1997, p. 123). Beyond getting proper attention from the children at the beginning of the class (Gagné, 1977), the use of opening and closing songs settles the class down for a formal learning session and conveys "a positive feeling toward learning" (Bredekamp & Copple, 1997, p. 124), a sense of belonging, order, and security that has been reported by educators of various fields such as music education (MENC, n.d.; Pincushion Community News, 2005), physical education (Satchwell, 1994), teaching

language (Bertrand, n.d.), teaching English as second language (Desorcy, 2005), and music therapy (Blue Cap New Music Therapy Program, n.d.; Lagorce, 2003; Llanos-Butler, 2006).

Beyond establishing a sense of order and security, the function of a hello song can also extend to decenter the egocentrism of preschool children (Kamii & DeVries, 1980; McDonald & Simons, 1989), should the song allow name replacement. The opening and closing songs as offered in WB1 correspond with the idea of decentration in that WB1 greets each student by name and simultaneously fosters children's development of language and communication (Bredekamp & Copple, 1997, p. 127).

In this manner, the opening song brings attention to all class members and highlights each participant in the course of the song, during which children will notice who the others are by way of their responses. The above scenario refreshed the memory of Peer Checker 1 in observing his own advisor teaching music to the early childhood classes and appraised this feature with the comment: "Nice idea to apply. It creates a cue for young learners" (Peer Checker 1, Verified Data, Comment WB1, p. 4). This observation of Peer Checker 1 coincided with Gagné's (1977) theory to make use of getting students' attention at the beginning of class instruction.

Based on the previous analysis, the inclusion of a hello and goodbye song within the preschool piano method represents a chance to promote self-confidence in children (Leeke, 1985; Peery & Peery, 1987), and is consistent with the guidelines of DAP that advocate creating a caring community of learners and teaching to enhance development and learning for the preschool children (Bredekamp & Copple, 1997).

SUMMARY

The chart below summarizes the material in this chapter. Please note that the symbol ☺ represents DAP-friendly applications and features.

TABLE 4: *Summary Chart—Musical Development of the Methods*

Vocal Technique

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
▪ Singing is used to reinforce rhythmic sense in combination with counting rhythm values and chanting finger numbers while playing (all three). ☺ Distinguishing singing voice from speaking voice in TA2.	☺ Singing is encouraged throughout the method. ☺ Distinguishing singing voice from speaking voice in WB2. ☺ Singing voice developed through "sol-mi" playground songs in WB2.

Piano Technique

Knowledge of the Body in Connection with Instrument

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Sitting Posture	
☺ Correct sitting posture with visual aid. ☺ Standing posture suggested for small children in TA3. ▪ Although pertinent to piano study, sitting posture occupying the major portion of lesson time may not suit the need of preschool children.	☺ Correct sitting posture with visual aid in WB2. ☺ Sitting posture occupies only a small portion of lesson time. ☺ Although sitting posture excluded, small children play while standing to feel the balance in WB1.
Gross- & Fine-Motor Development	
☺ Keyboard choreography and playing in the air. ▪ Emphasis on Loose Fist Technique, First Joint Technique (TA3), rounded hand shapes with curved fingers (TA1 & TA2). ▪ Emphasis on the usage of fingers 2, 3, and 4 in combination with black key groups. ☺ Use of large limb movements like	☺ Extensive use of large limb movements like gliding, marching, swaying, stretching, bending, and walking. ☺ Preparations for strengthening fine hand muscles through Whole Hand Position, Closed Hand Position, and finger play and action songs in WB2. ☺ Belief in natural growth that will gradually strengthen finger muscles and gain necessary control in WB1.

dance only in TA2 Discovery Book.	☺ Music played mostly by single braced finger of one hand (WB2) or alternatively between both hands (WB1).
Eye-Hand Coordination	
▪ Although pertinent to piano study, keeping eyes on the music while playing is strenuous for preschool children within their preoperational stage. ▪ May result in note-spelling instead of music reading.	☺ Establishment of versatile experiences such as singing, moving, listening, and playing by rote before keeping eyes on the music. ☺ Emphasis on the contour of melody to cultivate adequate reading habit in WB1.

Piano Technique

Knowledge of the Instrument through the Body

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Touch	
☺ Emphasis on braced finger technique (TA3's First Joint Technique) resulting in nonlegato touch. ▪ Introduction of legato touch via fingers 2, 3, and 4 without adequate physical and psychological preparation.	☺ Emphasis on braced finger technique (WB2's Closed Hand Position) resulting in nonlegato touch. ☺ "Pull" down the key as touch description in WB1.
Tone Production	
☺ Only TA3 provided relevant evidence regarding the relationship between speed of hammer stroke and the tone production.	▪ No relevant evidence regarding the relationship between speed of hammer stroke and the tone production.
Listening Skill	
☺ Emphasized in combination to evaluate tone production in TA1 and TA3. ☺ Mental representation or verbal mediation used in listening tasks. ▪ Listening skill only used to evaluate tone production. (TA1 & TA3). ▪ Described as the backbone of musical intelligence in TA2, but not adequately reinforced.	☺ Emphasized both in evaluation of tone production and overall music making. ☺ Emphasized throughout the method and interwoven in lesson plans: Listening Game (WB1), Question and Answer (WB1), Write and Listen (WB2), and Listening and Moving Activities (WB2).

Rhythm Reading

	TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Issues	*Rhythm Pre-Reading*	
General	▪ No relevant evidence. ▪ Green bars in TA3 are in effect pitch pre-reading system.	☺ Emphasis on fostering the sense of steady beat. ☺ Horizontal lines representing long-short sounds: Rhythm Lines (WB1) and Rhythm Line Notation (WB2).
Issues	*Rhythm Values*	
Rhythm Values	▪ TA1: all basic rhythm values, bar lines, and time signature. ▪ TA2: all basic rhythm values and related rests, bar lines, and measure. ▪ TA3: all possible rhythm values listed on the same page; even those not included in repertoire, e.g., eighth notes.	☺ No formal introduction of rhythm values in WB1. ☺ Alignment of rhythm lines and rhythm values provided in the method.
Rhythm Exercise	▪ Exercise in combination with counting and clapping rhythm values, chanting finger numbers, and singing words of the song while playing. ☺ Use of rhythm patterns.	☺ Exercise through isolated rhythm activity with rhythm chart offered within the method book. ☺ Use of rhythm patterns.

Pitch Reading

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Pitch Pre-Reading	
☺ Large and long keyboard diagram, later inserted with alphabet letters. ▪ Green bars in TA3, not reinforced adequately. ▪ TA3: unsuccessful design of keyboard diagram with color-triangle codes	☺ Large and long keyboard diagram, may be inserted with alphabet letters (WB2). ☺ Moving rhythm lines with pitch information: Melody Rhythm Lines (WB1).
Pre-Staff Reading Notation	
▪ Moving note values. ▪ Association of up-down stems with left-right hands. ▪ Small-sized keyboard diagram for key orientation at the piano. ▪ Note names inside note heads in TA1	☺ No evidence.

and TA2.	
Staff Notation	
▪ TA1: grand staff system.	☺ WB2: sound picture transforms into notated picture.
Exposure to Staff Notation	
▪ Two-voice contrapuntal system in accompaniment mostly, may distract due to centration effect of preoperational development. ☺ TA2: song score and symphony score in Discovery Book.	☺ Single-voice & chord accompaniment in WB2. ☺ Exposure in large print with various key arrangement and time signature. ☺ Supplementary melodies without accompaniment acknowledging young children's need in centration.

Repertoire Collection

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Tunes Used	
▪ Only one or two familiar songs used. ▪ Mostly composed songs serving the teaching purpose and theory learning. ☺ TA2: more familiar songs in Discovery Book.	☺ Primarily familiar songs in repertoire collection. ☺ Some composed songs serving teaching purpose and theory learning.
Accompaniment & Style	
▪ Contrapuntal, classical sounding, occasional passing tone effect, uniform style. ▪ Major or minor sonority in principle. ▪ Lower level of melodic appeal in music. ☺ TA2: more key arrangement and style reflected in the Discovery Book.	☺ Single voice accompaniment in various recognizable styles like march, jazz, waltz, and contemporary (WB2). ☺ Exposure to various sonorities such as pentatone, whole-tone, major and minor (WB1). ☺ Higher level of melodic appeal in music.

Creativity

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Exploration & Discovery of Sound	
▪ No evidence.	☺ In "Play-A-Picture" (WB2) and "Play-A-Story" (WB1).
Improvisation	
☺ TA3: new tunes to known nursery rhymes. ☺ TA2: new melody to same words, or new motions to composed lyrics.	☺ Essence of WB1 method: teacher should improvise frequently and students create listening materials. ☺ WB1: creative preparation through

▪ No procedure offered for creative experience.	Listening Game and Questions and Answer. Improvised answers encouraged. ☺ WB1: detailed information for "Play-A-Story." ☺ WB2: no instruction but allowing time and effort for "Play-A-Picture."

Opening and Closing Songs for Lessons

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Opening and Closing Songs for Lesson	
▪ Feature not included in the lesson books, but ☺ Included in TA2 Discovery Book to create a happy atmosphere for the lesson.	☺ Included in both method for sense of order, security, and accomplishment. ☺ Decentration against egocentrism in WB1 with possibility for name replacement.

On the whole, the musical development covered in preschool piano method books not only encompasses all domains of development such as physical, intellectual, and social-emotional corresponding with DAP principles and related research findings, but also verifies the existence of a unique creative development that is achievable within the capacity of preschool piano methods.

Nevertheless, the data indicated a collision between the tradition of piano pedagogy and the principle of early childhood music education according to the DAP standards. Similar conflicts still remained in the comments of the two Peer Checkers. While Peer Checker 1, who has more experience in early childhood education, condemned the series of TA2 as "the worst method" (Peer Checker 1, Verified Data, Comment TA2, p. 3) out of the five that he had evaluated, Peer Checker 2 praised TA2 for its "scholastic" (Peer Checker 2, Verified Data, All Comments/TA2, p. 5) quality

based on his piano teaching experiences. These two Peer Checkers represented the two fields of related professions and the amount of experience in piano pedagogy and music education definitely influenced their viewpoints.

Many piano pertinent features and traditions turn out to be DIP when dealing with piano beginners of preschool age. Given this, it is difficult to not suspect that the possibility of *miseducation* (Elkind, 1987)—neglecting children's developmental characteristics in the traditional preschool piano method, and the imposition of the next grade curriculum (Bredekamp & Copple, 1997) or a watered down curriculum (Katz, 1988) —may persist.

CHAPTER VII

NON-MUSICAL ASPECTS OF THE METHODS

The purpose of the current study was to identify features that can provide a basis for determining the extent to which preschool piano method books are compatible with the principles of Developmentally Appropriate Practice (Bredekamp & Copple, 1997) and related research findings. The emergence of the "non-musical aspects" theme is based primarily on analysis of non-musically related characteristics. During the process of data collection, illustrations (graphic presentation), page layout, and the way that completion of the book was handled gradually gained interest and attention as characteristics worthy of study. Interestingly, characteristics of these issues were found to differ according to the approach to which the text belonged. Evidence supporting this notion will be presented in (a) illustration and page layout and (b) the format of book completion.

Illustration and Page Layout

Traditional Approach

All three traditional cases utilized a full palette of colors. While utilizing a scheme of pastel colors, the graphic presentation of TA3 appeared more picturesque than that of TA1's and TA2's. The reason for this impression may lie in the fact that TA3 outlined the illustrations with thick dark grey lines (Illustration 27), whereas TA1 and TA2 shaped graphics with thin and soft black (Illustration 8) and grey lines (Illustration 9). In addition, the illustration size in TA3's graphics stood out for their magnitude in comparison to the keyboard diagram (Illustration 1 & 27), which I personally found to be overwhelming.

Compared to TA3, the size of TA1's and TA2's illustrations is smaller and may be more acceptable within the norm of graphic presentation within a book. Beyond the issues of color and size, the message beneath the illustration usually depicted the scenario according to the lyrics of the song on the page, or corresponding to the concept being taught. In TA2, the graphic presentation centered on the discovery and activities of Beethoven Bear and Mozart Mouse and their friends. All of these characters could be held by a child in their plush animal forms, which may make learning more playful, fun, and effective.

In regard to the page layout, the traditional methods used two different designs. The first design was encountered only in TA3, and is termed in this study as the "Center and Around Division." This term depicts how the graphic presentation is arranged in relation to the main course content. As displayed in the previous discussion (Illustrations 1 & 27), the keyboard diagram is quasi-circled by the huge graphic presentation. This page layout encompassed multiple forms of information such as the keyboard diagram, color codes of the pitch pre-reading system, and big, vivid illustrations, of which Peer Checker 2 subsequently supported my observation: "There are so many pictures, so it will weaken the learning of music." (Peer Checker 2, Verified Data, All Comment/TA3, p. 4). Towards the end of the book, layout became complicated due to task boxes containing "everyday practice instructions" (TA3.A, p. 34) and accompaniment notation (Illustration 47) printed alongside the small-sized keyboard diagram, graphic presentation, and the pre-staff notation.

The information-packed page layout was even more complicated in TA1 and TA2. Termed in the current study as "Multi-Division," the layout designs of both TA1 and TA2

have much in common. In a five-to seven-division layout, one TA1 page typically encompassed an eye-catching concept box, the title of the song, steps for teaching or practice, small keyboard diagram for orientation, illustration, small-sized pre-reading system, and/or music notation for exposure or accompaniment (Illustration 6).

Retaining the same elements, TA2's page layout can extend up to eight divisions (Illustration 7) where the concept box is transformed into the form of a "magic" book, and in addition including CD narration, CD/MIDI-correlated numbers, and left/right-hand symbols. The authors of TA2 seemed to notice the disadvantages of so much on the page for music reading and playing as they acknowledged: "If students have trouble focusing their eyes on the music in the student part, ask them to circle or highlight the student piano part. This will draw their attention to the music that they should be playing" (TA2.TH(1), p. 12). Given the great amount of text contained within the TA2 page layout, it is clear why both Peer Checkers seconded my remark that: "the layout is packed with information, mostly, texts" (Refined Data T&D: Traditional Approach, p. 11).

Whole-Body Approach

The graphic presentation of the whole-body cases is simpler, designed to provide space for children to color. While WB1 used dual-tone schemes such as one pastel color versus none (Illustration 48, WB1.Ch, p. 3 for example), WB2 left the children's book black and white. The rationale for this "uncolorful" decision was provided by the authors:

> You will notice that, while the book is in color, every page has plenty of places for the child to add his one coloring ideas. One word of caution – see if you can confine his coloring enthusiasm to a few pages at a time! (TA2.TM, p. 21)

And:

> Since most preschoolers cannot read the titles, they identify the songs by the picture. Since most preschoolers love to color pictures, you may wish to reward the student for playing a song well by allowing him to color the picture at home after you have checked it. This helps the student who does not relate to page numbers find his current working place in the book by looking for the pages with uncolored pictures. (WB2.TM(1), p. 8)

The whole-body design for page layout is mainly "Dual Division," sometimes a "Triple Division" in WB2. This design encompassed a large keyboard diagram that occupied half of the page horizontally. The other half of the space contained simple, non-intrusive illustrations, sometimes in combination with keyboard diagram notation or lyrics in extra-large print size (Illustration 48; Illustration 35). The "Triple Division" design retained all the information discussed above, but reduced the size of the keyboard diagram to show only certain groups of the alphabet letters (Illustration 49, WB2.Ch(1), p. 25). The left-hand pages in WB2 are dedicated as parents' pages for home practice instructions. There, parents can find tips for practicing, concepts to be learned, music notation in normal-sized print, rhythm line notations, song repertoire, and many other important suggestions (Illustration 13 & 20, for instance).

Analysis and Interpretation

The contrast of the colorful graphic presentation of the traditional methods with the dual-tone or black and white illustrations of the whole-body approaches is large. Upon revisiting the literature related to evaluating preschool piano methods, I found that items concerning non-musical aspects pointed at three factors related to design and format. These factors are (a) color scheme of the illustrations or graphics, (b) legibility and size of the print, and (c) the structural layout.

Color Scheme of the Illustration or Graphics

On the whole, all methods offered graphic presentation that was entertaining and supported the given concept intended for learning (Uszler, Gordon, & Smith, 2000). Yet, the colorful graphic presentation of the traditional cases seems to be more in line with Bastien's (1995) ideas. The use of color may affect the level of attractiveness of the traditional method books more so than that of the whole-body methods. This finding is not only supported by Peer Checker 2, who marked both WB1 and WB2 as "uncolorful" and "unattractive" (Peer Checker 2, Verified Data, All Comment/WB1, p. 8 & All Comment/WB2, p. 10), but also by Uszler, Gordon, and Smith (2000) who praised TA2 for its "colorful and uncluttered" presentation (p. 47), TA3 for offering "attractive and meaningful artwork" (p. 48), and TA1 for being "entertaining as well as instructive" (p. 52) in contrast to the "plain and colorless" design of WB2 (p. 49).

In my own experience, the embellished illustrations of the preschool piano method plays a role so significant that its users (including myself) tend not to be concerned with the thoughtfulness of the overall design of the method, but rather, intrigued by the colorful "surface" level appearance, and the extras such as MIDI and story characters that also take the form of plush animals.

The choice of color for preschool piano illustrations seems to center on pastel tones that may be commonly considered as the colors of "young children." Nevertheless, whether or not this pastel feature in combination with the graphic presentation is meaningful in any psychological way to the preschool children is unclear (Wolf, 1988). The effects of color and attractiveness within the preschool piano method books on children's responses to them warrant more investigation.

Despite the fact that learning with colorful pages and study buddies in the form of plush characters seem to be fun, the pale or colorless scheme of the whole-body cases allows children space to exercise their own imaginations and become responsible for tracking the assignments by distinguishing already-colored-pages from still-to-color-pages. This feature simultaneously supported Pohlmann's (1994/95) argument that "black and white illustrations allow children to color the picture themselves ... to develop their small muscle coordination while personalizing the book" (p. 11). Compared to the traditional methods' colorful pages that may distract children, the "less color" feature of the whole-body cases seems to align well with DAP thinking.

Legibility and Size of the Print

At the beginning of all five preschool piano methods, the size of the keyboard diagram was appropriately large. As each method unfolds, only the whole-body cases retained large print for the keyboard diagram, notational systems, and lyrics. The choice of large print not only offers better legibility for the preschoolers' still farsighted vision (Bredekamp & Copple, 1997), but also helps the page layout division to be large and uncluttered (Bastien, 1995; Bredekamp & Copple, 1997; Collins, 1996), in order to enhance reading success (Richards, 1996).

In contrast, the traditional cases encompassed information that is important to know, but too much for the preschool children to read in small print, and also sacrificed the size of music so much that the marginal difference (Bastien, 1995; Collins, 1996) between moving pre-staff notes going up or down becomes challenging. This finding can be viewed as DIP (developmentally inappropriate) based on Pohlmann's (1994/95) theory that "illustrations for young children are far more easily understood than long verbal

explanations" (p. 11). Visually, small-sized print weakens the significance of all of information on the same page, whereas large print reinforces the legibility of intended messages of texts or music notation.

Structural Layout

As stated previously, the size of print and layout can be dependent on one another. The traditional layout of Center and Around Division (TA3) and Multi-Division (TA1 and TA2) tolerated "too much clutter of symbols" (or complex visual presentation) "that are not absolutely necessary for the immediate task" (Collins, 1996, p. 43). This could create difficulty in maintaining the preschoolers' eyes to focus on one certain place on the page, due to their still-underdeveloped binocular vision (Bredekamp & Copple, 1997). Indeed, many of the text explanations may need to be replaced with illustrations to be better understood (Pohlmann, 1994/95).

The potential for visual or cognitive distraction seemed to be lessened within the whole-body layouts of Dual Division or even Triple Division, where the immediate task was offered in large print and easy to locate.

The Format of Book Completion

It is interesting to examine how each of the methods books concludes. At the conclusion of each traditional case, children receive acknowledgement that their completion of the book is an achievement worthy of recognition in the form of a certificate. The whole-body approaches did not provide this, however, but ended with either a song index, or suggestions for reviewing the child's accomplishments in the program.

Traditional Approach

All traditional cases provided a reward-like certificate at the end of the book with spaces allowing for the student's name, age, teacher's name, and favorite songs to be written in. The conclusion of TA1 contained a "certificate of promotion" (TA1.TG(A), p. 48) that recognized children's completion of prep course level A and thereby offered a promotion to level B, where as TA3 offered a "certificate of achievement" (TA3.A, p. 48) but did not included mention of the next level. TA2 did include an invitation, in that the authors wrote: "YOU too can join Beethoven Bear, Mozart Mouse and the children at their piano lessons. Continue your musical adventure with our music friends in *Music for Little Mozarts*, Book 2." (TA2.L(1), p. 48). This invitation was remarked upon by Peer Checker 2 as "special" and "attractive" (Peer Checker 2, Verified Data, All Comment/TA2, p. 6).

Whole-Body Approach

Instead of providing certificates of completion, the whole-body cases were concerned with different matters at the end of the books. WB2 offered page containing an "index of songs" contained within the book (WB2.Ch(1), p. 60). WB1 authors listed a reminder, similar to indicators of success at the end of the teacher's manual, which provides a guide for reviews of basic objectives and methods for evaluations. The excerpts below support this observation:

> Now let us review some of the basic objectives of these musical experiences. In summary, they have been:
>
> a. To begin the process of "thinking musically" through an aural awareness of the similarities and differences in music.
> b. To develop the creative potential of each child through musical improvisation.

c. To help the student become more expressive through a sensitivity to musical sounds, nuances and sonorities.
d. To begin the development of physical coordination necessary for good musical performance.
e. To initiate the process of eye, ear and finger coordination basic to reading at the piano.
f. To engender an eagerness for music as a means of real personal satisfaction.

In light of these objectives, it is now time to evaluate your results and to give the child a feeling of readiness to move on with his musical explorations. Therefore in these last two units, plan your lessons to allow for maximum usage of the basic material previously taught, as well as for a generous sampling of the students' original contributions.
One approach to review might be:

1. Check "Tune ups" in any key, including both three and five finger patterns. At the same time, observe the student's awareness of the letter names of the piano keys, as well as his physical and rhythmic coordination.
2. Let the children make up "Listening Games" for each other, using the notes of the "Tune Ups." …. (WB1.TM, p. 68)

Analysis and Interpretation

Evidently, the authors of each approach have a different vision in what shoud be accomplished by the last page of the book. The traditional last element tended to offer an external reward that is immediately visible to its users and satisfying to everyone who is involved in the study of piano, whereas the whole-body counterpart emphasized more the internal gain of the students from piano study.

One rationale for the offering of a certificate at the end of the traditional books may point to the marketing strategy of publishers, since these traditional preschool piano methods belong to a larger series with regular levels and many correlated books from which to choose. From this viewpoint, this issue becomes another interesting topic warranting further research. The judgment call here is not to score any method as right, wrong, better, or worse. In fact, it might be best if recognition and evaluation of student

achievement were both be contained in the same book, for the student to grow in a DAP piano environment that guarantees a balanced musical development.

SUMMARY

Analysis of the non-musical aspects of the preschool piano method design was interesting, in that it uncovered yet more differences between the traditional and the whole-body approaches. The following chart summarizes major similarities and dissimilarities in bullet points. Again, the ☺symbol represents DAP-friendly applications and features.

