A CASE STUDY OF EFFECTIVE DANCE INSTRUCTION FOR THE DEAF

by

YOUNG HA PARK

(Under the Direction of Michael Horvat)

ABSTRACT

The purpose of this study was to analyze a case of effective dance instruction for the individuals who are deaf or hard of hearing. A great deal of research has examined instructional methods for dance students as a whole; however, little has addressed specific instruction to dancers who are hearing impaired. This research focused on instructional methods used when teaching dance to students with hearing impairments and identified effective dance instruction for students with hearing impairments. Through a qualitative case study, hearing impaired students and the instructors from the AIT/Royal Dance Company (pseudonym) participated. The study used multiple qualitative methods, including semi-structured interviews; observations; and document analysis. In order to identify and interpret patterns and themes, all students were interviewed and their classes observed. Data from all sources were analyzed inductively. Four main themes emerged from data analysis of this study: sequential presentation leads to sequential learning; repetition is powerful; judiciously active instruction is beneficial; and friendly environment is essential. The teacher’s sequential presentation -- showing a physical demonstration and visual count, giving extra time, explaining detail skills, and the quality of the movement -- led to effective sequential learning for the deaf and hard-of-hearing dancers. When the teacher presented a physical demonstration and visual count, it effectively led deaf and hard-of-hearing dancers to perceive movement and rhythm; when the teacher provided extra time, it effectively led deaf and
hard-of-hearing dancers to find solutions to their problem such as communicating with others or practicing; when the teacher provided rhythm cues such as loud music, pre-counting, and manual count, this effectively helped the deaf and hard-of-hearing dancers keep their inner count; when the teacher provided the explanation of detail skills or the quality of the movement, this helped the deaf and hard-of-hearing dancers understand the movement effectively and develop the skills and the quality of movement successfully. Maximizing the number of times of repetition allowed hearing impaired dancers to improve in movement skills and memorization and to increase movement confidence. Judiciously active instruction includes visual instruction, kinesthetic instruction, linguistic instruction, encouragement, music choice and usage, and various instructional styles. These instructions are effective to both hearing and hearing impaired dancers. However, judiciously active instruction requires prerequisite when using these instruction effectively for the deaf. Judiciously active instruction with prerequisite built an effective learning environment for hearing impaired dancers that led dancers to effectively learn dance while reducing the obstacles in their learning process.

Moreover, Friendly environment of the class is essential not only leading students to a comfortable setting to participate in their learning, but also to enhance of teaching and learning experience. This study found effective factors that can used to build friendly environment in the dance class especially for the deaf; emotional environment and physical environment. These four themes illustrate ways in which the hearing impaired learned dance and thus provide a clearer picture of teaching strategies which might meet their particular need.

INDEX WORDS: Dance Instruction, Dance Education, Hearing Impaired Dancers, Deaf Dancers, Dance Theory, Multiple Intelligence Theory.
A CASE STUDY OF EFFECTIVE DANCE INSTRUCTION FOR THE DEAF

by

YOUNG HA PARK

BPE Kyung Hee University of Dance, Korea, 1997

M.A New York University of Dance Education, New York, 2000

A Dissertation Submitted to the Graduate Faculty of

The University of Georgia in Partial Fulfillment

of

the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2008
A CASE STUDY OF EFFECTIVE DANCE INSTRUCTION FOR THE DEAF

by

YOUNG HA PARK

Major Professor: Michael Horvat

Committee: Bryan McCullick
Karen Jones

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2008
DEDICATION

I would like to dedicate my work and talents to God for being my constant companion and strength. “IN HIS HEART A MAN PLANS HIS COURSE, BUT THE LORD DETERMINES HIS STEPS. (Proverbs 16:9)”. I give glory to God.

Also, I would like to dedicate my dissertation to my husband, Wootae; my mother, Jungja Um, father, Wonill Park, mother-in-law, Youngsook Park, and father-in-law, Heungjoo Lee as they have been understanding and supportive during the process of completing my goals and fulfilling my dreams.

Especially, I thank Wootae for always being with me and strengthening me whenever I was exhausted. I have appreciated your encouragement. I love you.
ACKNOWLEDGEMENTS

I would like to acknowledge my family for being so supportive and loving during my educational effort. Especially, I acknowledge my mom for your understanding and support. I have appreciated your love and support. I love you, mom. Moreover, I acknowledge mother-in-law, Youngsook Park. I have always appreciated your encouragement and continuous affection. Without you, I could not have accomplished this dissertation. Thank you for loving me and supporting me so much. I want to thank Seunghee Lee, Myungha Kim, Sungbin for their love. Also, I thank to my grandmother, Jungkoo Kang, Jinhee Park, Kisung Park, Minjae Kwon, Jiwon, Jisoo, Jaehyun for support and loving me. I would like to especially thank my best friends, Jungeun and Mija. Thanks to G.S Lee for always being with me.

I would like to thank the members at Prince Avenue Korean Baptist Church, Pastor Daniel Park, the Shepherd members, the Cell group members, who had all supported me by kind words and prayers. In addition, I thank to Pastor Kangpyung Lee who has always prayed for me in Korea.

I would like to acknowledge Dr. Thomas Warfield who allowed me to work at NTID Dance Company and all dancers at NTID Dance Company who participated in my dissertation. I would like to acknowledge my dissertation committee: Dr. Michael Horvat, Dr. Bryan McCullick, Dr. Karen Jones, and Dr. Mark Wheeler, who have shown so much wisdom and support of my efforts. Finally, I want to thank Dr. Michael Horvat, my advisor, for showing me so much patience, wisdom, knowledge, and support. Thank you.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Importance of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Research Questions</td>
<td>5</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>6</td>
</tr>
<tr>
<td>2 REVIEW OF RELATED LITERATURE</td>
<td>8</td>
</tr>
<tr>
<td>Characteristics of Hearing impairment</td>
<td>8</td>
</tr>
<tr>
<td>Dance Education for the Hearing Impaired</td>
<td>16</td>
</tr>
<tr>
<td>Instructional Methods of Dance for Deaf Dancers</td>
<td>23</td>
</tr>
<tr>
<td>Procedures of Learning Dance for the Hearing Impaired</td>
<td>27</td>
</tr>
<tr>
<td>3 METHODS AND PROCEDURES</td>
<td>32</td>
</tr>
<tr>
<td>Introduction</td>
<td>32</td>
</tr>
<tr>
<td>Design of the Study</td>
<td>32</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>34</td>
</tr>
<tr>
<td>Participants Selection</td>
<td>38</td>
</tr>
<tr>
<td>Data Collection</td>
<td>39</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>42</td>
</tr>
<tr>
<td>Subjectivities</td>
<td>45</td>
</tr>
<tr>
<td>Chapter</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>4</td>
<td>PARTICIPANTS AND SETTING</td>
</tr>
<tr>
<td></td>
<td>Participants</td>
</tr>
<tr>
<td></td>
<td>The Setting</td>
</tr>
<tr>
<td></td>
<td>Dr. Haynes’s Teaching Philosophy and Perspectives</td>
</tr>
<tr>
<td></td>
<td>Challenges in Learning Dance for the Hearing Impaired</td>
</tr>
<tr>
<td>5</td>
<td>FINDINGS – SEQUENTIAL PRESENTATION LEADS TO SEQUENTIAL LEARNING</td>
</tr>
<tr>
<td></td>
<td>Teacher’s Sequential Presentation</td>
</tr>
<tr>
<td></td>
<td>Summary of Theme</td>
</tr>
<tr>
<td>6</td>
<td>FINDINGS – REPETITION IS POWERFUL</td>
</tr>
<tr>
<td></td>
<td>Rehearsal Design for Repetition</td>
</tr>
<tr>
<td></td>
<td>Memorization of the Movement</td>
</tr>
<tr>
<td></td>
<td>Development of Movement Skills</td>
</tr>
<tr>
<td></td>
<td>Movement Confidence</td>
</tr>
<tr>
<td></td>
<td>Summary of Theme</td>
</tr>
<tr>
<td>7</td>
<td>FINDINGS – JUDICIOUSLY ACTIVE INSTRUCTION IS BENEFICIAL</td>
</tr>
<tr>
<td></td>
<td>Visual Instruction</td>
</tr>
<tr>
<td></td>
<td>Kinesthetic Instruction</td>
</tr>
<tr>
<td></td>
<td>Linguistic Instruction</td>
</tr>
</tbody>
</table>
Encouragement .......................................................... 108
Music Choice and Usage ................................................. 113
Various Instructional Styles ............................................. 116
Summary of Theme ......................................................... 120

8 FINDINGS — FRIENDLY ENVIRONMENT IS ESSENTIAL ........ 122
Emotional Environment .................................................. 122
Physical Environment .................................................... 125
Summary of Theme ........................................................ 127

9 DISCUSSION .............................................................. 129
Summary of Findings ....................................................... 129
Discussion of Findings ..................................................... 136

10 IMPLICATION FOR RESEARCH AND PRACTICE ............... 142
Implications for Dance Education for the Deaf ................. 142
Recommendations for Future Research ............................. 143
Recommendations for Dance Education for the Deaf .......... 144
Researcher’s Reflection ................................................... 146

REFERENCE .................................................................. 148

APPENDICES

A REQUEST LETTER ...................................................... 157
B CONSENT FORM ........................................................ 159
C INTERVIEW PROTOCOLS ............................................. 162
D EXAMPLES OF ARTIFACTS ......................................... 168
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Photograph of Dance Studio</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>Photograph of Ceiling Speakers in Dance Studio</td>
<td>54</td>
</tr>
<tr>
<td>3</td>
<td>Photograph of Dr. Haynes’s office Door</td>
<td>55</td>
</tr>
<tr>
<td>4</td>
<td>Diagram of Teacher’s Sequential Teaching Process</td>
<td>81</td>
</tr>
<tr>
<td>5</td>
<td>Diagram of Dancers’ Sequential Learning Process</td>
<td>82</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

School curriculum should provide students with the opportunity to take effective courses and, ideally, gain multiple experiences. Public Law 94-142, Education of All Handicapped Children Act, now codified as IDEA (Individuals with Disabilities Education Act), guarantees a free, appropriate public education to each child with a disability in every state and locality across the United States. Moreover, the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) is closely aligned to the No Child Left Behind Act (NCLB), as both are aimed at helping to ensure equality, accountability and excellence in education for children with disabilities. The No Child Left Behind Act (NCLB) is expanded options for parents and holds educators accountable by giving parents more control over their children’s education. When schools fail, the law gives parents a number of important options, including school choice. Special education programs exist, because all general education programs fail to educate effectively some portion of the students assigned to those classroom programs (Shinn, 1989). Special education seeks to solve the problem of how to provide more effective programs for individual students who are not served adequately in their education by the core, or mainstream, educational program (p, 2). Differentiating instructions for disabled students enables the successful inclusion of all students, including the disabled, in general education classrooms. In recent years periodicals reaching deaf consumers and professionals have frequently reported about 25,000 deaf and hard of hearing students enrolled in college (Schroedel, Watson, & Ashmore, 2003). During 2000 15.1 million students were attending the nation’s 5,000
colleges and universities (U.S Census Bureau, 2001). However, current school curriculum in the United States demonstrates how schools generally focus on the curriculum for dominant students, while the curriculum for disabled students routinely remains unchanged from year to year. In schools primarily designed for normative students, the curriculum for disabled students is typically substandard. For example, art instruction for the disabled consistently fails to address the reality of developmental problems and problems associated with daily living activities. While schools often concentrate on developing skills such as reading, writing, and verbal practice, areas such as music, dance, and the visual arts are not included as core curriculum. The deficiencies in these areas clearly impede the development of the disabled child.

The passage of the No Child Left Behind Act of 2001 (NCLB) has pointed to some of the problems with an increasingly narrow curriculum. Even though NCLB, at least in theory, embraces the arts as part of a core curriculum, the arts are increasingly at risk of being sacrificed to other priorities. In 2003, the Board of Directors of the National Association of State Broads of Education conducted the Study Group on Lost Curriculum project to examine the current status of curriculum at schools in the United States, particularly as regards the arts. The study emphasized that including arts in the curriculum increases academic achievement (Lori, 2005). Therefore, art education should be developed, and to develop art education, the development of effective teaching instruction and methods is essential.

In 1975, congress enacted the Education for All Handicapped Children Act (public Law 94-142) to meet the needs of individuals with disabilities and to protect their right to educational opportunities. The Education for All Handicapped Children Act (Public Law
was amended as the Individuals with Disabilities Education Improvement Act (IDEA) in 1997 and is currently being enforced. Since Public Law 94-142 was enacted, the Office of Special Education Program (OSEP) has concentrated on developing and implementing effective programs and services for early intervention, special education, and related services. Therefore, many programs and services have been provided to almost 20 million young children, and 6 million children and youth have been allowed to receive special education and related services. However, notably, even though IDEA has developed effective programs and services for disabled children, such children are still in need of more instruction, especially in art education. Included in this need is dance education and a concomitant need for research into instructional strategies and methods for dancers with special needs.

It is the aim of art education for the disabled to foster a greater awareness of, and involve the student in, the arts. Efforts to develop art in special education continue under government grants. Awarded grants from the U.S Department of Education, Very Special Art (VSA) and the John F. Kennedy Center for Performing Art provide programs for the disabled which emphasize the importance of art education for the disabled. Moreover, previous research has concentrated on the development of physical, psychological, and social skills for individuals with disabilities. For example, drama in art education has been found to be good for developing the social skills of autistic children, as well as for providing artificial situations in which participants can safely play out a variety of emotional and behavioral responses. Drama thus offers children a reflective window onto their play behavior: the possibility to explore, review and reflect on the implications of their actions and behavior and to make connections with the real world (Peter, 2003).
Dance education is widely recommended to individuals with disabilities to
develop physical, psychological, and social skills. Dance programs for individuals with
hearing impairment focus on developing motor performance, balance, and the ability to
interact with peers (Horvat, 2002). The study conducted by Boswell (1993) examined the
effects of movement sequences and creative dance on the balance of children with mental
retardation and found that such sequences resulted in significant improvement of the
balance skills of students in the participant group.

Researchers have also studied specific art programs for the disabled, examining the
effectiveness of newly developed teaching methodologies. One such study focused on how
relaxation and guided imagery training were effective in improving individuals'
self-control (Godelf, Petroff, &Trich, 2003). The process of relaxation helps the learner
become familiar with different movements, reducing fear and relaxing the muscles so that
relaxation becomes a pervasive, systematic aid to self-control (Godelf, Petroff, &Trich,
2003). It is also believed that guided imagery is a method by which individuals can reward
themselves in their imagination for a desired behavior in real life, thus facilitating a
person's ability to interpret and perceive a given behavior (Groden & Cautela, 1984). As
with relaxation and guided imagery training, self-controlled deep breathing can release
tension. In short, a variety of new and exciting innovations applicable to students with
special needs show a great deal of promise; their study and development should be
encouraged.

Importance of the Study

Art in special education necessitates a consideration of effective instructional
methods, especially for the hearing impaired, because the hearing impaired makes up the largest number of people with disabilities. About ten percent of people in the U.S have some sort of hearing loss, and over 75,000 children in the United States have a severe hearing impairment requiring the attention of special education programs.

Teaching methodologies for dancers with hearing impairment entails the use of specially developed techniques, such as the use of certain musical instruments whose vibrations can be felt rather than heard; visual and tactile cues; and sign language. The literature devoted to the use of such techniques, however, remains limited.

Purpose of the Study

The purpose of this study was to analyze a case of effective dance instruction for the deaf. It studied how deaf dancers learn dance techniques through a variety of instructional methods and identify effective dance instruction used to help students overcome their obstacles. The study analyzed teaching instruction and methods used in dance classes for deaf dancers and analyzed their perceptions of effective--and ineffective--teaching strategies. In so doing, it is hoped that the study will open new ways of looking at dance education of the deaf.

Research Questions

To analyze effective dance instruction for the deaf, this study has been designed to address the following questions:

1. What factors or circumstances are the greatest challenges to effective dance instruction in schools?
2. How these challenges are best navigated?

3. How do deaf dancers learn?

4. How do deaf dancers perceive and interpret emotional content of dance movements and incorporate it into dance?

5. With which teaching instructions and methods do deaf dancers feel most and least comfortable and effective?

Definition of Terms

**American Sign Language (ASL):** Visual gesture language using manual symbols to represent concepts or ideas. American Sign Language has its own grammatical structure and syntax. ASL is primarily used by signers in the United States.

**Deafness:** IDEA defines deafness as a hearing impairment that is so severe that a child is impaired in processing linguistic information through hearing, with or without amplification, and that this adversely affects a child’s educational performance (Sherrill, 2004).

**Hearing impairment:** a genetic term which includes all hearing disabilities regardless of the severity of the hearing loss, the age of onset, educational background, and etiology. IDEA defines hearing impairment (HI) as impairment in hearing, whether permanent or fluctuating, that adversely affects a child’s educational performance but is not included in IDEA’s definition of deafness (Sherrill, 2004).

**Hard of Hearing:** the sense of hearing is defective. However, hearing ability is functional with or without a hearing aid. The degree of residual hearing and function will vary from individual to individual.
**Total Communication:** the appropriate manual and oral methods in order to communicate effectively with the hearing impaired person. The manual and oral methods combine speech, signing, and finger-spelling. This combination of communication methods is also known as simultaneous method.

**Special Education:** Special education is defined as: “specially designed instruction, at no cost to parents or guardians, to meet the unique needs of a child with disability including (A) instruction in the classroom, in the home, and in other settings and (B) instruction in physical education” (PL 101-476, Sec 104 [16]).

**Single Movement:** Only one purposeful movement.

**Routine:** Two different purposeful movements joined together. In this paper, the term *Routine* means a choreographed sequenced movement.
CHAPTER 2
REVIEW OF RELATED LITERATURE

Introduction

The purpose of this study was to analyze a case of effective dance instruction for the deaf. The review was divided into three sections, according to the particular area being addressed by each entry: (a) the characteristics of hearing impairment: etiology & classification, characteristics of the hearing impaired, and educational considerations; (b) dance education for the hearing impaired: historical background; (c) instructional methods of dance for the hearing impaired; (d) procedures of learning dance for the hearing impaired.

Characteristics of Hearing Impairment

Etiology & Classification

Hearing impairment (HI) indicates some malfunction of the auditory mechanism (Winnick, 1990). The scope of hearing impairment is divided into several types and degree of hearing loss. It results in reduced performance of hearing acuity tasks, difficulty with oral communication, and/or difficulty in understanding auditorily presented material in an education environment (Bevan, 1988). IDEA defines deafness as a hearing impairment which is so severe that a child is impaired in processing linguistic information through hearing, with or without amplification, and that this adversely affects a child’s educational performance (Sherrill, 2004). Hearing impairment (HI), whether permanent or fluctuating, which adversely affects a child’s educational performance may not be included in IDEA’s definition of deafness (p. 698). However, the deaf community prefers to use the terms deaf
and hard of hearing (HH) rather than the terms deaf and hearing impaired because deaf people feel the word “impaired” is too broad to express all the degrees of hearing difficulties. Therefore, the deaf community prefers to associate deafness with being unable to hear with the ear, with or without amplification, and hard of hearing (HH) as the ability to hear with the ear, with or without amplification, even though hearing is hard (p.698). That is, deaf individuals cannot process linguistic information with or without a hearing aid, while individuals who are hard of hearing have enough residual hearing to hear linguistic information with the use of a hearing aid.

The causes of hearing impairment are generally determined from genetic or environmental factors. More than 50% of profoundly deaf people’s hearing difficulties stem from generic causes such as hereditary or endogenous illness. Approximately 30% of all hearing impairments cannot be traced to a specific cause (Horvat, 2002). In general, hearing loss is classified according to which part of the auditory system is affected, the degree of the hearing loss, and the age of onset. There are three major types of hearing loss: conductive, sensoryneural, and mixed.

With conductive hearing loss, sound is not transmitted properly to the inner ear. Frequently observed causes of conductive hearing loss are wax plugs, injuries, allergies, malformed ears, and an infection of the middle ear such as *otitis media*. People with conductive hearing loss speak their words faintly but understandably. Generally, children with conductive hearing loss associate with language problems and hyperactive behavior. Because the nerve system is not damaged conductive hearing loss can be treated by surgery and medical devices.
Sensoryneural hearing loss is more serious than conductive hearing loss and is likely to be permanent. Prenatal causes of hearing loss include rubella, glandular fever, influenza, anemia during pregnancy, toxemia, allergy, and drug. Perinatal causes of sensorineural loss include anoxia, kernicterus due to Rh incompatibility between mother and infant. Postnatal causes of sensoryneural loss include infection such as mumps, measles, meningitis, encephalitis, nose and throat infections, injuries, and drugs. Sensoryneural loss affects fidelity as well as loudness, so there is distortion of sound. People with sensoryneural hearing loss tend to speak loudly and distortedly. Louder speech or use of a hearing aid may help them hear words, but the words still may not be understood. Generally, they can hear low-pitched vowel sounds, but they cannot hear clearly high-pitched consonants such as t, p, and k. For example, they have difficulty distinguishing between the words pop and top. A mixed hearing loss is a combination of both conductive and sensoryneural hearing loss.

The degree of hearing loss is generally measured in terms of decibels: units of loudness. The classifications of hearing impairment are: slight impairment (0-25dB); mild impairment (25-40dB); moderate impairment (40-60dB); severe impairment (60-80dB); and profound impairment (greater than 80dB). People with a 30 db hearing loss are generally required fitting a hearing aid (Harman, Drew & Egan, 1999).

The age of onset and the severity of hearing loss are associated with language development. According to the age of onset of hearing loss, the type of hearing loss is classified as pre-lingual and post-lingual hearing loss. Individuals who are born with deafness are referred to as having pre-lingual hearing loss and being congenitally deaf, while individuals who lose their hearing ability later in life are referred to as having
post-lingual hearing loss and being adventitiously deaf. If a child has a hearing loss before age five, when language development occurs, the child may have problems with educational, social and emotional development because without language development the child may not be able to have frequent communication with peers and others. Also, the child may not be able to understand social situations and the actions of others. These causes can lead the child to lack social skills and have low self-esteem.

**Characteristics of the Hearing Impaired**

People with hearing impairment have typical characteristics. Those with mild or moderate hearing loss do not experience severe problems in communicating, but most with severe and profound deafness may have unique difficulties with communication. This chapter explains the culture of this group, as well as the cognitive, behavioral, and motor characteristics of the general population with hearing impairment. Knowing the unique characteristics of people with hearing impairment is essential in conducting this study because an awareness of the characteristics unique to this group will help the researcher understand deaf and hard of hearing participants’ activities during both observations and interviews.