TABLE 5: *Summary Chart–Non-Musical Aspects of the Methods*

	TRADITIONAL APPROACH	WHOLE-BODY APPROACH
Issues	*Illustrations & Page Layout*	
Color Scheme of Illustration or Graphics	☺ Palette of pastel colors in all cases. ▪ TA3: large illustration may be entertaining, but distract from learning. ☺ TA1 & TA2: smaller graphics supporting given concepts.	☺ WB1: single pastel color on each page. ☺ WB2: black & white pages for children to color. ☺ Illustrations are simple and attractive, supporting given concepts.
Legibility and Size of Print	☺ Large keyboard diagram at the beginning. ▪ Mostly small sized keyboard diagram, pre-staff reading system, texts, and lyrics.	☺ Overall larger keyboard diagram, pitch pre-reading system, and lyrics.
Structural Layout	▪ TA3: Center and Around Division. ▪ TA1 & TA2: Multi-Division. ▪ Cluttered page layout.	☺ WB1: Dual Division. ☺ WB2: Dual & Triple Division. ☺ Uncluttered page layout containing only information for immediate tasks.

TRADITIONAL APPROACH	WHOLE-BODY APPROACH
The Format of Book Completion	
▪ Certificate of achievement or completion and invitation to the next level, marketing strategy oriented.	▪ Song index in WB2 ☺ Evaluation of student achievement in WB1.

As revealed above, the whole-body approach encompassed more DAP-friendly features than did the traditional approach. Given the philosophy of the whole-body approach, this finding is not unexpected. The surprise, however, lies in the dissimilarities between the two approaches in structural and design decisions made for illustrations, page layout, and the format of the last element within each book. Although the issue of illustration and page layout has been briefly mentioned in piano pedagogical writings (Bastien, 1995; Collins, 1996; Uszler, Gordon, & Smith, 2000), its presence in this study come forward as a possible factor to affect user method choices. However, the extent of influence that illustration, page layout, and the format of the certificate and evaluation play on young children's learning cannot be illuminated further within the scope of the current study.

CHAPTER VIII

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this qualitative multi-case content analysis was to analyze preschool piano methods and assess their compatibility with what is known about child development, pedagogy, and curriculum for preschool children. After an extensive literature review, data were collected and analyzed to provide documentation and conclusions upon which answers to the research questions could be based.

Early in the analysis designed to address the first research question—"What are the salient characteristics of the existing preschool piano methods?" it became evident that, based on their attributes, the preschool piano methods serving as the cases of study here were segregated into two pedagogically different approaches. This distinction, between the "traditional" and the "whole-body" approaches, aligned closely with the material presented by Uszler, Gordon, and Smith (2000) in their important piano pedagogy text. Therefore, these two categories were used to provide the organizational framework for all subsequent analyses and comparisons in this study.

Characteristics of these two approaches were compared under the organization of four themes that emerged from the initial analysis: (a) the teaching *philosophy* reflected in the methods, (b) the curriculum design *logic*, (c) the *musical development* of the methods, and (d) non-musical *aspects* of the methods. In the process of examining the characteristics of all five cases under each emerging theme, findings were scrutinized through DAP guidelines and related literature reviews, in order to answer the second

research question: “To what extent will the characteristics identified be consistent with the principles of and guidelines of Developmentally Appropriate Practice?”

In the analysis, I attempted to identify DAP-consistent features within the piano methods by comparing characteristics identified with the guidelines of Developmentally Appropriate Practice (Bredekamp & Copple, 1997) and DAP-related research findings. Results indicated that the whole-body methods contained more DAP-relevant features across all four emerging themes than did the traditional approach. The whole-body methods provide for a DAP-friendly learning environment for preschool pianists and characteristics of those methodologies may serve as suitable models for appropriate preschool piano pedagogical practice.

In the course of data investigation and interpretation, the value of DAP-relevant features within the preschool piano methods became manifest when examined in light of the DAP principles of early childhood programs (Bredekamp & Copple, 1997) and the widely expected musical characteristics of the preschool children as found in the related literature. Consequently, the findings of this study can be turned into guidelines for generating future preschool piano methods. What I have termed the “Phil-Lo-Music-Aspect” principles capture the essential spirit of each theme that emerged; *phil*osophy, *lo*gic, *music*al development, and non-musical *aspect*s.

The “Phil-Lo-Music-Aspect” principles recapitulate major arguments based on the data analysis and interpretation, and address three specific components: (a) curriculum design, lesson planning, and instructional strategy; (b) content development; and (c) elements related specifically to piano instruction.

Curriculum Design, Lesson Planning, and Instructional Strategy

Decisions about constructing a DAP preschool piano curriculum according to the principles of "Phil-Lo-Music-Aspect" must be anchored in activating children's prior knowledge to "consolidate their learning and to foster their acquisition of new concepts and skills" (Bredekamp & Copple, 1997, p. 20). Information regarding the characteristics of very young students must be a pertinent component within any preschool piano method, for its user to know the client (Katz, 1988) and serve them well, as well as to enhance teaching and learning success (Bredekamp & Copple, 1997). In other words, DAP considerations should not only serve as a framework for the generation of curriculum design and its implementation, they should also permeate the developmental process of philosophy, goal and objective setting, lesson planning, and instructional strategies (like in WB1 and WB2).

Given that each component of curriculum design should correspond to every other (Gordon, MENC website document), establishment of a DAP-relevant philosophy logically facilitates the generation of a DAP-congruent preschool piano curriculum, in which goal setting and objective statements will not be misunderstood (e.g., in TA1 and TA3), lesson plans will encompass compatible instructional strategies corresponding to the philosophy, and content for learning will not exceed the current working stage of preschool children. Such a curriculum planning is essential to lesson success based on its DAP-relevant concerns with preschoolers (Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1996; Gordon, .n.d.; Katz, 1988; McDonald & Simons, 1989; Pohlmann, 1994/95: Rennick, 2000; Sanders, 1994).

“Phil-Lo-Music-Aspect” principles within a teaching philosophy that should be standard in every preschool piano method include: (a) acknowledgement of the belief that all children have musical potential and that every young child possesses the right to attend the development of this musical potential (Campbell & Scott-Kassner, 1995 & 2006; Choksy, Abramson, Gillespie, Woods, & York, 2001; Kodály, 1974; MENC position statement, 1991); (b) acknowledgement of the advantage of early commencement of piano study (Alvarez, 1993; Andress, 1986; Bastien, 1995; Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985; Gordon, 1990; McDonald & Simons, 1989; Palmer, 1995; Rauscher, 1999; Rauscher, Shaw & Ky, 1993; Zimmerman, 1971); and (c) acknowledgement of various benefits from early formal musical instruction including the piano lesson (Berk, 1999; Bredekamp & Copple, 1997; Cohen & Comisky, 1977; Katz, 1988; Shonkoff & Phillips, c2000; Willer, Hofferth, Kisker, Divine-Hawkins, Farquhar, & Glantz, 1991).

Following the aforementioned decisions regarding constructing a DAP preschool piano curriculum, the existence of an interview/readiness test should serve as the reference information of the child’s current working stage. The “Phil-Lo-Music-Aspect” test content should acknowledge the balance of the maturities of the physical, intellectual, social, and musical domains of the child and facilitate his or her assignment in a group or private lesson (e.g., the whole-body cases). The interview/readiness test should not be used and regarded as an apparatus for selecting a certain talented few and rejecting musically developmentally delayed individuals (Guilmartin, 2000). While common sense designates that the first two years of the piano study be considered as the preparatory phase (Uszler, Gordon, & Smith, 2000), these first two years may need a transitional

piano curriculum to connect both sides of the gap in terms of musical development (Azzara, 2002; Grunow, 1999; Hannagan, 1999; Tarr, 1999); thus the timeframe of two years may need to be extended if the client is of preoperational age or musically developmentally delayed. Should this be the case for certain individuals, the function of an interview test can greatly help in determining what musical areas to emphasize in order to reach the average music proficiency level of the same-age children.

A "Philo-Lo-Music-Aspect" lesson plan would be understood best by all users if written to the levels of a novice teacher serving as its user and the preschool child as the client. Instead of the traditional methods' outline listing all possible instructional ideas, or the whole-body methods' quasi-prose lesson writing, the three-legged elements of objectives, strategies, and evaluation (Campbell & Scott-Kassner, 1995 & 2006) represent an easy and comprehensible lesson plan model that should be included in the preschool piano lesson plan to help it to be both user- and DAP-friendly.

Objectives should define the achievement of the child within the lesson, with corresponding instructional strategies designed to follow the rule of *experience before symbol* (Bruner, 1960 & 1966; Campbell & Scott-Kassner, 1995; Collins, 1985; Hart, Burts, & Charlesworth, 1997; Jordan-DeCarbo & Nelson, 2002; Kenney, 1997; Kostelink, Soderman, & Whiren, 1993; McDonald & Simons, 1989; Neelly, 2001, Peery & Duru, 2000; Piaget, 1952; Pohlmann, 1994/95; Zimmerman, 1971) and to allow children time and space to explore and discover (Bruner, 1960 & 1966). Any subject matter has its own hierarchical sequences in terms of knowledge (Campbell & Scott-Kassner, 1995 & 2006) that can be broken down to suit students of any level and any age, according to Bruner's theory of spiral curriculum.

Thus, the problem-solving element of both LOTS (Lower-order thinking skills) and HOTS (Higher-order thinking skills) tasks must be included in the DAP lesson plan to challenge and motivate the student (Campbell & Scott-Kassner, 1995 & 2006; Gordon, n.d.). Although traditional rote teaching represents a worthwhile piano-teaching instructional technique at the preschool level, it should neither develop into merely "copying adult's model" (Bredekamp & Copple, 1997, p. 127) nor be used to the exclusion of fostering children's creative musical thinking.

Each instructional strategy should present many TST (Teacher's presentation – Students' response – Teacher's specific feedback to the response) cycles (Campbell & Scott-Kassner, 1995; Gagne, 1977) to avoid the *incomplete* TST cycles (Yarbrough & Price, 1989; Speer, 1994) that occupy too much time for direct instruction (Ausubel, 1968) with little to no time left for evaluation (e.g., the traditional cases). Methods of evaluation must assess children's achievement using child-developmentally appropriate methods (Andress, 1995; Bredekamp & Copple, 1997, Bredekamp & Rosegrant, 1992; Campbell & Scott-Kassner, 1995 & 2006; Flowers, 1993 & 2003, Walker, 1992), because children often know more than they can verbalize (Bredekamp & Copple, 1997; Hair, 1981 & 1987; Flowers, 1984; Zimmerman, 1981). Therefore, all original evaluation strategies and non-verbal, performance-based responses (Gordon, n.d.; Webster & Schlentrich, 1982) must be described in detail, as "indicators of success" (Sims, 1995b) to facilitate implementation by novice teachers or teachers new to a system such as this.

A DAP preschool piano method should acknowledge the benefit of parental involvement (Bastien, 1995; Berger & Cooper, 2003; Carson, 1994; Collins, 1996; Custodero & Johnson-Green, 2003; Zdzinski, 1992a, 1992b, & 1996) and encourage its

inclusion in lesson planning. Considering the various backgrounds of parents, authors of preschool piano methods may not need to schedule teacher-parent meetings, but should assign easy-to-follow musical exercises and game-like activities for parents to practice with their children at home (WB1 and WB2).. The rationale for this suggestion is to engage parents beyond scheduling lessons and practice times and announcing assignments, to be the facilitator in creating a music-loving environment at home. With the parents serving as the advanced organizer (Ausubel, 1968) at home on a regular basis, the child/student receives reinforcement that enhances the possibility of learning success.

Content Development

Listening Development

Aural perception and discrimination are essential skills for music study. These must be designated as integral components of the "Phil-Lo-Music-Aspect" lesson plans. Listening activities should obey the hierarchical sequences of listening development (Campbell & Scott-Kassner, 1995 & 2006; Greenberg, 1969; Jordan-DeCarbo & Nelson, 2002; McDonald & Simons, 1989; Miller, 1986 & 1987; Moog, 1976; Moorehead & Pond, 1977; Romanek, 1964; Zimmerman, 1971) and the influence of centration on preschool-age children (Crowther, Durkin, Shire, & Hargreaves, 1985; Hargreaves, 1986; Hargreaves & Zimmerman, 1992; Hildebrandt, 1987; Matter, 1982; McDonald & Simons, 1989; Pflederer, 1964 & 1966; Serafine, 1980; Sims, 1990, 1991, 1995a, & 2005; Zimmerman, 1971). Writers of "Phil-Lo-Music-Aspect" piano methods should design adequate listening games with visual aids or related movements (Campbell & Scott-Kassner, 1995 & 2006; Sims 1993) to nurture children's development of attentive listening, and for the acquisition of audiation (Gordon, 1971 & 1990).

Rhythm Development

A DAP preschool piano method should recognize that rhythm is (according to theories of Piaget and Bruner) motor-development driven and needs to be explored and discovered through the whole body (Campbell & Scott-Kassner, 1995; Theories of Dalcroze, Orff, & Kodály; Uszler, Gordon, & Smith, 2000). Maintenance of the steady beat should not rely solely on sight learning and clapping of quarter notes (mostly in the traditional cases), but should relate to the heartbeat and transform that experience into the understanding of inner pulses within music, as was the case in the whole-body approach. Recognition of the essence of steady beats and inner pulses establishes rhythmic security. Therefore, in the early stage of rhythm development, pitch or fingering information should be excluded from traditional exercises such as rhythm counting (Bastien, 1995; Chronister, 1996; Richards, 1996; Uszler, Gordon, & Smith, 2000) and replaced with more free and guided movement explorations (as in both WB1 & WB2) (Campbell & Scott-Kassner, 1995 & 2006; Miller, 1986 & 1987; Music teaching theories of Dalcroze, Orff, & Kodály; Sims, 1990 & 1993; Zimmerman, 1971).

Concentration on *rhythm pre-reading* such as the whole-body methods' rhythm lines, representing long-short sounds, obeys the centration limitation (Piaget, 1946, 1952, & 1968) in preschool children and facilitates the establishment of rhythmic security before that of pitch security, through multi-sensory experiences (Greenberg, 1979; Music teaching theories of Dalcroze & Orff; Romanek, 1974;. Zimmerman, 1971). Experiences of long-short rhythm lines in WB1 and WB2 create the phenomenon of learning to read rhythm values by the demand of patterns, not by the need to learn rhythm values (Theories of Dalcroze, Orff, & Kodály).

Pitch Development

A DAP preschool piano method should utilize a keyboard diagram such as a pitch pre-reading apparatus for the purpose of key orientation and high-low pitch direction (like in all five cases). Once the establishment of rhythmic security is achieved, horizontal rhythm lines can be combined with pitch information moving up and down to depict the melodic contour of patterns (WB1). Given that height differences are easier to detect within rhythm lines than pre-staff notes, the traditional pre-staff moving notes and note names inside note heads should then be replaced with staff notation aligned with the moving rhythm lines (see Illustration 12). This transition is DAP for preschool piano, and step-by-step comprehension with both rhythm and pitch information will correspond with one another. Overusing too many different pitch reading systems (traditional method's pre-staff moving notes with note names) and pre-reading systems (TA3's colored triangle system and green bar) may in actuality confuse children. Other than requiring children to learn any pitch reading system that is less meaningful, the usage of flashcards may result in more success, especially when exercised before the introduction of the musical alphabets and the white keys.

Next, "Philo-Lo-Music-Aspect" pitch development of the preschool piano method should never rely on "association of lines and spaces of the staff system with the keyboard" and "note values with finger movements," while neglecting aural responses (Moorehead & Pond, 1977, p. 67). Instead, elements of early pitch development such as melodic contour, melodic direction, and pitch relations (Campbell & Scott-Kassner, 1995 & 2006) should be emphasized in any preschool piano methods. The building blocks of these early elements in pitch development are pitch patterns, and the manipulation of

these pitch building blocks as the primary pitch-learning vehicle subscribes to the theories of Dalcroze, Orff, and Kodály and other early childhood music educators (Campbell & Scott-Kassner, 1995 & 2006; Collins, 1985; Kenney, 1997; Moorehead & Pond, 1977; Neelly, 2001). Following the same logic, instruction of the musical alphabet should also use group or pattern introduction (Campbell & Scott-Kassner, 1995; Chronister, 1996; Richards, 1996); and most effectively, use three-note pitch patterns (Collins, 1985).

Nevertheless, the musical alphabet letters serve only as a learning tool in music study; they should not be manipulated as a linguistic subject. Association of alphabet letters with names such as "A for apple" (in TA1 for instance) or a learning slogan such as "every good boy does football" projects a limited learning effect in registering the appropriate musical sound in children's brain. The resulting failure in developing audiation skills (Davidson, Scripp, & Welsh, 1988; Gordon, 1971 & 1990; McLean, 1999; Richards, 1996) of young children leads music reading into the category of note-spelling (Chronister, 1996; Richards. 1996). The preschool piano student in a DAP curriculum would acquire meaningful pitch development, in order to protect a multi-sensory musical endeavor filled with joyful music making from becoming merely an intellectual activity (Grunow, 1999).

Repertoire Collection

A "Philo-Lo-Music-Aspect" preschool piano method should include a collection of repertoire that is familiar to young children in order to activate their prior knowledge "to consolidate their learning and to foster their acquisition of new concepts and skills" (Bredekamp & Copple, 1997, p. 20). Typically including text for singing, this collection

of repertoire should feature familiar folk songs, traditional nursery rhymes, and piano-method-author-composed songs that are "worthwhile, motivating, and important in order to provide a general, fundamental base" involving singing, movement, listening, improvising, performing, and reading music (Gordon, MENC website document, p. 3). Songs without appealing music that serve primarily the purpose of teaching theory and concepts should be avoided. All repertoires should be sung and listened to by the children before they are taught to play, as was the case in WB2.

The "Philo-Lo-Music-Aspect" repertoire collection should also encompass opening and closing songs. These assist with focusing attention, supporting children's beginning friendships, establishing a sense of belonging and security, and allowing opportunities for children to learn from each other and from adults (Berger & Cooper, 2003; Bertrand, n.d; Bredekamp & Copple, 1997; Collins & Clary, 1987; Desorcy, 2005; Gagné, 1977; Lagorce, 2003; Llanos-Butler, 2006; MENC, n.d.; Pincushion Community News, 2005; Satchwell, 1994). In turn, the sense of security enhanced by the feature of opening and closing songs promotes the development of self-concept, self-esteem, and social competence (Bredekamp & Copple, 1997; Campbell & Scott-Kassner, 1995 & 2006; Garbarino, Dubrow, Kostelny, & Pardo, 1992; Leeke, 1985; Peery & Peery, 1987; Pohlmann, 1994/95; Vygotsky, 1978).

When accompaniments are used with the children's singing or playing, the arrangement of the "Philo-Lo-Music-Aspect" accompaniment should not overwhelm the student's part. The accompaniment can take the form of one single voice (like in WB2), an ostinato pattern (like in WB1), two simple voices, or uncomplicated chord arrangements reflecting various characteristics of music styles. Early exposure to a

variety of music styles is known as a DAP-relevant feature to the shaping of music taste (Gembris, 2002; LeBlanc, 1981; Peery & Peery, 1987; Scott, 1989; Scott-Kassner, 1993; Zimmerman, 1971).

Creative Development

A "Philo-Lo-Music-Aspect" piano method should recognize the benefit of creative development, as was in cases of whole-body approach. Not only should preschool children be allowed to explore sound possibilities with the piano and to discover their own expression with the usage of those sounds, the teacher should also make an effort in serving as a creative model like in WB1 (Pace, 1999). While prescription of creative development may stifle the imagination and other original possibilities, the initial stage of creativity should begin with the alteration of one single musical element (Welsbacher, 1992), and the children should perceive and recognize of that change. As children collect enough alteration experiences, the process of improvisation can take place. Activities such as creating question and answer phrases represent one of many creative games that can generate good results (Campbell & Scott-Kassner, 1995 & 2006; Sims, 1993; WB1).

Children can use such inventory of unrelated musical elements through various sound possibilities (Burton, 1989) and create out of them something new and satisfying (Cox, 1966). Consequently, the "Phil-Lo-Music-Aspect" principles advise, for the benefit of the children, all method writers to include creative opportunities in the form of sound exploration, discovery, and improvisation (Campbell & Scott-Kassner, 1995 & 2006; Gowan, Demos, & Torrance, 1967; McDonald & Simons, 1989; Scott-Kassner, 1993;

Sims, 1993) within the method and encourage the teacher-users to frequently engage children in creative musical thinking activities.

Graphic Presentation and Page Layout

For the sake of appeal, a the method's graphic presentation should contain some color, but at the same time allow space for the children to color, and use colored pages to help them find the location of assignments. The DAP page layout should not employ the Center and Around Division and Multi-Division (of the traditional approach), as they tend to clutter the page with many symbols, texts, and visual presentations (see Illustrations 1, 6, 7, & 27), thus distracting preschoolers' concentration (Bredekamp & Copple, 1997). It would be advisable to stay with the simplicity of the Dual or Triple division (like in the whole-body approach, see Illustrations 35, 37, 48, & 49) offering necessary information regarding the immediate task (Collins, 1996) and using illustrations instead of text explanations (Pohlmann, 1994/95).

In general, a good and uncluttered proportion emphasizes a large area for the core music content of a keyboard diagram or reading system, and large print for supporting information such as illustrations and song lyrics (Bastien, 1995; Collins, 1996; Richards, 1996). Although narratives and additional practice suggestions or texts can be important, they may at the same time distract children's attention from concentrating on the core information for playing. A better solution for placing such information for its users should be included in the teacher's manual or teacher's note at the end of the lesson book.

Elements Related Specifically to Piano Instruction

The importance of piano-pertinent characteristics of methods, such as (a) sitting posture, (b) reading proficiency, (c) piano technique, (d) treatment of rhythm, and (e)

eyes on music were evident as a result of the data presentation and analysis. While all are relevant to future piano study, the introduction of these topics requires the following reconsideration in order to be “Phil-Lo-Music-Aspect”-friendly.

Sitting Posture

A recommended “Phil-Lo-Music-Aspect” solution to the inappropriate practice of young children sitting for long periods of time would be the combination of singing with motions, moving to music, listening away from the piano, playing percussion instruments, and many other active tasks to respect children’s natural development use of their whole bodies, and engage them musically (Berk, 2000; Bredekamp & Copple, 1997; Bruner, 1960 & 1966; Campbell & Scott-Kassner, 1995; Howe, 1993; Kenney, 1997; McDonald & Simons, 1989; Monsour, 1996; Neelly, 2001; Piaget, 1946, 1952, & 1968; Pohlmann, 1994/95; Zimmerman, 1971). When the child is old enough to sit still (Enoch, 1996b), the correct information about sitting posture must be available for the young beginner (Bastien, 1995). As a result, the entire body must be regarded as the origin from that posture and arms are recognized as the extension of the body to the instrument (Andress, Heimann, Rinehart, & Talbert, 1973).