**Cultural Characteristics.** Language is the important factor in interpersonal communication. Deaf individuals, especially, have difficulties communicating and in social interaction because they have trouble speaking. Writing and signing have been used as alternative ways of communicating. Recently, simultaneous communication, which is a combination of speech, residual hearing, finger-spelling, and sign language, has become the preferred method of communication among deaf individuals (Winnick, 1990). The
most commonly used sign language in the United States is American Sign Language (ASL). Like English, American Sign Language (ASL) is used as a language with which one can communicate and has its own grammar and word structures. Moreover, a combination of residual hearing, lip-reading, and speech, as well as cued speech, which is spoken language accompanied by hand signals which aid in distinguishing words, are preferred in many schools for the deaf. Thus, the bilingual-bicultural (BI/BI) education movement: The primary use American Sign Language (ASL) to teach deaf children, with English taught as a second language, is becoming increasingly popular in the deaf community (Winnick, 1995).

**Cognitive and Behavioral Characteristics.** People with normal hearing are less impulsive and demonstrate less incidence of behavioral disorder than deaf individuals (Winnick, 1995). The tendency toward impulsivity and behavioural disorders is due to problems with communication and a lack of incidental learning opportunities (Winnick, 1995). Confusion and miscommunication between parents and a child who is deaf or hard of hearing create stress, which in turn can create awkward and hurtful situations in which the child is inadvertently given an incorrect impression of his or her behavior (Auxter, Pyfer & Huettig 2001). According to a developmental study on the relationship of cognitive style of reflection-impulsivity to communication mode and age in deaf and hearing boys, deaf children and younger children were likewise more impulsive than hearing or older children in cognitive style (O’Brien, 1987). The development of receptive and expressive language skills and speech intelligibility is delayed because the degree of hearing loss has a great impact on language development. Both the difficulty and delay of language development are related to academic achievement. Children who are deaf or hard
of hearing struggle in traditional educational environments. Deaf students with average and even above average intelligence tend to slip substantially behind their hearing peers in academic achievement (Winnick, 1990). The mean reading level of deaf high school graduates is comparable to that of 9-to 10-year-old hearing children (p.220). The performance of deaf students when tested in their working knowledge of written English is poor, due to their lack of opportunity in incidental learning (Freeman, Carbin, & Boese, 1981). However, according to Howard Gardner’s multiple intelligence theory, if a young child who is deaf or hearing impaired is given every opportunity to develop his or her intelligence, there is no reason the child can not succeed in school. Moreover, a deaf child’s ability can be developed through his or her native intelligence associated with musical, logical-mathematical, or bodily-kinesthetic, linguistic, spatial, interpersonal, and intrapersonal skills. Therefore, educators should discover effective instruction and maximize the innate intelligence of deaf students, which may enhance their academic achievement.

Motor Characteristics. A review of research on children who are deaf or hard of hearing reveals some differences in static and dynamic balance skills, motor development, and motor ability. Children with damage to the semicircular canals of the inner ear have depressed balance skills, which may result in developmental, as well as motor ability, delay. According to one study on motor proficiency associated with vestibular deficits in children with hearing impairments, 65 percent of those studied had normal motor proficiency, except for balance when they had abnormal vestibular function, whereas 24 percent had normal vestibular function and motor proficiency, including balance, and 11 percent had normal vestibular function but poor motor proficiency and balance (Crowe,
Butterfield and Ersing (1988) found fewer deaf students showing mature basic gross motor patterns than that found among hearing students. Deaf students showed age-expected motor development in running, throwing, striking, and skipping. However, they had delayed skills in activities which engaged balance, such as kicking, jumping, and hopping (Butterfield, 1986, 1988). Deaf students do not seem to differ from hearing students with regard to body composition, strength, flexibility, power-speed, and cardiorespiratory endurance (Winnick, 1995). However, in power-strength tests, hearing students perform significantly better than hearing impaired students (p. 223). Moreover, motor speed of hearing impaired students may be slower than that of hearing students because hearing impaired students take more time to process information and to complete a motor skill (Butterfield, 1988). Therefore, the physical educator should concentrate on specialized teaching strategies in order to develop the hearing-impaired students’ speech-language skills, and developmentally appropriate functional and social skills.

**Educational considerations for the hearing-impaired**

Children with hearing loss require early detection, identification, and management in order to maximize their intellectual growth, speech and language development. The first three years is critical period of neurological and linguistic development because the number of neurons and synapses are influenced by the child’s environment and experiences (Sharpe, 1994). Therefore, children with hearing impairment should be identified and treated with appropriately functioning amplification or medical technology as soon as possible. Obviously, there are many goals to be achieved in educating children with hearing impairment: the achievement of adequate language skills, establishment of
mental health, and the development of intelligible speech and fluent communication with peers (Northern & Downs, 2002). The development of communication is essential for hearing impaired students to integrate into regular classes as well as for communicating within the deaf community (Stewart, 1987). In schools and the community, visual inputs such as sign language and finger-spelling are essentially used as means with which teachers and deaf students can communicate. Without proper communication methods and teaching strategies, children may miscommunicate or misunderstand in both social and learning settings (Nowell & Marshak, 1994). When teaching deaf students, educators should consider following few questions and seek answers in order to provide appropriate teaching strategies: What can the student hear? Knowing a student’s hearing limitations enables the teacher to maximize the use of any remaining hearing. Moreover, teachers should also address these questions: What is the student’s preferred mode of communication? How can the teacher maximize communication with the student? Are there any contraindications? (Winnick, 1995).

Teaching methods of dance for the hearing impaired have been developed from empirical experience of dance professionals working with hearing impaired students. Teaching methods of dance for the hearing impaired are generally used with visual and tactile cues, auditory accompaniment, and total communication, including speech, signing, and finger-spelling. The simultaneous method is widely used in educational settings in order to maximize the effectiveness of teaching, as well as to reduce communication errors (Roman, 1990). Moreover, the instructor should address each individual’s needs and should communicate through manual signing. When teaching dance to hearing impaired students, all materials and cues should be presented simply and directly. When giving
instruction, teachers should remain visible to students at all the time, maintain eye contact and avoid walking around the room (Kelly and Frieden, 1989).

Dance Education for the Hearing Impaired

The handicapped and non-handicapped alike share the universal human need to express and communicate. Dance is a living language which creates the possibility for people who can’t speak to communicate through movement (Pesetsky & Burack, 1984). It seems natural that the hearing impaired, whose language is based on inner and visual movement expression, would engage in dance. However, the history of participation of the hearing impaired in dance reveals the misconceptions and prevailing myths of deaf people which have obstructed the development of dance for the deaf.

The literature reveals the prevailing assumption that deaf people cannot dance or enjoy dancing since they cannot hear. Fernandez (1987) notes that many people assume that the deaf do not enjoy dancing because of their sensory handicap. Peter Whisher, who was a dance educator at Gallaudet University, recalled that “back in 1955, many of my students told me their parents would not allow them to attend school dances because they could not hear the music” (Roman, 1990). Sue Gril, assistant director of the National Deaf Dance Academy in Washington D.C, reported that the assumption on the part of able-bodied people that dance is beyond the reach of individuals with hearing impairment is simply not true (Kelley & Frieden, 1989).

In contrast to these misconceptions of deaf people, many researchers and educators have insisted that dance is meaningful to the hearing impaired regardless of their hearing ability. Tracy (1980) reported that the ability to hear music is not a requisite for dancing.
Allen (1988) notes the secret held by deaf dancers: while music benefits the hearing audience, those who are dancing don’t require it. What enables the hearing impaired to dance is an exquisite inner sense of timing developed only after many hours of practice. Three studies (Wisher, 1965; Freeman, 1987; Hottendorf, 1989) found no significant evidence to support the misconception that the profoundly deaf person will possess a lesser degree of ability or interest in dance. Research has thus suggested that the ability to learn dance or have an interest in dance does not correlate to one’s ability to hear (Pesetsky & Burack, 1984). Moreover, the literature supports the importance of dance education for the deaf. Benari (1995) emphasizes the benefits of dance education in the social interaction, physical body awareness, and emotional gratification of the deaf. Benari (1995) also insists dance is a living and moving language from which the deaf can derive additional benefits specific to their disability; in dance, the opportunity to express themselves relieves the frustration of having no verbal language.

For the hearing impaired, dance was not initially performed as an art form but rather, until the mid 1970s, as a tool of instruction in the development of speech. Awareness of rhythm helps hearing impaired children to compensate for their hearing deficiency and contributes to the improvement of their imitating speech, and speech-reading skills. (Morkovin, 1960). Through rhythm training, hearing impaired children recognize the pattern of speech such as accent, intonation, emphasis, and breathe pause. Hearing impaired people sense these patterns via multi-sensory experiences: the auditory sense of rhythm from a remnant of hearing, a visual sense from movement of the lips, a kinesthetic sense from feeling words in the mouth, and a tactile sense from the vibration of music and the floor. The development of a sense of rhythm is correlated with
rhythmic movements of the body. Rhythmic movements involve a normal pattern of movements such as hands opening, closing, and grasping, as well as kicking, twisting, crawling, rocking, and walking. The hearing impaired discovers the innate rhythm patterns throughout these physical movements. The square dance has also been introduced to handicapped people for the purpose of rhythm training as well as for its social and psychological benefits. Henry Ford and Benjamin Lovett are pioneers in bringing square dancing to the handicapped. They believed dancing was a great balancing exercise, and taught rhythm, manners, poise, grace, and self-confidence, along with helping participants overcome timidity and appreciate of good music.

Moreover, dance for the hearing impaired was utilized to teach learning objectives. Demonstrations of action verbs, such as jumping, falling, skipping, swinging, working and hopping increase the understanding of reading and knowledge of vocabulary. Chamberlain (1982) described the use of creative dance movement to improve vocabulary, comprehension, and the concept of action verbs. The fundamental physical movements, such as walking, jumping, hopping, leaping, galloping, and skipping are similar to action verbs found in every language and in many reading texts. The study conducted by Chamberlain (1982) described the demonstration of a movement through which hearing impaired children translated action verbs in a sentence. The older hearing impaired demonstrated more complex sentences through movement.

The year 1955 marked a significant turning point in the development of sign dance for the hearing impaired. The development of sign dance has offered more opportunities for the deaf to participate in dance activities and was based on deaf dance as a performing art form. Peter Wisher, who was a professor of physical education at Gallaudet University,
observed a concert of students performing “The Lord’s Prayer” using American Sign Language. While observing the sign performance, he questioned why they were not dancing it. After that, he began to develop dance movement using American Sign Language as the principle method. Wisher emphasized three key principles in transferring sign language into dance movements as an art form. First, the movement should be natural. Second, if the sign movement is performed well enough, it does not require costume or make-up. Third, the sign movement should be abstract. For example, to complete sign dance, sadness is signed by covering one’s face as if weeping. Here, Wisher begins to build a dance movement from the sign of sadness (Constance, 1983). To make the sign for night, one holds one arm parallel to the chest, representing the horizon, while the other moves in a downward arc, representing the setting sun. In abstracting this sign, Wisher slows down the action and adds movement of the torso and feet (p14).

In the 1980s, the use of sign dance for the hearing impaired began to develop professionally. Tracy (1981) coined a new word ‘Danslan’, which means a creative art form combining dance, signing, mime, and self expression. The Danslan program was developed for both hearing and hearing impaired people to physically communicate lyrics and music, as well as to develop a new concept of self expression. Fernandez (1987) categorized four different ways of sign dance. First, dance is performed by interpreting the lyrics of a song into American Sign Language. Second, dance is performed by integrating abstracted signs with or without lyrics. Third, dance is performed by interpreting a song by the use of sign language. Fourth, dance is performed with American Sign Language. American Deaf Dance Company (ADDC) is the nation’s first professional deaf dance company. Though American Deaf Dance Company (ADDC) disbanded in the early
1980’s, its legacy continues and has inspired a new generation of deaf dancers and choreographers to express themselves. In 1986, the Common Ground Sign Dance Company pioneered a sign dance that integrated sign language into choreography, a creative art form, and has built a strong national and international reputation. The Common Ground Sign Dance Company tours regularly in and out of the U.S. and operates projects and workshops for schools, colleges, community groups, and youth theater groups. Moreover, the Common Ground Sign Dance Company provides professional skills and technique development training programs for both hearing and hearing impaired people. Sign dance has become a significant art form which can be shared by people with or without hearing loss. In 1955, the Gallaudet Dance Company was established first as a group for recreational dance activities, not as a performing dance company. Peter Wisher, its director, was impressed by the beautiful movements of signs and began to incorporate signs into dance, inviting interested students to join sign dance. The Gallaudet University Dance Company became a professional performing dance company and the only accredited Liberal Arts University for the deaf and hard of hearing students. In addition, many dance companies for the deaf and to the deaf and hard of hearing to participate in dance activities.

Formal and informal dance activities for hearing impaired people involves various dance styles such as folk dancing, tap dancing, social dancing, modern dance, ballet, creative movement and sign dancing. Recently, sign dance has combined contemporary elements of Ballet, Jazz and sign language to create an art form. Roman (1990) surveyed seventy one dance programs in schools with hearing impaired students across the United States. The study found that dance styles most commonly taught in schools with hearing
impaired students are creative movement, jazz, modern dance, ballet, and tap in order. In contrast, sign dance is rarely taught in K-12 curriculum. Dance programs in schools with hearing impaired students tend to emphasize the promotion of self-confidence, improvement of coordination and social skills, and the development of language skills and rhythm in speech. However, the number of schools providing dance classes for the deaf and hard of hearing have continuously decreased, as have dance programs, due to lack of funds, instructors, and student and administrative interest.

In tracing the academic degree program of dance for the deaf, it seems that deaf students have has less opportunities to participate in dance degree program than non-handicapped students. This review of literature identified only two degree programs of dance study in higher education for the hearing impaired. One program exists at the National Technology Institute for the Deaf (NTID) in Rochester, NY and the other exists at Gallaudet University in Washington D.C.

The National Technical Institute for the Deaf (NTID) offers a B.A degree program in the department of performing art, and Gallaudet University provides a dance degree program as a minor course to both hearing impaired and hearing students. The National Technical Institute for the Deaf (NTID) is a college that provides a mainstreamed dance program for the hearing impaired and hearing students. It’s program for the hearing impaired students was developed in 1975 for the purpose of providing the deaf students more opportunities in the art activities. The program also offers modern dance, ballet, dance performance, sign mime, creative movement and stage management. Moreover, NTID offers a performing art certificate program to deaf students that encourages deaf students to have professional skills on theatrical operating procedures as well as technical
experiences. NTID performing students take dance for many reasons: personal enjoyment, a physical workout, or to fulfill academic requirements (Sullivan, 1982). The NTID formed The Rochester Institute of Technology Dance Company (RIT/NTID Dance Company) in 1982. RIT/NTID Dance Company is committed to enriching the educational life of the dancers by providing challenging and rewarding choreographic and performance opportunities. Annually, they perform and share the training and touring experiences of the deaf dancers in and out of school.

Gallaudet University is the most famous liberal arts college primarily devoted to education of the deaf. Gallaudet University offers dance programs as a minor degree in the department of physical education and recreation. The dance program provides both hearing and hearing impaired students ballet, tap, jazz, modern, and ballroom dancing as well as the opportunity to choreograph and participate in dance. Dance technique classes for hearing impaired students at the degree program are similar to the dance technique classes that can be found at other major universities for hearing students across the United States.

Hard of hearing students can attend any regular degree program in the United States. They rely on an amplification device to hear the beat and the teacher’s instruction. They have competed with non-handicapped students to enter dance degree programs in colleges or universities. However, only a few hearing impaired students are attending regular dance programs in colleges and universities. Partially hearing impaired students dance successfully through their disability and perform beautifully as members of dance teams. However, professional dance programs for hearing impaired students are sparse. Many talented young students with hearing impairment still give up any hope of a career in dance because there are not enough places in the dance world to find work.
Instructional Methods of Dance for the Hearing Impaired

This is a challenging time in education for the deaf students. Over the past 20 years, the educational system has recorded a large increase in the participation of deaf minority students. Even though deaf education is the oldest field in special education, few research-based instructional interventions are routinely used in classrooms serving deaf students (Easterbrooks, 1999). Because deafness is a low-incidence disability, few researchers have studied the instruction of deaf education. The lack of studies on instruction of deaf education still leaves a fundamental question: How do educators of the deaf effectively teach deaf students? For the last two hundred years, studies on the instruction for the deaf have dominantly focused on the development of communication skills and the development of English proficiency, so that the academic programs for the deaf have focused on speech, auditory training, and sign language rather than art. Therefore, the lack of development of art instruction for the deaf affects the lack of skills and academic achievement, which limits their participation in art activities as well as in professional training.

The professional field of art, especially dance for the deaf, requires sensitive and effective instruction to stimulate all their senses, which helps deaf dancers understand a dance technique and perform dance successfully on the stage. A review of instructional materials used in deaf education indicates that the hearing impaired students perceive all information from visual and tactile and auditory cue, and various forms of communication. Students with hearing impairment must depend on all their senses to stimulate their learning process, which help them understand information.
For the hearing impaired, vision is a primary method of learning and performing dance. Visual cues can be used as the spoken word to help them understand rhythm of dance movement as well as lesson instructions. Rhythm can be visualized by counting with signed numbers, clapping, flicking lights, or beating a drum. Wisher (1959) reported that flicking lights on and off is useful for getting attention, as well as for conveying rhythmic patterns for the hearing impaired. Hottendorf (1989) suggested that the instructional use of blackboard or cards is useful in providing directions or cues for dance movement. When teaching dance for the hearing impaired, using eye contact is effective in maintaining student’s attention to dance movements, as well as in facilitating communication between teacher and student. When learning dance movement, the instructor’s physical demonstrations are important visual cues for facilitating a physical image as well as the techniques of each movement.

Tactility has been utilized as a teaching aid for the hearing impaired dancers. Hearing impaired dancers can perceive rhythmic patterns by touching musical instruments, amplified speakers, and a vibrating floor. Vibration cannot be perceived from the floor when dancers are moving through space. Vibration can be felt through the floor only under the following conditions: if the floor is suspended, if the dancer is stationary, if the music is amplified, and if the music contains heavy bass (Roman, 1990). The use of live music rather than recorded music is helps dancers perceive rhythmic patterns because people with hearing impairment can perceive the vibration from all instruments which help them feel the rhythm. Tambours, kettle drums, drum vibrations, and the vibration of a piano allow the student to easily perceive the rhythm. Therefore, teachers should have experience with, and learn to play, these instruments. To maximize the effectiveness of the use of live
music, it is important to place the students near the sound instruments so that they can feel the vibration of the music easily. When a teacher uses recorded music, it is helpful to place the speakers on the floor to convey the vibration through the floor. Therefore, bare feet improve the transmission of vibration. Hands-on instructions and the placement of the body in proper alignment can also encourage students and may be used to guide dancers to perceive a kinesthetic sense of each dance movement as well as their relationship to other dancers.

If individuals possess any degree of hearing, they may have the advantage of the use of hearing aids, as well as some auditory cues, such as percussion instruments, amplified music, and a heavy bass drum. These auditory cues are effective methods for teaching dance to hearing impaired students. Many professionals have supported the use of the drum as an effective instrument in teaching dance to the hearing impaired because the drum provides both vibratory and visual stimuli for students who are unable to hear the beat (Roman, 1990). Programs using amplified recorded music or piano have placed speakers on the floor to increase the intensity of the vibrations. A microphone is placed in the piano and the music is amplified quadraphonically, so that the sound which comes from four different speakers at the same time (p.35).

Total communication and American Sign Language (ASL) are the preferred methods of communication for teaching dance. The term total communication is a philosophy; its basic premise is that all means of communicating with deaf children, from infants to school age, should be encouraged (Northern & Downs, 2002). Therefore, total communication is the use of all means of communication: sign language, voice, finger-spelling, lip-reading, amplification, writing, gesture, visual imagery. Another
commonly used term for total communication is simultaneous communication. Simultaneous communication ensures that a child has access to some means of communication. Wisher (1959) reported the use of the simultaneous method is the most effective method of communication with dance students who are deaf and hard of hearing. However, opponents of total communication insist that the effort to sign and speak at the same time results in a poorer quality of sign language, so that deaf children may fail to develop fluency in either English or ASL because of imperfect use of both (Northern & Downs, 2002). On the other hand, a survey was conducted by Matkin (1985) on the impact of the total communication method to hearing impaired students. The survey found that the use of total communication benefits on hearing impaired children’s educational and emotional growth. In addition, the survey could not find any negative impact on the use of total communication in developing speech-reading and speech production skills (p 367).

American Sign Language (ASL) is the dominant sign language of the deaf community in the United States. Words can be spelled on the fingers to connect the signs into sentences. The use of American Sign Language (ASL) provides benefits to the user for building an atmosphere of trust: with the use of finger-spelling, signs, and speech, there is no doubt as to what is being communicated; signs on the hands are considerably larger and clearer than lip movements; finger-spelling and signing do not discriminate, and all have equal opportunity to participate and learn from classroom activities (Northern & Downs, 2002). Manco (1987) reported that when a dance teacher used sign language or had an American Sign Language (ASL) interpreter, the class ran smoother. Moreover, Kelly and Frieden (1989) stated that if a student communicated only orally, the instructor should
speak with short and clear sentences rather than with longer expatiatory sentences. For teaching dance, the instructor should meet the needs of each student.

Procedures of Learning Dance for the Hearing Impaired

The hearing impaired their own techniques for learning dance. Their limited accessibility to auditory symbols during pre-linguistic years yields an information processing system that seems to be systematically different from that of hearing children (Tomlison & Kelly, 1978). Some research indicates that those who process most information in a visual mode have a different information processing system from those who don't (Chamberlain, 1982). The findings regarding different learning procedures for the deaf emphasize the consideration of alternative methods for teaching deaf students which maximize their efficacy for the deaf.

All the senses are engaged when people dance. People excite kinesthetic senses as they recognize the body placement and motions they are making. The visual sense responds to the image they see, while the auditory is stimulated as they respond to the sounds they make or hear, as well as to music. The tactile sense is stimulated in touching one another. Such multi-sensory experiences are necessary in leading children to act in natural way. The development of effective multi-sensory instruction for deaf dancers reduces the gap between hearing and hearing impaired dancers. It also increases makes it easier for hearing impaired dancers to learn and makes it possible for them to obtain professional skills (Freeman, 1987).

Dance is movement in rhythm and time. To transfer movement into rhythm, both hearing and hearing impaired dancers should observe each movement as well as participate
in them. First, dancers observe the physical demonstrations of the instructor. In this awareness of physical demonstration, dancers recognize the flow of dance movement by observing steps and physical rhythms. As dancers move, they recognize and develop specific skills and movement techniques. Tracy (1980) describes six stages of physical expression through dance movements for the hearing impaired: the development of body movement; the translation of language into body movement; the coordination of movement with music; the translation of language into visual images; the use of facial expression to convey emotional reactions to words; and the presentation of words to an audience (p. 746).