Reading Proficiency

A “Phil-Lo-Music-Aspect” preschool piano method may not need to stress the importance of reading proficiency, but to use the natural sequences of pitch reading that start with various adequate pre-reading musical experiences (Chronister, 1996) such as singing, listening, moving, performing, and composing. Guidance to reading proficiency at the preschool level must pursue a slow but solid pace with the goal of establishing rhythmic security prior to pitch security (Greenberg, 1979; Music teaching theories of

Dalcroze, Orff, & Kodály; Romanek, 1974; Zimmerman, 1971), discriminating same or different contour, combination, direction of pitches, and translating the obtained sound experiences to their "notated picture" (WB2.Ch(1), p. 52, see Illustrations 35 to 37) by the use of meaningful patterns.

Piano Technique

A "Phil-Lo-Music-Aspect" piano technique at the preschool level should respect the physical development of the children and incorporate many large-limb movements (Berk, 2000; Bredekamp & Copple, 1997; Howe, 1993; Monsour, 1996), as well as preparatory exercises such as finger plays and action songs for fine motor development (Campbell & Scott-Kassner, 1995; Scott-Kassner, 1993; WB2). The traditional emphasis on hand forms and finger shapes should be enriched with more information and exercises incorporating children's natural motions.

Movements such as throwing and catching a ball are not operated by one isolated muscle; the teamwork of gross and fine motor muscle movement must be recognized from the preschool level. Consequently, the nonlegato touch produced as a result of the combined work of gross and fine motor muscles should be introduced as the first touch for preschool children, instead of the legato touch. The nonlegato touch (in WB1 and WB2) represents the primitive form of sound production that may be rooted in the human genes, and thus qualifies itself as the first touch for the preschool piano level (Campbell & Scott-Kassner, 1995; Moorehead & Pond, 1977; Scott-Kassner, 1993).

Treatment of Rhythm

The traditional rhythm counting system cannot satisfy the rhythmic needs in beginning piano study. A "Phil-Lo-Music-Aspect" treatment of rhythm should start with

whole-body movements (Campbell & Scott-Kassner, 1995 & 2006; Heyge, 2002; Jordan-DeCarbo, 1999; Miller, 1986 & 1987; Orsmond & Miller, 1999; Sims, 1990; Uszler, Gordon, & Smith, 2000; Zimmerman, 1971), continue to keeping the steady beat, and result in synchronizing rhythm patterns to the beat (Theories of Dalcroze & Orff). Deciphering rhythm information using rhythm value counting while singing the words, chanting finger numbers, and playing the notes is counter to the Piagetian idea of centration and can be confusing for young children, potentially resulting in a decreased level of learning success. For this reason, rhythm activities of a DAP preschool piano method should retain rhythmic-pertinent information while excluding pitch or other materials in order to be effective.

Eyes on Music

The piano tradition of looking at the music instead of the fingers should be regarded as the ultimate level of eye-hand-ear coordination, whereas its "Phil-Lo-Music-Aspect" level for preschool children should start with easier experiences such as playing mallet instruments or producing nonlegato sounds at the piano. Other than sound making by simply shaking or drumming, the sophistication of sound production in mallet instruments or piano lies in the precision and calculation of the physical execution to the visually selected tone bar or key, and later the aural evaluation for corrections.

The transmission from visual reception to physical response to aural examination (Udtaisuk, 2005) needs to be exercised from the preschool level. Neglecting this initial level of eye-hand-ear coordination and asking the children to start with eyes on the music may convey a sense of note-naming (Chronister, 1996; Richards, 1996) that is more

important and diminish the importance of audiation (Gordon, 1977 & 1990) within the intended task of music reading.

CONCLUSIONS

Grounded in the data, evidence revealed that several DAP-related considerations are relevant to preschool piano instruction. The current "Phil-Lo-Music-Aspect" paradigm was developed based on data collected from the designated five teaching methods and materials, an extensive review of literature related to children's musical development, and the best practices for early childhood as defined by the National Association for Early Childhood Education.

The "Phil-Lo-Music-Aspect" principles offer practical guidelines for analyzing or constructing future preschool piano methods, while preserving elements traditionally included in beginning piano curricula that are consistent with DAP considerations. The possibility that there could be a relationship between increased student retention in piano lessons with the use of the most developmentally appropriate methods and materials for teaching piano to preschool-age beginners warrants careful consideration and systematic investigation. Applications of a preschool piano curriculum that follows the "Philo-Lo-Music-Aspect" principles, however, may help reduce the frequency of frustration in learning and the possibility of developmentally inappropriate practice in the setting of piano teaching. This may be one way to help overcome retention problems that were first signaled as an alert for the profession by Rennick (2000, reprint from 1951), and which have remained a problem for piano teachers for over half a century.

While this study was in progress, several piano methods written for young piano student or the elementary level have been published. They include *Piano Discoveries*

(2001) by Vogt and Bates, *Beanstalk's Basics for Piano* (2002) by Finn and Morris, and *My First Piano Adventure* (2006) by Faber and Faber. These methods were excluded from the current study because none of them provides the teacher's manual that conveys in-depth information about the method. In case of the publication of teacher's manual addition, any of the aforementioned new piano methods could serve as the data source to test the finding of this current study.

Questions remain on the mode of instruction in preschool piano method books. Specific directions for how to switch from private teaching to group teaching or *vise versa*, while using the same curriculum, should be addressed by future method authors. The effectiveness of the "either-or" and "combined" modes of instruction can be a research topic of value. Likewise, the relationship between the number and types of supplementary materials in piano methods and learning success may also initiate interest for future research. Issues relating to the influence of publishers' marketing strategies on the creation of preschool piano methods, the publishers' financial decision for color inclusion versus "non- or less-color" determination, and comparisons of teaching effectiveness between experienced teacher and novice teacher using the same approach, surfaced as potential topics of investigation as well.

The results of this study indicate that preschool piano methods share an established "operational" curriculum that is actually implemented and subject to many influences (Campbell & Scott-Kassner, 1995 & 2006). This curriculum encompasses guidelines derived from the tradition of piano teaching and is worthwhile for the teacher user to follow. Should this established piano curriculum not respect children's developmental issues and its goal not address learning outcome in connection with

children's characteristics, the teacher will be the one to use "state or national goals" as a guide (Campbell & Scott-Kassner, 2006, p. 305) and to supplement lessons with a variety of learning experiences.

While it is crucial to choose the appropriate piano method for the preschool beginner, success in piano teaching and learning in actuality depends on how the teacher teaches rather than what the program, or the method, teaches. Still, a preschool piano method containing a DAP-relevant curriculum that is comprehensive and based on children's characteristics, developmental issues, and instructional strategies, will meet the needs of the less skillful, novice teacher. Implementing the DAP thinking and instruction throughout lessons can potentially avoid frustrations on the part of the teacher and the children, and help provide positive and pleasurable experiences with beginning piano that can set the stage for continued music learning and enjoyment.

APPENDIX A

LIST OF DATA EXAMPLES

Example Page

1. Raw Data Example …….336

2. Peer Check Protocol …….. 337

3. Ready-To-Read Case Record …… 339

4. Refined Categorized Data: Data Interpretation and Discussion (WB)……...348

Example 1 Raw Data/WB2

SOURCE: MUSIC-METHOD BOOK/ SING AND PLAY

Collins, Ann & Clary, Linda. (1981, 87) Sing and Play. Champaign, IL: Stipes Publishing Company

p.3

Readiness for a 4-yr-old to take piano lesson:
1) Ability to remember and sing songs with degrees of pitch and rhythm security. 2) Ability to feel and respond to a steady beat physically. => *Should there be more than just 2 requirements? Otherwise, well said for the youngster beginners!!*

p.3-4

Authors' basic concept in designing this method book:
1) **Oral-aural experiences before symbol presentation.**
2) **Rhtythm**:* *Security* - through whole body experiencing rhythmic flow, then tapping or patting (no clapping). * *Rhythmic notation before pitch notation*. Q: "… so that natural responses to the rhythm aids the task of reading and playing from the staff."
3) **Technic**: ~focusing on good physical technical habits. A. Whole hand, then closed hand position. B. Finger play songs and hand shaping exercises for open hand position. C. Playing with expressive concept. => ad B. *WHAT is OPEN HAND position???*
4) **Repertoire**: The selection of songs/pieces – related to children's world, not the one of adults. Pictures, words, titles, melody and word phrases add to motivation.
5) Theory/**Musicianship**: can be started at the preschool level. => *Aiming at the musicianship literacy. Emphasis on listening competency, improvisation skill, and ear training task, avoiding fatal mental-physical reaction, but nurturing mental audiation skill.* Qp4: "The piano student who hears, sees, and understands structures of music will learn repertoire more easily and play with greater understanding and expressivity."
6) **Teachers** assume the role of a helper to develop students' character and world both musically and socially. => *DAP??*

p.7

Method book design:

1) Unit organization as "concept blocks." Each concept block presents several new concepts and skills to be worked and mastered.
2) Instruction cycle: Select new concepts – Reinforce with accompanying materials – Select review concepts.
3) Instruction dynamic balance: quiet vs. movement; intense concentration vs. easy to accomplish tasks.
4) Pictures of the books are for the kids to color. May be used as a reward to color and Qp8: "This also helps the student who does not relate to page numbers, find his current working place in the book by looking for the pages with uncolored pictures". => *This is a really neat idea*.
5) Areas of concepts:

- Concept of tone: intensity, duration, pitch, timbre.
- Concepts of rhythm and tempo: awareness of beat, keeping a steady beat or pulse, Fast or slow-moving beats (tempo), Groupings of long and short tones (rhythm).
- Concepts of melody: moving upwards, downwards, or staying the same. Identified by its pitch and rhythm patterns. => *Just the right level of musicianship foundation for the 4-6 yrs-old to learn. NO WHOLE/HALF NOTES, or QUARTERS. NO METERS!!* Qp2 under to the parents: "not only to develop musical concepts but to teach musical skills that will help the child successfully read and perform music at the piano."

Analysis Instruction and Orientation for Peer Check

Dissertation Topic: Preschool Piano Method & Developmentally Appropriate Practice

Materials to be analyzed: *~ in the alphabetic order of the method title*

1. Alfred's Basic Piano Library Course for the Young Beginner, Level A: Lesson Book, Theory book, Activity & Ear Training Book, & Solo Book + Teacher's Guide for Lesson Book A [Abbreviation: **Alf.** 5x bks.]
2. Bastien's Invitation to Music Series: Book A: Piano Party, Theory and Ear Training Party, Performance Party + Teacher's Guide for Book A. [**PP.** 4x bks.]
3. Music for Little Mozarts: Level A: Lesson Book, Work Book, Discovery Book, CD + Teacher's Guide for level A (+B). [**MLM.** 4x bks. + 1 CD]
4. Music for Moppets + Teacher's Manual. [**MfM.** 2x bks.]
5. Sing and Play: Preschool Piano, Book 1, Write and Listen, Book 1 + Teacher's Manual. [**S&P.** 3x bks.]

Steps to analysis

1. A set of 5 ready-to-read analyses (Microsoft Office document via email) completed by the researcher and analysis materials (5 method sets) will be retrievable to the designated peer checkers for their use.
2. Given that there is only one copy of each analysis method in the piano pedagogy library, the researcher predetermined the order of analysis for each checker to insure the quality of review process. In this manner, one can avoid the simultaneous demand of the same method within the same time frame.
3. For each set of method, peer reviewers set aside the ready-to-read analysis and obtain an overview of the method by speed browsing the material individually based on his or her experience of teaching piano and knowledge of early childhood music education. However, review participants are specifically asked to look through all materials from different angles. **Attentions** will focus on *the **logic** of the structural design, the **appropriateness** of musical content offered (to meet learning capacities and characteristics of the age group as assumed), the teaching **philosophy** of the authors concerning very young beginners*, and ***other** commendable **aspects** of the method design*. In case of confusion, peer checkers can refer to Developmental Appropriate Practice (DAP) guidelines (Bredekamp & Copple, 1997) and the National Standards for Prekindergarten in Music, and other relevant early childhood music education texts and articles.
4. During the method speed browsing, peer reviewers will record remarks in the form of page numbers or short notes as questions or other concerns may arise during their isolated analysis period.
5. After the speed browsing, peer reviewers compare their notes with the ready-to-read analysis provided by the researcher. Comments can be added to the Microsoft Office document with yellow highlight. Upon finishing the analysis, please send the copy containing yellow highlighted comments via email to the

researcher. Save another analyzed copy along with any individual notes for later analysis discussion.

6. Repeat procedures 3-5 for the next sets of method.
7. Analysis discussion will be exchanged via email by all peer review participants. Conclusions will be made and reported in the dissertation.

Keys to the Understanding of the Analysis	
NS	Nursery Rhymes/Folksongs/Familiar songs
[Q]	Quotation
Blue Texts	Direct quotation
Red	Discrepancy found in what the authors said.
Pink	Execution of Children's Action
Green or *Green*	Thoughts of the researcher.
Grey	In the first lesson/class.
Yellow Highlight	Thoughts of Peer Reviewers

Order of Analysis	1	2	3	4	5 ~ *predetermined mathematically*.
Peer Checker I	Alf.	PP.	MfM	MLM	S&P
Peer Checker II	MfM	MLM	S&P	Alf	PP
Peer Checker III	S&P	Alf	PP	MfM	MLM
Peer Checker IV	PP	MfM	MLM	S&P	Alf
Peer Checker V					
Etc.					

~ *Please mark your analysis forms with* I.1, I.2, I.3, *and so on after* Peer Check *for checker* I; *mark* II.1, II.2, II.3, *and so on for checker* II.
For example, peer checker #II on investigation of # 4 material:
Analysis of Preschool Piano Method …. **Peer Check II.4**

~ *All participants in peer check are encouraged to contact the researcher at* fh139@mizzou.edu or fangtinghuang@yahoo.com *during and after the process of analysis as needed*.

Researcher: Fang Ting Huang
Date of Mail: Dec. 12. 2005

Example 3 Ready-To-Read Case Record

Analysis of Preschool Piano Method/Readiness Course Method Book/TA2
Peer Check #

Title of the Core Book: Music for Little Mozarts, Music Lesson Book 1
Abbreviation: TA2. Or specific TA2.L(1)
Books besides Core: Music Workbook 1, Music Discovery Book 1, Teacher's Handbook for Books 1 & 2
Abbrev.: TA2.W(1), TA2.D(1), TA2.TH. (Examination only includes Book1, the number 1 can be excluded.)
Authors: Christine H. Barden, Gayle Kowalchyk, E. L. Lancaster.
Year: 1999 for all books.
Publisher(s): Van Nuy, CA: Alfred Publishing Co., Inc.

Targeted Age: preschool children, 4-6 yrs-old. TA2.TH, p. 4 & 6.
Intended Setting of Lesson: suitable for group or private lessons. TA2.TH, p. 6. 45-60 min. group lessons ~ adapted private lesson of any length, TA2.TH, p.8, 15.

Readiness Test/Interview *in the form of IV parts*, TA2.TH, pp. 14-15

informing the goals of the study, the readiness of the child, the amount of parental support for piano study. => *Lots of verbal exchanges, feels like a real interrogation, or can be done via the phone? Do not think that interview should dedicate too much time on parent investigation. The purpose here is to determine "student interest and readiness" as the authors stated. Physical, musical, social, and intellectual maturities should be the core to be studied during the process.*

Part I: Explanation of the Program to Parents: TA2.TH, p.14.

- Discuss and show course materials and CDs, goals of the course, scheduling, tuition fees, studio policy, events, and commitment from both parents and the child. => *Can preschool children do this with success?? Lots of time wasted on the expense of children's attention and interest.*

Part II: Q for Parents, TA2.TH, pp.14-15 => *Can't this be done with the child only? This part should be done informally.*

- Level of social maturity that parents know of their child.
- Possible musical background and extra-curricular activities that the child is and has been involved.

Part III: Q for the Child, TA2.TH, p.15 => *This seems to overlap with part II.*

- Level of social (birthday and name?), physical (write or draw), and intellectual (alphabets – A-G) maturities of the child.

Part IV: Musical Activities to Do with the Child: p.15.

- Level of musical ability: pitch matching in familiar songs, response to high/low sounds with the help of method characters (Beethoven Bear and Mozart Mouse), echoing tapped rhythm, moving to music.

Social maturity – *I guess throughout the test, the teacher can notice the general social maturity of the child, therefore Part II seems to be redundant in this matter, since the child is the focus of the interview. Also, the researcher is not so sure about the idea of Part I. From the perspective of*

the researcher, this part feels rather like method promotion, not introduction. Besides, why should the teacher introduce course material before the interview, as you are not sure whether the child is ready or not. Shouldn't the teacher build positive rapport with the child and parents instead of wordy teaching philosophy and expectation??
Intellectual Maturity – *Evidence of writing down names, (although not suggested123 would be the kind of thing to ask), or ABC, like those in Bastien's.*
Physical Maturity – *Based on observation in Part III, writing or drawing. Also Part IV, vocal, aural, eye-hand, and cognitive maturation.*
Musical Maturity – Based on observation of pitch matching and responding skills to music and rhythm. => *observation on ear development, basic pitch discrimination skill (high/low), sense of rhythm (move to music), and memory (copy tapped rhythm).*

Notes to Teachers

- **TA2.L** provided appropriate piano instruction while simultaneously developing listening skills, and a balance between the discipline necessary for playing the instrument and the enjoyment one gets from the process of music-making. TA2.TH, p. 6 & TA2.L, p. 2.
- Musical characters, such as Beethoven Bear and Mozart Mouse, guide the very young children through various adventures in the music study. As learning buddies, these musical characters also serve as a springboard for introducing major composers of four musical style periods.
- **Music Workbook** = TA2.W: reinforces each concept presented in the TA2.L through carefully designed pages for children to color, focuses on the training and development of the ear. TA2.W is coordinated page by page with the TA2.L. TA2.TH, p. 6.
- **Music Discovery Book** =TA2.D reinforces each concept presented in the TA2.L through singing, listening and movement activities. Various songs are introduced to sing just for fun, to move as a response to music, to reinforce rhythm patterns, and to aid in the development of musical expressiveness.
- **Issue of Flash Cards**: TA2.TH, p.7. The cards are to be used in correspondence with the lesson book for concept reinforcement. Included are musical terms, keys on the keyboard, notes and rests, rhythm patterns, notes on the staff, and steps and skips. The set of flash cards should be used during the lesson and at home practice.
- **Issue of compact disc recording**: two recordings to support the concepts introduced in the series. Disc I: for TA2.L, contains narration for the story and one performance model (sound recording on the acoustic piano) and one orchestrated accompaniment for student practice. Disc II: for TA2.D, every single song and example has its sound recording. Students are encouraged to listen to the music of both discs even before studying it to develop their listening skills. TA2.TH, p.7.
- **Guide to Teacher's Handbook**: TA2.TH, p.8: included topics are *The importance of Early Childhood Music, Reasons for Studying Piano at a Young Age, Characteristics of 4-, 5-, and 6-Year Olds, Special Considerations in Teaching Piano to Young Children, The Triangle for Success in Music Study* – Role of the Teacher, Role of the Parents, *Skills Included in TA2, Group/Private Lessons* – Advantages of GrTeaching, Organizing Grps, Equipment Needs, Interviews, Grouping Students, Size and Length of Groups, Organizing the Lessons, Classroom Management, *Effective Use of Technology in TA2*. More details on TA2.TH, p. 8-17.

- **Equipment needs**: TA2.TH, p.14. Similar to those provided in MfM.TM, p.2. Large flash cards are the necessary display for classroom teaching. "The teacher should make a "Magical Music Book" and place flash cards from the TA2 series in the book." [Q]
- **Role of the Teacher**: as a model, the teacher needs to be patient and plans carefully for each lesson with both short and long goals. Demonstrations must come before verbal explanation. **Role of the Parents**: as a partner in the music study, parents are responsible for regularity in attending the lessons and home practicing, assist the child in reading directions and practice orders, offer support to increase the interest level, communicate with the teacher for best learning result.
- **Issue of grouping students**: Grouping by age (e.g. 4 or 4+5 yrOlds, 5+6 yrOlds) is more appropriate than by ability level, for young students change and mature quickly. TA2.TH, p. 15.
- **Issue of classroom management**: details on TA2.TH, p. 16. => *this part is more geared toward the general classroom teaching, may or may not be suitable for the 4-yr-olds*.

Parental Involvement, TA2.L1, p.2, TA2.TH, pp. 11-12.

- **Parents' Role**: provide guidance in the musical training by attending lessons and participating actively in the learning process.
- **Instruction Announcer:** read the directions to their children during daily practice. Set a regular practice time (optimal 2 for a day) and schedule of 10-15 minutes a session with activities changing frequently within the practice time. A reward system may be adapted for effective practice. => *practice police? The child is 4 yr old, can't they not play musical games together?*
- **A Musical Partnership:** through patience, sincere praise and a show of enthusiasm to create a nurturing learning environment; thus generate quality family time and relationship together.

Information regarding the very young beginner: TA2.TH, pp.8-10.

- **Issue of Teaching Piano to the Young Children**: these students need a variety of music activities, many different types of the same thing, experience before signs/symbols, and a great deal of repetitions. TA2.TH, p. 10.

Model Pacing of a Well-balanced Lesson (45-60 minutes)

The TA2.TH, p. 32 offers a sample lesson pacing chart for overview: 1) **Establish a positive atmosphere through secure and enjoyable activities** – Hello song, listen and sing for voice warm-up, then review pieces both from TA2.L or TA2.D on the keyboard to build confidence, 2) **Include activities that require the most focus** – Music theory on the desk or on the floor and TA2.D for ear training and movement activity, 3) **End each lesson happily** – music appreciation from TA2.D, performance of known pieces for reward moments, then Good-bye song. => *Activity locations are given, they are mostly designed to alternate between movement space and keyboard. A lesson planning form is also given, see* p. 33 on TA2.TH for details.

Model Lesson Plan TA2.TH, p.35 ~ *This Lesson Plan can serve as the Model Lesson Plan for the rest of 20 lessons.*

I. **New Concepts:**

II. **Review Concepts:** none.

III. **New Materials**: Page numbers of the three correlated books.
IV. **Review Materials**: none.
V. **Board Activities**: The usage of the magnet board: blue magnets = low sounds, black magnets = high sounds, etc.
VI. **Assignment**: Incl. listening to CD tracks that correlate to assigned pages). Page numbers of all three books.

~ Basically, the TA2 lesson plan only lists concepts to be introduced and reviewed, board activities to be arranged, and the assignment to be given. No teaching steps are offered or suggested.

Important Aspects and Summary of Method Design

♫ **Concept/Material covered**: ***concepts in* bold *fond*.**

In the first class ***~concepts inside the box.*** *Concepts outside the box are the remaining material covered in the method.*

- TA2.L1, pp.4-9: **High-mouse/low-bear**, , **BH playing** high/low patterns in a **steady beat** while saying words to the rhythm**, Higher/lower** – bear meets mouse, mouse meets bear, **Glissando**.
- TA2.W1, pp.4-9, **Curve fingers**, **listen and circle** (*Listening Game*).
- TA2.D, pp.4-11, 48. **Hello Song**, **moving to Music + glissando**, **Good-bye song**.
- **Intro of the opening song** and the **good-bye song**, starting from the 1st lesson, although the authors do not specify how to go about it or why.