Dance movements consist of both general movements, such as walking, jumping, running, and specific movements, such as twisting the arms, rotating the hips, and flexing the ankles. The development of both general and specific movement increases control over the entire body as well as special skills for each particular body part that each dance form requires. In this stage, deaf dancers obtain dance patterns through visual observation. The second stage of physical expression through dance is the translation of language into body movement. In this stage, dancers put meanings into each dance movement. Dancers decide to jump, glide, or twist to demonstrate the meaning and emotion of each movement. For example, when dancers demonstrate the meaning of “I love you”, they will choose an appropriate dance movement to express “Love”. In this stage, dancers build the ability to translate meaning and emotion of language into dance movement. The third stage is the coordination of movement with music. In this stage, deaf dancers use inner rhythm. Generally, rhythms are divided into two categories: external rhythms which are generated from outside the individual’s body; and internal rhythms which are generated from inside the individual’s body. External rhythms are produced by various musical instruments or
machines, such as gongs, a bass, drums, an audio system, flash lights, or ringing bells, all of which serve the purpose of encouraging dancers to recognize rhythmic patterns of movements. Piaget describes hearing dancers use sound memory to rehearse the rhythm in their head and to count the rhythm internally (Wood, 1988). However, deaf dancers have no sound memory to remind them of the rhythm of dance because deaf dancers can not hear music and have no knowledge of pulse or rhythm in a dance phrase. Instead of processing sound memory, deaf dancers obtain rhythmic information through visual modes and are aware of the rhythm of steps and movements by using inner rhythm stimulated through all fundamental senses.

Inner rhythm is generated from the speed of breathing and heartbeat. Deep breathing helps deaf dancers understand the slow tempo of dance movement. Deep inhalations and exhalations facilitate sustaining slow movements. In silence, deaf dancers feel rhythmical inhalation and exhalation, shallow breathing, and pulse. The calm mood of deep breathing prepares the way for dancers to move their own slow sequences. An accurate sense of pace also helps them become aware of the movement itself. (Benari, 1995). Inhalation can help sustain balance and ensure that a jump is high and stops in the air at its peak, while exhalation renews energy and prepares for the next inhalation. Thus, inhalation and exhalation can help achieve dance movement easily. However, the speed of breathing tends to accelerate the nervous system, so that dancers tend to breathe rapidly and more shallowlly when dancers get nervous. Nervousness often causes dancers to breathe more rapidly, making their movements smaller and less well-defined (p. 9). Therefore, an awareness of the pace of breathing is important in controlling body movement as well as increasing the quality of dance movement.
Deaf dancers can dance by following their rhythm of breathing and their own sense of time. Jaques-Dalcroze (1921) insists that the human body possesses its own sense of time, generated by physical and muscular memory that is achieved by the repetition of dynamic physical exercise. Jaques-Dalcroze (1921) introduced an example of this in his book *Rhythm, Music, and Education* to show the power of muscular memory in dance activities. According to his experience, a profoundly deaf girl had a dance experience which she tried to repeat three months later. She remembered all the dance movements and steps in a slightly faster tempo. She remembered all the dance movements with her own sense of time generated by her rhythm of breathing and physical memory.

The fourth stage of performing dance is the translation of language into hand and body images and lip movements. In this stage, deaf dancers reproduce movements as meaningful movements in an attractive and graceful manner. Hand movements are an especially important tool in translating words into dance. In addition to hands movements are movements of other parts of the body: head, arms, legs, and torso help to convey words into physical pictures. Putting emotions into dance movement is the fifth stage of producing dance movements, completing the artistic and meaningful dance movements. In this stage, dancers express inner feelings for language through facial expressions. For the final stage, dance performance for the deaf dancers presents posters or slides in order to provide a clear picture of all the words the dancers represent.

All these stages encourage deaf dancers to use all their senses and sense of inner rhythm created in their minds and bodies as a result of visual stimuli. All information from all their senses and minds create physical movement with an inner rhythm. In dance education for the deaf, the development of the inner senses can be the most beneficial
factor in the completion and integration of dance movements. Also, the development of auxiliary instructional methods to stimulate dancers' senses can be beneficial in enhancing dance for the deaf.
CHAPTER 3
METHODS AND PROCEDURES

Introduction

The purpose of this study was to analyze a case of effective dance instruction for the deaf. This study researched how the deaf dancers learned dance movement through various effective instructional methods. Interviews were the primary methods for this study. Nine hearing impaired dancers interviewed in order to know how they perceived dance instruction and to find what effective instruction was used to overcome their obstacles in learning dance. Moreover, observations of dance classes for nine hearing impaired students were made not only to observe interaction between teacher and hearing impaired dancers in dance classes but also to research the use of various methods of dance instruction and instrument methods for the hearing impaired. Confidentiality was maintained not only by providing pseudonyms but also masking other identifiable information such as specific programs or schools.

Design of the Study

The design of this study was a qualitative case study. This study researched hearing impaired dancers participated in Royal Dance Company in order to know their perceptions of effective dance instruction. Each participant in this study constituted a case. This study was interpretive. Simply observing and interviewing do not ensure that the research is qualitative; the qualitative researcher must also interpret the beliefs and behaviors of
participants (Patton, 2002). In this approach, interpretive qualitative research emphasizes the subjectivity of the individual and focuses on personal opinions.

This study was substantiated from four different data collection sources: interviews, observations, field notes, and document analysis. Qualitative research methods had the advantage of revealing the hearing impaired dancers’ perceptions about dance instruction. Qualitative methods are ideally suitable to study the perceptions, beliefs, and interpretations that define individuals’ experience of life because qualitative methods give the researcher access to the human voice (Crowley, 1995). Therefore, many researchers and educators have used qualitative methods in order to examine a problem in an in-depth manner. These data have been used to inform and enrich intervention design and implementation.

Multiple qualitative methods were used to increase the reliability of this study including interviews, observations, field notes, and document analysis. A lot of recent research has included multiple research methods to collect data, which is known as triangulation. The term of triangulation means researchers combine more than two data collection methods in order to collect more reliable data. The idea of triangulation assumes that the different methods will complement each other, the weakness of one being covered by the strength of another (Patton, 2002). According to research conducted by Silverman and Manson (2003), combinations of individual interviews and field notes, and of individual interviews and document analysis have been frequently used in qualitative studies. In these ways, using multiple research methods is increasing, with the purpose of gathering accurate information and producing reliable results. In this study, confidentiality
was maintained not only by providing pseudonyms but also by masking other identifiable information such as specific programs or schools.

**Theoretical Framework**

The theoretical framework guiding this study was constructivism, a theory about how people learn. Constructivism is based on the idea that individuals construct knowledge through experience and interaction with their environment. It thus focuses on the internal mental process within the learner’s control. Recently, educators sharing the constructivist perspective have become increasingly aware of the cognitive diversity of learners: students vary in learning styles, intelligence, and self-regulation, and each of these aspects affects how students learn (Cothran, 2000). The constructivist view emphasizes the necessity for teachers to provide different teaching approaches and learners to use active learning techniques.

From the constructivist point of view, perception is central to the way we construct knowledge of the world. Perception encompasses all processes associated with recognition, transformation and organization of sensory information (Carterette & Friedman, 1978). This theory emphasizes higher-order cognitive functions and sensory-motor behavior. Constructivist, Bruner, insists that all perceptions are influenced by the individual’s experience and expectations, so individual differences in ability and cognitive styles have been shown to be important in perception.

The Fleming and Mills Model (1992) and Gardner’s Multiple Intelligence Theory (1993) address the diversity of learning styles and provide approaches for effective instruction. "Learning styles" describe the different ways people learn. It is commonly
believed that most people have some preferred learning methods of processing information and stimuli. The Fleming and Mills Model suggests four categories used for processing information: visual (V); aural/auditory (A); read/write (R); and kinesthetic (K). Instruction following the VARK model accesses all four categories in learning and allows students to employ preferred ways within each category. This model supports the hearing impaired by providing alternative categories and methods for learning. For example, students with hearing problems obviously fail to process auditory information fully and thus tend to prefer processing information through other means. Therefore, teachers, coaches and trainers should find categories accessible to the learner and encourage learners to follow their preferred methods.

Multiple intelligence theory was first proposed by cognitive psychologist Howard Gardner in 1983. Over the past two decades, educators and scientists alike have devote a considerable amount of research into how learners learn. The book “Frame of Mine”, by Howard Gardner, was of particular importance to art educators. They embraced Gardner’s Theory of Multiple Intelligences regarding it as proof that art is not just a reflection of talent but also of multiple intelligences expressed through earning and knowing (Gilbert, 2003). Multiple Intelligence theory combines and extends behaviorism, social learning theory, and the cognitive information processing model. Gardner divided the construction of human knowledge into eight categories of intelligence: bodily-kinesthetic; musical; spatial; linguistic; logical-mathematical; interpersonal; intrapersonal; and naturalist. As with instruction following the VARK model, multiple intelligence theory supports the diversity approach to teaching. Gardner insists that the application of one or more of these eight categorizes maximizes the learning process. Gardner’s Multiple Intelligence Theory
is a rising theory in the dance education. Gilbert (2003) insisted that bodily-kinesthetic intelligence is associated with concept of movement and dance: space, time, force, and body (Gilbert, 2003). Students of dance often pick up ideas more efficiently through visual and kinesthetic senses than through auditory senses (p.269). For example, balance requires bodily-kinesthetic intelligence. By repeating balance movements, students may come to understand alignment and a sense of movement, such as shifting one’s center of gravity or maintaining a still position. Thus, the application of bodily-kinesthetic intelligence is a way a constructing knowledge by understanding concepts of movement and dance.

Rhythm is obviously an important element of dance and a powerful means through which to enhance the body’s memory of movement. Hearing impaired dancers remember musical rhythm by use of an inner sense of rhythm, as well as by repeating various muscle exercises. Moreover, students gain spatial knowledge by mimicking movements. Visual observation is an important means of gathering instant feedback and information about movement in space.

Dance also provides an excellent medium through which to apply linguistic intelligence. To explain a movement, instructors should provide clear and specific demonstrations of movement and use accurate vocabulary to direct it. Students can remember the vocabulary by performing the movement. Dance students may recognize essential word cues for specific movements and thus perform dance based on the use of this kind of intelligence.

Repetitive patterns, rhythms, techniques are based on student’s logical - mathematical intelligence. Students need to count beats, as well as remember the number of repeated patterns.
Learning and performing dance is based on social interaction. Students therefore learn dance better through social interaction and emotional engagement with others. Both duet dance and group dance require each dancer to recognize tempo and rhythm, as well as the pattern and direction of other’s movements. Emotional engagement is entailed; when students enjoy dance classes, they create positive emotions, which, in turn, maximize their ability to learn and remember (Gilbert, 2003). Thus, we can see that dance truly engages each aspect of Gardner’s Theory of Multiple Intelligences (p.272).

Finally, this theory engages teachers to develop various instructional methods appropriate to each individual student. Hearing impaired students require learning methods different from those of students without aural limitations; their aural limitation leads all cognitive differences in learning styles as well as in information processing. Over the last fifteen years, cognitive differences in the way students learn have become increasingly researched, and it is now generally accepted that learners conceptualize learning in many different ways. This trend recognizes individual differences, needs, and strengths. The acknowledgment of these differences has encouraged educators to individualize their instruction (Honigsfeld and Schiering, 2004), with the aim of instruction not being to teach information, per se, but to create situations in which students will interpret information appropriate to their own understanding. That is, the role of instruction is not to have students memorize facts but to help them assemble knowledge. The constructivist approach seeks to discover what perceptions hearing impaired students construct from their educational environment and how they process information through various teaching methodologies.
Participants and Group Selection

The participants of this study are nine hearing impaired dancers participating in the Royal Dance Company. A purposeful sampling strategy, criterion sampling, was used. The logic of criterion sampling is to study all cases that meet some predetermined criterion of importance, a strategy common in quality assurance efforts (Patton, 2002). To be selected for this study, participants should meet predetermined criterion characteristics: 1) each individual is a hearing impaired dancer, but not a multi-handicapped hearing impaired individual 2) each individual is periodically participated in dance lessons. Moreover, Royal Dance Company meets the criterion: 1) a group involves hearing impaired dancers 2) a group provides high quality of teaching instruction and instruments 3) a group provides the regular schedule of dance lessons.

The Royal Dance Company is a product of the North East Institute (NEI) Performing Art Program in the Cultural & Creative Studies Department at NEI and supported in part through the Creative Arts Program, and the generosity of individual donors who see the potential for communication across cultural and language barriers through movement. The Royal Dance Company was a unique ensemble of hearing impaired and hearing students.

The purpose of this study was to analyze a case of effective dance instruction for the deaf. This study was based on research of how hearing impaired dancers learn dance through a variety of instructional methods. The Royal Dance Company was a perfect group to study hearing impaired dancers’ perception of dance instruction because the Royal dance group provided hearing impaired dancers with high quality teaching instruction as well as effective instrumental techniques such as a high quality sound system and visual
cues. Through providing various experiences on performance, the Royal Dance Company encouraged hearing impaired dancers to engage in professional work in the art field. The Royal Dance Company had performed various dance forms such as modern dance, ballet, jazz, a variety of ethnic-based dance, and sign dance. Various instruction instruments and specially designed dance studio and theatre were used in dance training; vibration floor, amplified bass, drum, and visual cues including light, demonstration, written words, and symbols.

Data Collection

Data was collected by using document analysis, semi-structured interviews, video-recorded observations, and field notes.

Documents Analysis. Document analysis for this study included personal files of physical status, individual experiences of dance performance, videotapes recording prior performances, history of dance performance of the company, lesson and performance schedules. The personal files were reviewed to analyze each hearing impaired dancer’s history. Document analysis not only reduced the risk of conducting interviews and observations but also increased the quality of this study as the researcher understands the background of each hearing impaired dancer. Participants with physical disabilities such as poor hearing or poor vision tend to become easily frustrated and depressed; fatigue and discomfort can impair participants’ ability to express themselves. According to the research by Bloch and Singh (1999), depression has been associated with reduced linguistic complexity which includes difficulty in processing thoughts. Therefore, individual interviews were scheduled with sensitivity to the participant’s given condition
and psychological burden. Moreover, document analysis provided useful information to
distinguish differences in each individual’s dance background, which helped the researcher
discover any behavioral differences in classroom activities as well as any differences in
each individual’s perceptions on dance instruction.

**Interviews.** Interviews were the primary methods for this study. The in-depth
interviews in this study followed a semi-structured interview protocol. Interviewing is an
important way of knowing the individuals’ perceptions and beliefs on dance instruction.
In-depth interviewing can be used to focus on the informant’s perception of self, life, and
experience (Patton, 2002). Qualitative methods require effective communication.
However, miscommunication between the researcher and hearing impaired students not
only can lead to missing any information from the respondents but also lead the interview
astray from the purpose of the original research questions. Therefore, if a researcher cannot
use American Sign Language (ASL), he or she should use an interpreter in order to
facilitate fluent communication between a researcher and hearing impaired students. To
reduce the miscommunication, this study recruited an interpreter who was trained with
American Sign Language (ASL). An ASL interpreter participated in all interviews to
facilitate communication between hearing impaired dancers and the researcher. All
interviews involving an ASL interpreter, a researcher, deaf and hard of hearing dancers
were conducted to each hearing impaired student approximately for an hour, recorded on
video and audio tapes, and translated literally based on audio tapes.

All interviews were scheduled at a time and place that were comfortable for the
interviewee and with consideration for the interviewee’s physical and emotional condition.
Each participant was interviewed approximately for an hour. Before interviews were
conducted, the interviewees read and signed a consent form to give their agreement for the participation in this study. Interview questions included the semi-structured questions which elicited answers related to the main research questions. The further interviews were conducted by e-mail to seek answers to additional questions and inquiries as they arose. The further interviews, whose questions varied, were conducted with both teacher and deaf dancers.

**Observations.** A primary advantage of the observation method was that the observer could enter the natural setting of the participant’s activities. Observation in a natural setting helped the observer discover any change in the setting. Especially in the case of dance activities, most dance instruction required instant reproduction of teaching. When a teacher gave dancers a cue and demonstration, dancers instantly moved, following the instructor’s cues and demonstration.

Therefore, the purpose of the observations was to observe the interaction between hearing impaired dancers and teachers in instructional settings, the teachers’ use of various methods of instruction as well as instruments, and the hearing impaired dancers’ responses to instruction and to instruments that teachers provided for dance lessons. Observation allowed the observer to trace how hearing impaired dancers perceived and responded to various methods of instruction and how hearing impaired dancers perceived the interaction between teachers’ and dancers’ behaviors.

The observations for this study were conducted from an outsider’s perspective. Video- and audio-taped observations were taken in dance lessons providing. The observations were conducted for every lesson during a month. Because dance lessons for hearing impaired students used ASL as a communicational method, an ASL interpreter
participated in all observations to translate the signs used in the classroom to the researcher.

**Field Notes.** Field notes recorded specific events and happenings in classroom activities. Field notes were taken by three observers during the observations. Three observers were used to reduce the error of one-sidedness and to more fully capture the activities in the observations. They observed the dance lessons and noted down everything that happens. Field notes were descriptive. The note takers recorded such basic information as where the observation took place, who was present, what the physical setting was like, what social interactions occurred, what activities took place, and what people said. Moreover, field notes contained the observer’s feelings, reactions to the experience, and reflections about the personal meaning and significance of what has been observed (Patton, 2002). All field notes takers who participated in this study were given training in how to take field notes for a qualitative study and ideally, so that they understood the procedure and skills as a field note taker.

**Data Analysis**

Data from all sources were reviewed and analyzed inductively. Inductive analysis involved discovering patterns, themes, and categories in data collected (Patton, 2002). This study used two primary analysis strategies: within-case analysis and cross-case analysis.

Each case was separately analyzed to determine within-case themes and categories. Analyzing content such as interview transcripts and field notes helped the researcher to find the main themes which referred to a finding, idea, or a feeling that almost all participants reported. Content analysis is used to refer to any qualitative data
interpretation that takes a volume of qualitative material to identify core consistencies and meanings (Patton, 2002). Four strategies of content analysis were applied: HyperResearch data analysis software, coding classification; core content highlighting; and theme cross checking. This study used HyperResearch Data Analysis Software, which allowed the researcher to inserts main codes into software program and to highlight core content and to encode main codes with highlighted core content. The researcher followed this coding process in each case, which allowed within-case analysis and cross-case analysis. In cross-case analysis, the software automatically showed data comparing to the core contents among cases, which allowed the researcher to find themes as well as negative cases of research questions. However, data analysis of this study relied on not only findings of HyperResearch Data Analysis Software but also the findings of the researcher’s analysis. Based on the findings from HyperResearch Data Analysis Software, the researcher analyzed themes and categories form all gathered data-- interview transcripts, observation videotapes, and field notes, other documents such as documentary DVDs and personal information charts.

Coding was the first step in content analysis. This process facilitated classification of core content analysis of interviews and observations. Simple codes were recorded on both left side of interview transcripts and in field note margins. Each code and transcript were colored differently, according to subject categories; this helped the researcher organize different ideas and concepts. Highlighting core concepts related to key answers from research questions, transcripts, and field notes were used to elucidate sub-themes (categories). Cross checking was also used to compare sub-themes within a case. This was
useful in finding any relationship between such themes identified in previous stages and helped clarify, refine, and integrate findings.

After completion of within-case analysis, cross-case analysis was applied to clarify main themes and sub-themes. Cross-case analysis makes it possible to locate themes that recurred across cases and interpret differences between cases (Guteng, 2005). The key thoughts for each participant were identified as sub-themes, first, in within-case analysis; these sub-themes were compared to sub-themes of other participants in order to trace main themes. Inductive analysis including within-case and cross-case analysis provided insight into how deaf and hard of hearing dancers learned and performed, how teaching instruction was the most effectively of the least effectively used, and what obstacles hinder instruction. Results were presented as both main themes and patterns from all data collected, supported by the use of participants’ own words as well as elucidative evidence from the data.

Data analysis was ongoing. All recorded audio interview tapes were literally transcribed. The researcher found main patterns and themes, including key responses to questions. Each participant’s key thoughts and patterns were documented from interview transcripts and field notes. Analysis of transcripts was entirely based on the answers of the interviewees. Analysis of observations was based on field notes and videotapes. The researcher reviewed videotapes of the observations and transcribed special events and key thoughts, minute by minute, for each observation. Each interview transcript revealed the participant’s key thoughts, and the field observations provided intuitive speculations and questions to initiate further problems that required recall interviews. Peer debriefing and member checks of data analysis were conducted from each step. While conducting the
further interviews, the researcher asked in-depth questions related to the main findings. The further interview answers were also analyzed through inductive analysis. The further interview process allowed for refinement, confirmation, extension, and elucidation of the main findings.

Subjectivities

My personal interest in hearing impaired dancers came from my background of dance. I was a professional dancer and have 10 years’ dance experience. I was trained with various dance types: ballet, modern dance, jazz dance, tap dance, African dance, and folk dance. When I performed dance, I had to process a lot of information via multiple senses in order to learn a dance technique. First of all, I needed to listen to the teacher’s instruction and to observe physical demonstrations; to imitate the physical figures in order to get kinesthetic and rhythmic senses by myself; and to practice and elaborate my dance technique with emotion. All these process required a lot of information processing through multiple sense impulses. My experiences performing dance led me to be curious about how hearing impaired dancers process all this information with their physical difficulties and how hearing impaired dancers learn a dance technique. I was convinced that hearing impaired dancers process information with different ways because they were not able to receive information from their auditory sense. Therefore, this study researched how hearing impaired dancers learn dance and how various instructions and methods for teaching dance are effectively used for hearing impaired dancers.
Data Trustworthiness

The procedures employed to ensure data trustworthiness of this study were credibility and reliability.

It was essential that the bases of any qualitative inquiry were dependable, and a great deal of effort had been put into ensuring that the data employed in this study were reliable. Credibility depends on whether one’s research reflects object interpretation of data drawn from participants’ original information (Lincoln & Guba, 1985). To enhance the credibility of this study, I had applied three measures: use of multiple sources; peer debriefing; and member check of data analysis.

The study had been designed to collect data from natural settings. By use of multiple sources this study collected information about different events and relationships from different point of view, each eliciting divergent constructions of reality from its participants. This approach provided a richer, more credible collection of data than that constructed from only one or two sources.

Peer debriefing and member checks of data analysis were conducted from each step. The procedure was reviewed with two doctoral candidate trained for a qualitative research. They were working outside the context of this study and had a general understanding of the nature of the study. I consulted with them in review of all perceptions, insight and analyses. Throughout, source information, error correction, respondent intentionality assessment and overall efficacy of data collection were rigorously checked. All respondents were encouraged to review and clarify content of actual interview transcripts. After review of transcripts, respondents were encouraged to offer comments on the interviews. In the process of member checking, instructors reviewed a summary of the data analysis and a
summary of the final results of the inquiry. The researcher asked several standardized interview questions and invited comments as to whether or not teachers felt the data had been interpreted in a manner congruent with their actual experience. All participants surveyed and rated the data analysis as “moderately” to “strongly” credible. All participants rated the data analysis “strongly” credible. Peer debriefing and member check analysis minimized any procedural errors and enhanced the reliability of the study’s conclusions.

The reality of the participant through interviews and observations enhanced the internal validity of this study. External validity refers to the ability of a study’s findings to be generalized to a wider population or other situations. Merriam (2000) insisted that rich, precise description can enhance generalization. When processing data collection and analysis, this study focused on the use of precise descriptions and actual words of the participants. Merriam (2000) also suggested that the use of multi-site research design, which was the use of several sites, cases, or situations, especially those representing some variation, allowed the results to be applied to a greater range of other situations (p.103). The observations of different dance styles and the use of three observers enhanced external validity so that this study was more broadly generalized to other settings.

The reliability of qualitative research means consistency or agreement of a measure (Patton, 2002). Patton (2002) insisted that using multiple qualitative methods for doing field work yields high quality data that are analyzed with attention to the issue of reliability. To increase the reliability of data collection in this study, two separate strategies were used: triangulation and multiple observers. Triangulation by combining multiple observers, theories, methods, and data sources reduced the bias that comes from
single-methods and a single-observer (Patton, 2002). This study allowed for triangulation by combining multiple methods: interviews, observations, and document analysis. By using a combination of observations, interviewing, and document analysis, the fieldworker is able to use different data sources to validate and crosscheck findings (Patton, 2002), which enhanced the consistency and agreement of findings. In addition, three different observers participated in observations and take field notes individually, which reduced the bias of single site of observations and enhanced the reliability of findings from observation field notes.
CHAPTER 4
PARTICIPANTS AND SETTING

The purpose of this study was to analyze a case of effective dance instruction for the deaf. This chapter briefly introduced each dancer’s career and the special characteristics of both deaf dancers and teachers who were chosen to participate in this study. Moreover, a short description of the participants’ working environment and the setting of rehearsals were included in this chapter. Pseudonyms were used for participants, the program, and the school in this study in order to maintain confidentiality and to avoid future risks.

The Participants

Twenty-two hearing and hearing impaired dancers were participating in the Royal Dance Company in Winter quarter 2007. Nine out of the 22 dancers were hearing impaired dancers. Four out of nine dancers were hard of hearing dancers. Two hard-of-hearing dancers were able to communicate by using voice, but the other seven deaf or hard-of-hearing dancers preferred to communicate by using ASL (American Sign Language). All hearing and hearing impaired dancers attended the rehearsals together. The researcher interviewed nine hearing impaired dancers for approximately an hour. And 10 hearing dancers allowed the researcher a short interview. Five of hearing impaired dancers were not trained with professional dance instruction. They enjoyed social dance or hip-hop dance in the community with their friends for fun, which helped them keep an interest in dance. Because of this interest in dance, they took dance classes at the Royal and decided to
participate in the Royal Dance Company. The professionally trained four dancers had danced for over 16 years and were trained at a professional dance studio. Six male dancers participated in the Royal Dance Company. Two out of six male dancers were hard-of-hearing dancers who used sign language. Every participant’s name and any information that can be identified remained confidential.

Deaf and Hard of Hearing Dancers

Anny was a hard-of-hearing female dancer. She was a White American and she was able to speak. She was in her first year of college and majored in Digital Imaging & Publishing Technology. She took dance when she was eight years old. She went to a mainstream school. After school, she went to a professional dance studio and took ballet, tap, jazz, and gymnastic. She learned how to dance and how to interact with other dancers there. This was the first time participating in the Royal Dance Company, so she had never performed at Royal Vincent Theatre.

Karen was a deaf female dancer. She was a White American and she used ASL. She was in her first year of college and was majoring in LST Laboratory Science Technology. She started dance at the Royal Dance Company a year ago. She went to deaf school. All teachers signed, so she felt that it was easy to follow teacher’s direction in dance class. She did cheerleading and hip-hop at middle school and high school, but not professional dance. She took Jazz in fall 2006 and modern dance during this winter quarter 2007.

Jennifer was a hard-of-hearing dancer. She was a Chinese and was able to speak. She was in her first year of college and was also majoring in LST Laboratory Science Technology. She was born in China but moved to Canada when she was in high school.
She moved to Albans in fall 2006. She took hip-hop and break dance in the community with her friends for fun, and also she learned Hawaiian dance from her friends. She took ballet class in fall 2006, which was the first time she studied professional dance. She also did acting and mime in a mainstream high school.

Jane was a deaf female dancer. She was a White American and she used ASL. She was in her first year of college and was majoring in Graphic Design. She started dance when she was three years old. When her parents discovered she was deaf, they wanted her to do something that she would enjoy. However, she went to a mainstream school and was put into a special class because she was deaf. She could not have any opportunities to learn dance because the other kids in the special class were not interested in dance. Therefore, her parents sent her to a professional dance studio that mainly focused on hearing dancers; there she learned dance with the hearing students. She continued to dance for 16 years and took ballet, jazz, modern, tap and pointe. She also took acting when she was in the Little Children Theatre. She performed at the Royal Vincent Theatre in Fall 2006, which was her first experience of performance at Royal Dance Company.

Amy was a deaf female dancer. She was a White American and used ASL. She was in her first year of college and was majoring in Psychology. During her last year of high school, she went to a deaf residential school, but for most of those years she was mainstreamed. She danced for 12 years and learned hip-hop, jazz, modern, and some ballet at a dance studio. She participated in the Royal Dance Company for six months and had the opportunity to perform acting and mine/movement at a 2006 performance at Royal Vincent Theatre. She auditioned for dance three times in her life, but she failed because of deafness. She enjoyed being able to dance at Royal Dance Company.
Rena was a deaf female dancer. She was a White American and used ASL. She went to a deaf residential school. She was in her second year of college and was majoring in Digital Imaging & Publishing Technology (DIPT). She performed acting in the Royal Vincent Theatre, which was her first time for performance. She learned hip-hop in high school because they had a dance competition. She danced to have fun and enjoyed herself.

Barbara was a deaf female dancer. She was a White American and used ASL. She went to a mainstream school. She was in her first year of college and was majoring in Art and Computer Design (ACD). She trained at a professional dance studio, but she was the only deaf student there. Her mother wanted to her to become involved in something.

Peter was a hard-of-hearing male dancer. He preferred to use ASL. He was in his first year of college and was majoring in Applied Computer Technology for PC Support Tech. He went to a mainstream school which offered dance classes, but he did not take the dance classes because he had to concentrate on his graduation requirements. He took some dance classes at Royal Dance Company for the first time. He learned hip-hop and jazz in fall 2006. He performed dance and acting in winter quarter 2006. He danced to have fun.

Tom was a hard-of-hearing male dancer. He preferred to use ASL. He was in his first year of college and was majoring in Web Design. In high school, he was in the drama club and he also had dance class. He learned modern dance and improvisation and mostly freestyle of dance. He loved improvisation rather than formed dance types because he really could feel connected with other dancers through dance improvisation. Moreover, he took a course in Art Quest when he was in high school. In fact, he was involved in acting during his last three years of high school.
Instructors

Dr. Haynes began taking dance classes in Albans when he was 12. He took ballet, and then during his teenage years he wanted to take classes in New York City and he studied at the American School of Ballet. When he went to college, he studied both modern dance and ballet in New York. He danced with the Joffrey Ballet when he graduated from college and then went to live in Hong Kong and danced for a Chinese Dance Company. Then he later joined modern dance companies in England, Stockhom, and other parts of Europe. Then, he returned to the states and attended graduate school at the University of Utah, where he majored in modern dance, anthropology, and dance ethnology, the study of culture through dance. In Taiwan, he did one project with a violinist and a pianist who were both blind. In other countries, he worked with deaf students. When he moved back to Albans, the position of director of Royal Dance Company opened, so he thought this job was the right thing for him and he opened his classes to deaf and hard-of-hearing students. The Royal Dance Company is open to the entire Albans Institute of Technology (AIT) community, so anyone could audition for it. Also every AIT student could earn academic credits by taking dance classes in the performing arts at Royal Dance Company.

Dr. Cann was Associate Professor in the School of Film and Animation in Albans Institute of Technology (AIT). He directed Saturday rehearsals and taught mime to deaf and hearing dancers. He had never worked with deaf and hard-of-hearing dancers before so this project was a new experience for him. Dr. Cann used a big screen when the performance “Moon Girl” runs on the stage. The big screen displayed a moon girl in the middle of the moon. The moon girl was one of the dancers and Dr. Cann used a special device to connect between the screen and computer.
The Setting

The dance studio was located on the first floor of the North East Institute (NEI) building. When following the hallway on the right side of the lobby, I found two entrance doors for the dance studio. In the dance studio, mirrors covered the front wall and eight big speakers were placed on the ceiling. Used performance materials were left on the pianos and on the top of cabinets. On the class wall were posters for the last performance. The tables and chairs used in the last performance were left in the corner of the classroom.

Figure 1. Photograph of Dance Studio

Figure 2. Photograph of Ceiling Speakers in Dance Studio
Dr. Haynes’ office was on the opposite side of the classroom. A white board and pen were hung on the door. He and his deaf students left urgent messages on the white board. It was one of the ways to communicate between teacher and deaf dancers. On the other side of the hallway, a dance department notice board was placed on the wall. On the board, pictures of the last performance and advertisements of other dance company auditions and dance stores were placed. Around the dance studio, signs and writing white board could be found easily, which showed that many hearing impairment students were enrolled in this department and that the dance department was open to all hearing impaired students at AIT. An advertisement poster supported that the faculty and staff signed to the best of their ability in public places.

Figure 3. Photograph of Dr. Haynes’s office Door

On the right side of the lobby, I could find the Vincent Theatre, where the Royal Dance Company performed. The Vincent Theatre could accommodate an audience of 300,
and this theatre was specially designed for hearing impaired people. On both sides of backstage, there were two TV monitors which allowed communication between stage staffs and performance directors who stayed in the director room, which was located on the second floor of the theatre. All staffs communicated by using sign through TV monitors, and the stage staffs gave cues to deaf dancers based on cues received from the directors. All cues of music, light, movements, and stage decorations came through the two monitors. The stage staffs had the responsibility to give cues at the right time. This theatre was useful to hearing impaired dancers and it allowed better dance performance to deaf dancers on the stage.

Observations at the Royal Dance Company rehearsals started on Feb 3, 2007, and ended on March 2, 2007. Performers met every Tuesday, Wednesday, and Saturday from 6:30pm to 9:30pm. Tuesday and Saturday rehearsals were regular rehearsals, but Wednesday rehearsals were open only to dancers who were in the “Moon girl” performance. For Tuesday and Saturday rehearsals, twenty-two dancers attended, but on Wednesday only six dancers rehearsed. Three dancers were hearing impaired dancers, and the other three were hearing dancers.

Interviews were scheduled at a convenient time for the participants. A quiet meeting room in the NEI student center was reserved and interviews were conducted through Feb 26, 2007, to March 2, 2007. Depending on their schedules, two ASL interpreters alternated attending the interview sessions. A hard-of-hearing dancer wanted to speak by herself, so the researcher let her speak by herself and if the researcher was not able to understand her words, the researcher asked an interpreter to help. All interviews were recorded by both voice and video recorders.
Dr. Haynes’s Teaching Philosophy and Perspectives

Dr. Haynes’s own personal history as a processional dancer and as a director of PeaceArt International led him to work with hearing impaired dancers at Royal Dance Company and served to shape his mission as a dance teacher. He believes that performing with hearing impaired dancers is importance because it provides them the opportunity to dance. He gave the following explanation in his interview:

For deaf dancers, I think one of the most important things that the dance company provides is the opportunity for them to dance. I have had many students tell me that they wanted to dance their whole lives, and they were told that because they were deaf they could not do it. Now they can finally do it! So I think that one of the main functions of the dance company is to provide the opportunity for students that may not have or may never get the chance to dance again.

Every hearing impaired student who wanted to dance could participate in the Royal Dance Company, no matter which schools and which department they attended. Dr. Haynes invited every hearing and hearing impaired students in AIT and outside AIT to the Royal Dance Company. Also he insisted that providing an opportunity could even change the student’s life. The following story demonstrates how providing an opportunity is important:

There was one female student I had who had never danced before joining the dance company. She was adopted. She was deaf and grew up in a hearing family. Her adopted sister went to dance classes, but she was not allowed to join, so she had to sit there all those years and watch. When she came to North East Institute (NEI), she wrote a paper about that experience and she said the best part of her college
experience was dancing. When she first arrived, she found dance a little awkward -- I mean if you've never danced before and the only way you used your body was for walking, running, or riding your bike. Dance is more than that; sometimes it doesn't feel natural. But after a year or so, she totally changed and dance became natural for her. After she graduated, she moved to a place for work, got married, and to this day she is still dancing. That’s a wonderful success story. There was another male dancer who was in the same situation, he had always wanted to dance but was told that he couldn't. When he finally started dancing, I realized he had a talent for dancing. He had a natural ability. He could jump and dance naturally. Now he lives in New York and is dancing and acting. We also had some students who have not been successful. There have been some who have gotten so frustrated that they quit, but most of the dancers have moved on and continued to dance.

Dr. Haynes’ perspectives on teaching were to help deaf dancers and feel supported and to lead them to enjoy dance. He emphasized that enjoying dance is important in order to lead hearing impaired students to dance as a life-long activity. The following passage illustrates his belief about giving enjoyment through dance:

My biggest concern is that they feel supported. That I believe in them and that they can do it. That’s the main important thing for me, for them to know that I am not going to give up on them. Even if they could not do it at that time, I still believe that they can! It relieves them of their sense of stress, because sometimes when you are under stress it makes it hard to do anything. Sometimes, I tell them that “you do not have to understand this now” because I don’t want them to be pressured. I want
them to enjoy whatever they are doing. So, my main concern is that they enjoy dance.

Challenges in Learning Dance for Hearing Impaired Dancers

This subtitle introduces the greatest challenges confronting the hearing impaired dancers in general and describes how they overcame these challenges. Hearing impaired dancers cope with two main challenges in learning dance: people’s prejudgment and a weakness of auditory ability.

The main challenge is the effect of the immanent people’s prejudgment in society that deaf students cannot dance because they cannot hear. This prejudgment reduces their opportunities to participate in dance in both school and theater. Most hearing impaired dancers attended in a mainstream school have never had chances to learn dance at school because their school did not offer dance classes for the deaf. Therefore, most hearing impaired dancers try to find a private dance studio or learn dance from a friend, but these private dance studios were also mainstreamed with hearing students. Teachers at these studios did not know sign language, so most hearing impaired students learned dances only by reading the teacher’s lips and copying the teacher’s physical demonstration. However, the most serious problem is the teacher’s attitude. The teacher’s negative attitude discourages the deaf students from learning dance and frustrates them in performing dance.

The other major challenge in learning dance is their weakness in auditory ability. This weakness leads to difficulties with counts, balance, and memorizing routines. Counting is the hardest part in dance to hearing impaired dancers. They have to realize counts mostly from visual cues such as finger-count, clapping hands, and physical
demonstration. Therefore, if there are no visual cues or demonstration of movement, it is
difficult for them to understand the counts of movements. If the dance teachers cannot use
sign language or do not give any cues, deaf people can only find clues of rhythm by reading
the teacher’s lips and copying movements. However, hearing impaired dancers find it
difficult to read the teacher’s lips during dance lessons because dance teachers continue to
move and cannot look directly deaf learners while demonstrating movement.

Another challenge in learning dance is balancing -- like turning, for example,
because the ear mechanism itself is so related to the equilibrium, how we balance ourselves,
so when they turn around, their equilibrium is being thrown off, so we have to constantly
balance ourselves. It can be a challenge for a lot of people, but it also challenges to the
hearing impaired dancers. Hearing impaired dancers are unfamiliar with turning motion
and performs slower turning or are off-balanced easier than other hearing dancers.

The other challenge is memorization of movement. Deaf and hard of hearing
dancers require more time to memorizing routine because they must memorize movement
and counts at the same time, so it takes them more time than hearing dancers. While
copying the teacher’s demonstration, they must memorize the counts of each movement.
Hearing dancers also memorize movement order and counts simultaneously. However, the
difference is that hearing dancers perceive counts by listening, but deaf dancers perceive
counts by watching. When deaf dancers learn a sequential movement, they understand
movement sequences as well as counts by visual pathway, which makes them a slow
learner in memorizing movement order.

Like this, hearing-impaired dancers cope with two main challenges -- the
prejudgment by others and the weakness of the dancer’s auditory ability; counting beats,
maintaining balance, and memorizing routines. The prejudgment of believing that deaf
dancers cannot dance because they cannot hear music reduced the dancers’ opportunity to
participate in dance activities. Also, the teacher’s negative attitude leads to teaching
hearing-impaired dancers without effective instruction for them, and that makes deaf
dancers frustrated in learning dance. Moreover, the weakness of the dancer’s auditory
ability leads to difficulties in keeping count, maintaining balance, and memorizing
movement. The hearing-impaired dancers can overcome their challenges by repetition and
effective instruction for the deaf. The following chapters describe how hearing-impaired
dancers overcome their challenges and other difficulties by effective dance instruction for
the deaf – sequential teaching, repetition, judiciously active instruction, and friendly
environment.
CHAPTER 5
FINDINGS – SEQUENTIAL PRESENTATION LEADS TO SEQUENTIAL LEARNING

While analyzing data regarding the question of how hearing impaired dancers learn dance, the researcher found that the teacher’s sequential presentation led to a unique learning pattern for deaf dancers. The dance teachers taught dancers by using a sequential teaching pattern -- providing a physical demonstration and visual count, giving extra time, explaining skills in detail, and offering feedback on the quality of the movement – that led to effective sequential learning for the hearing impaired dancers. The researcher denominated these four orderly connected stages of the teaching process as “sequential presentation.” The sequential presentation presented in this study supports Weikart’s (2003) teaching model for a sequential approach to rhythmic movement. Weikart (2003) introduced three categories of the teaching model that creates success for students in rhythmic movement: engaging the learner, enabling the learner, and extending the learner. These three categories of the teaching model are connected sequentially and developmentally.

Teacher’s sequential presentation led hearing impaired dancers to have a sequential learning process. The hearing impaired dancers effectively learned a new movement technique as well as a routine through the sequential learning process: perceive movement and rhythm, confirm movement and rhythm, hold inner rhythm, develop the quality of the movement and put emotion into movement. In this study, the researcher denominated these four orderly connected stages of learning process as “sequential learning.” Through this
sequential learning, all hearing impaired dancers can complete dance movement. Therefore, an effective teacher’s presentation would lead hearing impaired dancers to experience successful sequential learning. This chapter describes what teachers present and how hearing impaired dancers learn in sequential learning. Included in this chapter are teacher’s teaching philosophy and teaching perspectives, the process of the teacher’s sequential presentation, and the process of the dancer’s sequential learning. In addition, this chapter describes how sequential presentation and sequential learning occurred together effectively.

Teacher’s Sequential Presentation

Rehearsals consisted of a set of teaching sessions. Rehearsals began with warm-up, feet movement, the day’s routines, side walk, and cool down session. Warm-up and cool down sessions included free style of static movement, so the teacher did not require exact movement skills on warm-up and cool-down sessions. However, the routines in other sessions required dancers’ performance with exact movement skills following his sequential presentation: showing visual demonstration and visual count, giving extra time to clarify movement and count, providing effective rhythmic cues, and explaining detail skills of movement. Warm-up and cool-down session have the purpose of stretching and relaxing muscles, so the teacher let the dancers be free in following his demonstration. However, in other sessions, his presentation guided hearing impaired dancer’s sequential learning, which led both hearing and hearing impaired dancers to successfully complete the routines. Each subtitle included the description of how Dr. Haynes taught and how hearing impaired dancers learned from Dr. Haynes’ presentation.
Show Physical Demonstration and Visual Count

In order to teach a new routine, Dr. Haynes provided a physical demonstration and manual count. His demonstration was repeated five or six times according to the difficulties of the movement technique. Dr. Haynes demonstrated a whole perfect picture of the routine in slow tempo for three or four times with manual count. In this process, he clearly demonstrated the travel of steps with manual count. When Dr. Haynes assumed a part movement of the routine would be hard for hearing impaired dancers, he demonstrated the part several times. In the fourth and fifth demonstrations, Dr. Haynes showed the routine with original tempo twice and provided a manual count. The following passage is extracted from field notes, which illustrates how Dr. Haynes demonstrated a routine in a rehearsal:

Dr. Haynes stands in front of mirror and he faces toward mirror. All dancers stand behind Dr. Haynes and face toward mirror. He shows pre-count with fingers, five, six, seven, eight, then, he starts to move on slow tempo. He crosses right legs and made two steps forward a bit and then jump bends at the same time. Let body drop down into floor after jump. Body moves switch and then stand up with pose. He demonstrates them again twice on slow tempo. After he demonstrates, he looks around dancers. He realizes that deaf dancers cannot understand the routine and the count exactly, so he demonstrates the routine again on slow count and repeats the demonstration at the part of jumping and switching movements. He looks around dancers and gives pre-count and demonstrates the routine with original count for twice times.
When the teacher presented demonstration and finger count, hearing impaired dancers perceived movement and rhythm simultaneously. Mimicking the teacher’s demonstration, hearing impaired dancers perceived what movement they were supposed to do and how they counted for the movement. The pattern of perceiving movement and rhythm was the same in every rehearsal. Especially, the teacher’s steps and finger count led the deaf dancers to understand the count easily. In both interviews and observation with the hearing impaired dancers, this study found that hearing impaired dancers are more concentrated on understanding steps than other components in learning dance at the first stage because understanding steps helped them perceive rhythm of the movement. The following passage illustrates how hearing impaired dancers perceive count by following the teacher’s steps. Karen explained the following:

Most times I am focusing on the teacher’s feet. That is very important to know count. And it is most important because it moves the body. Then I focus on the rest of the body from the feet up. I try to dance while the teacher is demonstrating to coordinate his movements with mine. That helps me understand more.

Except following teacher’s steps, deaf dancers understood rhythm by watching the movement itself.

The following passage indicates how hearing impaired dancers recognize and memorize changes of tempo in a routine. Jane’s interview shows that hearing impaired dancers absolutely rely on visual information:

I just do it. The first time, dance is fast, music is fast, dance is slow, music is slow. Sometimes, Dr. Haynes starts dance slow, and then after we do spinning, we are supposed to dance fast and change tempo fast. I just see what Dr. Haynes does and
I realized -- Ok, that’s movement, at the certain movement, that movement will be tempo movement follow on.