***f* = loud/*p* = soft**, **BH playing** loud/soft sounds in a **steady beat** while saying words to the rhythm, **finger numbers** – thumb = 1, **Two black keys** + steady rhythm + high/low and loud/soft, **Quarter note**, **bar line** (also **measure & double bar)**, **three black keys**, **quarter rest, DC, repeat sign, half note, E, half rest, B, whole note, A, whole rest. (All the white keys introduced are ABCDE, thus making up the middle C position).**

♫ **Concepts experienced, might not be perceived and not much explained: meter**.

♫ **Sequence of Concepts: 1)** Focus on the **steady beat** is more verbally than **whole bodily or aurally felt**, **patterns are in use**, **2) A juxtaposition of pitch positions (black key groups or alphabets) and rhythm values**: two lines of concepts are intertwined throughout the method. After a position is introduced, the authors place a note value as a new concept to follow. In this manner, the pitches are cast in the rhythm pattern of that note value and practiced with designated finger numbers. (TA2.L, pp.15-17.) => *This seems to be logical within the method, since it does not offer any pre-staff reading such as rhythm lines or others. The children may be naturally drawn to learn the note values.* **3) Spiral sequence**: Yes, see TA2.TH's lesson plan, it is all too predictable.

♫ **Presentation of Concepts: "**New concepts are introduced and carefully reinforced throughout the book. Each page contains a fragment of the story as background for each new concept or new piece of music, as well as practice instructions to read to the student." [Q: TA2.TH, p.6] => *Unfortunately, the presentation of concepts is not following the rule – experience before label and symbol*.

***~ Starting with TA2.L, p.6, and all the rest, pp. 10, 12, 15, and 17 for* example *of* 'label/symbol before experience'.**

- [Q: TA2.L1, p. 6] "The next time they [the study buddies] entered the Music Room, Beethoven Bear ran to the piano bench first. He climbed up and sat on the left side of the

bench. "Oh, I do *so* like playing LOW sounds!" he said, knowing that LOW sounds are on the LEFT side of the keyboard." *This is incredibly a label before experience instruction!! The teacher can follow the book and be so easily misled to teach the very young student without knowing that s/he is breaking the LAW. If the concept has sth to do with sounds, why not let the sound speak first??*

- **"**In the Magical Music Book on the piano Beethoven Bear discovered the musical name for LOUD: *forte*. He shouted: "I can play a *forte* anywhere on the keyboard."" [Q: TA2.L1, p.10] => *Oooops!! Is this experience before sign and symbol?? The same learning process was suggested as Mozart Mouse discovered soft sounds for **piano** while turning the page*.
- TA2.L1, p.12 [Q]: "Beethoven Bear wanted to use his left hand to play low sounds. But he wasn't sure which fingers he should use. "Look!" said Mozart Mouse. "The Magical Music Book says that the THUMB is the first finger of each hand!" => *Another bitter proof of label/symbol before experience. Instead of looking into the book, the children can be directed to the teacher and watch the real thumb. Right?*
- TA2.L1, p. 15 [Q]: "What should we do with the 2 black key groups?" Mozart Mouse asked. "Let's play quarter notes [never heard before] on them!" suggested Beethoven Bear. "I learned about them in the Magical Music Book." => *Another proof of label before experience instruction!!!*
- [Q: TA2.L1, p.17]: "After reading about bar lines in the Magical Music Book, Beethoven Bear …." => *why do we have to read first about the bar line, and why is it important to let a 4 yr old to know about bar line?? It is like to give out all the rules before playing the game*.

=> This is a sad finding behind the wonderful cast of Beethoven Bear and Mozart Mouse indeed. There might be a mistake in the ways to teach between music and language. When a child learns to speak, s/he hears what has been said and copies it. But when a child learns to play music, s/he should first hear the music or the sound, the very element of the music, instead of the linguistic label of that sound or the concept.

♫ **Main Emphasis of the Method: The development of music appreciation and reading readiness –** music literacy. => *Somehow, I am not sure what the main emphasis is, at this point. Please verify it with me.*

♫ **Technic:**

I. **Vocal Technic: singing** should be taught by listening and repetition. TA2.TH, p. 13. Range is limited, D-A in the middle C register. Children will listen to songs several times before singing.

II. **Listening Skill:** coined as the backbone of musical intelligence by the authors, TA2.TH, p.12. Children respond to dynamics and timbre first, later pitch and rhythm, followed by harmony. Listening just for fun of movement, for responding to certain musical elements, or for a time to relax and color pictures. => *This is not emphasized enough in the lesson book. The story characters have only mentioned once "Listen!" in the book, TA2.L, p.20. Other times "look" – the visual tool in learning has been used more frequently: TA2.L, pp. 12: "Look!" said the Mozart Mouse. "The Magical Music Book says…." Or p. 27: "Look, Beethoven Bear, we can play a song using D!" Mozart Mouse added." => A song using D should be listened!! Right?*

III. **Playing Technic:**

- **Tone Production:** No evidence.

- **Gross/Fine Motor Development:** TA2.TH, p.13. Movement should be seen as the precursor for performance at the piano. The technical development focuses on developing a good hand position and promoting freedom of movement over the keyboard. TA2.TH, p.12. => *This idea should be planted in the teacher's head to be effective, because no teaching steps promoting the idea above is mentioned in the TA2.L, the book that conducts the lesson. Following the teaching steps in blue circled numbers, one can hardly find the device to foster a good hand position or the freedom over the keyboard, not to mention movement in music.* TA2.L, p.16 or pp.27 & 47, the last song of book I.
- **Finger Numbers**: First using 2, 3, & 4 fingers to play black key groups, later the thumb and the fifth finger in order to establish a balanced hand position.

IV. **Keyboard Performance:**

- **Sitting Posture and Hand Form**: Either the picture of children sitting at the piano or texts for teachers and parents to read all point to the importance of the sitting correctly at the piano. Hand form – holding a bubble gently and do not drop it. Interestingly, the message is passed on by the two story characters, Beethoven bear and Mozart Mouse, who direct a type of peer talk that the children may favor over learning from "what the teacher said.' TA2.L, p.5. => *Learning from peers becomes the unique way to participate in the music study.*
- **Alternating Hands:** TA2.L, pp.24-25.
- **Eye-Hand Coordination:** TA2.TH, p.12: can be achieved via the music written in the lesson book to be played by the child. The music is short and technically appropriate to the very young beginner. The artwork and song lyrics reveal a close relation to the concept for easier understanding of the children. "If students have trouble focusing their eyes on the music in the student's part, ask them to circle or highlight the student piano part." [Q: TA2.TH, p.12] => *The authors also admit that the layout of the book can be overwhelming and distract the child's attention. Why not reduce some of the narration??*

♫ **Rhythm Reading: ~ (***The ultimate form of rhythm reading is the rhythm set in values, therefore all other forms of rhythm reading before rhythm values are pre-reading system***.)**

I. **Pre-Reading:** No evidence.

II. **Rhythm Values: 1)** Introduction: The full range of rhythm values, all notes and rests. => *Full range!! Maybe too much for the very young child*. The authors listed the following points in dealing with rhythm: whole body steady beat approach TA2.TH, p.13 => *not in the lesson book, though, I only see count aloud and say finger numbers,* also included in the authors' notes about **rhythm:**

III. **Rhythm Reading Exercises**: **1)** rhythm patterns**,** limited, not as much drilled as in the MfM. **2)** rhythm instrument**,** yes used some in the TA2.D.

♫ **Pitch Reading: ~ (***The ultimate form of pitch reading is the mature notation on staff including rhythm values. In this manner, the notation without staff is regarded as pre-staff-reading notation. All other forms of pitch reading not including rhythm notes are grouped in the pre-pre-reading system.***)**

I. **Pre-Pre-Reading: 1)** Keyboard diagram**,** starts from the beginning and to the end of the book A.

II. **Pre-Staff-Reading: 1)** Moving notes with stems**:** up=RH, down=LH**,** TA2.L, pp.16-17. **2)** Note name inside the note head: moving notes with names without staff, combined with note values. TA2.L, pp.27-47.

III. **Positions**: **1)** DCEBA = shared Middle C position.

♫ **Presentation of Music Notation: treated more like illustrations to experience not to understand, starts from the beginning with loud/soft sounds –** Pre-staff note rhythm reading. 1st mature notation (Grand staff accompaniment for the teacher and parents) shown in the lesson book on page 16, composed major tune for the RH with 6 flats – in TA2.L1, key board diagram + pre-staff note RR + grand staff notation with meter all printed on the same page. By this time, the children have already seen and experienced the first two reading methods, but not the grand staff. The children may or may not have questions for it. => *This may not overwhelm the children, since they have experienced more complicated song-and-accompaniment notation in the discovery book. The presentation of the mature notations reveals to children the realm of notated music, so that the children are not afraid of it once it is time to learn it.*

♫ **Tunes used/Repertoire:**

- **Familiar NS/folk songs:** none in TA2.L1 ~ Major classical tune for a long time. More NS in TA2.D1 ~ (If you're Happy and You Know It, Finger Play Song, Hickory, Dickory, Dock, Mexican Hat Dance, Old McDonald Had a Farm, Twinkle, Twinkle, Little Star), Frère Jacques, Hot Cross Buns, Three Blind Mice, The Farmer in the Dell, & Jingle Bells).
- **Composed songs** to synchronize rhythm and melody and to introduce various musical elements. Music written for development of finger dexterity, => *low quality music*. Other repertoire includes a variety of musical styles, moods, and keys to introduce expressive elements. P.13. => *In reality, the music is really dull here and everything seems to be C-major, it is hard to feel the expressiveness through limited styles all set in C major*. *This is really the down side of the method. It really lacks both the rhythmic and melodic variety.*
- **Melody** – no words mentioned about the melody. => *In fact the musical materials provided are all real teaching pieces, can not talk about the quality of melody or music=> What a pity. Melody is the most appealing element in the music, and the authors do not spend time and space to mention it from the beginning. Chances are that students will mistake playing the piano with moving the right fingers and counting the correct note value and name without listening at all.*

♫ **Accompaniment/Ensemble Playing:** beginning with the 1st class, no ostinatos, just some accompaniment, can not say it contains melody. Very short, the longest 4 measures only.

♫ **Creativity: No evidence.**

♫ **Opening and Closing songs for Lesson: Yes, but** no word saying why to use both songs**.**

♫ **Illustration:** OK, not too overwhelming. The story characters are not only illustrated in the book, they also come in forms of plush stuff animals. The layout is packed with information, mostly, texts.

♫ **Detailed lesson planning:** No, not helpful.

♫ **Certificate of Promotion:** Yes, more like an invitation to continue with level B.

Strength of the Method

~ TA2.D introduces the children to great composers and their compositions: Beethoven's Rage Over the Lost Penny, Mozart's Variation on Twinkle, Twinkle, Little Star, and Sousa's Stars and Stripes Forever. TA2.TH, p. 7.
~ TA2 directs the children and parents to the world of ***music appreciation****. Compact Disc Recordings helps develop children's listening skills. => while practicing at home, the CDs also serve as the high quality model for the student and parents, the teacher need not worry about incorrect sound and music being studied over the week.*
~ Accompaniment arrangements in the MIDI range from simple drum patterns to full orchestrations in order to "enhance the musical performance in a stylistic manner. These accompaniments add musical interests and motivate students to complete assignments both on the classroom and during the practice." [Q] TA2.TH, .p.7.
~ Separate sessions in the Teacher's Handbook are dedicated to acknowledge the importance of Early Childhood Music, to offer characteristics of the young children, and to suggest special considerations in teaching piano to young children. TA2.TH, p. 8. *Citations are listed in the ECM section.*
~ Authors' ***philosophy*** *presents that "influences of music go far beyond the intellectual and physical development of a child. Studying music contributes to the growth of a well-balanced child in sensitivity, expressiveness and the spirit essential for functioning in a complicated world." The Authors also believe that music study will aid to the development of the following areas: Patience, confidence and poise, perseverance and commitment, friendships (opportunities for interaction with peers), coordination (of gross and fine motor muscles), self-respect and satisfaction, creativity and self-expression, pride in achievement, concentration, fun and relaxation.* TA2.TH, p.9 [halfQ].
~ TA2 offers the success triangle in the music study: ***Teacher*** *– contributes knowledge of subject matter and professional expertise,* ***Child*** *– contributes natural learning abilities and interest in subject matter,* ***Parents*** *– contributes support to both the teacher and child through understanding of the process, cooperation with the teacher and assistance to the child.* TA2.TH, p. 11. [Q].
~ Pacing is very slow, suitable for the four yr old beginners. (e.g. one to two max. new concept each lesson.)
~ Each new musical alphabet is based on the one and single rhythm pattern. Easy for the children to remember and manipulate.
~ Three keys each hand Middle C position is appropriate for the children to control. The method of book I finishes with playing the strongest fingers of each hand.

Weakness of the Method

~ A great amount of texts and narrations is printed in the book for the teacher and the parents; however, it looks like another story book and can be overwhelming for kids to concentrate. TA2.TH, p.12 says if students have trouble focusing; they should highlight or circle their part.
~ Steps to teaching: Place Beethoven Bear on 2 black keys, clap and count the rhythm, point to the quarter notes and count, say finger numbers while playing in the air, play one key at a time and say the finger number, play and sing the words. => Use study buddies to locate the keys is a good idea, however, may not be necessary. At this point, the steady beat seems to be felt with fingers and mouth.
~ The sense of rhythm seems to be emphasized via counting and saying the rhythm value and finger numbers. Although the method advertises its rhythm learning through movement

experience, the lack of the whole body movement is throughout the method. See TA2.L and TA2.W.
The case of whole body movement in TA2.D is like the dessert of the week, too small the amount to be felt as real. The counting and saying rhythm value and finger numbers are the usual teaching tool in most piano method books. This method seem to misdirect the students that playing the piano would not need other parts of hands or body, only fingers will do ok. This is a dangerous mistake!!
~ Listening drills and games are limited. I wish that the teacher's handbook can share more teaching strategies to bridge the gaps between the workbook and the discovery book.
~ The design of concept reinforcement is the downside of the method. Most of the exercises are visual and cognitive/intellectual discrimination that does not really engage the aural facility of the brain. Without the aural perception, can music be music??
~ Types of rhythmic patterns: limited. All the alphabet songs are cast in the same rhythm pattern. See TA2.L, pp. 27, 29, 33, 39, and 43. => Might be predictable for the very young beginner, but sort of lacking variety in rhythm patterns.
~ The rhythm pattern provided in TA2.D for facilitating the music appreciation may be difficult to execute for the very young pianist. Many of the patterns are not underlining or highlighting the existing rhythm but are themselves a new pattern to the music. This may cause confusion in the young children's listening process. Music appreciation could turn out to be stressful.
~ Although creativity has been listed under the reasons for studying piano at a young age in the teacher's handbook, the lack of creativity is evident throughout the method. Please note that coloring is not creativity. In fact, the Teacher's Handbook does not include creativity as one of the skills planned for the children to learn in the TA2.TH, pp.12-13.

Thoughts of Peer Checkers on Author(s)' Notes to Teacher & Other Contemplations in General. *Use another paper if applicable.*

~ After examination, do you find relevancy in what the authors have advertised about their method? Or any thoughts on the structural design, the appropriateness of the musical content provided, and other commendable aspects of the method?

Example 4 Refined Categorized Data

Data Interpretation and Discussion: The Whole-Body Music Trend

Define whole-body music?
The *belief* in that a total music experience should be initiated through a combination of aural, visual, physical, & mental domains of the child's development to nurture musical thinking, proper coordination for sound production, and freedom to utilize musical materials, as well as to achieve genuine personal expression and satisfaction.
The *trend* to involve students in music making and enjoyment.
The following themes help define the whole-body music.
Similar deviant cases: MfM & S&P.
Organization according to four emerging themes:
I. The teaching **philosophy** of the authors concerning very young beginners.
II. The **logic** of the structural design
III. The **summary** of musical content offered (to meet learning capacities and characteristics of the age group as assumed)
IV. Other commendable **aspects** of the method design

I. The teaching **philosophy** of the authors concerning very young beginners.

General: Music and movement class approach centered around the keyboard, with **Emphasis**: on whole body music understanding, development of aural, performing, & creative skills that aids to individual expression. ("individuality" & "self expression" in MfM.TM, p.8; S&P.TM, p.3-6).
Teaching strategies: Thoughtful and helpful *lesson planning* in form of prose (MfM & S&P), *sample lesson plan* in block format (S&P), both methods immerse *valuable information regarding learning characteristics of the very young beginner* & *evaluative strategies* in lesson planning, *issue of rote teaching* – in terms of demonstrating enabling the necessity of experience (oral, aural, visual, physical) before symbols (MfM.TM, pp.8-9, S&P.TM, pp.3 & 7).
Interview/Readiness Test: A *balanced evaluation of maturity in all area* – social, intellectual, musical & physical (both), *the use of test* is to see where the child stands and to group children of similar musical background together.
Parental involvement: Parents as teacher-assistant & music play-mates at home (Both). **MfM** also advocates monthly parent meeting with the teacher for music consultation.
Bonus: Declared quality and characteristics of preschool piano teachers (MfM.TM, inside cover & S&P.TM, p.5).

II. The **logic** of the structural design

Sequence of Concepts: At norm, essential and basic – **MfM**: 2s before 3s; whole body experience of steady beat before rhythm patterns, melodic contour & a- & descending directions before three-note patter. **S&P**: 2s before 3s, finding D (inside the 2s) before C, rhythm line notation before rhythm values, gross-motor before fine-motor development, sound picture before notated picture.

Presentation of concepts: Endorsement of experience before S, with various experiences for the same concept (MfM & S&P.TM, see lesson plan in blocks – development of various areas encouraged).
Reinforcement of Concepts: Thoughtful spiral sequence with emphasis on whole body and aural experiences. Built-in success indicators carefully interwoven into lesson planning prose.
Bonus: Cognitively from simple to complicated, physically big to small. Rhythm security before pitch security.

III. The **summary** of musical content offered (to meet learning capacities and characteristics of the age group as assumed)

MfM:

Technic:

I. **Vocal Technic:** singing is encouraged throughout the method. Children are also given chances to change words to the melody. However, no specific technic is offered.

II. **Listening Skill:** emphasized throughout the method in various activities, such as listening game, whole body movement, questions and answer. Listening skill is exercised on daily basis.

III. **Playing Technic:**

- **Tone Production:** "Don't worry too much about perfectly curved fingers as the child experiments with "Tune Up." If you encourage him to pull gently as he depresses each key, he will gradually strengthen his finger muscles and gain necessary control." [Q: p.54].
- **Gross Motor Development:** 1) When playing the keys at the piano, children are allowed to use large muscles (MfM.TM, p.18) of their arm, such as a fist to produce the sounds. 2) First 'glide' around the room with children; dance with scarf to explore and express "a soaring sail plane" moving silently and gracefully through the sky. Also, let their arms express the lightness of the glider playing in the breeze. (Emphasis of free flow of a long line). (MfM.TM, p.23).
- **Fine Motor Development:** Finger/fine motor manipulation is not required. (MfM.TM, p.18)
- **Copy Cat:** [Q: p. 57] Demo dynamics of patterns in echo fashion, let students copy the technic to play louder and softer.

IV. **Keyboard Performance:** MfM.TM, p. 62. Reminder of the musical rule of all – *keep going.*

- **Sitting Posture and Hand Form: No evidence.** Since this method is designed for group class, its orientation on the first day for class members circles around practical things such as making acquaintance with the environment, instruments, traffic patterns.
- **Cross Hands:** MfM.TM, p. 56.
- **Eye-Hand Coordination:** MfM.TM, p.55: In the children's book, circled notes are for the students to play. "Remember to stress the "picture" of the notes (contour of the melody line) and encourage them to look at the music when they play this. [Q] They are "reading" patterns and configurations, so that later, when the more

technical aspects of notation are introduced, there will be the necessary experience in eye movement across the page."

♫ **Rhythm Reading:** ~ (*The ultimate form of rhythm reading is the rhythm set in values, therefore all other forms of rhythm reading before rhythm values are pre-reading system.*)

I. **Pre-Reading: 1)** Steady beat**:** achieved through whole body movement. **2)** Line rhythm (printed on the children's book, MfM.Ch, p. 7), before that rhythm only physically experienced. **3)** Melody rhythm line (MfM.TM, p. 31, mature notation in children's book, p. 8), rhythm and pitch combination,

II. **Pre-Reading Exercises**: **1)** Listening Game: the *rhythm realization* of notation in treble clef in the Children's book, p. 14, **LG** is evolved from the Line rhythm, the dashed rhythm lines (representing long short values) are placed directly above the corresponding note-head notation to facilitate the proper rhythmic association. No explanation provided for the black-, white-noted, or white dotted notes. Notation seems to be treated as part of the illustration. **2)** Sonority of various rhythm instruments: the mature notation in bass clef (Indian Dance) provided on the children's book, p.15, learning is purely based on experience, not reading.

III. **Rhythm Values**: No evidence of formal introduction. Although printed as part of the illustration.

♫ **Pitch Reading:** ~ (*The ultimate form of pitch reading is the mature notation on staff including rhythm values. In this manner, the notation without staff is regarded as pre-staff-reading notation. All other forms of pitch reading not including rhythm notes are grouped in the pre-pre-reading system.*)

I. **Pre-Pre-Reading: 1)** Keyboard diagram serves as the foundation of orientation, patterns are more important than individual notes. **2)** Melody rhythm line: a kind of line notation that contains the long short patterns of rhythm and yet moves up and down like a melody will do. (MfM.TM, p.31, corresponding with MfM.Ch, p.8.) **3)** Shapes of the melodic patterns for single hand: *black key* groups, *scale* a- and descending patterns (finding A, then ABCDEFG a), *three-note- patterns* (using any three, major or minor tunes), repeated notes. Throughout the method emphasized. => *No evidence of Pre-Staff Reading, leading directly to notation*.

II. **Staff Notation in company with Keyboard Diagram or/and Melody Rhythm Line: 1)** Listening Game: MfM.Ch, p.14, A Combination of 1) and 2) + mature staff notation for RH. **2)** Tune Up: MfM.Ch, pp.30-31. **3)** Question and Answer: MfM.Ch, p.38. **4)** Shapes of the melodic patterns.

III. **Positions**: **1)** Shared Positions: 2,3,4,5 fingers for each hand. Mostly three note patterns. **2)** Transposition: start with any key and play. **3)** LH's accompaniment pattern: two-note chords, I, MfM.CH, p.44, and V, MfM.Ch, p.48.

♫ **Presentation of Music Notation: all are treated more like the illustration of the book:** 1st mature notation shown in the children's book on page 8, composed pentatonic tune for the RH with 6 sharps. Page 14 in the children's book, key board diagram + line rhythm + real RH notation with meter all printed on the same page; however, by this time, the children have already seen and experienced each one of them for at least three weeks, therefore putting them all together seems to complete the puzzle without a big hassle. => *This may make children like the notation better than the other two tools, since*

one only tells you where to play and the other the long/short patter, none of both can give out the music as clearly as the real notation can do. Not yet grand clef notation for both hands.

♫ **Tunes used/Repertoire:** mainly NS ~ (Frère Jacques, Hot Cross Buns, Three Blind Mice, The Farmer in the Dell, Hickory, Dickory, Dock, & Jingle Bells) some composed short tunes around the introduced tonal system (pentatone, whole tone, major, minor) for better aural understanding. => *All sonorities are experienced both aurally, visually, and physically; the author seems to treat all three domains with success.*

♫ **Accompaniment/Ensemble Playing:** beginning with the 1st class, MfM.TM, p. 16 – with the teacher's melodic ostinato, children play another layer of two black key ostinato of the song. It may be just partly accompaniment, but a real ensemble experience for many of the children.

♫ **Creativity:** Penetrating the entire method. The courier activity, Play-A-Story.

♫ **Opening and Closing songs for Lesson: A Hello song** can use the familiar song (such as Frere Jaqcues) as a "theme song" to help "children focus their attention" [Q: MfM.TM, p.22] and ease the transition to the next one. **A Good-Bye** song can evolve from the Hello song, for "that the children should leave each class with as sense of accomplishment and a real enthusiasm for music." [MfM.TM, Q: p.33]

S&P:

♫ **Technic:**

I. **Vocal Technic:** Emphasis on developing the singing voice through chanting playground songs (Sol-mi, S&P.CH, p.4), encouraging the child to use singing voice rather than speaking voice in responding words set in sol-mi. **=>** *It is crucial that the teacher notices the difference between the singing voice & the speaking voice.* "Although you may want to add piano accompaniment at times, it is generally best to sing the songs unaccompanied, with the children matching your voice rather than the piano." [Q: S&P.TM, p.18]. => *This may explain why most of the songs have no accompaniment, some of the accompaniment parts are reduced to one voice, and a few of the accompaniment parts appear with the remark as optional.*

II. **Listening Skill:** The realization of this technic can be observed in two self-contained blocks (Listening & Write and Listen) of the lesson plan (see S&P.TM, pp.16, 23, 28, 33, & 38.) "Preschoolers should not play anything that they do not experience aurally. Ear-training should begin with the very first class and be continued throughout every week of piano study." [Q: S&P.TM, p.5] => *The authors provided practical hints and strategies to help teachers to realize the task of teaching listening skill.*

III. Playing Technic:

- **Tone Production**: No evidence of how to produce the tone at the keyboard. However in the notes to parents in S&P.Ch (p.2), the authors listed intensity, duration, pitch, and timbre as the major factors to the concept of tone. => *This is can be the **TONE 101** for the parents. Interesting to see that authors recognized the quality of tone as the essential information to share with the parents.*
- **Gross Motor Development**:

1) Exploration of ways to keep steady beat: clapping, marching, nodding the head, etc. S&P.Ch, p.6. => *Utilizing the natural instinct of children to cultivate a good*

music and movement response. "Feeling the beat with the whole body is basic to the child's rhythmic development. Walk the beat to music that you play or to a recording. Choose music that has a strong, easy-to-hear beat in a fairly quick tempo. Remember that children have shorter legs and a faster metabolism, and move at a faster walking tempo than do adults." Q:S&P.TM, p.25.

2) Orientation at the keyboard: Chant "How do I know my left hand?" Play steady beat while chanting "Left hand is low." Chant again: "When I am at the piano," play steady beat while saying "it tells me so." – activity for distinguishing LH & RH. S&P.Ch, p.46. => *Interesting to see that this issue is dealt in the middle of book I, not at the beginning. Reasons for this may be 1) up to this point, the child has been using just the supported index finger of both hands to play. The child will start RH playing the piece, then use the LF to play it again. 2)Distinguishing LH from RH might not be as important as developing finger independence at this stage as the authors stated that isolating individual fingers is the first task in developing the finger independence that will lay good foundation for the open hand position. (S&P.TM, p.34). Better thoughts?*

3) Closed Hand Position: "In this position the very young child can play with a good solid tone, using a large-muscle movement appropriate to his stage of physical development." [Q: S&P.TM, p.25]. => *The authors pointed out the connection between the fine motor development and gross motor development and acknowledged the importance of support from both sides.*

- **Fine Motor Development:**

1) Whole Hand Position: 4 fingers without the thumb!! "Open, Shut Them" – action songs S&P.Ch, p.11. => *The researcher assumed a 'palm' technic or 'flat hand and fingers' here*, see S&P.Ch, p.4 for illustration of whole hand position.
2) Closed Hand Position: the supported index finger by the thumb to shaped the arched hand and form a flexible wrist. "Three Black Cats" S&P.Ch, p.12 and "EIEIO" of Old MacDonald, S&P.CH, p.14. => *the usual 'braised finger technic.'*
3) Whole & Closed Hand Exercise: A combination of both technic: "Three black Keys" – pentatone song,
4) Finger Play Songs: "Five Little Ducks" – action song for whole-closed hand and finger control, S&P.Ch, pp.16 & 19. This activity emphasizes on controlling movements of hands in a rhythmic context. (S&P.TM, p.18). [Q: also p.18: "Your goal is not simply for the child to sing the song and so the gesture, but to do them in rhythm."] Setting a precise model will help the child to "the best of his coordination ability."
5) Open Hand Position: Introduced in Block 7, Book 2. S&P.TM, p.46. => *A so-called 5- key cluster (5-note position) with a good hand shape, adapted for preschoolers from "elementary graduation exercises" by Richard Chronister's Keyboard Arts (Winter, 1985).*

IV. Keyboard Performance:

- **Sitting posture & Hand form:** S&P.Ch, p.3. Illustration of a child sitting at the piano. Elbow aligns to the key level and good balanced support from the foot stool.
- **Keyboard Geography**: No evidence. => *However, may emphasize on* **Keyboard Expressiveness** *instead. S&P.TM, p.23 inside the Playing block.* [Q:S&P.TM, p.4:

"Piano playing should be more than playing the correct key at the correct time, and preschoolers should be made aware of beginning expressive concepts."]

- **Alternating Hands:** S&P.Ch, p.16, "Three Black Keys" pentatone song with interesting texts reinforcing concepts. => More alternation between singing and playing than alternating hands technic.
- **Eye-Hand Coordination:** No evidence. => *Since a great deal of playing is rote teaching the eye-hand coordination needs not be emphasized at this stage. Information regarding this topic emerges in Book II (S&P.Ch(2), p.2).*

♫ **Rhythm Reading: ~ (***The ultimate form of rhythm reading is the rhythm set in values, therefore all other forms of rhythm reading before rhythm values are pre-reading system.***)**

I. **Pre-Reading: 1)** Steady beat**:** achieved through whole body movement, such as walking, marching, clapping, tapping. **2)** Rhythm Line Notation: horizontal short/long lines representing rhythm pattern. S&P.Ch, p.8. [Q: S&P.TM, p.17: "Rhythmic reading is introduces durationally by hearing, reading, and playing short and long sounds." Rhythm chart is offered on teacher's M, pp.11-12. => *Isolated rhythmic experience.*

II. **Rhythm Values: 1)** Introduction: quarter note in numeric counting system. S&P.CH, p.24; [Q: S&P.TM, p.29: "Walk quarter notes, tap quarter notes, read quarter notes from a rhythm chart or card and practice drawing quarter notes."] Half note, S&P.CH, p.32, half dotted and whole notes. Rhythm patterns are practiced with dynamic changes and different tones. => *Note values are introduced to complete the demand of rhythm patterns.* **2)** Note Values aligned with Rhythm Line Notation: the durational idea of short-long lines is extended to the form of rhythm notes. See S&P.Ch, pp.24&32 for example. => *In this manner, the very young children will be ready to see the relationship between two forms of notation.*

♫ **Pitch Reading: ~ (***The ultimate form of pitch reading is the mature notation on staff including rhythm values. In this manner, the notation without staff is regarded as pre-staff-reading notation. All other forms of pitch reading not including rhythm notes are grouped in the pre-pre-reading system.***)**

I. **Pre-Pre-Reading: 1)** Keyboard diagram: a type of pitch notation in itself, starts from the beginning and continues to the end of S&P.Ch. **2)** Keyboard Diagram with Alphabets**:** D is the 1st key to learn, S&P.CH, p.21. Then C. Later, CDE, CDEF,, CDEFG; FGA & GABC. All: A-G, S&P.CH, pp.48-49. => *D is easier to find inside the two black keys than A inside the three blacks.*

II. **Staff Notation *without* Keyboard Diagram: 1)** Music Notation for RH: with treble clef, S&P.Ch, pp.52-53 – the realization – the notated picture of the sound picture. (Also see S&P.Ch, pp.22-23, the "sound picture" of p. 52-53's the notated picture. => *The total freedom from keyboard diagram carries over to the rest of the series, e.g. Books II-IV. It is surprised to see that the child leaves this book with a music notation without keyboard diagram.*

III. **Positions**: No actual five finger position. As all songs are played with the supported index finger of closed hand position only.

♫ **Presentation of Music Notation: Mostly the songs to be sung are set in one voice (melody) notation.** (with occasional one-voice accompaniment). The melody notations

are prepared for the use of the parents and the teacher not for the child, but the child can see how the songs he knows can be notated. Toward the end of Book I, the child will also learn to read treble clef music notation.

♫ **Tunes used/Repertoire:**

- **Familiar NS/folk songs** to be sung are set in various key.
- **Composed songs, based on sol-mi,** are used to synchronize rhythm and to introduce musical elements & concepts. Music written serving teaching purposes and theory. => *Mostly in Gb (or pentatone), D, C, and a minor. Although all music to be played are composed pieces with limited key choices, they still convey a variety of style and mood. See styles under accompaniment section.*
- **Melody** – emphasized throughout the method. (Only melody of the songs is printed on the book.) S&P.Ch, p.2 offers essential information to the parents.

♫ **Accompaniment/Ensemble Playing: "**Although you may want to add piano accompaniment at times, it is generally best to sing the songs unaccompanied, with the children matching your voice rather than the piano."[Q:S&P.TM, p.18, under supplementary songs]. The style of accompaniments is simple, non-intrusive, mostly single voice, and yet reveals a variety: march, waltz, jazz, traditional major-minor tonality chordal, and contemporary. Ensemble playing starts with black key groups. => *It seems that the authors viewed singing as the vital part of rote teaching. When the goal is singing, the teacher needs to be a good singing model, and when it comes to playing, the teacher will transform oneself into perfect playing model just to guarantee the success of the child in music study. In this case, the role of any fancy accompaniment is diminished. This treatment is age appropriate, I assume. Since most four year olds can only focus on one single thing at a time. (Piaget's centration.)*

♫ **Creativity:** Play-A-Picture activity encourages creative sound usage of the piano from the child and reinforces learned concepts. The picture to be 'played' and its instructions are printed in the children's book. => *Although the authors dedicated an activity especially to the development of creativity, they do not share information about how to do it. However, it is still better than never mentioning about it.*

♫ **Opening and Closing songs for Lesson:** Yes, the authors said that opening and closing songs give the class a comfortable feeling of order and security. (S&P.TM, p.8). Songs are printed on the children's book, p.11.

♫ **S&P.W&L:** reinforces and reviewed learned concepts in forms of visual, cognitive/intellectual, and aural discrimination.

IV. Other commendable **aspects** of the method design

Illustrations: Simple to the point, large keyboard diagram, space for children to color, music notation serves as illustration at the beginning, large print – **MfM**: dual tone scheme. **S&P**: black& white, as the integral part of the method. "Since most preschoolers cannot read the titles, they identify the songs by the pictures. Since most preschoolers love to color pictures, you may wish to reward the students for playing a song well by allowing him to color the picture at home after you have checked it. This helps the student who does not relate to page numbers, find his current working place in the book by looking for the pages with uncolored pictures." [Q: S&P.TM, p.8]. => *This is very*

thoughtful. However, may not appeal that much to the students and parents if they were exposed to other more colorful preschool piano methods.
Layout: *Dual to triple divisions* - large keyboard diagram occupies half the page horizontally; the other half space is reserved for simple non-intrusive illustrations, sometimes in combination with music notation or the text to the song in large print. (MfM.Ch, cover & p.8, p.14, or p.20; S&P.Ch, p.5 or p.23). S&P: *suggestions for home-practice* are outlined on each left-hand page; there parents/readers can find tips for practicing, concepts to be learned, music notation, song repertoire, and many other important suggestions.
Certificate for Promotion/Completion: No evidence. **MfM**: provided information similar to *indicators of success* at the end of the teacher's manual (MfM.TM, p.68). => *It is nice to find that the author offered an evaluative apparatus at the end of the book*.
S&P: provided an *index for song repertoire* (S&P.Ch, p.60) => *this seems to be more useful than a certificate to congratulate children's achievement. However, children are drawn to rewards more or less, they may not care that much about more useful things listed at the back of the book*.

APPENDIX B

ABBREVIATION GLOSSARY

TA1	The series of Alfred's Basic Piano Library: Prep Course for the Young. Palmer, Morton, & Lethco, 1988.
TA1.L(A)	Lesson Book, Level A, 1988.
TA1.TG(A)	Alfred's Prep Course: Teacher's Guide, Level A, 1988.
TA2	The series of Music for Little Mozarts. Barden, Kowalchyk, & Lancaster, 1999.
TA2.L(1)	Music for Little Mozarts: Music Lesson Book, 1, 1999.
TA2.D(1)	Music for Little Mozarts: Discovery Book, 1, 1999.
TA2.TH(1)	Music for Little Mozarts: Teacher's Handbook for book 1 & 2. Examination concentrated on book 1 only.
TA3	The series of Bastien's invitation to music series: Piano Party. Bastien, Bastien, & Bastien, 1993.
TA3.A	Piano Party, Book A, 1993.
TA3.Perf(A)	Performance Party, Book A, 1993.
TA3.TG(A)	Piano Party: Teacher's Guide, Book A, 1994.
WB1	The series of Music for Moppets. Pace & Pace, 1971.
WB1.Ch	Children's (Lesson) Book, 1971.
WB1.TM	Music for Moppets: Teacher's Manual, 1972.
WB2	The series of Sing and Play. Collins & Clary, 1981 & 1987.
WB2.Ch(1)	Sing and Play, Children's Book, 1, 1981 & 1987
WB2.Ch(2)	Sing and Play, Children's Book, 2, 1981 & 1987
WB2.TM(1)	Sing and Play, Teacher's Manual for books 1, 2, & 3, 1981 & 1987. Examinations concentrated on book 1 only.

APPENDIX C

MUSIC ILLUSTRATIONS

Illustration 1 The use of alternating hands & Center and Around Division (PP.A, pp. 10-11).

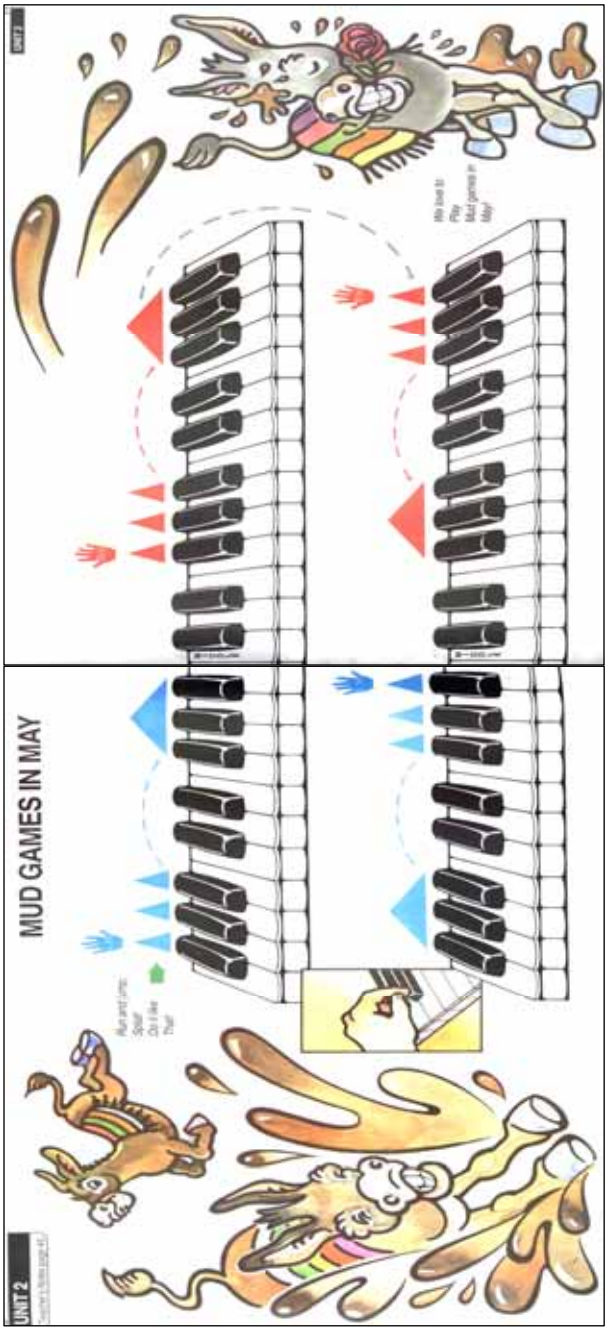


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Illustration 2 Introduction of white keys in a chart (TA3.A, p. 20).

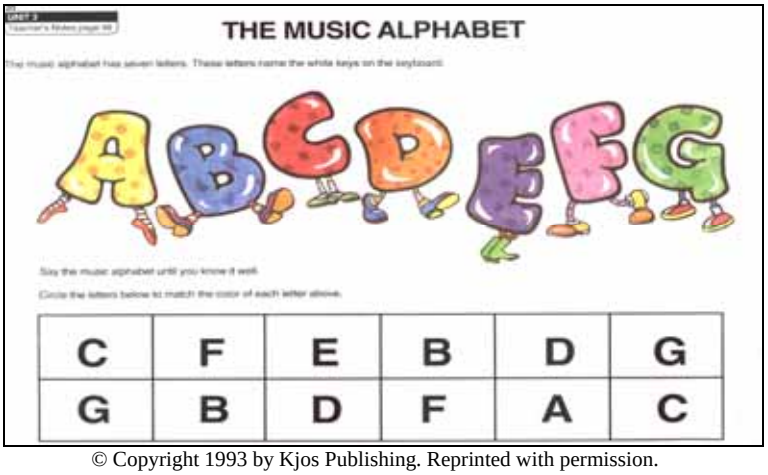

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Illustration 3 Introduction of rhythm values in a chart (TA3.A, p. 23).

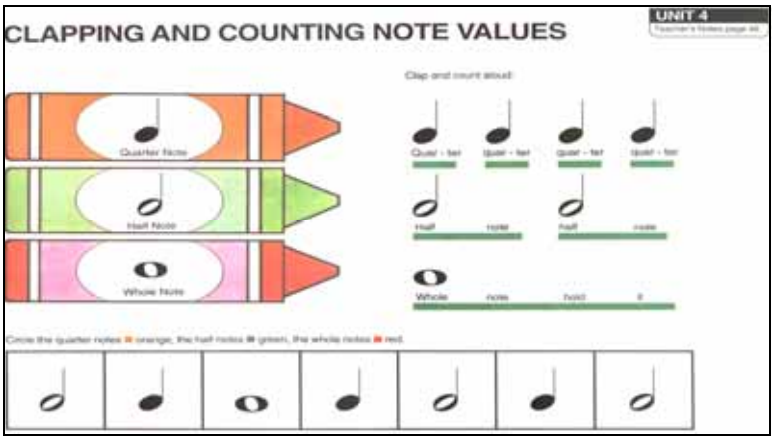

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Illustration 4 Introduction of rhythm values in a chart (TA3.A, p. 29).

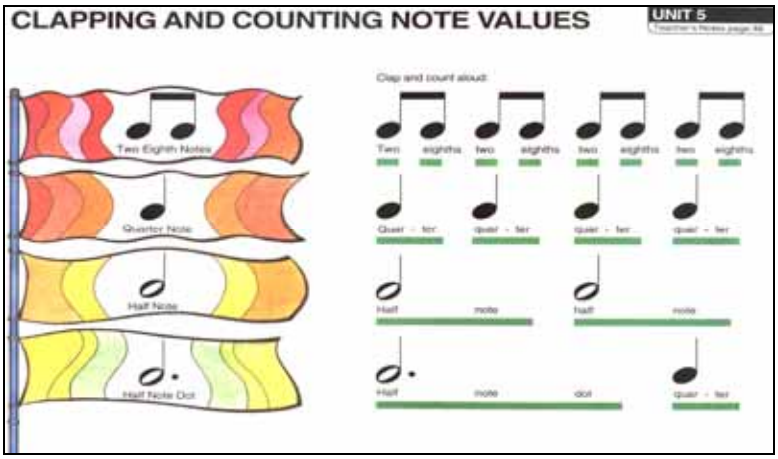

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Illustration 5 Green bars (TA3.A, p. 14).

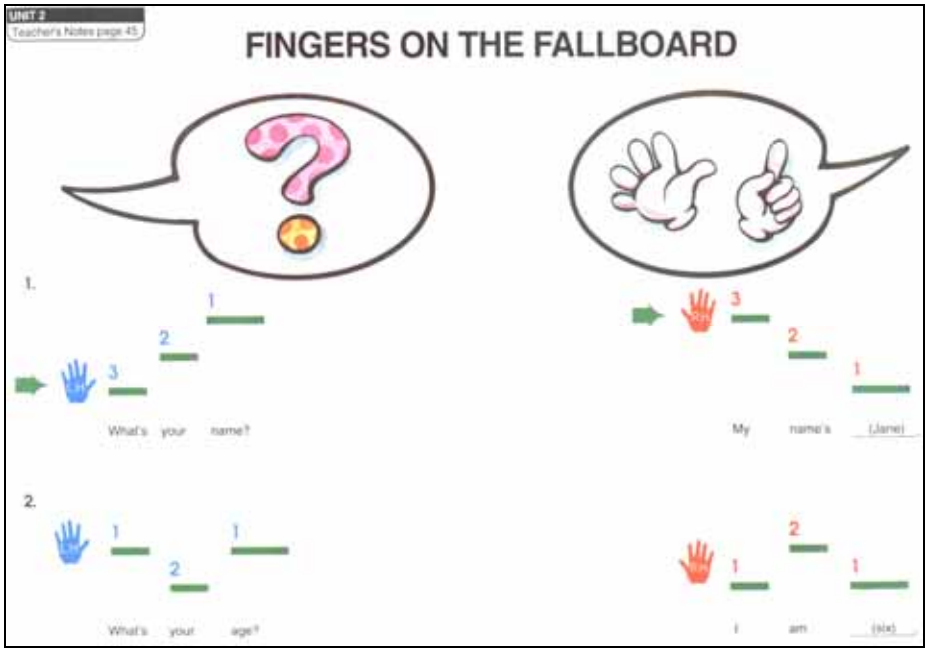

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Illustration 6 Two black keys in quarters using alternative fingers & Multi-Division (TA1.L(A), p. 8).