In perceiving movement and rhythm, the hearing impaired dancers chose different learning patterns according to the complication of a routine. When the teacher demonstrated a simple routine, all hearing impaired students copied the teacher’s demonstration simultaneously. However, when the new routine was too fast or complicated, most of hearing impaired dancers stepped back and observed the teacher’s demonstration at first. After observing the demonstration, they tried to copy the new routine with the teacher’s demonstration for the second time trial. When asked why they stepped back and observed the teacher’s demonstration instead of copying the routine at once, they answered that if they copied the teacher’s demonstration for the first time trial, they could not watch any steps and not understand the rhythm of the routine, which might make it hard to remember the routine and rhythm. The following passage illustrates how hearing impaired dancers decide on their learning pattern. Karen explained as follows:

It depends on how hard the movement is. If something is really hard, I wait and watch the movement in the whole way and then start. It is easy.

Providing finger count allowed hearing impaired students to correctly learn the rhythm of the movement. Finger count maintained deaf dancers keeping counts in a whole routine. While watching and copying teacher’s demonstration, hearing impaired dancers continued to keep counts in their mind. However, if they lost the tempo of movement, they usually watched their peers’ performance and followed the tempo by the teacher’s finger count. Therefore, providing finger count is an effective visual method to lead deaf dancers to maintain clear counts of a routine in the first stage of sequential learning. The following
passage demonstrates the effectiveness of using finger count in teaching for the hearing impaired, which is extracted from the field notes at rehearsal:

Music is on. Teacher gives pre-count, five, six, seven, eight, then dancers start to move. While demonstrating the routine in front of dancers, teacher provides count by fingers. All hearing and deaf dancers follow his demonstration. In the middle of the performance, Amy goes away from the group and sits on the side and calls the teacher. She may have hurt back hamstring. The teacher turns the music on and tells the rest of the dancers to repeat the performance. The teacher goes out of the dance studio to get an ice pack. Music is started and dancers are ready to start on the right count. Without the teacher’s pre-count, all deaf dancers lose the first step of the performance. However, they catch the count by watching the hearing dancers. After the spinning movement, a few deaf dancers lose the count and follow the other dancer’s demonstration, but the count is not clear. The teacher comes back to the studio and gives an ice pack to Amy. The teacher looked dancers and notices that the deaf dancers lose count. The teacher stays in front of the dancers and demonstrates the routine with finger count. The deaf dancers look like they feel more comfortable following the count and keep their counts in the right tempo.

**Give Extra Time**

After showing the final demonstration, Dr. Haynes gave extra time for one or two minutes to both hearing and hearing impaired students. This time, he let them clarify and to solve problem on movement and count. He observed dancers and answered questions or demonstrated the separate movement onto the united movement and gave feedback. In this
period, he allowed dancers to communicate with each other. The following passage is extracted from field notes, which indicates how he managed extra time in rehearsal:

After Dr. Haynes demonstrates the routine for four or five times, he observes how deaf and hearing dancers responded. A deaf dancer asks about the part of jumping and switching movement, he demonstrates steps with manual count and added arms movement with steps. After demonstrating the part, he demonstrates from the beginning of the routine with slow tempo. When a hearing dancer asks a question, dancers demonstrate the routine from the beginning with manual count. Jane, Rena, and Karen gather together and they are trying to match movement with each other. But, their movement is not on the right tempo. The teacher walks to them and says “Count is not correct.” Then he demonstrates the routine with manual count again. After he demonstrates the routine, he checks dancers’ performance and says “Excellent.” He walks toward audio and sets a track for the routine.

When the teacher provided extra time, hearing impaired dancers spent the extra time to confirm the rhythm and the order of routines. From observations, this study found hearing impaired dancers followed five possible ways in order to confirm routines and rhythm or to solve their problems in understanding rhythm and routine: (1) ask the teacher for help; (2) ask the hearing students for help; (3) solve problems with deaf dancers; (4) follow the hearing dancers’ demonstration; and (5) practice by oneself. Field notes in every rehearsal provided the evidence that hearing impaired dancers sought these five possible ways to confirm their information and to solve their problems:

Teacher demonstrates a new movement with original tempo. The movement involves a turning on the floor after a big jump. After the turning, tempo is changed
from slow 4 counts to fast 4 counts. When teacher finishes final demonstration, deaf dancers look like they’re in trouble. Their face expresses perplexity. A deaf dancer asks the teacher to show demonstration and count one more time. Teacher demonstrates and tries to make her understand the change of tempo. Three deaf and hard-of-hearing dancers gather a spot and sign each other. A dancer among them demonstrates the jumping and turning movement with count and other dancers followed her. However, they could not figure out the count by themselves, so they ask a hearing dancer who can sign. The hearing dancer demonstrates the movement with count. They communicate by sign and it looks like they understood the count. Few deaf dancers stayed behind rows, and they followed other dancers’ demonstration. Few deaf dancers seem like they understand the routine and the change of tempo. They practiced the jumping and turning movement repeatedly. At the first time, their tempo was awkward, but they were discovering the right tempo of the movement as they practice.

The first possible way is to ask the teacher for help. Most of hearing impaired dancers who were close to the teacher chose this first possible way. The following passages illustrate the first possible way requesting that the teacher provide a demonstration. Anny explained as follows:

I ask questions when I don’t understand something. I repeatedly ask him “would you show us that again slowly” then he shows us that again. Sometimes, it helps he shows us that slowly twice because every time I can get the idea what he wants us to do.
The second possible way is that hearing impaired dancers know that hearing dancers are better than they are at knowing the count, so hearing impaired dancers asked hearing dancers to correct the count in order to confirm the count they perceived. Sometimes hearing dancers who are majoring in ASL can help hearing impaired dancers understand performance better than other hearing impaired dancers. Most of the time, hearing impaired dancers successfully communicated with hearing dancers and took information about correct routines and counts from the hearing dancers. Therefore, the hearing impaired dancers were very glad to work with the hearing dancers. This study could find considerable evidence of hearing and hearing impaired dancers helping each other in rehearsals. Amy answered a question about her personal experience dancing with hearing students:

It’s great. There are students who have a lot of experience who know and can hear the music so they know it better. Maybe I don’t hear the music but at the same time, I think hearing people teach dance better too and I can see the power within the dance that matches the music. For example, Thomas -- he had about three or four expert dancers who have danced for about 15 years come in and teach and do workshops, so that helps us to see professional dance and see how it is done. It was amazing too to see the group sign while they danced. In our group we have some students who are interpreting students so it makes communication easier too. It was great.

The following passage illustrates that Jane chooses a possible way in accordance with situation:
I ask for a lot of help. I ask the teacher. I ask about specific steps and things. I am trying to talk to hearing students in class too because they hear music and they can help me in counts.

The third possible way is that hearing impaired dancers prefer to solve a problem together with hearing impaired dancers because of deaf culture. Deaf people are used to helping people each other. Deaf people are more community based, so they are supporting each other. If a deaf student has a problem in understanding routines or count, they gather together and solve the problem together. In observation, this study could easily find this deaf culture in every rehearsal. After deaf dancers watched and copied the teacher’s demonstration, deaf dancers gathered together and worked to solve their problems. Dr. Haynes mentioned this in his interview:

At the start, company members are divided into deaf and hearing groups, but sometime later deaf and hearing dancers worked together and there is no division between hearing dancers and deaf dancers. The process of working together with deaf and hearing dancers is amazing and beautiful.

The fourth possible way is that hearing impaired dancers prefer to stay behind the hearing dancers in order to facilitate matching their performance with the hearing dancers. If hearing impaired dancers felt unclear about routines or counts, they stayed behind the rows and followed the routine of the hearing dancers. In this way, hearing impaired dancers could confirm and memorize routines and counts.

The last possible way to confirm their performance is practice by her or himself. If hearing impaired dancers understand all routines and counts clearly and have confidence about them, the hearing impaired dancers spent time to practice by her or himself with her
or his internal rhythm. By observation, many cases indicated that hearing impaired dancers chose this last possible way only when the routine and counts were simple.

Provide Effective Rhythmic Cues

After giving extra time to the dancers, Dr. Haynes turned on the music for the routine. In order to maximize the effect of the music cues, he provided music with high volume, clapping hands, pre-counting cues, and manual cues. The following passage is extracted from field notes, which indicates teacher’s instruction for effective rhythm cues:

He turns volume up to high. The ceiling speakers are shaking a lot. I can feel the vibration through my skin. He stands in front of mirror and claps hands with the music beat. Just before the routine starts, he provides pre-counting, five, six, seven, eight. Then he and dancers start to move. While demonstrating the routine, he continues manual count. After the routine movement is done, he comes to audio and set the track again. Music starts and he claps hands and gives pre-counting, five, six, seven, eight. He continues manual count and observes dancers’ performance.

After the routine finished, he stops music and stand in front of mirror.

Loud music with high volume helps hearing impaired dancers have a sense of the music. The vibration of the bass in the music makes it easy for them to dance with the music. The following explanation by Tom illustrates the effectiveness of loud music:

Well, most deaf still have some hearing capability. Most of the time, I relied on the bass in the music to get the feeling of a song, and then I could dance. If the music is loud enough, then it was easy to hear and feel it.
Especially for hearing impaired dancers, starting cues such as pre-counting, touching cues, or light cues should be provided in order to keep counts in their mind. Most of the time, hearing impaired dancers could not recognize when the music would be started and when they were supposed to move. In rehearsals, Dr. Haynes provided pre-count, such as counting from five, six, seven, and eight. After eight, dancers started movement at once. The following passage is a part of an interview with a deaf dancer, Anny. The following passage illustrates the use of pre-counting and how it is helpful to keep up with the count:

I really don’t have trouble with that. Basically, I am used to it. I know how to deal with that. At first, the difficulty was to know when I need to start and when the music starts and how to know the count. When I was in elementary school, in the dance class they usually had to push me or tap on my back to get started because I didn’t know. Because it is very difficult for me to know when it starts, I cannot hear the music. I know the step, but there is doubt about it because I cannot hear the music. So it is easier when someone taps on my back. In the dance studio, Thomas signs like five, six, seven, and eight, whatever. That tells us, oh, I start right after that, so I don’t need someone to tap my back or push my shoulder. I usually watch instructor…..I just count by myself in my head. Think I am ok. Someone says five, six, seven, eight, then, I need to start counting. That helps me keep the counts in my head.

However, at theatre performance, Dr. Haynes is not able to provide pre-count on stage. From the data of documentary DVDs and performance DVDs, this study could find out how hearing impaired dancers performed on stage successfully:
In the case of that deaf dancers were off stage, hearing dancers or stage staff gave cues or touched deaf dancers when deaf dancers should enter stage. In the case of deaf dancers on stage who should start movement in the middle of the performance, hearing dancers touched a part of the dancer’s body, which could not be seen by the audience. With the visual and tactile cues, the deaf dancers started performance and matched tempo between hearing dancer’s count and their inner count. Like this, visual cues and tactile cues led deaf dancers to be able to perform on stage, and their strong sense of inner rhythm made them complete the performance on stage.

The following passage illustrates Rena’s experience of use pre-counting in rehearsals and of visual cues in her performance on stage last year:

Sometimes the teacher leads with counts like five, six, seven, eight. Or you have separate group, so first group go, and you know after you can count with while first group watching, and then you know when is supposed to in and out. I was in a dance show, I was at end and I started first. That was harder, but I have a friend and teacher who were on the other side; then he tells me when I need to go. I followed that way. That’s what I did.

**Explain the Quality of the Movement**

When the teacher believed both hearing and hearing impaired dancers performed the routine quite successfully, he explained detail skills or the quality of the movement by using explanation, kinesthetic sense, and imagination. In this stage, he used both spoken and sign language. He generally demonstrated the tension of muscles or the shape of the movement. In order to help their understanding of the movement, Dr. Haynes explained the
movement by simple and metaphorical words such as *spongy* or *floating*, which led the dancers to have a simple sense of the movement. The following passage is extracted from field notes, illustrating how the teacher demonstrated and explained the detail of the movement:

He explains the cross step movement with both sign and spoken language. He says, “It’s like a sponge. If a sponge is soaked, it’s getting heavier. So, the second step movement should be shrunk and be heavier”. (Pause). He asks Judith to translate his speaking into ASL. He demonstrates and explains the movement in the relation of the image of the soaked sponge. Also, he demonstrates jumping movement. He shows the tension of the thigh when making a jump. He shows the perfect shape of the legs in the jump position.

Dr. Haynes believed that kinesthetic sense is important in order to know the quality of the movement. As dancers copy the movement, they can naturally feel the sense of the movement by their kinesthetic sense. The following passage is a part of the interview with Dr. Haynes, which illustrates the importance of using physical demonstration and using words to develop the quality of the movement:

Well, I would use words like “soft” or “percussive” or “flowing” or “spongy.” You know words that would give them a sense of what this means. So, I mostly use the words and try to not talk about it too much because it goes back to the idea of thinking too much. Think that your body can move in different ways and have different qualities of movement without thinking about how to do it. It’s like acting, you can become something without thinking about the process of how to do it. The more efficient for them is getting them to try to do it and get the aesthetics and
kinesthetics. So, I think it’s important that they get the movement into their bodies before they start trying to process the emotion. So, if I want them to do a soft quality, I show a soft quality! I may even use a word like “soft” or “flowy” or “floating.” I teach it in a way they can copy me. In doing it, they feel it rather than they think it. Sometimes, this process is very helpful.

In order to help hearing impaired dancers understand the emotion of the movement, telling a story, explaining what the music is about, and showing videotapes were effectively used. Dr. Haynes shares his experience of telling the history of Fosse dance, which allowed the dancers to try the movement with better understanding. According to Dr. Haynes’ interview:

Sometimes when I introduce a new technique, I explain about where it came from and the person that developed it. This way the students have a personal history of the movement. For example, last year we did a dance based on the jazz of Bob Fosse, so I explained to him that he has a lot of quirky movements in the hands and hips because he as a dancer had a lot of quirkiness about him. A lot of people didn't think that he could be a dancer because of the awkward movements he used. It was that awkwardness that he used to create his dances. Also Bob as a young man was starting to go bald as his hair was falling out, so he always wore a hat. So that’s why the Fosse dancers always wore hats. So I would explain all of this history about where the dances came from and how and why they were developed. I think this allows the students to try the movements with some understanding. That way it is not so foreign for them.
In a “Moon Girl” performance rehearsal, Dr. Cann provided the explanation of history, story, and characteristics of each character, and examples, which encouraged the dancers to incorporate the emotion into their character. The following passage indicates Dr. Cann’s instruction, which is extracted from field notes from observations:

Dr. Cann set his laptop on the right side of the dance studio. Dancers sat in front of the laptop and looked over him. He was holding a bunch of papers in his hands and Dr. Haynes stood at his side. Dr. Cann started to talk and Dr. Haynes translated the spoken words into Sign Language. He explained the long history of a piece and handed out the bunch of papers to the dancers. The papers included the history of the piece, the characteristic of each character, and the story of each screen. Dr. Cann explained all that information and also showed a physical demonstration if it was necessary. After finishing his explanation of the history, story, and characters, Dr. Cann played a performance video and Dr. Cann explained again the characteristics of each character while watching the video. After watching the video, Dr. Cann asked everybody to stand up and move around studio. Dr. Cann gave a cue to express the characteristic of each character with interval. The dancers expressed the emotion of each character based on what they perceived and what they felt from the character. All dancers expressed similar emotional movement, but everybody was not the same. This process showed the way that deaf and hearing dancers perceive and interpret emotion and incorporate them into movement in rehearsal.

In the process of sequential learning, after hearing impaired dancers confirmed routines and counts and built strong inner counts of routines, they tried to develop the
qualities of the movement. There are four ways to understand the quality of movement in rehearsals. First, nearly all of the dancers perceived those movement elements from the teacher’s demonstration. While watching the teacher’s demonstration again, hearing impaired dancers perceived the movement effort and understood what they were supposed to do for the moment. Second, the teacher’s linguistic explanation also led hearing impaired dancers to understand the teacher’s intention of the movement exactly. The following passage is a part of the interview with Karen, which illustrates the benefits of the teacher’s demonstration and explanation of movement to understand the quality of the movement:

Most of the time, I watch how the teacher himself is moving. He moves in a powerful way; I do that way. A lot of times, I observe the teacher’s demonstration and do that with stronger or gentle….A lot of time, the teacher says “no, no, you are doing that wrong. You have to throw all the strength into your arm.” Whatever I am doing wrong, whatever the problem is, he will tell me and I can fix it.

According to the analysis of the interviews, watching the teacher’s demonstration and having the teacher’s linguistic explanations were the most preferred process to understand the effort of the movement for hearing impaired dancers. Third, the beat and vibration of the music helped hearing impaired dancers perceive the mood of the piece, which led them to assume the effort of the movement. When the music beat and vibration were light, they led to using little energy. If the music beat and vibration were strong, they led to increased energy. Therefore, when the music was ready, they felt the vibration from the music first and then followed along. If they were off stage, they waited until they could feel the beat from the music and then they kept going with energy. The following passage
is a part of the interview with Jane, a deaf dancer, which indicates the feeling of the beat from the music and how respond on the music:

Loud music feels more like “boom,” but with soft music you can rarely feel it, so you can feel the difference between loud music and soft music. With loud music, I know when I was supposed to jump and make something big or something small on that beat, so I know what I need to do with each beat. With soft music, just go with that feeling and try to dance softly.

The fourth way to learn the quality of movement is the use of imagination. If they need to jump, they imagine about jumping over something or flying. None of hearing impaired dancers had specially trained for developing the quality of the movement, but it seemed as though they were familiar with them and a natural sense they were born with. The following passage indicates the use of a natural sense of feeling in the quality of the movement. The following passage is extracted from Amy’s interview:

It’s just a matter of the heart and if you know if the music is light or soft then it is easy to get the energy. When I know the music, sometimes I can close my eyes and dance because I know it. Now how I learn to do energy flow of movement… I don’t know. It’s just one of those things that come from the heart. I have always wanted to dance so. It’s just natural.

Telling the history and story of the piece and identifying the music helped the dancers perceive and interpret the emotion better. Communication by sign language was necessary to understand the piece better and interpret the emotion of their character. When the teacher told the story and explained the emotion dealing with the piece, dancers tried to understand what emotion they were supposed to express in their characters. When the
teacher explained what the music was about, the dancers tried to relate their emotion to the music. Regarding the interview question of what deaf dancers think about Dr. Cann’s instruction, Karen answered as follows:

The teacher gives me an example or tells me what they want me to do. You know what emotion we are supposed to do or tell us what dancers are about; then I can be emotional easy and I can connect to that well.

About the interview question of what deaf dancers think about Dr. Cann’s instruction, Jane answered as follows:

I think it depends on what people are saying about the music -- if they tell me the music is happy or sad. It can be related to any emotion. And in dance school, they have creative dance that matches that, so I think about those experiences and I just try to incorporate with my feeling and everything. Again, I know what kind of music that I am doing, so I attach my emotion to it. For the Royal Dance Company, I was a moon girl. So we had to discuss who the character is, so that helps me to know so that I can add my facial expression into the idea with emotion, so I can change my idea and change my character.

Moreover, while watching videotapes that recorded the same piece of their performance, the dancers easily interpreted the characteristics of characters and the mood of the piece.

The following passage indicates the way of perceiving and interpreting emotion from observation. The following passage is extracted from Jane’s interview:

The teacher’s physical demonstration of the character, the story of our performance, and the videos really show me how to do my own character. It really did help me.
The history showing on the video on the computer helped me a lot because I could see my character. I could follow and that showed me much of my character.

The sequential teaching observed in this study is applicable to all dancers. There were no differences -- only that the teacher used sign language and visual count for the deaf and that deaf dancers danced with their inner rhythm. Both hearing and deaf dancers use the sense of inner rhythm and count internally. However, the difference in the use of inner rhythm between deaf and hearing dancers is that hearing dancers perceive information of counts by ear, but deaf dancers perceive information of counts by vision and kinesthetic sense. When deaf and hard-of-hearing dancers followed these stages of sequential learning, the researcher could not find any difference between age and sex. However, there were some differences according to the degree of hearing loss and dance experience. When experienced dancers perceived movement earlier and kept counting more clearly than low experienced dancers.

Figure 3. Diagram of Teacher’s Sequential Teaching Process
Figure 4. Diagram of Dancer’s Sequential Learning Process

Summary of Theme

In summary, the teacher’s sequential presentation, which is a teaching pattern, led to effective sequential learning for deaf dancers. When the teacher presented a physical demonstration and visual count, it effectively led deaf and hard-of-hearing dancers to perceive movement and rhythm; when the teacher provided extra time, it effectively led deaf and hard-of-hearing dancers to find solutions to their problem such as communicating with others or practicing; when the teacher provided rhythm cues such as loud music, pre-counting, and manual count, this effectively helped the deaf and hard-of-hearing dancers keep their inner count; when the teacher provided the explanation of detail skills or the quality of the movement, this helped the deaf and hard-of-hearing dancers understand the movement effectively and develop the skills and the quality of movement successfully. In conclusion, the teacher’s sequential presentation -- showing a physical demonstration and visual count, give extra time, explaining detail skills, and the quality of the movement -- led to effective sequential learning for the deaf and hard-of-hearing dancers. Therefore, the teacher’s sequential presentation, which is a teaching pattern, is effective dance instruction for the deaf.
CHAPTER 6

FINDINGS — REPETITION IS POWERFUL

Repetition is an extremely important methodology for the effective instruction of dance to hearing impaired dancers. A dance performance may consist of many “scenes”, which communicate like the scenes of a story. In turn, a single scene may include many different sets of routines, and each routine consist of various single or sequenced movements. In order to successfully complete a performance, it becomes essential that dancers learn and repeat their routines until they can perform them autonomously. Because of this requirement, it becomes of paramount importance to evaluate the nature and structure of rehearsal design.

In this study, the word, “repetition” will be defined to mean the structured and repeated practice that leads hearing impaired dancers to perform their various routines, autonomously. In order to more adequately describe the physical and psychological importance, to the dancers, of repetition in rehearsal design, the following subtitles will be utilized: rehearsal design for repetition, memorization of the movement, development of movement skills, and movement confidence. The findings on the power of repetition to solve problems and develop skills of movement support Bernstein’s theory (1967). As Bernstein (1967) has suggested, practice does not consist of repeating the means of the solution to a motor problem but in repeating the process of problem solving by techniques which are changed and perfected from repetition to repetition.
In Royal Dance Company rehearsals, Dr. Haynes planned rehearsals for the express purpose of teaching hearing impaired dancers to perform their various routines, autonomously. These rehearsals were planned to maximize the use of repetition as follows: first, Dr. Haynes used the same routines in both dance classes and rehearsals; secondly, he only taught one or two routines for any single rehearsal, repeating the routines in a structured pattern; thirdly, he scheduled rehearsals with enough time allotted for the dancers to adequately prepare for their performances; and, finally, he provided different types, of repetition in order to enhance the learning process.