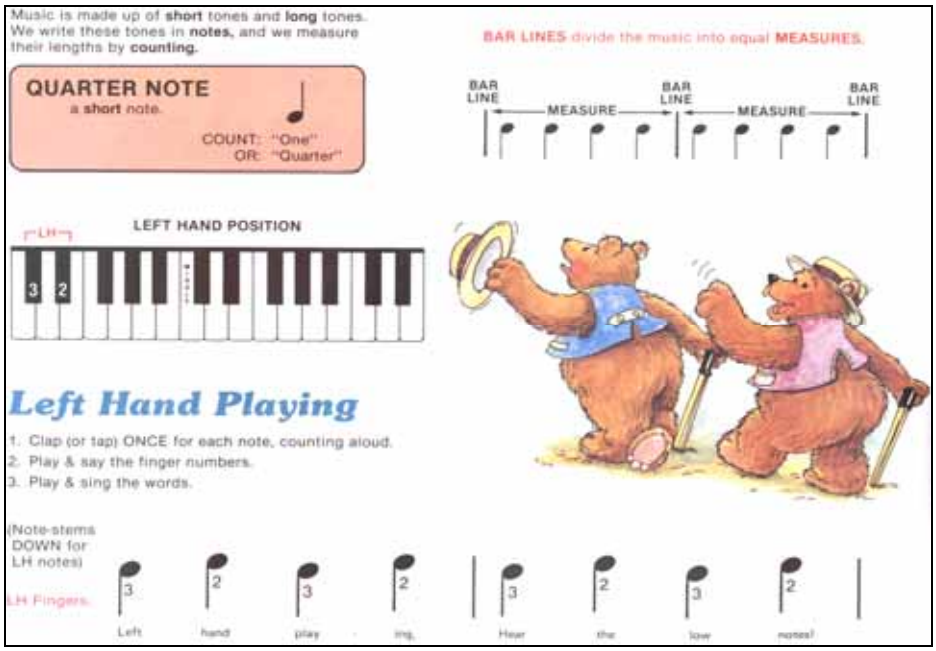

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Illustration 7 Two black keys in quarters using alternative fingers & *Multi-Division* (TA2.L(1), p. 16).

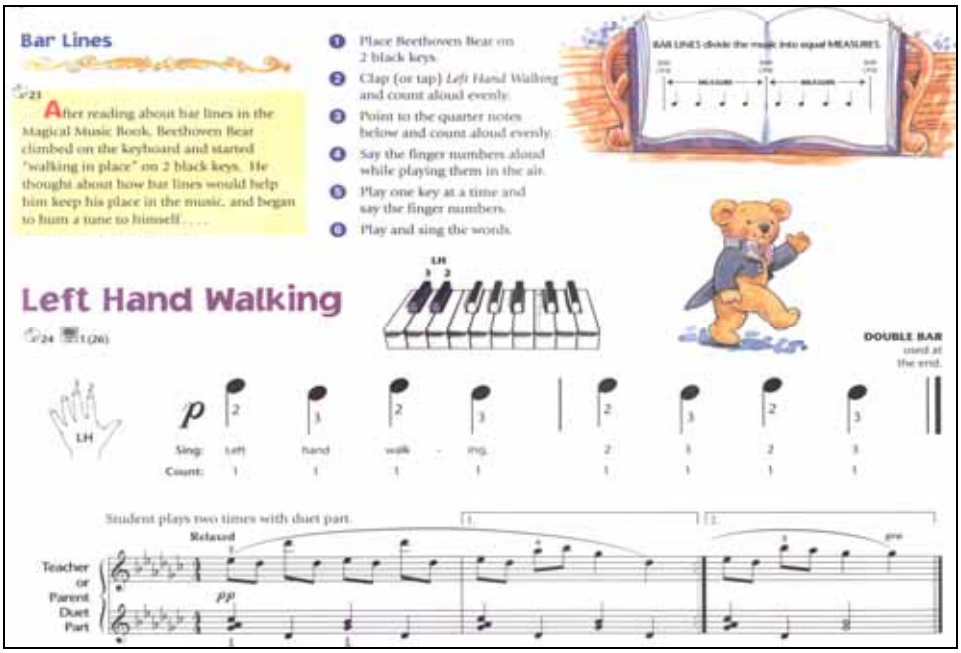

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Illustration 8 Pitch position exercised in new rhythm value with designated finger numbers (TA1.L(A), p. 10).

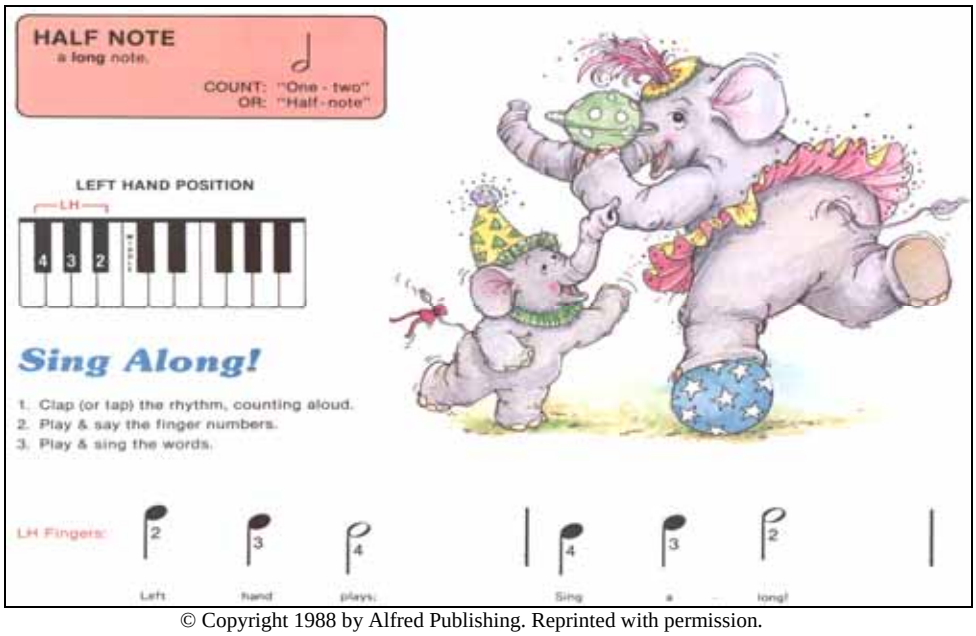

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Illustration 9 Pitch position exercised in new rhythm value with designated finger numbers (TA2.L(1), p. 31).

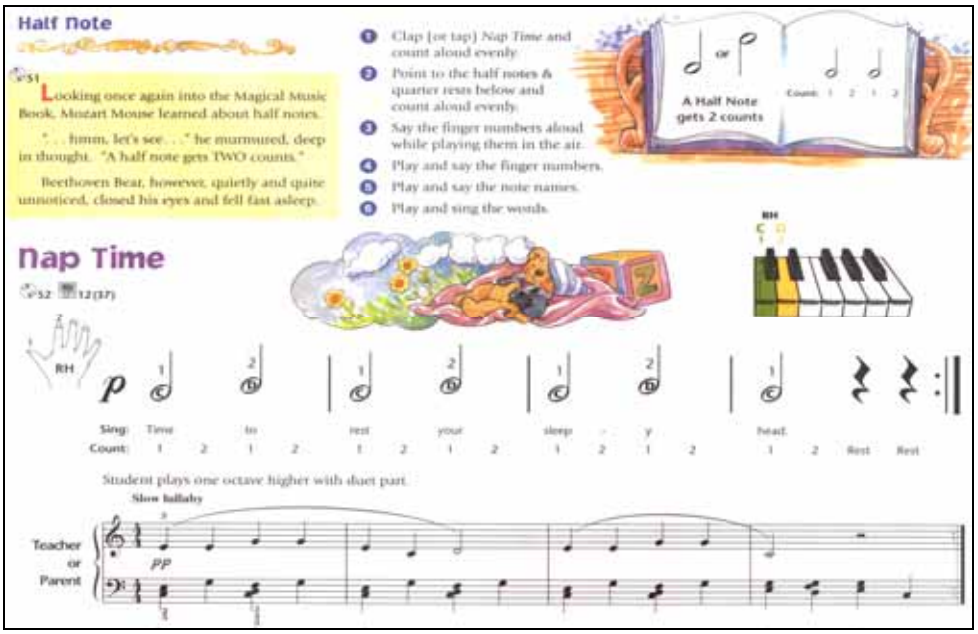

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Illustration 10 Linguistic association (TA1.L(A), p. 17).

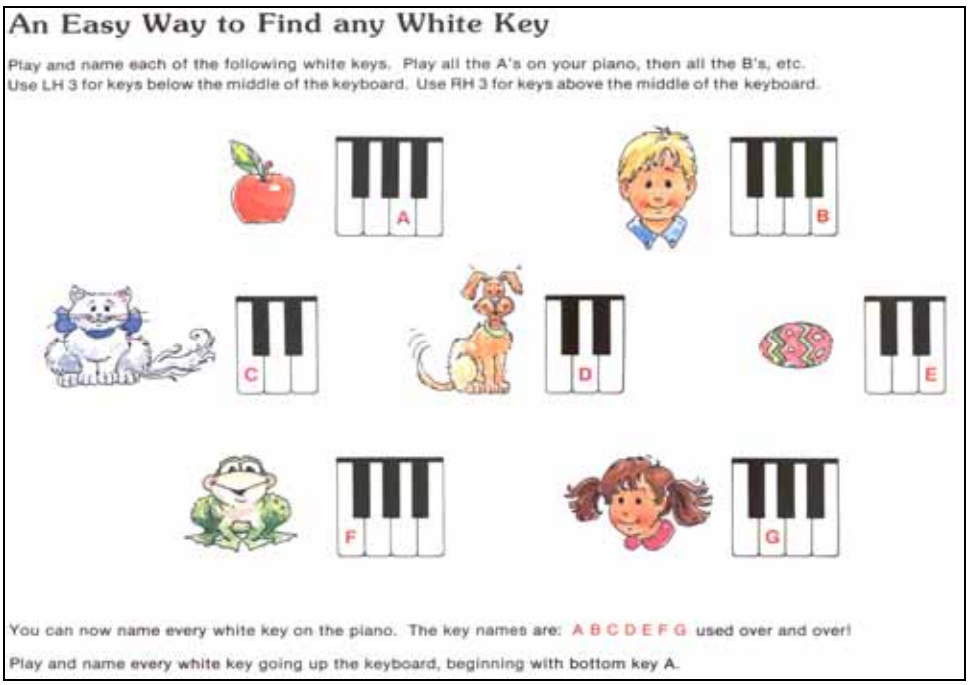

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Illustration 11 Localized register (TA2.L(1), pp. 20-21).

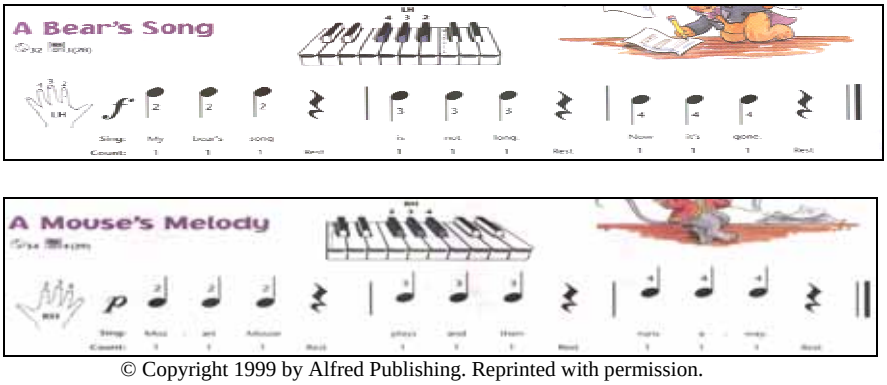

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Illustration 12 Rhythm Line in Listening Game (WB1.Ch, p. 14).

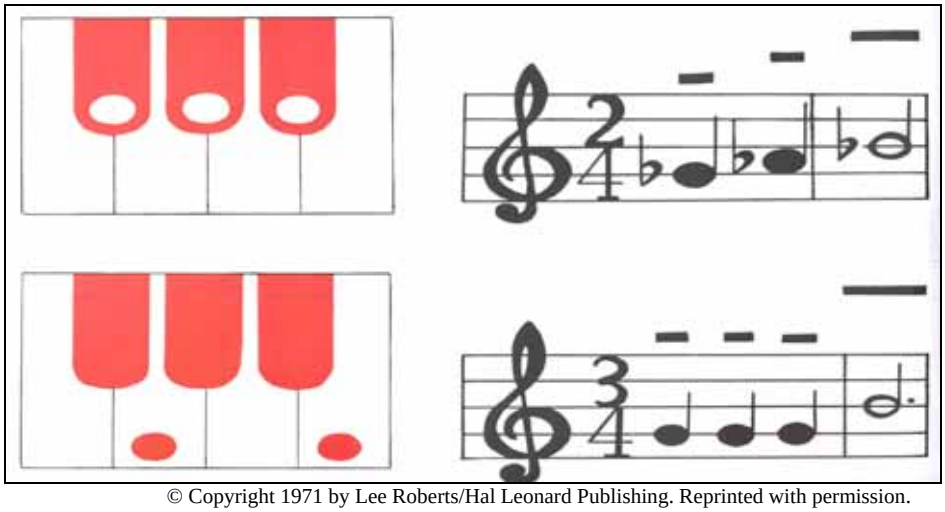

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Illustration 13 Line Notation (WB2.Ch(1), p. 24).

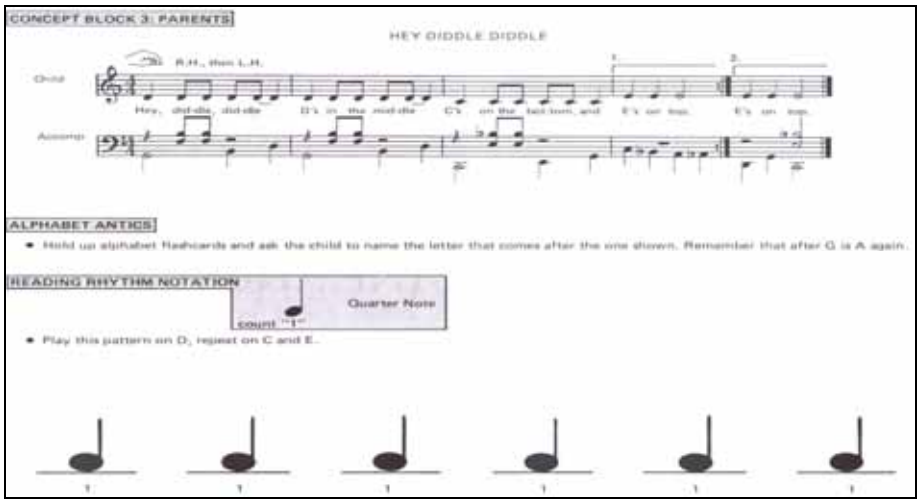

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Illustration 14 Confusion in task presentation (TA3.A, p. 3).

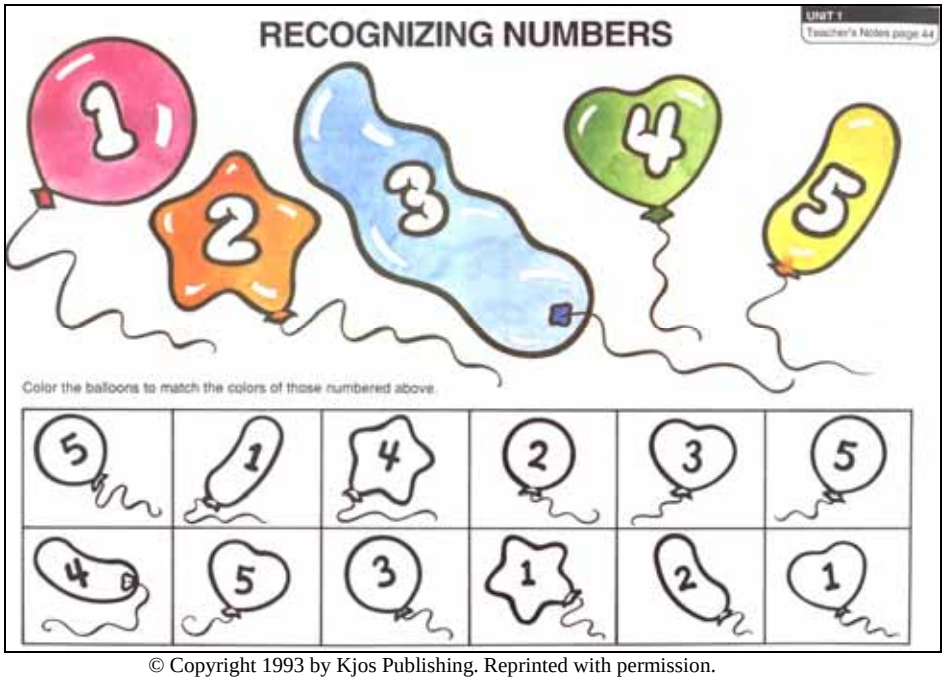

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Illustration 15 Confusion in pre-reading (TA3.Perf(A), p. 6).

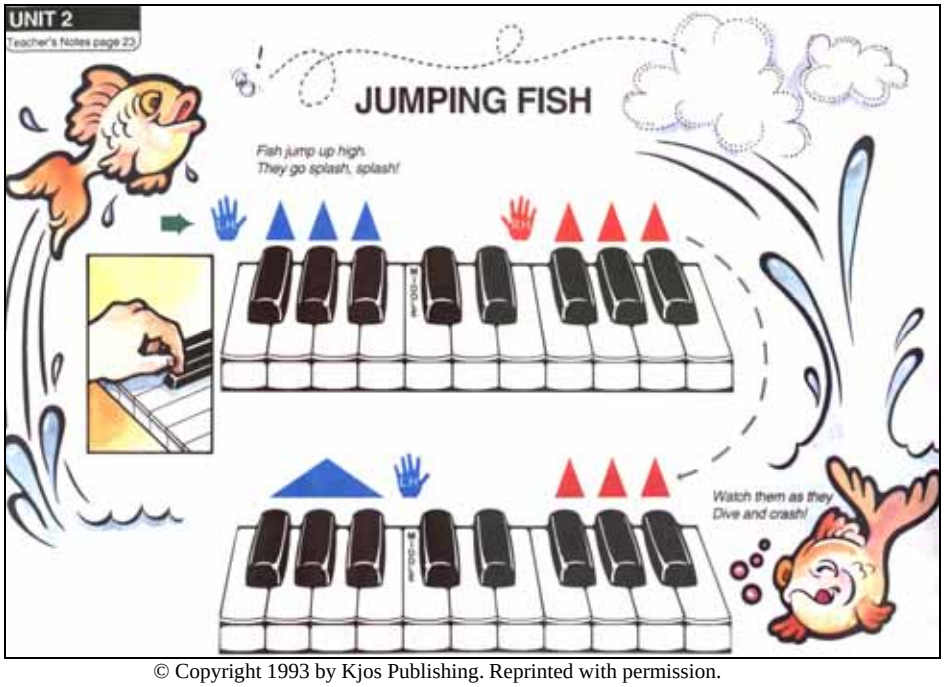

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Illustration 16 Confusion in pre-reading (PP.Perf(A), pp. 8-9).

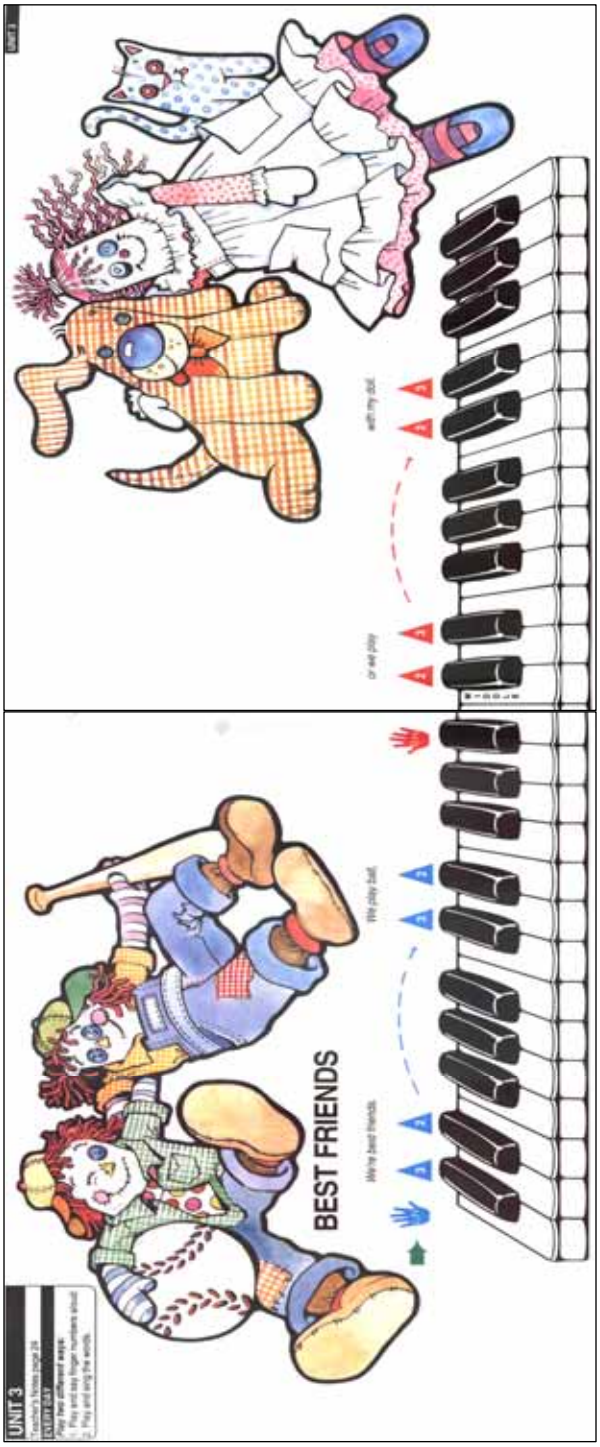

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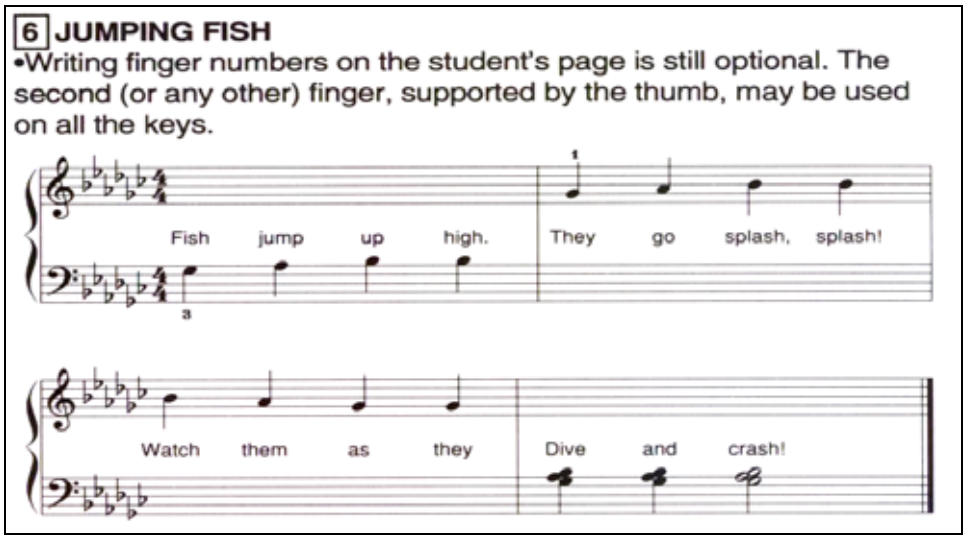
Illustration 17 Confusion in pre-reading: *PP* authors' version of music (TA3.Perf(A), pp. 23 & 24).