It soon became evident that the amount of time usually needed for rehearsal was not adequate for deaf dancers to learn to perform routines autonomously. Dr. Haynes recognized that deaf and hard of hearing dancers often learn more slowly and usually need additional repetition in order to learn a complete performance. Therefore, he taught the various routines of the performance pieces in both dance classes and rehearsals, which allowed the dancers to practice the routines repeatedly during a week. Moreover, Dr. Haynes only taught one or two routines in any given rehearsal and repeated them as many times as needed for that day. By so doing, he maximized the number of repetitions for the standard practice day and for the practice week, which in turn, allowed the dancers to improve their skills as well as the quality of the routines. Teaching the dancers only one or two routines a day meant that it was quite a lengthy procedure to completely and adequately prepare for a performance show. To manage the time problem created by the need for practice and repetition, Dr. Haynes would often schedule rehearsals to begin four or six months before the actual performance was scheduled.
In addition to increasing the amount of repetition in the rehearsal structure, Dr. Haynes also had the dancers do different styles of repetition at different times, depending on which styles of repetition were the most efficient and suitable for the learning process. When the purpose of repetition was on development of specific skills, he led the dancers to practice those specific parts of the routines which emphasized these skills over and over. When the purpose of repetition was on being familiar with the rhythm of the routine, he led the dancers to practice the whole sequence of the routines time and again. In the early stage of the rehearsals, the repetition of very specific parts of various routines was mostly emphasized. In the latter stage of the rehearsals, the repetition of the complete sequence of the routines was mainly emphasized.

Memorization of the Movement

Memorizing the routine is always the first step in learning dance. In rehearsal, memorizing the routines is important to both deaf and hearing dancers, but it is especially important in helping deaf dancers “keep count”, or “keep time”. In the Royal Dance Company rehearsals, deaf dancers started counting when the start cue was given. From the beginning of the movement, deaf dancers continued to count to the end of the routine. When a deaf dancer lost their place or did not know parts of the movements of the routine, he or she became confused and was not able to keep count of the routine. This, in turn, would cause the dancer to fall out of step with the appropriate count of the movement, ruining their performance. Thus, deaf and hard of hearing dancers had to memorize the routines and the movements very precisely, according to the appropriate count.
The dancers also had to remember changes of tempo in certain movements. Thus, memorizing the routine was necessary to remembering and understanding not only the various movements of the dance, but also the various rhythms of the dance. However, because memorizing the routines is not easy to deaf dancers, it was obvious that deaf dancers had to attempt to memorize both the routines and the rhythms at the same time. This necessity, in turn, created the need for more time to understand and memorize due to the complexity of the task. Even though some of the dancers may have had few years of dance experience, memorizing the routines was still a very difficult process for them. To reiterate, perhaps the most important methodology used to overcome their difficulties in their task was repetition. Through much repetition, deaf and hard of hearing dancers can remember the routines much more efficiently. The following passage illustrates the benefit of repetition for memorization of the movements. Bunny (a dancer) mentioned:

Well for me, I prefer to use a lot of repetition to learn dance. Persistence is important also... When I am persistent and don’t give up. Then I can remember the dance a lot better.

The repetition process in memorizing the routine could easily be seen in the first segment of rehearsals whenever the dancers had to learn a new routine. Dancers would repeat the routines more than 4 times, following closely the teacher’s demonstration of the various movements. Consequently, the more they repeated the memorized routines, the better and more successful were their performances. The following passage illustrates the important combination of memorization of the routines with repetition in a rehearsal:

The teacher demonstrates a new routine. It is a first time demonstration and the routine involved a lot of hands and steps movements. Even though the teacher
demonstrates the routine at a slower tempo than normal, a few dancers are forced to stop their routines in order to stand and watch their teacher’s demonstration. Some of the deaf dancers are confused concerning the combination of the movements with the tempo. When the teacher finishes the first demonstration, the standing deaf dancers who are watching the performing deaf dancers appear to have frustrated and distressed appearances. The teacher perceives their state of anxiety and their confusion and starts the demonstration again from the beginning with a much slower tempo. The dancers then slowly follow his demonstration. They begin to look more comfortable as they follow his demonstration. As the dancers continue repeating certain parts of the routine, it becomes evident that they are memorizing the routine. The teacher then demonstrates the routine for the third time. The deaf dancers begin to appear to be getting familiar with the entire sequence of the routine. By the time the teacher demonstrates the routine with the original (and faster) tempo, the dancers seem to have memorized the largest part of the routine and successfully followed the tempo of the routine.

By repeatedly copying the aspects of the teacher’s demonstration, the dancers were able to understand the routine and tempo and were able to memorize them, regardless of the difficulty of the routine.

**Development of Movement Skills**

Dr. Haynes strongly believes that repetition makes deaf dancers develop various skills of movement as well as discover solutions for their dancing problems. In the following statement, he emphasized the importance of repetition in learning dance:
Well, a lot of it is repetition. In fact, a lot of dance itself is learning repetition or for anything. When you are a toddler learning how to walk, you get up, you fall, you get up again and fall. You keep getting up and doing it again until you are walking. That’s repetition. Your learn so much by repeating. Like you are in grade school, learning the alphabets, you practice writing ABC’s over and over again until you get it. It’s the same thing with dance, you use repetition, and each time you do it and you’re learning something different about it. You know, it’s like Thomas Edison, the man who invented the light bulb. He was quoted as saying that he had tried to make the light bulb 31,000 times, but he never said that he failed 31,000 times. He only learned the many ways how not to make the light bulb 31,000 times. It’s the same case with dance. When you do it over and over again, you learn what works and what doesn’t work, each time trying it differently. It’s the repetition that is a part of this kind of learning.

Like Dr. Haynes opinion, this study found that deaf dancers solve problems and develop skills by repetition. The following passage is extracted from field notes, which illustrates the power of repetition in the aspect of solving the dancers’ problems and developing the dancers’ skills:

Teacher demonstrated the speed turning movement. Jennifer does not seem familiar with turning skills. She easily loses her balance and takes off her line. Teacher demonstrated the skills of turning at a slow speed and explained the movement while Jennifer was watching the spot in turning. After she observed his demonstration and heard his explanation of turning skills, she practices the turning movement. Her turning is still awkward. Legs, body, head, and arms were turning.
but moving separately. Arms are moving without conscious effort and legs stepped double when body is turning. She does it the same way three times, and then she practices only on the turning steps. With the correct turning steps, the body begins to follow the turning direction. I think she is beginning to understand the principle of turning movement..... (A week later in dance class).....A routine movement involves a speed turning, Jennifer makes turns with a stable position, but she cannot turn quickly enough. In other words, she only made two turns while the other dancers made four turns ..... (Two weeks later in a rehearsal).....A routine movement involves a speed turning. She performed the movement, with music, almost perfectly, in a stable position and at the appropriate speed.

The following passage quoted from another dancer indicates the use of repetition in order to overcome her dance problems. Anny mentioned:

The biggest difficulty which I have is turning. It requires a lot of ability in balance. My balance is very bad and awkward because of my ears. So, I have to find a way to figure out the balance. So, I really need to practice.

Movement Confidence

Repetition also has psychological benefits for deaf dancers. In other words, repetition not only allowed deaf dancers to develop the physical and mental skills needed to perform the movement, but also reduced the dancers’ fear on rhythm issues and generally increased the dancers’ self-confidence. Deaf dancers have a great deal of fear in dancing with music because they cannot hear the music. So, they are forced to watch their teacher’s finger count and try to match their performance with other students’ performance
in order to effectively reproduce the rhythm of their dance movement. However, after deaf dancers have repeated the routines over and over, deaf dancers begin to get familiar with the various routines and rhythms, and thus begin to develop the confidence needed to perfect and perform their dancing. The following passage illustrates the psychological power of repetition on deaf dancers. Anny mentioned:

Yes, I do. It really makes a big difference when you repeat them over and over. It starts to give you confidence with the movements. It feels like, O.K, I can do this…. it feels positive and I can fix the wrong movement that I used to do.

Karen mentioned:

I had little plays or little projects like cheerleading things. In these, we would have to learn dance. But really my problem was following the music. To get over my problem, I kept practicing. From practicing, I learn the counts, like one, two, three, and four, and it made me confident to do the movement.

As these statements reveal, repetition helped deaf and hard of hearing dancers not only develop the necessary skills of the movement, but also reduced their fear of doing what they were not familiar with and increased their confidence in their dancing as they overcame their difficulties. Dr. Haynes has worked with deaf and hard of hearing dancers for a long time, so he emphasizes that teachers must have a teaching mind geared to encourage deaf dancers continuously and to help deaf dancers overcome their physical and psychological difficulties in dancing.

Repetition is a powerful tool in the learning process for both deaf and hearing dancers. Actually, there is little difference in the content of actual instruction for the two groups, except that deaf and hard of hearing dancers require more time to practice a routine
than hearing dancers do. The effectiveness of repetition is evident for both deaf and hearing dancers. In the dancers studied, there was no difference in sex and ages between deaf and hearing dancers, but there were some differences in degree of dance experience. More experienced dancers became familiar with the routines more quickly than less experienced dancers; so, at times, less experienced dancers would have to employ more repetition in order to completely learn a routine.

Summary of Theme

In summary, by designing the dance rehearsal structure to maximize the number of times of repetition, deaf and hard of hearing dancers had an adequate amount of time to practice their performance. This, in turn, led them to develop the appropriate skills needed to perform the various dance movements by finding solutions to their problems. Also, the use of repetition helped engender confidence in their ability to perform by reducing the fear of recognizing the rhythm of the movement and by allowing sufficient time to memorize the routines within the movement. As can be seen by this analysis, maximizing the number of times of repetition is an important tool in the learning environment for deaf and hard of hearing dancers. Repetition allows deaf and hard of hearing dancers to overcome their difficulties both physically and psychologically.
While analyzing the observations of rehearsals and interviews of both dancers and teachers, the researcher could find that hearing impaired dancers learned dance mainly through judiciously active instruction: visual instruction, kinesthetic instruction, linguistic instruction, music choice, encouragement, and various instructional styles. The findings from this study support Gardner’s Theory of Multiple Intelligence (1983). According to Gardner’s Theory (1983), application of one or more of eight intelligence categories maximizes the learning process, so determining which intelligence categories the deaf dancers best process can help educators to know the best active learning and teaching instruction. This study found that the best active learning and teaching instruction for the deaf is education by visual, kinesthetic, linguistic, and intrapersonal intelligence. The application of all these four intelligence is essential to maximize the effectiveness of teaching dance to deaf and hard of hearing dancers.

However, unlike in the instruction of dancers with hearing, not all active instruction behaviors work all the time. This chapter describes all active instruction and also discusses judicious points in active instruction for deaf and hard-of-hearing dancers and how to deal with judiciously active instruction.

Visual Instruction

As we know that deaf people are visual learners, deaf and hard-of-hearing dancers mainly rely on visual instruction. Among visual instruction, deaf and hard-of-hearing
dancers effectively learn dance by physical demonstration, finger count, mirrors, and videos.

Deaf and hard-of-hearing dancers first perceived information by watching the teacher’s physical demonstration, from which they understood the routines and rhythm simultaneously. Moreover, finger-count made it easier for deaf dancers to continue their inner counts. When deaf and hard-of-hearing dancers lost the count in the middle of performance, finger-count helped them catch up the count. Also, pre-counts facilitated informing them when they were supposed to start. The teacher gave pre-count “five, six, seven, eight, and then dancers started to dance at the following “one”. Using a mirror was also an effective teaching method for deaf dancers. Deaf and hard-of-hearing dancers could see the teacher’s instruction and check their own movement in the mirror, so the dancers could observe themselves and correct errors while comparing movements in the mirror. In addition, watching videos offered effective instruction to help dancers understand the whole picture of the performance and specific characteristics of a character. Showing a sample of performance provided clear understanding on what they were supposed to do in the performance. The following passages indicate the effectiveness of visual instructional behaviors. The following passage illustrates the effectiveness of physical demonstration. Amy said:

The physical demonstration definitely helps because he is counting through each movement so you can see the counts with each movement. He also adds the pauses and shows you where they are. I mean he is the master choreographer so he is used to doing that way and it helps me learn better.
Deaf and hard-of-hearing dancers relied on finger-count and pre-count in order to keep up the correct count. The following passages illustrate the effectiveness of using finger-count. Tom said:

The most effective technique Dr. Haynes uses is the manual counts from one to eight. That guides me throughout each step. When he signs during demonstrations we can see and feel how his body follows the rhythm in the music.

The following passage is extracted from Dr. Haynes’ interview. He insisted that the mirror is a good visual instruction:

Well, first of all, we have the mirror which helps them be able to see. If I am facing them they can see, but also they can see in the mirror. The mirror helps them to see me while seeing themselves at the same time. I think in a way it’s a very important thing because you want to internally sense how you are moving your body, knowing how you are moving from inside yourself, but it can also be helpful to see yourself through the mirror. So in that sense you get both the internal feeling of moving but you can also see it in the reflection. So you can put those two things together; how you look and how you are feeling.

The following passage illustrates the effectiveness of showing videos as a visual instruction. Peter mentioned:

Use videotapes because I can see emotions and I can see the dancers and I can see movements. I can compare to something they do before and compare to what we do now. So, it gives more creative.

In these ways, visual instruction helped dancers learn dance effectively. However, some prudence is required in using visual instruction, especially for deaf and
hard-of-hearing dancers. First, the teacher should be prudent when demonstrating movements in front of deaf and hard-of-hearing dancers. The teacher should present demonstrations clearly and evenly. To deaf and hard-of-hearing dancers, physical demonstration was the mainly used instruction to know movements as well as the count of movements. While watching the teacher’s demonstrations, the deaf dancers tried to keep the count. That is, at the beginning of the teacher’s demonstration, the deaf and hard-of-hearing dancers started the count simultaneously. Therefore, when the teacher stopped in the middle of the demonstration and changed a movement, the deaf dancers lost their count. That is, if a teacher did not demonstrate clearly, the deaf and hard-of-hearing dancers were confused and took more time to understand movements and rhythm of movements. Therefore, the teacher should demonstrate routines clearly and evenly in every demonstration. If the teacher makes some changes in the middle of a routine, he or she should demonstrate the routine again from the beginning. The following passage indicates how deaf dancers feel when the teacher demonstrates unclearly. Tom said:

He sometimes forgets what he has just taught us. That’s frustrating sometimes too.

Second, the teacher should be prudent when demonstrating movements with crooked or half tempo. Understanding steps with crooked or half tempos took more time for the deaf and hard-of-hearing dancers because they only perceived tempo by vision. In order to help the deaf and hard-of-hearing dancers understand the steps with crooked or half tempo effectively, the teacher should teach steps first with a single tempo and then demonstrate the tempo of the steps clearly and repeatedly. When understanding steps first, the deaf and hard-of-hearing dancers felt that it was easier to perform movement with crooked or half tempo. Therefore, when teaching deaf and hard-of-hearing dancers, the teacher should
consider the first step and then the next. Third, the teacher should be careful with teaching pace. The deaf and hard-of-hearing dancers preferred a comfortable teaching pace, especially in demonstrating movements. When the teacher demonstrated movements too fast, the deaf and hard-of-hearing dancers had difficulty to understand the tempo of each movement. Because the deaf and hard-of-hearing dancers recognized both movement and rhythm at the same time by watching the demonstration and finger count, the teacher needed to demonstrate movements and count slowly. Therefore, the teacher should slow down the tempo of movement first, and then keep up the tempo later. The following passage indicates the importance of demonstrating pace. Tom continued to say:

Well, Dr. Haynes taught us how to count with the movements so that is always important. When it’s slow, it’s not rushed. I prefer the whole movement together and at a slower pace so I can have time to understand it all, and then later add the speed.

Fourth, the teacher should be prudent when speaking in front of deaf and hard-of-hearing dancers. If a teacher speaks without consideration of the deaf dancer’s sight, deaf dancers will have a hard time to read the teacher’s lips. When somebody blocked their sight or when a teacher had his or her back to students, they failed to read lips. Before presenting visual instruction, the teacher should consider ensuring the range of vision for deaf and hard-of-hearing dancers. Ensuring the range of vision is the most important requisite to increase effectiveness of visual instruction. To ensure the range of vision, providing proper distance between a teacher and a student and keeping a small size of class are necessary for deaf and hard-of-hearing dancers. Deaf and hard-of-hearing dancers prefer to stay a little far from the teacher because dancers can see the whole picture of the teacher’s
demonstration easily with the proper distance. However, if a class is crowded, peers easily block the deaf dancers’ sight, so breaking class into small groups is effective in teaching deaf dancers. The following passages indicate why the teacher should be careful with changes in the demonstration and the teaching pace. The following passage illustrates the importance of ensuring the dancer’s sight:

What was really difficulty is reading lips. I am trying to follow what the teacher is asking. Sometimes when I am looking at you like this (she turned around from the interviewer), it is hard. I think it is the biggest challenge right there trying to follow what the teachers are saying. However, Dr. Haynes signs and speaks at the same time. So, I don’t have the difficulties in understanding. But, I was in elementary school, and I had a dance teacher, I was looking at the mirror, but sometimes I couldn’t understand what she was saying because she usually turned around and then she said. Then, I couldn’t understand what she was saying.

In observation, Dr. Haynes choreographed the day’s routine that he would teach in the day’s rehearsal before he came to rehearsals. He taught many routines during rehearsals, so he sometimes confused the routine and mixed the order of the routines. So, he found the solution: He would write the order of the routine in the sketchbook and give the routine a name. This helped both the teacher and dancers to remember the routine easily and correctly. Moreover, whenever he taught a routine, he demonstrated the routine more than twice with slow tempo first, and then he demonstrated the routine usually twice with the original tempo. This judiciously active instruction with solutions led dancers to learn dance effectively.
Kinesthetic Instruction

Using kinesthetic sense is one of the important teaching methods in dance. With kinesthetic instruction, the deaf and hard-of-hearing dancers effectively learned dance by copying and practicing movements. While copying the teacher’s demonstration, the deaf and hard-of-hearing dancers learned kinesthetic sense. The information learned by kinesthetic sense helped dancers not only to find a way to dance but also to develop the quality of movement effectively. The following passage illustrates the effectiveness of using kinesthetic sense to find solutions of the problem. Dr. Haynes insisted:

The benefit of kinesthetic learning that way, it forces you to jump in and try it and figure out what’s happening as you do it. It would be good to have the basics but in some ways, you have the opportunity to learn differently by jumping in to something that is way beyond your capacity at the moment but you can strive for it. It’s almost like throwing a duckling in the water, they don't know how to swim, but they have to figure out for themselves. So it’s like that, throwing them into the water, and instead of drowning, they have to find a way to swim. In essence, it not only teaches you about that moment, but also teaches you that you can do more than you think you can, so that you grow your own belief in yourself when you are thrown in that situation.

In the following passage, Dr. Haynes also emphasized the effectiveness of repetition of kinesthetic instruction to develop the quality of movements effectively:

Oh yes, definitely by repetition. For example, I talk to them a lot about when they are doing a plié to press the floor when they bend their knees, and press the floor when they come up. I'm trying to get them to feel the difference in bending their
knees and using pressure inside the body. A plié is a different feeling than just walking on the floor; this way the floor will have a different sensation for them, and by doing that over and over they have an understanding and they can use that in other parts of dance. So it’s important to do it in order to understand it.

For deaf dancers, kinesthetic instruction is more valuable than for hearing dancers. The deaf dancers also understood rhythm by kinesthetic sense unlike the hearing dancers. So, the repetition of kinesthetic sense gave them confidence in both the rhythm and the quality of movements.

Visual and kinesthetic teaching and learning happened simultaneously except when dancers individually practiced. When the teacher demonstrated, the deaf and hard-of-hearing dancers watched and followed the demonstration at the same time. That is, providing a correct and clear demonstration was important for kinesthetic instruction in dance because the deaf and hard-of-hearing dancers absolutely relied on watching the teacher’s demonstration more than the hearing people thought. They observed the teacher’s demonstration as a target movement all the time and copied that to get a correct kinesthetic sense. Therefore, the teacher should provide a correct and clear demonstration every single time. Moreover, the teacher must consider encouraging deaf and hard-of-hearing dancers to keep trying a movement rather than to stand and watch a demonstration. The deaf dancers had a more difficult time learning dance because they had to understand the rhythm of movements without auditory capacity. Their confusion could easily cause them to become frustrated. So, encouraging deaf dancers was an important part of the teacher’s role in teaching dance to provide continuous repetition of kinesthetic
learning that would lead the dancers to improve their performance. The following passage indicates Dr. Haynes’ belief about the teacher’s role in kinesthetic instruction:

I teach it in a way they can copy me. In doing it, they feel it rather than thinking, feeling, doing; I do doing, feeling, thinking. I think you learn much more efficiently if you just do it. That’s why I always tell them to “keep trying, keep trying” because you can’t learn it if you’re just standing there thinking about it. Dance is so about the physical and the emotional is so connected that you can’t really think how a movement will feel.

Linguistic Instruction

Communication was effective instruction to convey the teacher’s intention and to enhance the quality of the performance. The deaf and hard-of-hearing dancers mainly learned dance by following the physical demonstration and visual cues. However, communication by sign language allowed the deaf and hard-of-hearing dancers to learn dance specifically and qualitatively. Through linguistic instruction, the deaf and hard-of-hearing dancers learned dance effectively by simple signs, telling a story, telling what music is about, description of techniques and the quality of movement, and answers to questions. Communication using ASL facilitated learning dance more effectively without barriers of communication like those of hearing dancers. In rehearsals, sign language was the main method for communication between the deaf dancers and the teacher. About the question of which instruction is most effective, all deaf and hard-of-hearing dancers answered that sign communication was the most effective that made them comfortable to learn dance in rehearsals. Before joining the Royal Dance
Company, most deaf dancers had learned dance without sign communication. They learned dance at dance studios where teachers generally did not know sign language, so following teachers’ and other peers’ movements were the only way to understand movements and the quality of movements. However, in the Royal Dance Company the deaf and hard-of-hearing dancers freely communicated with teachers, and they asked whatever they wanted to know. All the deaf and hard-of-hearing dancers in the Royal Dance Company were very happy that Dr. Haynes could sign. Using sign language made the deaf and hard-of-hearing dancers feel supported and encouraged them to learn dance effectively and completely.

Simple signs allowed fast and correct communication between the deaf dancers and the teacher. Using simple signs during the physical demonstration facilitated the instruction. While demonstrating a routine, the teacher used simple signs such as “slow,” “soft,” “light,” or “strong.” These simple signs helped the deaf and hard-of-hearing dancers to catch the teacher’s intention of the movement fast and correctly. Moreover, simple signs allowed clear and fast feedback at the moment while dancers were moving. When the deaf dancers performed the routine in a somewhat fast tempo, the teacher signed to the dancers “little slow.” The simple sign made the dancers move slowly, which allowed them to match the rhythm of music. Moreover, the hard-of-hearing dancers and even the hearing dancers who could sign mentioned that signing was a helpful instruction, especially when the music was too loud. If the music was on and too loud, the hard-of-hearing dancers had a hard time hearing what the teacher said, so signing was helpful to understand what the teacher mentioned and what they were supposed to do. The following passage indicates the
effectiveness of using sign language in teaching deaf and hard-of-hearing dancers. Amy said:

I think it’s very helpful that he signs and counts while we dance and when he turns around and looks at us and makes sure that we get what we need from him. Also, if we have any questions or any feedback he is always willing to demonstrate and explain again. He is very approachable and I think that he does a great job.

Jane mentioned:

Usually, the music is off. I can understand easily what he is saying, but when the music is on, it’s like you need to keep up your count and usually you get lost. But, the teacher counts and assists me to keep up the count at a certain position, and tells me what the position should be. But, sign language makes it a lot easier because it tells you what you’re supposed to do exactly.

Telling a story and the music of a piece gave dancers concrete information of the characteristics of characters and the mood of a piece. Three ways to present a story of a piece to deaf and hard-of-hearing dancers were used in rehearsals: sign language, written papers, and videotapes. Sign language was available when the teacher could sign or when an ASL interpreter attended the rehearsals. The written paper was a possible way to tell a story or history of a piece when the teacher could not sign. The written paper involved specific information of the background of a story, the synthesized story, the characteristics of each character, and the composition of a piece, which helped dancers draw a whole picture of a piece as well as imagine the characteristics of the characters. Videotapes were used as an example of a piece. While watching a previously performed piece, dancers understood the mood and story of the piece and observed movement of each character.
Showing videotapes was effective to understand a piece in a short amount of time. All three ways were used together to help both deaf and hearing dancers understand the content and characters of a piece. The following passage illustrates the effectiveness of using videotapes. Jane mentioned:

That really shows me how to do my own character. It was the male character. It really did help me. The history showing on the video on the computer helps me a lot because I can see my character. I can follow and that shows me much of my character.

Jennifer also mentioned the effectiveness of telling a story of a piece and showing a video:

Deaf culture is completely visual. They rely on pictures or a lot of stuff internally like image. More images make it easier to understand. Showing the movement or video or image is better than explaining, explaining, explaining the words.

Moreover, explaining what the music was about was important for developing the quality of movement. The deaf dancers could not hear the rhythm of the music, but they could understand the rhythm of the music. When the teacher explained what type of music it was, what mood the music had, what kinds of instruments were used, and what the tempo was, the deaf dancers found it easy to understand the quality of movement as well as to incorporate their emotion into the movement. The following passage indicates the effectiveness of telling what the music is about. Barbara mentioned:

I think it is harder because most of the time I don’t know what the songs are about and I don’t know how much emotion to put out and put it through. When someone said what the song was about, then I could understand the emotion behind it. It helped me a lot.
Moreover, the linguistic description of specific techniques and concrete quality of movement was essential to convey the teacher’s intention exactly to the deaf and hard-of-hearing dancers. Moreover, the explanation of specific skills and quality of movements helped the dancers perform with correct feeling and skills. Dr. Haynes believed that the explanation of specific techniques and concrete quality of movement allowed dancers to understand the movements:

Sometimes when I introduce a new technique, I explain about where it came from and the person that developed it. This way the students have a personal history of the movement. For example, last year we did a dance based on the jazz of Bob Fosse, so I explained to them that he has a lot of quirky movements in the hands and hips because he as a dancer had a lot of quirkiness about him. A lot of people didn't think that he could be a dancer because of the awkward movements he used. It was that awkwardness that he used to create his dances. Also Bob as a young man was starting to go bald as his hair was falling out, so he always wore a hat. So that’s why the Fosse dancers always wore hats. So I would explain all of this history about where the dances came from and how and why they were developed. I think this allows the students to try the movements with some understanding. That way it is not so foreign for them.

In this way, linguistic instruction is essential for developing skills of movements qualitatively. However, some prudence is required in using linguistic instruction, especially for teaching deaf and hard-of-hearing dancers. First, in the case of using written paper, the teacher should write clearly and briefly. Most deaf and hard-of-hearing dancers are not familiar with reading English because English is a second language to them. So,
when providing a paper, the teacher should put information clearly and briefly without including too many sentences or the terminology. The following passage indicates some errors of linguistic instruction using video, explanation of a story, and written paper. Judith explained:

The problem of Cann’s rehearsal yesterday, it is good to see the video, but it wasn’t clear. He didn’t say this is your character and this is your character. He just said to watch the movie. And in watching, we did not know what specifically we were. And he talked while watching the movie. Deaf students cannot watch a movie and an interpreter at the same time while watching a movie. I think Cann is not familiar with deaf culture. I don’t think he knows that yet. Also, Cann gave us papers a lot. English is their second language. It’s nice to have paper. But some deaf students are not in the college level of English. Not all, but some deaf students here are not college-level English readers. To read papers like he gave that were kind of complicated and had lots of theatre terms that they may not be familiar with is hard. If you demonstrate emotion, they can do it. But, to give them a paper with a bunch of emotions listed on it, it isn’t easy for them. It all depends on the person; every person is different. But, you know this is general.

Second, the teacher should be careful when presenting the explanation and demonstration at the same time. The teacher sometimes had a hard time explaining movements while doing the demonstration. In the case of bending forward of his upper body or rolling on the floor, it was difficult to explain the movement with signing. So, the deaf and hard-of-hearing dancers recommended that he give the demonstration and explanation separately rather than simultaneously. The deaf dancers believed they learned dance
effectively when the teacher presented the demonstration and explanation separately. Karen responded to the question of whether it was more effective to give the demonstration and explanation at the same time or separately:

I prefer separately because it’s one little half movement of time, so that’s one, that’s two, that’s three. So I prefer them separately.

Peter also answered:

Thomas sometimes has a hard time explaining how to move while doing the demonstration. That’s hard for me. I think I would like to see parts and pieces -- maybe breaking down the movements into sections.

However, the teacher believed that presenting the demonstration and explanation at the same time was effective in teaching deaf dancers. The following passage illustrates this different belief about presenting the demonstration and explanation between the teacher and the deaf dancer. Dr. Haynes believed:

When I first started teaching, I couldn't sign very well. It was trial and error because I didn't know how best to approach the teaching so I tried different ways of explaining and demonstrating. I think what is best is to explain and show all at once because I think our sensory perceptions happen all at the same time. Just like this conversation, I’m talking while listening while thinking, so we are used to it. I think that breaking it up it becomes harder because we focus on one thing and we close off the other senses. It’s like looking at a piece of a puzzle and when looking at one part, we don't see the piece in its entirety. So with dance, if I only explain and not show, the students have to make the connection with what I shown and what I’ve explained. I think that we process as human beings this way, we take in everything
at once and we process it. So I try to do all of these parts at the same time and I found this to be the most efficient way through my process of trial and error. At first, it’s frustrating to understand something coming at you all at once, but when I look around at the dancers I notice that they in fact do start to understand and pick up dance this way. All that is required is to first get over the initial frustration of everything coming at you at once. So when students finally get over being overwhelmed, they are able to soak in all the elements. So I really believe in this multiple perception view of the dance however you can arrive to it.

According to the above interview, Dr. Haynes assumed that the deaf and hard-of-hearing dancers might be confused on presenting demonstration and explanation at the same time in the short term, but Dr. Haynes believed it was effective in the long term. In rehearsals, if Dr. Haynes thought the demonstration would be hard to present while signing, he used an interpreter to translate his speaking into ASL while he was demonstrating. However, the deaf and hard-of-hearing dancers had a hard time watching the teacher’s demonstration and the interpreter’s signs at the same time.

In using linguistic instruction for visual learners, understanding deaf culture and communication without barriers were a prerequisite. First, seeing and understanding both the demonstration and explanation simultaneously is difficult for deaf and hard-of-hearing dancers. To reduce some difficulties for visual learners, first, it is better to explain movements first, and then demonstrate movements next. When the teacher explains the movement first, the deaf and hard-of-hearing dancers understand what the teacher’s intention is and can observe the teacher’s demonstration. This would deliver more clear information and visual observation. Moreover, if a teacher cannot sign, it is better to recruit
an ASL interpreter for the lessons or rehearsals. Without communication by signing, learning dance is limited to only visual and kinesthetic instruction that cannot lead to a complete performance. Ensuring communication is necessary in teaching deaf and hard-of-hearing dancers. The following passage indicates Judith’s insisting on recruiting an ASL interpreter for rehearsals. Judith is a hearing dancer and a licensed ASL interpreter. She knows well about deaf culture and she sometimes has a role as interpreter in the NTID Dance Company:

Dr. Haynes is good signer, but just dance or just sign can make better. Talking and signing are impossible because the structures are different. So, having an interpreter will help the deaf dancers more. Cann’s class highly requires an interpreter.

Encouragement

Encouragement was an important instruction to lead deaf dancers to success in dance. Because of their deafness, the deaf dancers could not have the opportunity to learn dance at schools or at studios where they would be mainstreamed. They could not feel supported in the mainstreamed dance class, in which the dancers participated in sports activities or only observed the hearing dancer’s dance activity. Moreover, teachers’ and theatre directors’ prejudgment of deaf dancers made the deaf dancers feel frustrated in dancing. To encourage these deaf dancers, Dr. Haynes built a friendly environment for the deaf, reduced pressure in learning dance, and provided much feedback. These specific ways to encourage deaf and hard-of-hearing dancers effectively helped deaf dancers enjoy dance and build the confidence in their dancing.
Communication played a significant role in building a friendly environment for the deaf and hard-of-hearing dancers. Signing in rehearsals and dance classes made deaf dancers feel comfortable and supported, which helped the dancers gain strong confidence in learning dance. Dr. Haynes realized that signing is necessary for communicating with and teaching deaf dancers, so he learned how to sign. Moreover, he bought a text phone to facilitate communicating with deaf and hard-of-hearing dancers. Most of the deaf and hard-of-hearing dancers used text phones which had a keypad on the phone to send a text message instead of speaking. Dr. Haynes communicated with deaf dancers via the text phone or e-mail whenever he had something to tell them. Also, for communication resources, Dr. Haynes hung a white board in front of his door. If the deaf and hard-of-hearing dancers wanted to tell Dr. Haynes something, dancers wrote a message on the board, or if the teacher wanted to tell the dancers something, he wrote a message on the board too. It was an effective way to communicate with deaf dancers. Moreover, Dr. Haynes decorated the dance department notice board with sign language. He believed it would make them feel a part of the Dance Company.

The reduction of pressure during instruction was important to encourage deaf dancers to maintain their interest in dancing. Dancers who attended rehearsal varied in auditory capacity and dance ability. So, in rehearsals, Dr. Haynes controlled the teaching pace with the consideration of the dancer’s capability. When a routine required a long time to understand a technique or a complicated tempo, Dr. Haynes encouraged the deaf and hard-of-hearing dancers to repeat the routine and allowed them to have extra time to practice. However, the deaf dancers less experienced in dance occasionally could not perform a movement successfully, and then they were frustrated. Whenever Dr. Haynes
realized that dancers were frustrated, he tried to reduce their stress as he reminded dancers to enjoy dancing. The following passage is extracted from field notes in a rehearsal, which indicates Dr. Haynes’ instruction to encourage deaf dancers:

Dancers are practicing the routine over and over. However, Tom, Jennifer, Anny and Rena who have less experienced in dance are struggling for performing the routine. The technique of the routine requires a high skill of movement and it seems like it’s hard for novice dancers. Tom is standing away from the group and glazing other dancer’s movement. He went out of the studio. Jennifer keeps trying the routine, but her face is flushed. Dr. Haynes becomes aware of their difficulties and he tells dancers “you don't have to understand this now because I don't want you to be pressured. I want you to enjoy whatever you are doing.” After the teacher’s signing, Jennifer, Anny and Rena started to practice the routine again, they look like they were comfortable in their dancing with less stress…Tom came back to the studio after the routine was finished.

Tom was a hard-of-hearing dancer and he had less experience in dance. According to the interview with him, he knew that he needed to practice difficult movements without giving up. However, he went out of the studio when he occasionally had stress in dancing. Tom answered the question of how to overcome frustration in learning dance:

I sneak away.. (Laugh)..I would just say to not give up, you have to move on and not give up!

The following passage indicates the importance of encouragement to keep interest in dancing. Dr. Haynes explained:
Well, the biggest challenge is keeping the dancers interested, so in a way I have to kind of entertain them because when they lose interest, the lose the ability to improve their dancing. It’s kind of like anyone else, when you lose the interest to do something, you don't put all of your effort into it. In a way it’s easier for deaf dancers to lose interest because for hearing people it’s so easy to get excited about the music we are hearing but for deaf dancers you have to be motivated on your own and it’s hard, so I have to find ways to keep them interested so they work hard to try to do it. There are some challenges when dancers don't attend rehearsals as much so when it’s time to go on stage they aren't really sure of what they are doing.

Providing positive feedback was an effective instruction to encourage dancers. Dr. Haynes mainly used four types of feedback: demonstration, hands-on correction, instant response, and answers to questions. These four types of feedback were effectively used in different environments. When the dancers performed the wrong way, the teacher demonstrated again for a dancer or for a class. While demonstrating, the teacher could emphasize and explain again the parts that should be corrected. Secondly, when the dancers needed to understand kinesthetic sense of the movement, the teacher touched their body and helped them feel the kinesthetic sense with the correct movement. Thirdly, Dr, Haynes provided many positive responses such as ”good,” “right,” “good job,” or “yes” instantly when the dancers performed. These positive responses helped the dancers to have confidence in their dancing. Lastly, the teacher’s answers helped the dancers solve their problems. The teacher used signs or physical demonstration or hands-on teaching according to their needs.
Previously working with deaf and hard-of-hearing dancers, the teacher should build strong trust in dancers and never give up dancers. The teacher’s strong belief in the dancers was conveyed to the dancers, which relieved stress and encouraged them in dancing. The following passage indicates the importance of the teacher’s trust in learning dance:

My most concern is that they feel supported. That I believe in them, that they can do it. That’s the most important for me, for them to know that I am not going to give up on them. Even if they couldn't do it at that time, I still believe that they can! It relieves them of their sense of stress, because sometimes when you’re under stress it makes it hard to do anything.

With a strong trust in the deaf and hard-of-hearing dancers, Dr. Haynes insisted that teachers should encourage deaf and hard-of-hearing dancers to use all their capability in learning dance. In other words, teachers should not treat them with special attention that could make a dependency or crutch. Even if deaf students learned by trial and error, Dr. Haynes satisfied the dancers’ essential needs and left them with other dancers, which created an effective learning environment to challenge the deaf and hard-of-hearing dancers. The following passage indicates Dr. Haynes’ belief in effective learning environment:

I think it is ineffective for teachers to feel like deaf dancers require special attention. I don't think that’s effective because they still have to keep up with the choreography and the movement. I don't want that to be a dependency or a crutch. It’s best if they “fall” and then get up and try again. It’s okay if when they fall that you are “holding” them but I think it’s not effective to cater to their disability. Also when we do group dance, I try to maintain a mixture of both deaf and hearing and
also experienced and non-experienced dancers together. That way, they get a range of perspective. This goes back to the idea of not only teaching students how to dance, but how to learn and share with other people. In essence, growing and learning together. So it’s not only just dance, it’s sharing knowledge and sharing potential with each other.

Music Choice and Usage

Especially for the deaf and hard-of-hearing dancers, music choice and usage was important. In accordance with kinds of music and usage of music, the deaf and hard-of-hearing dancers responded differently to music. People could think a dance teacher does not consider much in choosing and using music for the deaf because they cannot hear, but this is not true. Deaf dancers listened to music through their body. They perceived rhythmical vibrations through their skin. The rhythmical vibrations helped the deaf and hard-of-hearing dancers not only to understand the rhythm and the mood of the music but also keep their count continuously. As long as the rhythmic vibrations were strong and simple, the deaf dancers effectively perceived the music through their body.

Loud music with a strong single beat played by bass and drum was most effective for the deaf. According to interviews with the deaf and hard-of-hearing dancers, they effectively understood the rhythm of the music when the music had a single count beat, when the music included a bass or drum instrument, and when the music was loud enough. A single beat by a bass and drum instrument helped the deaf dancers easily understand the beat of the music. The dancers could feel the vibration of the single beat through their skin and it made it easier for them to count with one, two, three, and four. The music played by
a bass or drum instrument was more effectively perceived than the music by piano or singing because the latter could not make a strong vibration from the speakers. A loud volume maximized the vibrations from the speakers, so it made it easy for the deaf and hard-of-hearing dancers to feel the beat of the music. Therefore, music should be chosen and used with consideration of the beat of the music, instrument, and types of music, and the volume of sound. The following passage indicates the importance of music choice for the deaf. Amy said:

Yes, vibration helps a lot especially when it’s strong and loud, and then I can put myself into the dance…. For loud music I can feel the vibrations and of course I cannot hear anything that’s soft. Sometimes it’s hard for me to know a slow song, so I like it when it is loud….when I know the music then sometimes I can close my eyes and dance because I know it.

The following passage indicates a deaf dancer’s perception of music. Tom said:

Well, most deaf still have some hearing capability. Most of the time, I relied on the bass in the music to get the feeling of a song, and then I could dance. If the music was loud enough, then it was easy to hear and feel it.

Dr. Haynes used the recorded music for both rehearsals and dance classes. A piano was placed in the back of studio, but live music was not used for rehearsals. Eight big speakers were placed on the ceiling, so when Dr. Haynes used music with a single beat by bass and drum instrument and turned up the volume high, the ceiling speakers were shaking and the vibration could be felt through their skin. Dr. Haynes provided different types of music every session. For the warm-up and cool-down session, Dr. Haynes used music with piano or flute that allowed dancers to relax or stretch body more effectively
than with music with a strong beat. However, in the routines session, Dr. Haynes used music with a strong single beat played by drum or bass that conveyed a clear beat of the music.

Loud music with a strong single beat would be the best choice for teaching deaf and hard-of-hearing dancers. However, if speakers are not placed in the right position, the loud music may not be able to make strong vibrations. Speakers would be better if placed on the floor to convey the vibrations through the floor or on the ceiling to convey the vibrations through the air than any other place. Placing speakers on both the floor and the ceiling might be the best way to convey the vibration to deaf dancers. According to interviews, the vibration was definitely essential to feel the song and beat. But, there were two different opinions between two dancers on the effectiveness of speakers according to the place of speakers. A hard-of-hearing dancer insisted that the floor vibration was more helpful than the ceiling vibration, but a deaf dancer insisted that the floor vibration was not helpful. The following passage indicates the different opinions between the two dancers. Barbara said:

I don’t feel anything from floor speakers. So, I am standing still, then, I can feel something, but if I move I cannot feel anything.

And, Anny, who was a hard-of-hearing dancer, said:

I would think it is better to have speakers on the floor than on the ceiling. I don’t know how I get vibration from the ceiling. It is a lot better to feel the vibration on the floor. You can feel the counts and it is a lot easier…. Ceiling speakers help, but not much.

Therefore, the vibration of music was not always helpful to the deaf and hard-of-hearing dancers, so even if loud music was used, Dr. Haynes provided clear visual
counts such as finger count or clapping hands to let dancers know the beat of the music, and it was better to explain what the music was about to let dancers understand the mood of the music.

**Various Instructional Styles**

Rehearsals involved various movement sessions: warm-up, step work, center activity, side work, and cool down sessions. Each session dealt with different forms of movement and different use of studio space, so different instructional styles were required to teach dancers effectively. The following passages illustrate Dr. Haynes’ instructional styles for each session that effectively taught both deaf and hearing dancers.

**Warm-up/ Cool-down Session**

The warm-up and cool-down session required similar instruction. Dr. Haynes generally used the standing position and gave both voice and finger count all the time. A hand was stretched out above the head or either side of the torso and gave count. However, he allowed dancers to move freely without serious consideration of count in these sessions. The tempo of the music was always slow and soft played by piano or flute. All warm-up and cool-down movements were static and simple movements stretching each body part and relaxing them with deep breathing. Sometimes, Dr. Haynes used a floor activity that needed all the dancers and the teacher to lie down on the floor and move. Dr. Haynes demonstrated a static and simple stretching movement, and then the students watched and then followed his instruction. He gave finger direction, such as right, left, up, down, forward, backward, when the body should be shifted to a direction. Movements were
simply repeated. If Dr. Haynes needed to explain a kinesthetic sense of a movement, he faced toward the dancers and demonstrated the movement with explanation by using both voice and sign. When the warm-up movement was finished, he smoothly moved to the step work session.

**Step Work Session**

Step work included only step movements. This session was not included all the time for rehearsals. In the step work session, Dr. Haynes focused only on showing clear direction, steps, and tempo. He presented direction first by using both voice and hand direction, and then demonstrated steps with count. After providing information on both direction and count of the steps, the teacher demonstrated the steps with both voice and finger count, and the dancers followed his demonstration and counting. Steps started from single steps with single counts and moved to double and triple steps with crooked or half tempo. He repeated the steps over four times, and then added arm movement with the steps.

**Center Activity Session**

The teacher provided pre-count with voice and finger all the time whenever the performance started. Dr. Haynes demonstrated a routine with a very slow tempo two times with finger count and voice. He checked the dancers’ performance to see whether the dancers understood. If the dancers could not perform a correct routine or a correct count, he demonstrated again with a slow count any part that confused the dancers. After presenting a demonstration with slow count for three times, he demonstrated the routine twice with the original tempo. He gave the dancers extra time to confirm their movement and count with
other dancers or the teacher. Dr. Haynes answered all dancers’ questions and demonstrated the movement with explanation. Sign language was used to communicate between the dancers and the teacher. After extra time, Dr. Haynes turned on the music and tried to match the routine with the music. He presented both voice and finger count all the time and repeated the routine two more times by providing his demonstration. When the routine was becoming familiar to the deaf dancers by repetition, Dr. Haynes moved to the next session, the side work session.

**Side Work Session**

Dr. Haynes used the routines which were already learned at the center activity session in the side work session. In this session, Dr. Haynes divided a class into small groups according to the number of attending dancers for a rehearsal. There were two types of side work sessions. Dr. Haynes placed the small groups at the end of the right or left side of the studio. Each small group differently started to follow the music and Dr. Haynes gave a finger count all the time. Dancers entered the center of the studio while performing the routine. As soon as the first small group finished the routine, the second small group started the routine. In the other type of side work session, Dr. Haynes placed the small groups to the end of the right side and the left side of the studio. The small groups started the routine together from the end of right and left side. This side work session provided good instruction for rehearsals to overview the use of stage and the mixture of the routine.

These various instructional styles helped the dancers to meet the goals for the sessions. In warm-up and cool-down sessions, the teacher’s demonstration and unrestricted instruction for count allowed the deaf and hard-of-hearing dancers to concentrate on their
relaxation and stretching of their bodies. Moreover, Dr. Haynes developed step movements with arm movements in the center activity session that effectively led the deaf and hard-of-hearing dancers to understand and perform a whole routine. The dancers could rehearse the use of stage and the sense of group dance. As explained above, all sessions required different forms of teaching that effectively led dancers to meet the goals of each session that would help the dancers perform a whole routine successfully.