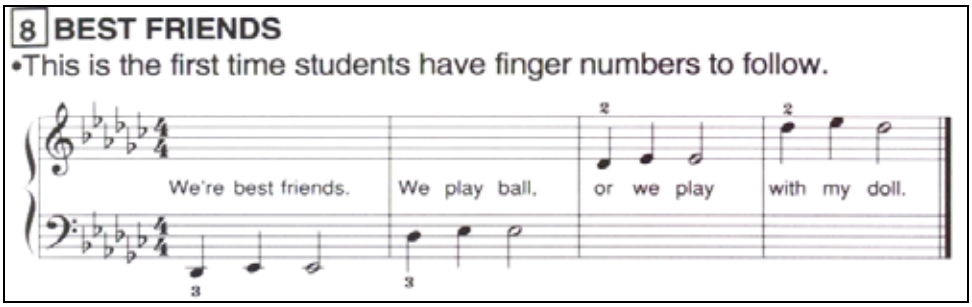


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Illustration 18 Traffic pattern for Listening Game in a studio (WB1.TM, p. 44).

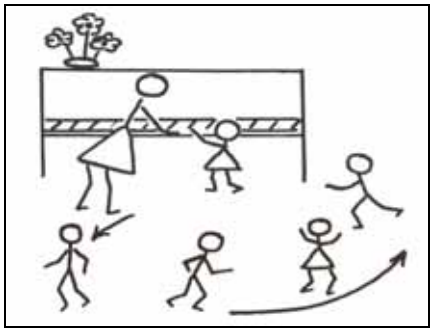

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Illustration 19 Whole Hand position (WB2.Ch(1), p. 4).

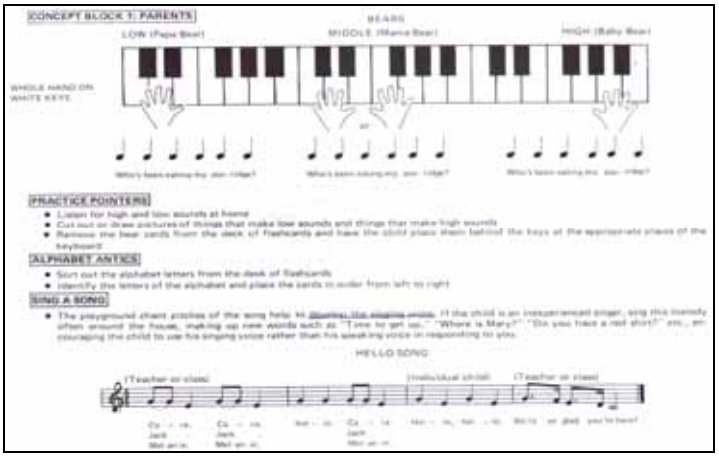

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Illustration 20 Whole Hand and Closed Hand position (WB2.Ch(1), p. 16).

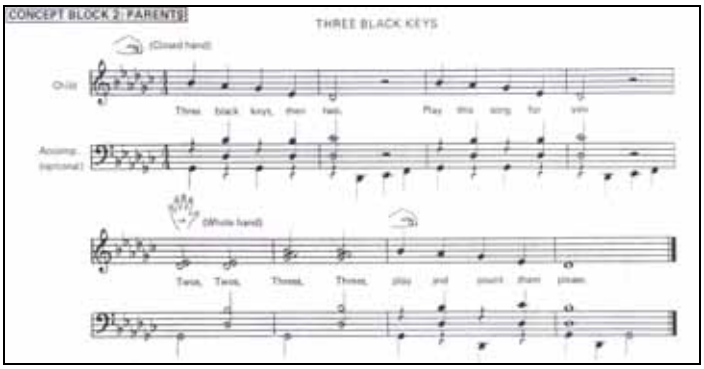

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Illustration 21 Circled notes for melodic contour (WB1.Ch, p. 23).

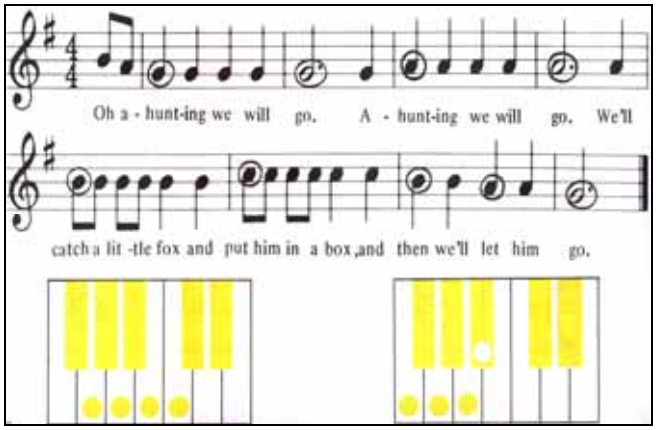

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Illustration 22 Tune Up (WB1.Ch, p. 30).

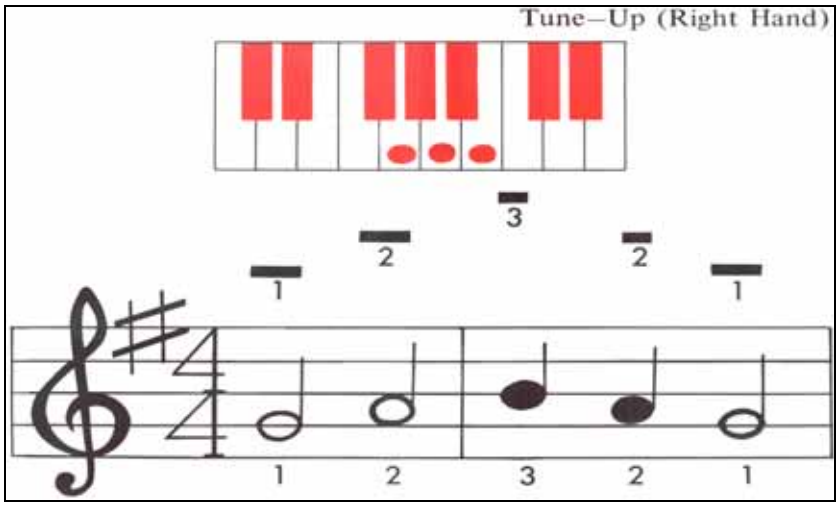

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Illustration 23 Green bars (TA3.A, p. 22)

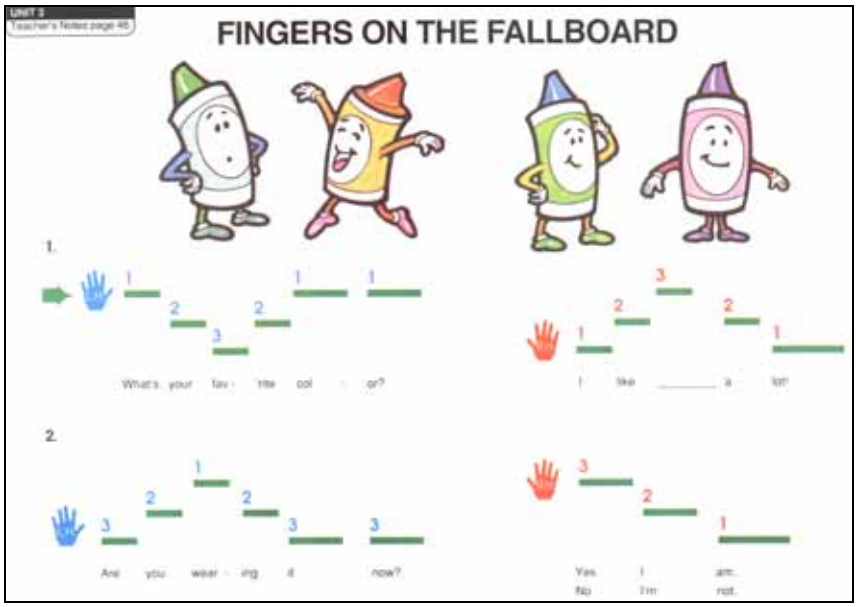

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Illustration 24 Rhythm patterns exercised with alternative hands (TA1.L(A), p. 22).

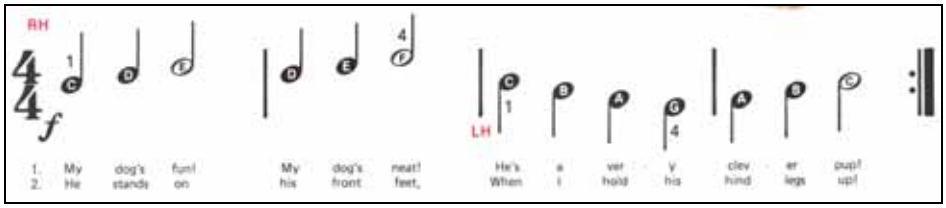

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Illustration 25 Rhythm patterns exercised with alternative hands (TA2.L(1), p. 24).

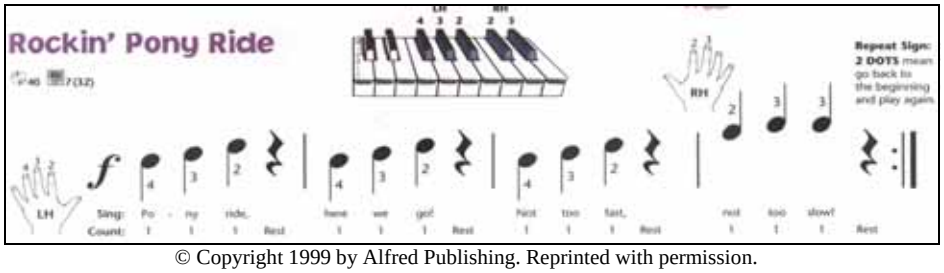

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Illustration 26 From rhythm lines to values (WB2.Ch(1), p. 32 & p. 48).

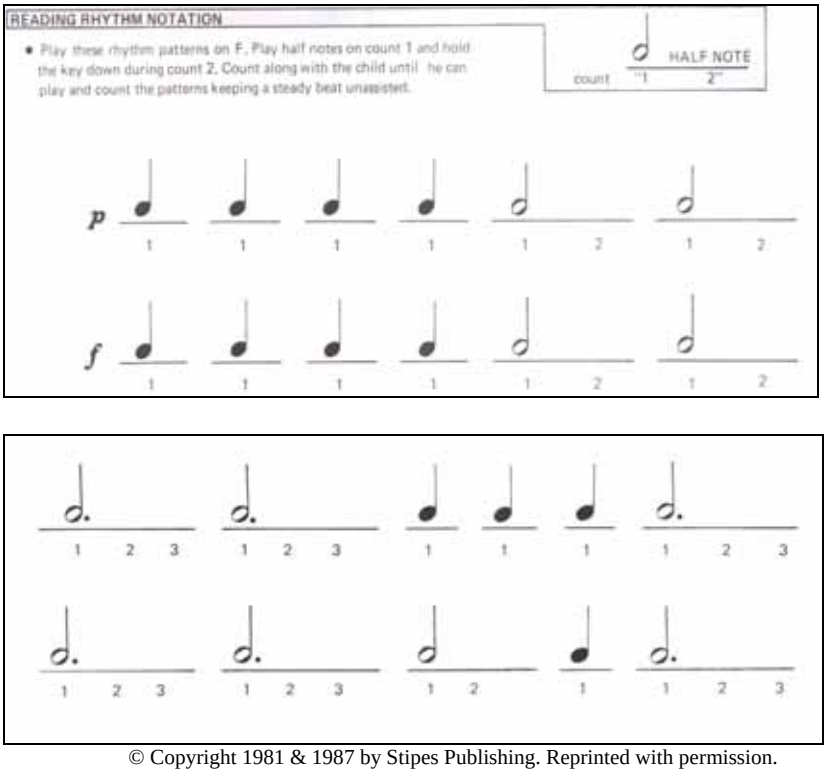

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Illustration 27 Phase I: big and long keyboard diagram & Center and Around Division (PP.A, pp. 6-7).

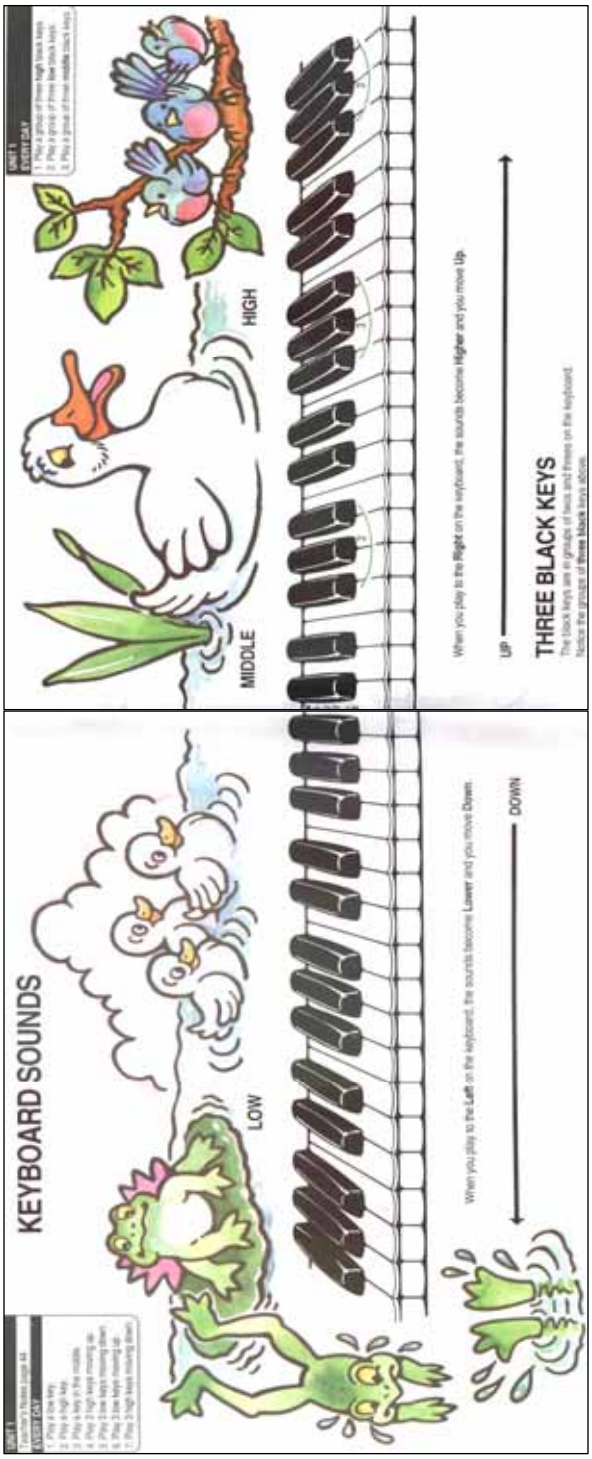

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Illustration 28 Phase III: Keyboard diagram with finger numbers inside colored triangles (TA3.A, p. 16).

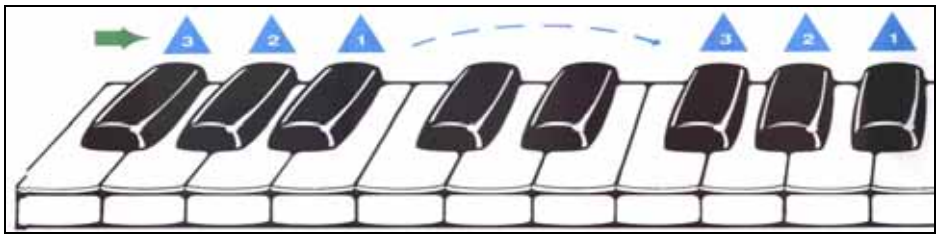

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Illustration 29 Phase IV: Keyboard diagram with alphabets (TA3.A, p. 21).

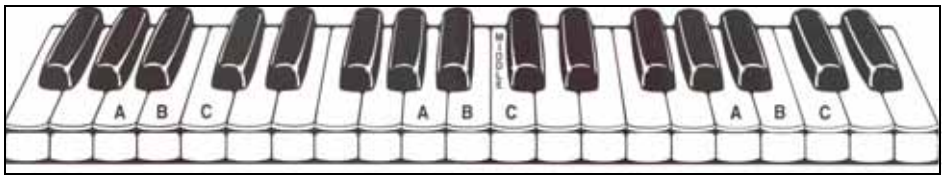

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Illustration 30 Phase V: Keyboard diagram with rhythm values and finger numbers (TA3.A, p. 26).

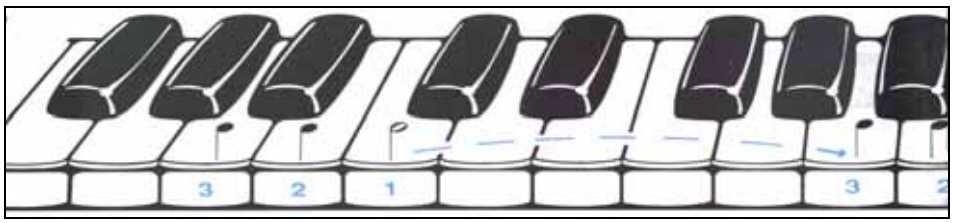

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Illustration 31 Pre-staff reading in moving rhythm values with stems (TA3.A, p. 33).

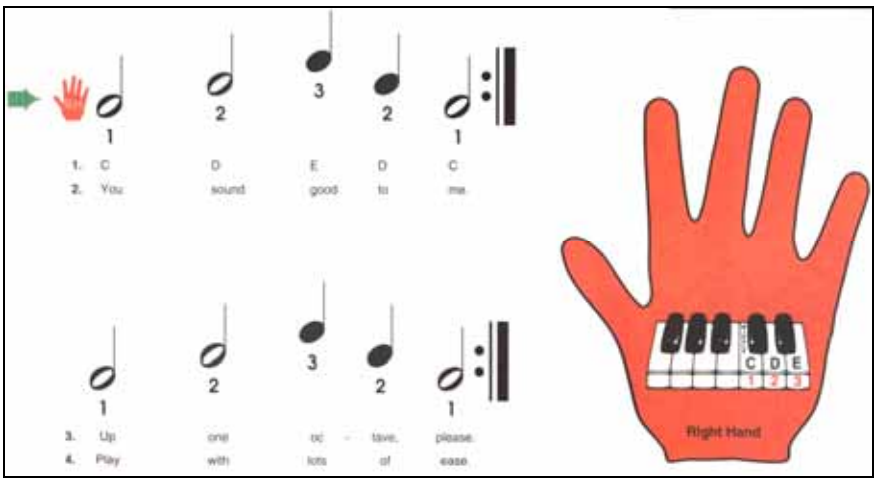

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Illustration 32 Note names inside note heads (TA1.L(A), p. 19).

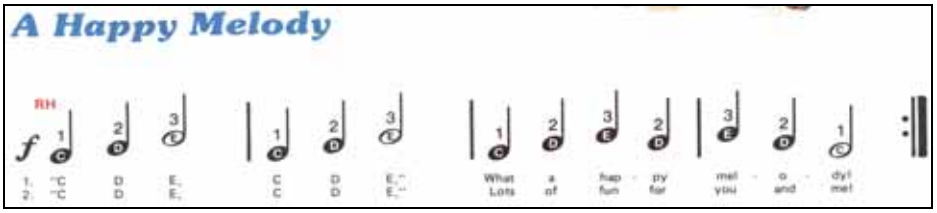

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Illustration 33 Grand Staff Notation (TA1.L(A), p. 43).

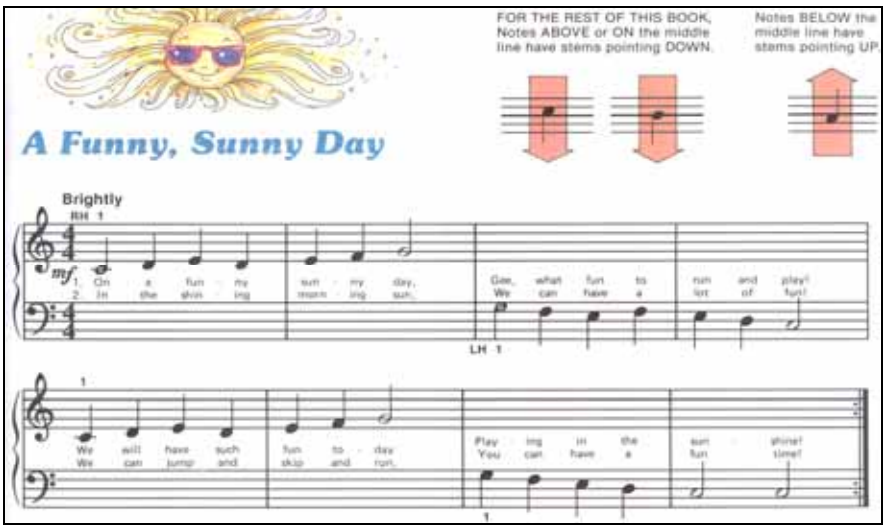

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Illustration 34 Question & Answer (WB1.Ch, p. 38).

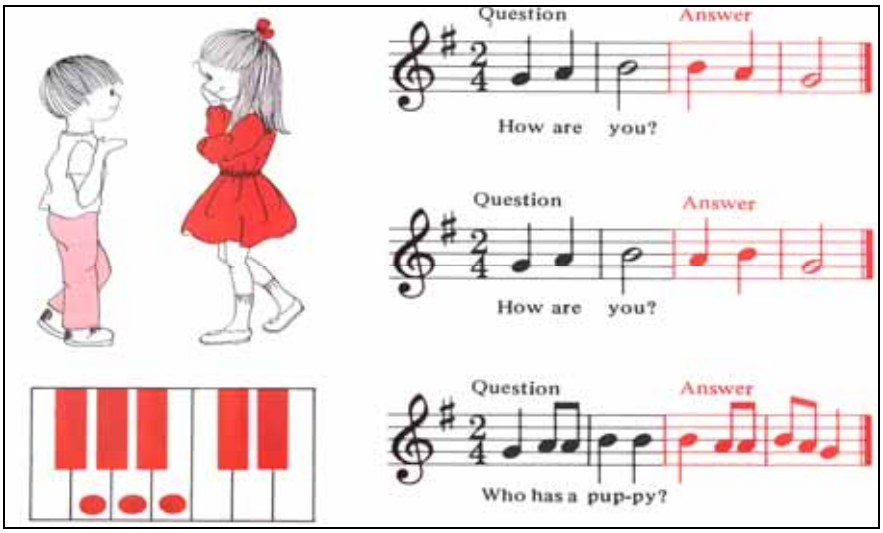

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Illustration 35 Sound picture of Engine Number 9 (WB2.Ch(1), p. 23).

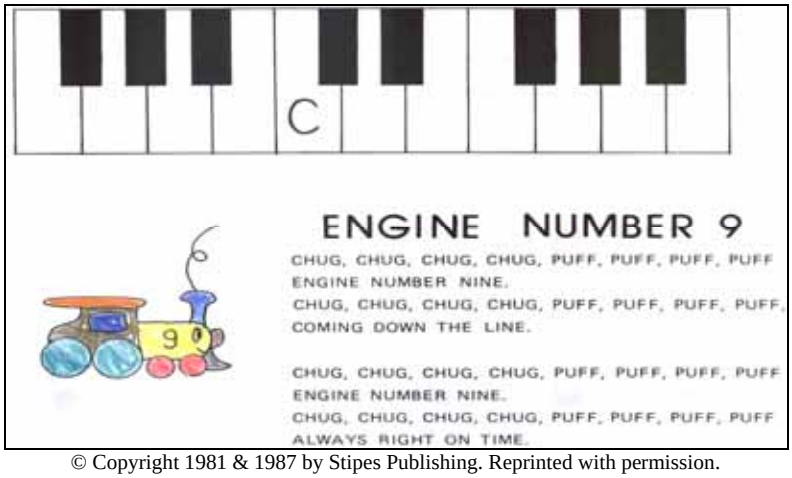

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Illustration 36 Engine Number 9 at the parents' page (WB2.Ch(1), p. 22).

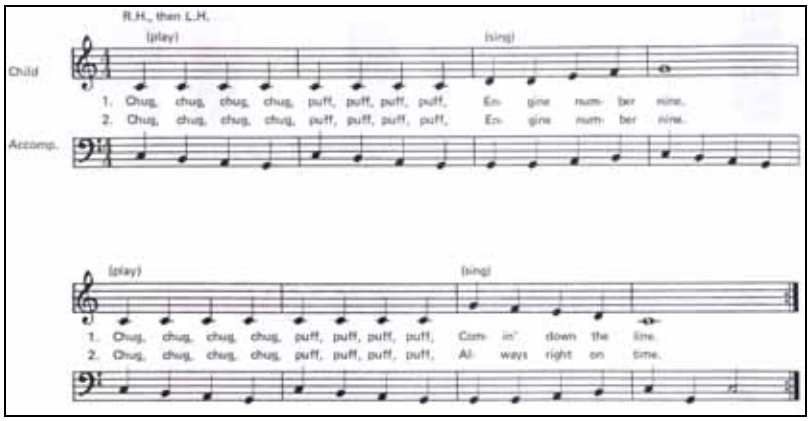

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Illustration 37 Notated picture of Engine Number 9 (WB2.Ch(1), p. 53).

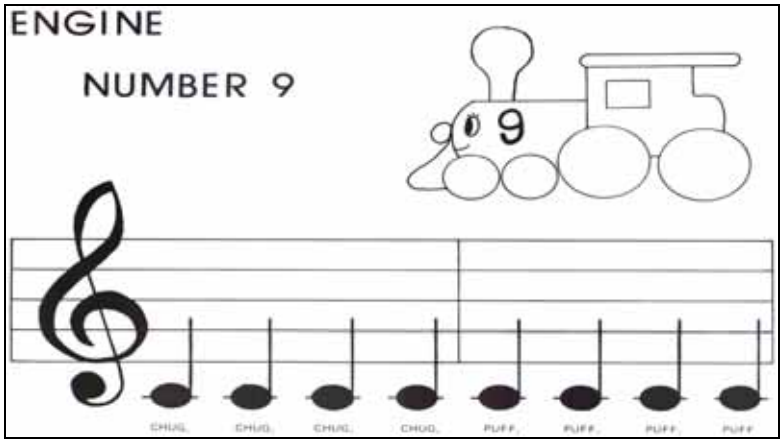

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Illustration 38 Exposure to Staff Notation (WB1.Ch, p. 8).

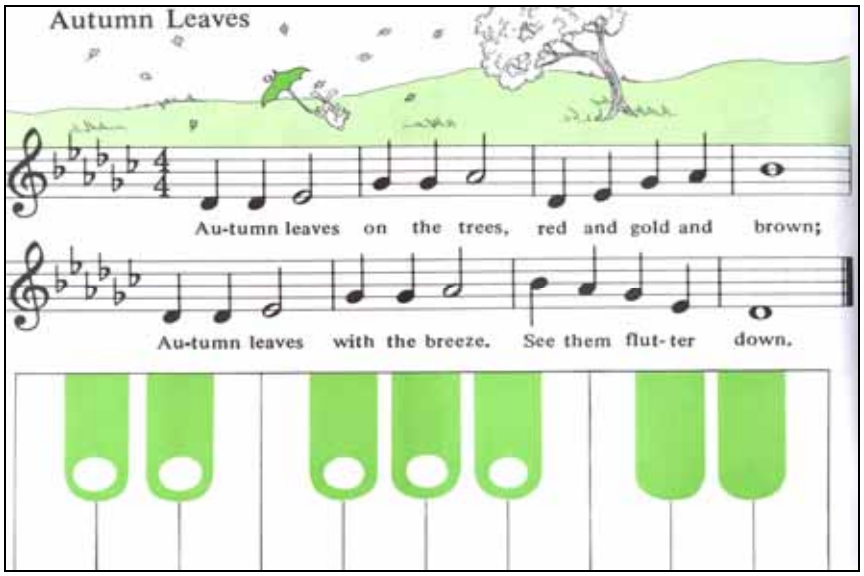

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Illustration 39 Exposure to Staff Notation (WB1.Ch, p. 44).

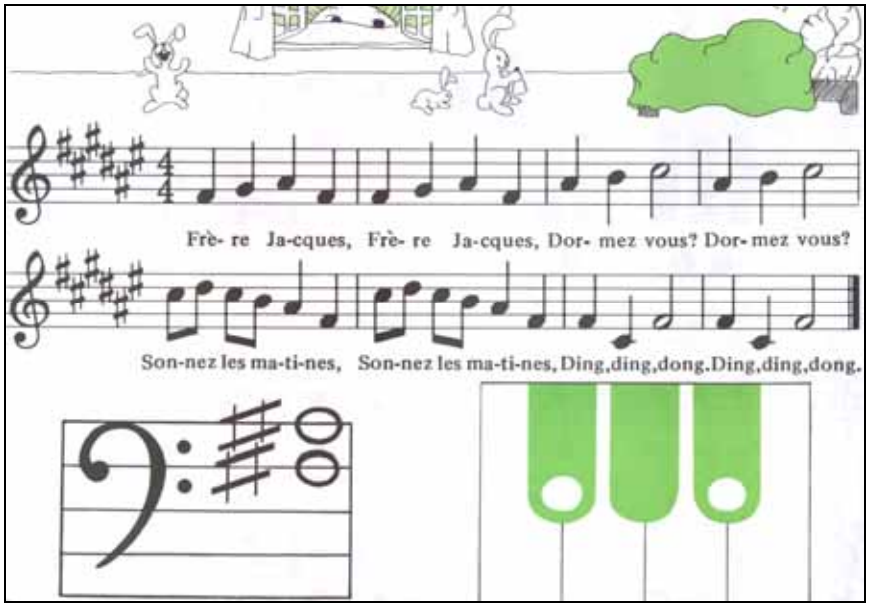

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Illustration 40 Challenge in pre-staff reading with note names inside note heads (TA2.L(1), p. 47).

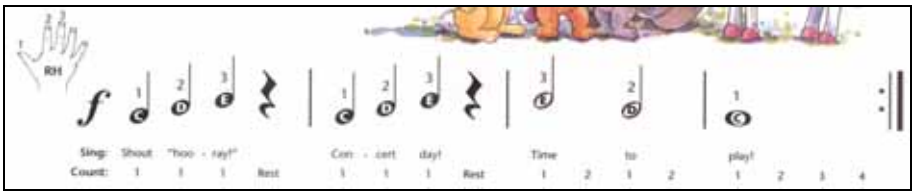

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Illustration 41 Marginal difference in heights of quarter notes (TA2.L(1), p. 30).

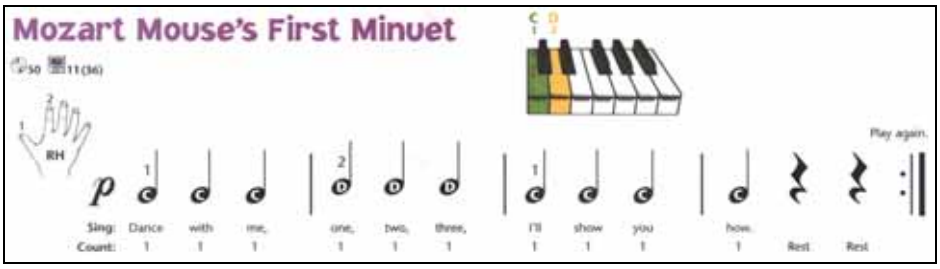

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Illustration 42.1 Accompaniment: counterpoint (TA3.A, p. 33).

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Illustration 42.2 Accompaniment: passing notes (TA1.L(1), p. 23).

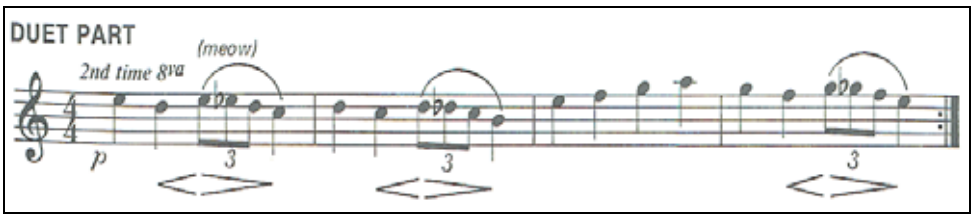

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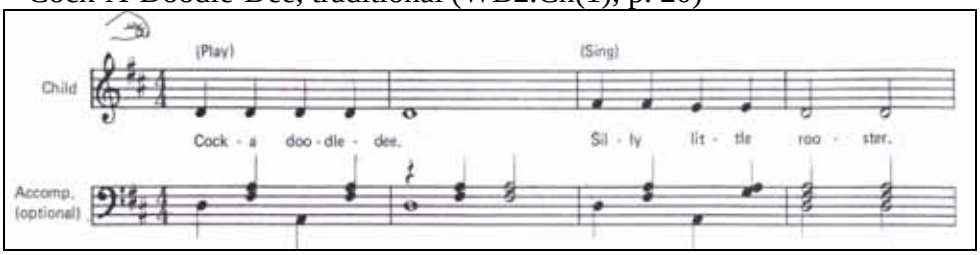
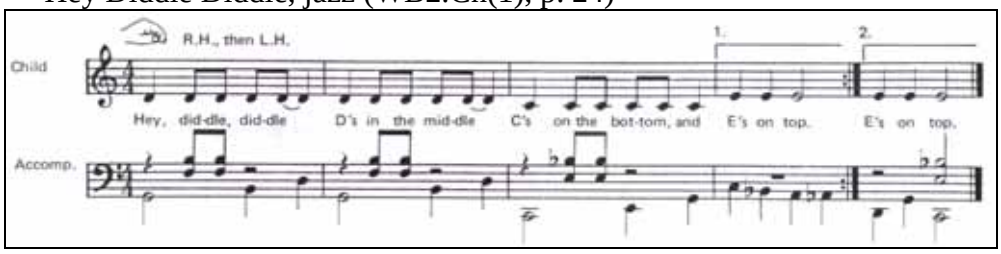
Illustration 43 A collection of accompaniment styles in WB2.

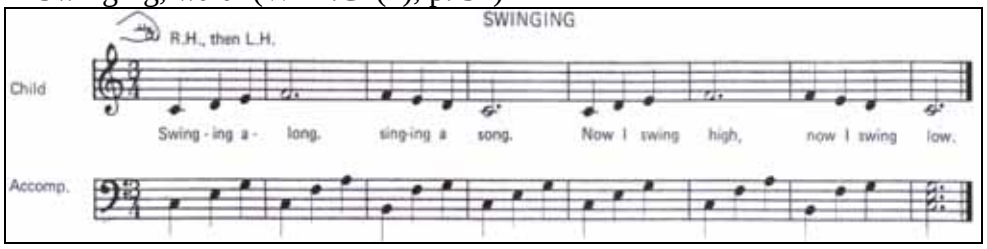
Cock-A-Doodle-Dee, traditional (WB2.Ch(1), p. 20)



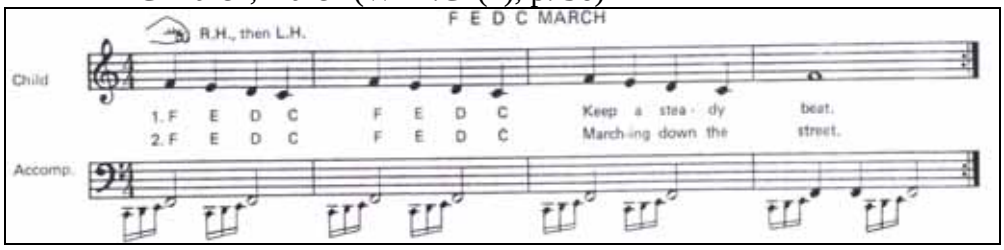
Hey Diddle Diddle, jazz (WB2.Ch(1), p. 24)



Swinging, waltz (WB2.Ch(1), p. 34)



F E D C March, march (WB2.Ch(1), p. 36)



Willie Wiggle, contemporary (WB2.Ch(1), p. 46)

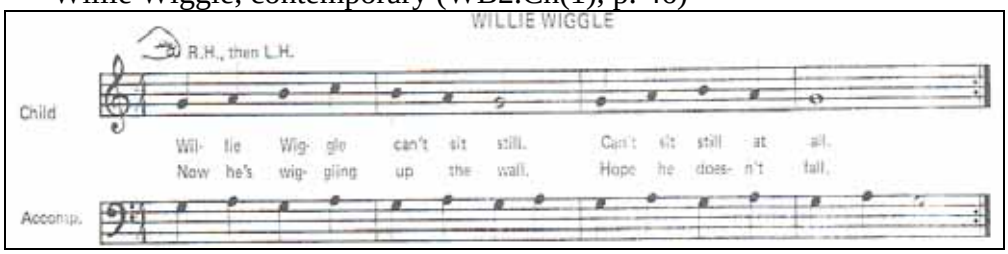


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Illustration 44 Creative activity (WB2.Ch(1), p. 31).

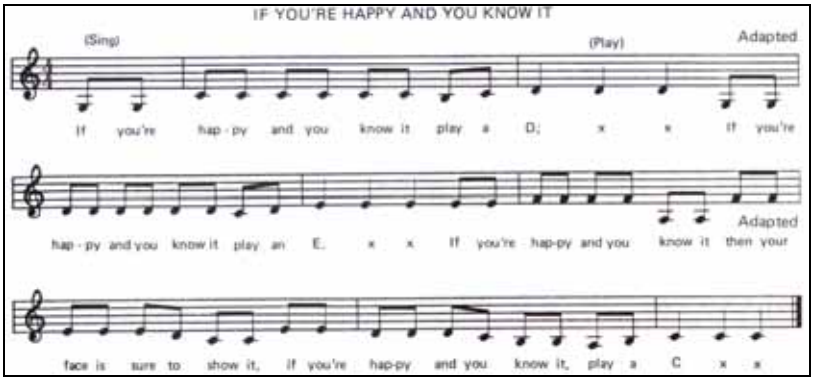

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Illustration 45 Play-A-Story (WB1.Ch, p. 17).

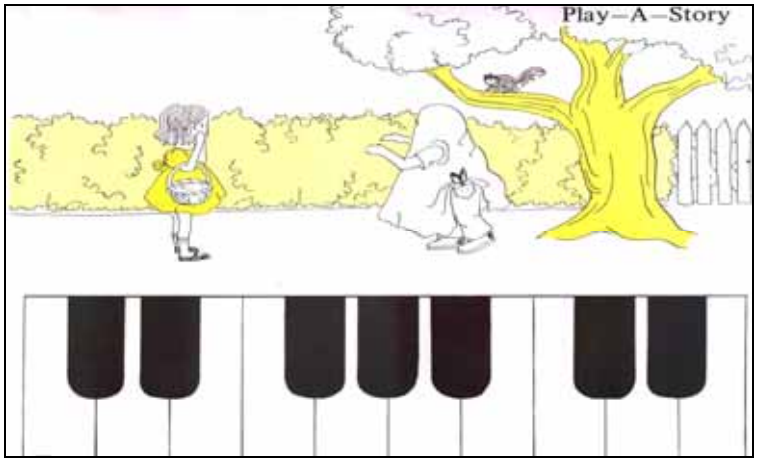

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Illustration 46 Play-A-Picture (WB2.Ch(1), p. 58).

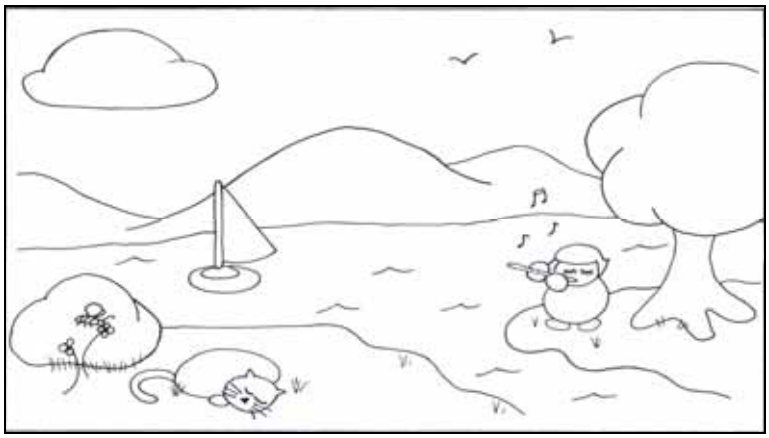

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Illustration 47 *PP*'s variant of *Center and Around Division* (TA3.A, p. 34).

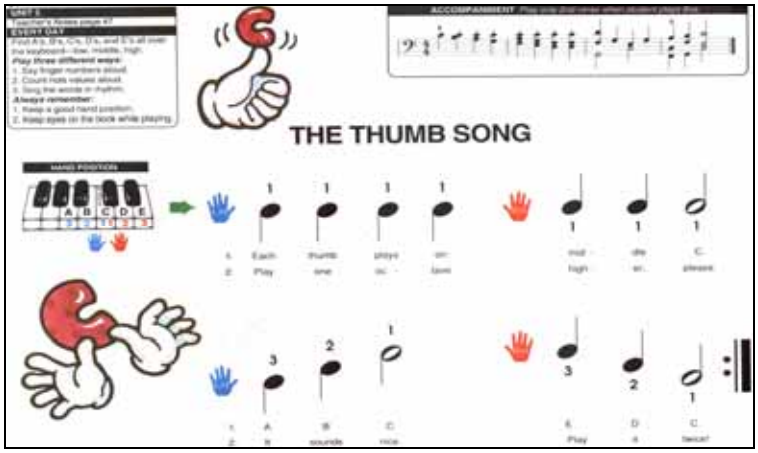

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Illustration 48 *Dual Division* (WB1.Ch, p. 3).

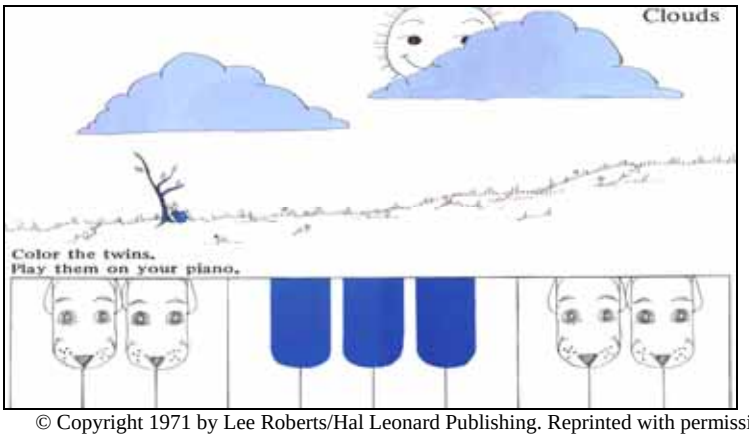

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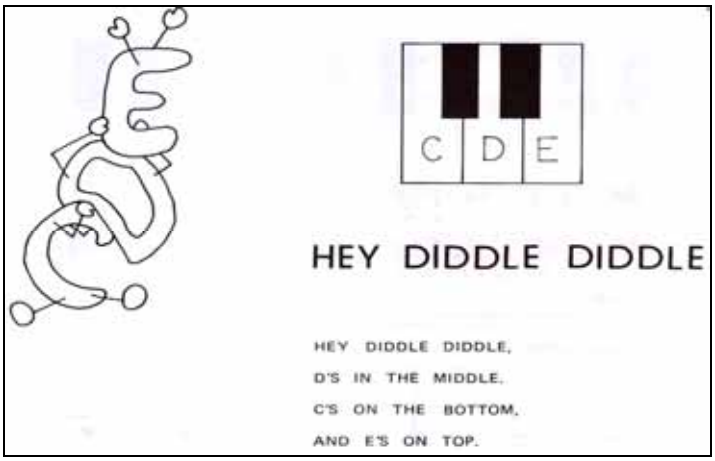
Illustration 49 *Triple Division* (WB2.Ch(1), p. 25).



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APPENDIX D

Sample Pacing of Lesson Plan (TA2.TH(1), p. 32).

Pacing of a Well-Balanced Lesson (45–60 Minutes)

		Activities/Materials	Purpose	Classroom Location	Approximate Time
Establish a Positive Atmosphere through secure and enjoyable activities.	1	Sing Hello Song, Favorite Songs with motions, Listen & Sing Examples or Lyrics/Note Names from Music Lesson Book.	Establish positive atmosphere and warm-up voices	Movement Space	5–7 minutes
	2	Review Music Lesson Book pieces students have practiced and/or melodic ostinato pieces from Music Discovery Book.	Build confidence in keyboard playing	Keyboard	6 minutes
Include activities that require the most focus.	3	Drawing or coloring activities from Music Workbook or Music Discovery Book; Ear Training Pages from Music Workbook; Activities with Magnetic/Dry Erase Board and Flash Cards	Music Theory, Music Reading, Ear Training	Floor or Desk	6 minutes
	4	Movement Activities from Music Discovery Book	Rhythm and Listening Skills, Movement, Active Participation	Movement Space	5–8 minutes
	5	New Music Lesson Book pieces	New concepts and patterns	Keyboard	5–7 minutes
End each lesson happily.	6	Music Appreciation, Song or Dance from Music Discovery Book	Listening, Rhythm, Movement	Movement Space	5–8 minutes
	7	Play Music Lesson Book pieces that students play well.	Reward concentration with successful performance	Keyboard	5–7 minutes
	8	Music Appreciation Activity, Dance or Song from Music Discovery Book	Positive and exciting end to lesson	Movement Space	5–8 minutes
	9	Sing Goodbye Song; Confirm assignment with parents.	Encourage practice for week	Movement Space	3 minutes

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VITA

Fang Ting Huang (黃方亭) was born February 1971 in South Taiwan as the youngest child of three sisters. All three sisters were encouraged by their musical mother to play the piano in their early childhood. At her teenage, Fang Ting Huang followed both sisters' footsteps to pursue further piano study in Vienna, Austria.

During the study in the Vienna Academy of Music and the Performing Arts (Hochschule fűr Music und Darstellende Kunst in Wien), she was awarded a scholarship by the Ministry of Science and Research from the Austrian government and was invited to participate in the 40th Anniversary of Chopin Gesellschaft. After receiving Artist Diploma (1991) and Magister Artium (Master of Arts, 1995) in piano performance from the Vienna academy, she attended the study of Piano Performance at Indiana University-Bloomington and graduated with Master of Music (1998).

At the University of Missouri-Columbia, Fang Ting Huang pursued the doctoral study and earned Ph.D. (2007) in Curriculum and Instruction with an emphasis in Music Education. Ms. Huang has taught piano to all levels, functioned as teaching assistant for the School of Music, appeared in public performances, and served as adjudicator to evaluative audition for piano. She is married to Dr. Feng-Kwei Wang and the mother of two lovely children.