When teaching floor activity, the teacher should be careful with deaf and hard-of-hearing dancers. Floor activity required all the dancers and the teacher to lie down on the floor. When presenting floor activities, Dr. Haynes and the dancers were facing the ceiling, so this made it difficult for the dancers to see the teacher’s finger count and demonstration. Even if Dr. Haynes straightened his hands up to the air and presented a finger count, the deaf dancers had to lift up their head to see the teacher’s demonstration, so the deaf dancers could not concentrate on their body in the floor activities.

The best way would be for a teacher to explain and demonstrate what the dancers were supposed to do on the floor before starting the floor activity. This may help deaf and hard-of-hearing dancers to assume what the next movement will be. Also, the independent styles with the free count of the floor activity could make the deaf and hard-of-hearing dancers concentrate on their body effectively. If the teacher demonstrates and explains the movements for the floor activity, the deaf and hard-of-hearing dancers may be able to perform the movement independently with their inner count. Therefore, before starting rehearsals or lessons, the teacher should decide which instruction for the floor activity will be used.
As explained above, judiciously active instruction built an effective learning environment for the deaf and hard-of-hearing dancers. Teachers should be careful with the prudence of using judiciously active instruction in order to prevent the drop in efficiency of active instruction. If a teacher uses judiciously active instruction without the prudence, this could increase confusion in learning dance that would reduce the efficacy of active instruction. That is, when a teacher designs lessons carefully, deaf and hard-of-hearing dancers effectively learn dance without obstacles of learning. Judiciously active instruction can inform future or current educators about how to teach deaf students as well as how to maximize the efficacy of their teaching in their own setting.

**Summary of Theme**

In summary, the deaf and hard-of-hearing dancers learned dance mainly through judiciously active instruction: visual instruction, kinesthetic instruction, linguistic instruction, encouragement, music choice and usage, and various instructional styles. In visual instruction, the dancers effectively learned dance through the teacher’s physical demonstration, finger-count, mirror, and video. In order to effectively use this instruction for deaf and hard-of-hearing dancers, ensuring the deaf dancer’s sight, presenting clear and phased demonstrations, and controlling proper teacher pace were prerequisites. In kinesthetic instruction, the deaf and hard-of-hearing dancers effectively learned dance through copying and practicing the movement. As a prerequisite for using kinesthetic instruction effectively, the teacher has a role to encourage dancers to make continuous repetition of kinesthetic learning that will help them to improve their performance. Linguistic instruction; simple signing, telling a story with music, explanation of skills, or
the quality of movement were effectively used for learning dance. In order to use linguistic instruction effectively for deaf and hard-of-hearing dancers, understanding deaf culture and communication without barriers were prerequisites. Encouragement through building a friendly environment for the deaf, reducing the dancer’s pressure in dancing, and providing feedback effectively influenced the deaf and hard-of-hearing dancers. In order to prevent deaf and hard-of-hearing dancers from becoming dependent, a teacher should not treat them as special. The deaf and hard-of-hearing dancers understood music through the vibration of music. Loud music with a strong single count beat played by bass or drum was the most effective music for the deaf and hard-of-hearing dancers to perceive rhythm and mood of music. Placing speakers on the floor or the ceiling was important to convey the vibration to deaf and hard-of-hearing dancers. However, the vibration of music was not always conveyed to the deaf and hard-of-hearing dancers, so even if loud music was used, the teacher had to present visual counts all the time. Rehearsals involved various movement sessions: warm-up, step work, center activity, side work, and cool down. Different forms of instructional styles in each session helped the dancers reach the goals of each session, thereby enabling the dancers to perform successfully.

Assuming that the teacher uses prudence and is aware of the prerequisites that were previously discussed, judiciously active instruction can build an effective learning environment for the deaf and hard-of-hearing dancers. In this type of supportive environment that increases the efficacy of teaching instruction, deaf and hard-of-hearing dancers can effectively learn dance without obstacles of learning.
CHAPTER 8

FINDINGS — FRIENDLY ENVIRONMENT IS ESSENTIAL

Friendly environment of the class is essential not only to lead students comfortable atmosphere to participate in their learning, but also to enhance the effectiveness of teaching and learning procedure. This study found effective factors that can used to build friendly environment in the dance class especially for the deaf; emotional and physical environment.

Emotional Environment

Building emotional environment is one of the most important factors to lead deaf and hard of hearing dancers to feel comfortable and to be succeeded in their learning. This study found some friendly emotional environment in dance classes including deaf and hard of hearing students; understanding deaf culture, dancing with hearing and hearing impaired dancers together, concentrating on deaf dancers’ performance.

In order to build friendly emotional environment in the dance class including deaf students, instructors should understand deaf culture first. Deaf population tends to work in a setting of ‘being together’. Because deaf individuals communicate with sign language, they should face each other with proper distance to use sign. Moreover, deaf population tends to help each other considerably. At rehearsals, this study observed that deaf and hard of hearing dancers stood together in the one side of the classroom, which built a friendly and closely bonded environment among deaf dancers. They stood together to facilitate their communication whenever they have some difficulties or questions on routines or
rhythm. When a deaf dancer had a question, he or her asked to other deaf dancers and solved a problem together. Therefore, teachers should let them get together in a group and communicate together whenever they need. A hearing dancer, Jessica, who is working as a professional ASL interpreter mentioned about deaf culture:

They help people each other a lot. Deaf people are more community based. They are supportive of each other and they ask each other for help and interact by using the sign language which is a part of deaf culture. Dr. Haynes signs something by speaking and so many deaf students would get confused by his speaking. Student would ask to fellow students and explain to each other by ASL.

Another factor to build friendly emotional environment is dancing with hearing and hearing impairment together. Hearing and deaf dancers separately stood in the classroom, however, it is better to dance together because they learn to dance with interdependence with deaf dancers have a lot of help from hearing dancers. As deaf dancers observe hearing dancer’s movement, they sometimes earn some sense of rhythm or movement. First time in dancing with hearing and hearing impaired dancers together, teacher will often find that hearing and hearing impaired dancers would separately stand and dance with no interaction. However, as they spend more time together, they will be able to come together and work all together. Dr. Haynes strongly emphasized that working with hearing and deaf students together is amazing. They helped each other and perform together. At first, they would separately stand in the classroom and do not make interaction each other. They eventually built a relationship as they spend months, practicing and helping each other for preparing the performance. I saw them all together were crying at the end of performance filled with different emotions of achievement as wells as grief. I believe that dancing with hearing and
hearing impairment students is not only effective to learn and teach dance but also effective to build strong relationship each other.

Moreover, a teacher needs to concentrate on deaf dancer’s performance more than hearing dancers. It does not mean treating deaf dancers with differently. Deaf and hard of hearing dancers require more time to learn dance movement, so a teacher should process the lesson with checking the success or failure of deaf dancers’ performance. An instructor must confirm that deaf dancers understood and ability to perform required routine and technique before going on to next step. At rehearsals, Dr. Haynes checked the success or failure of deaf dancers’ performance in every trials of routine. If he believed most of deaf and hard of hearing dancers were success in their performance, Dr. Haynes moved to the next step of the lesson. When he observed the failure of deaf dancer’s performance for a routine, he provided extra time to practice the routine instructed them individually.

Another important factor to build friendly emotional environment is one-on-one teaching. Throughout one-on-one teaching, deaf and hard of hearing dancers definitely felt the improvement in moves and steps with a feeling of supportiveness. A deaf dancer, Rena, emphasized the importance of one and one teaching in learning dance:

If I could be a dance teacher, I will provide one-on-one teaching if they need to. I would set up the time for private tutoring and ask about what the student is having a trouble with and work on student’s weakness together.

Moreover, during observation, this study found that Dr. Haynes built friendly emotional environment as teaching one and one teaching in order to point out some parts of movement deaf dancers performed with wrong techniques or wrong rhythm.
If such emotional consideration is ignored in learning environment for deaf dancers, deaf dancers would be easily frustrated in learning process, will lose interest in learning dance and will possibly quit their learning. Building friendly emotional environment is one of essential instruction for the deaf to encourage their interest as well as effectiveness in their learning.

Physical Environment

Building physical environment helps deaf and hard of hearing dancers to learn more effectively. This study found some effective physical environment factors in dance classes including deaf and hard of hearing students such as keeping small size of class, placing mirrors on front and side walls, speakers on floor or ceiling, and proper teacher’s position.

Keeping small size of class is necessary to build effective and comfortable environment for the deaf. Having a small size of classes provides the range of vision so that deaf dancers can observe the instruction without being veiled by one another. If a class is too crowded, a dancer in front of another deaf dancer can be hidden which obstruct his or her sight resulting a reduced correct delivery of instructor’s lesson. Deaf dancers interviewing in this study requested a small size classes for ensuring their sight in learning. Royal Dance Company Rehearsals observed 22 hearing and hearing impaired dancers in a small studio. And discovered deaf and hard of hearing dancers were struggling to watch teacher’s instruction and demonstration when a dancer obstructed their view from watching the instructor. So, instructor usually broke dancers into two groups and let dancers perform routines separately. It was an effective ways to conduct crowded classes.
Placing mirrors in front and side walls is another beneficial way to teach deaf and hard of hearing dancers. As we know, visual instruction is most effective way to teach deaf dancers. By using mirror, deaf and hard of hearing dancers not only can check their body alignment, but also compare their movements to instructor’s or other dancers’ movements. As placing mirror in the front is crucial, the side mirror on the side walls will allow dancers to check their position and movement especially during side work sessions. Dr. Haynes emphasized placing the mirror in the dance class:

Well, first of all we have the mirrors which help them to be able to see. If I am facing the class I am able to see their movement, but also they can see through the mirror. The mirror allows them to see both watch me while watching themselves at the same time. I think it’s a very important thing because you want to comprehend how you are moving your body with knowing how you can express yourself with each step. It’s also helpful to see yourself through the mirror and be able to evaluate yourself through the reflection. If you put those two elements together, you can see how you feel emotionally and how you look externally by using the mirror.

Moreover, placement of speakers is important to convey the vibration of the music. Deaf dancers understand rhythm of the music through the feeling of vibration. They feel the sense of vibration through their entire bodies; however, placing speakers on floor or on ceiling effectively transmit more intense vibration to deaf dancers. If speakers are not placed in the right position, music may not be able to make strong vibrations. Placing speakers on both the floor and the ceiling may be the best way to convey the vibration to deaf dancers. A hard of hearing dancer, Anny mentioned the effectiveness of vibration from speakers:
I think it is better to have speakers on the floor than on the ceiling because vibration from ceiling helps only to a certain extent, but not as much as the ones on the floor. Even though I can hear the music, I still need vibration because sometime I may not pick up the start cues, but when music is blasted, the vibration hits the floor and I can feel that.

Proper teacher’s position in teaching dance for the deaf is important. Teacher should stand in front of deaf and hard of hearing dancers all the time during instruction session. When teacher sign, teacher should face toward deaf and hard of hearing dancers in order to let them watch teachers sign. Moreover, proper distance between teachers and deaf dancers allows deaf dancers to observe physical demonstration through whole bodies of the instructor. During the observation, Dr. Haynes positioned his body toward the class to demonstrate the movement. When the performance needed to face toward back stage, then he moved at the back of stage and demonstrated movement. Most important thing to consider for teacher’s physical position was that teacher’s should stand in front of deaf and hard of hearing dancers and face toward deaf and hard of hearing the dancers whenever teacher provided instruction using the sign language.

Summary of Theme

Building friendly environment in the dance class including deaf and hard of hearing students is essential to lead students to comfortable atmosphere to participate in their learning experience and to increase the effectiveness of teaching and learning procedure as well. This study found many effective factors to build friendly environment in the dance class especially for the deaf; emotional environment and physical environment. Building
emotional environment is one of important factor to lead deaf and hard of hearing dancers to feel comfortable and be successful in their learning. This study found some emotional environment in dance classes including deaf and hard of hearing students; understanding deaf culture, dancing with hearing and hearing impaired dancers together, concentrating on deaf dancers’ performance. Building friendly physical environment also allows deaf and hard of hearing dancers to learn dance movements effectively. This study found effective physical environment in dance classes including deaf and hard of hearing students; keeping small size of class, placing mirrors on front and side walls, speakers on floor or ceiling, and proper teacher’s position.
CHAPTER 9
DISCUSSION

Summary of Findings

The purpose of this study was to analyze a case of effective dance instruction for individuals who are deaf or hard of hearing. To identify effective dance instruction for the deaf, five research questions had been designed and supported to address the following three main areas; (a) what challenges deaf and hard of hearing dancers have and how they overcome, (b) how dancers learn dance, and (c) what the most effective and least effective instruction are. From interviews and observations with deaf dancers and teachers, this study founded three themes on effective dance instruction for the deaf: sequential teaching leads to sequential learning, repetition is powerful, judiciously active instruction is beneficial, and friendly environment is essential.

The teacher’s sequential presentation, which is a teaching pattern, is effective dance instruction for the deaf. The teacher’s sequential presentation -- showing a physical demonstration and visual count, give extra time, and explain the quality of the movement -- led to effective sequential learning for the deaf and hard-of-hearing dancers. When the teacher presented a physical demonstration and visual count, dancers effectively perceived movement and rhythm; when the teacher provided extra time, dancers found solutions to their problem on rhythm or movement; when the teacher provided rhythm cues, dancers effectively keep their inner count with rhythm cues; when the teacher provided the explanation of detail skills or the quality of the movement, dancers understand the movement effectively and develop the skills and the quality of movement successfully.
Repetition is a powerful tool in the learning process for both deaf and hearing dancers. Maximizing the number of times of repetition allowed dancers to have sufficient time to memorize the routines within the movement, and it led dancers to develop the appropriate skills needed to perform the various dance movements by finding solutions to their problems. Also, the use of repetition helped engender confidence in their ability to perform by reducing the fear of recognizing the rhythm of the movement. Repetition is an important tool that allows deaf and hard of hearing dancers to overcome their difficulties both physically and psychologically.

It was also evident from this study that deaf and hard of hearing dancers learned dance through effective and judiciously active instruction. This instruction would include visual instruction, kinesthetic instruction, linguistic instruction, individual encouragement, music usage, and various, other instructional styles. Unlike in the instruction of dancers with hearing, not all active instructional methods proved effective with deaf and hard of hearing dancers. However, when implemented by a skilled, well trained and seasoned dance teacher, it was obvious that a judiciously active and planned methodology of instruction established an effective learning environment for deaf and hard of hearing dancers.

By visual instruction, dancers effectively learned dance by physical demonstration, finger-count, mirrors, and videos. Deaf and hard of hearing dancers perceived information by observing their teacher’s physical demonstrations, from which they could comprehend the dance routines and dance rhythm, simultaneously.

Finger-count instruction was a particularly helpful method for teaching deaf dancers how to understand and maintain their inner music counts. During this form of
instruction, deaf and hard-of-hearing dancers could visually observe their teacher’s instruction and then proceed to check their individual movements through the use of mirrors. This, in turn, enabled the dancers to discover errors and make corrections through visual observations with the mirrors.

Watching videos was an essential instructional tool for giving the dancers an understanding of distinctive aspects of a character in the dance performance, as well as a comprehensive understanding of the entire performance piece.

In order to properly utilize visual instruction for deaf and hard of hearing dancers, the dance teachers had to 1) know the quality of each individual dancer’s eyesight, 2) make sure all visual presentations were given clearly and in sequentially phased demonstrations, and 3) properly regulate the pace of instruction for the dancers.

In kinesthetic instruction, deaf and hard of hearing dancers learned dance through observing, copying and practicing the dance movement. While copying their teacher’s movements during a demonstration, deaf and hard of hearing dancers developed a kinesthetic sense that, in turn, helped the dancers develop and enhance the quality of their movement more efficiently. To deaf dancers, kinesthetic instruction was more valuable than it was to hearing dancers because deaf dancers understood rhythm primarily by this kinesthetic sense. Thus, the development of this kinesthetic sense was important in giving the dancers the confidence to comprehend and follow the appropriate dance rhythm as well as learn and perfect their quality of dance movements. As a prerequisite for using kinesthetic instruction effectively, a teacher had to adopt different “roles”: one as a presenter, for demonstrating a target movement; and another as a supporter to encourage dancers to practice through continuous repetition. By so doing, the teacher was truly
utilizing kinesthetic learning techniques as a method for allowing dancers to improve their performance abilities.

In linguistic instruction, simple signs, telling a story or stories about the music, as well as the explanation of various skills and the quality of movement were all efficient methods for learning dance. Simple signs allowed fast and accurate communication between deaf dancers and teachers which, in turn, helped deaf and hard-of-hearing dancers perceive their teacher’s intention of the movement more quickly and correctly. Telling a story about the music of a performance piece informed the dancers of concrete characteristics of characters as well as gave the dancers a sense of the mood of a performance piece. Three different ways to present a story to deaf and hard-of-hearing dancers were used in rehearsals: sign language, written papers, and videotapes. The written paper involved specific information of a story or characters that helped dancers gain a comprehension of the entirety of a performance piece, as well as helped the dancers imagine various attributes, or qualities, of the performance piece characters. Showing the students videos was also effective as an instructional method, helping the dancers to understand a performance piece in a shorter amount of time. All three ways of presenting a story were used together to help both deaf and hearing dancers understand the content and characteristics of a piece. Linguistic descriptions of the specific techniques and concrete qualities of the dance movement were essential to convey the teacher’s intentions concerning the performance piece and, in turn, proved helpful to the dancers’ ability to perform with feeling and skill. In order to provide effective linguistic instruction to deaf and hard-of-hearing dancers, understanding deaf culture and understanding how to communicate without barriers were prerequisites for the teachers.
Encouragement was another important instructional method for assisting deaf dancers to attain success in dance. Building a friendly environment for the deaf, reducing the dancer’s self-imposed pressure to perform, and providing the appropriate feedback, all proved to be essential ingredients in the encouragement of deaf and hard of hearing dancers. These specific ways of encouragement helped the dancers to enjoy dance and helped them build the confidence needed to perform successfully. Communication was a big element in building a friendly learning environment for deaf and hard of hearing dancers. Using signs in rehearsals and dance classes made deaf dancers feel comfortable in their learning environment which, in turn, led dancers to have more confidence in their ability to learn dance. The reduction of the dancers’ self-imposed pressure in learning dance helped ensure that the deaf dancers would continue their interest in dancing. Four types of feedback were used in rehearsals: demonstration, hand-on correction, instant response, and answer to questions. These four types of feedback proved to be useful and productive teaching tools in the varied learning environments encountered by the students. However, perhaps the most important consideration in the encouragement of a deaf or hard of hearing dancer was the teacher’s attention to treating the student just as a hearing student would be treated, and, particularly, to not treat the hearing impaired student as a special case.

Deaf dancers often “listened” to music through their bodies by perceiving rhythmical vibrations through their skins. These rhythmical vibrations helped the deaf and hard-of-hearing dancers not only understand the rhythm and the mood of the music but also helped the dancers keep their musical count, continuously and consistently. As long as the rhythmic vibrations from the music were strong and simple, deaf dancers were able to “understand” the music through their bodies. A loud music with a strong single beat played
by the bass or drum was the easiest form of music for deaf and hard of hearing dancers to comprehend in this manner. Different types of music were utilized with efficiency in every teaching session. For the warm-up and cool-down sessions, music played by piano or flute allowed the dancers to relax or stretch their bodies more easily than did music with a strong beat. In the routines session, music with a strong single beat, played by a drum or bass, was more apt to convey the clear beat essential for deaf and hard of hearing dancers to learn their movements. Placing speakers on the floor or the ceiling of the dance studio was also efficacious in conveying the vibration of the music to deaf and hard of hearing dancers. However, the vibration of the music, alone, was not always enough to allow the dancers to comprehend their tasks. For this reason the music, whether loud or soft, was always accompanied by visual counts from the teacher.

Rehearsals involved various movement sessions: warm-up, step work, center activity, side work, and cool down sessions. Different forms of instructional styles were employed in different types of sessions, which, in turn, helped the dancers to meet their individual learning goals for each session. Warm-up and cool-down sessions sometimes involved floor activity, but the use of floor activity required more prudence and caution from the teacher, especially when deaf and hard-of-hearing dancers were on the floor. A teacher could not be absolutely certain of a deaf dancer’s ability to see during floor activity, since both student and teacher would often be simultaneously lying on the floor. The most efficient use of floor activity for deaf and hard-of-hearing dancers would be when a teacher explained and demonstrated what the dancers were supposed to do on the floor before the dancers started their portion of the floor activity. Another efficient use of floor activity was when deaf and hard of hearing dancers were allowed to practice free style; because this
allowed the dancers to concentrate on their body movements and physical skills without having to match their movements with the music count.

This study found some emotional environment in dance classes including deaf and hard of hearing students; understanding deaf culture, dancing with hearing and hearing impaired dancers together, concentrating on deaf dancers’ performance. Building friendly physical environment also allows deaf and hard of hearing dancers to learn dance movements effectively. This study found effective physical environment in dance classes including deaf and hard of hearing students; keeping small size of class, placing mirrors on front and side walls, speakers on floor or ceiling, and proper teacher’s position.

Thus, when implemented by a skilled, well trained and seasoned dance teacher, it was obvious that a judiciously active and planned methodology of instruction established an effective learning environment for deaf and hard of hearing dancers and reduced the dancers’ obstacles to learning.

In conclusion, this study found that effective dance instruction for the deaf and hard of hearing student included three separate instructional aspects: the teacher’s use of sequential instruction, repetition, judiciously active instruction, and friendly environment. The teacher’s sequential instruction led to effective sequential learning for the deaf and hard-of-hearing dancers. Maximizing the number of times of repetition allowed deaf and hard of hearing dancers to overcome their difficulties both physically and psychologically.

Also, given the prerequisite of a seasoned, well trained and prudent teacher, judiciously active instruction by the teacher built an effective learning environment for the deaf and hard of hearing dancers that, in turn, led dancers to effectively learn dance while reducing the obstacles in their learning process. It was found that these three instruction methods,
sequential instruction, repetition, and judiciously active instruction, were closely interwoven and all three were essential to the effective teaching of dance to deaf and hearing impaired students.

Discussion of Findings

The major findings in chapters five through seven are discussed in this section as they related to the existing literature on dance instruction and practice at the district level. The findings also supported the constructive principles of sequential teaching and learning process as compared and contrasted through constant comparison analysis. This session discusses why teacher should consider on effective instruction for the deaf. Moreover, This section makes connections among the three findings (sequential presentation leads to sequential learning, repetition is powerful, judiciously active instruction is beneficial, and friendly environment is essential) connects them to literature, and finishes with presenting recommendation for future studies and Implication for dance education for the deaf.

Special Consideration in Using Effective Dance Instruction for the Deaf

The findings of effective dance instruction in this study such as teacher’s sequential presentation, repetition, and judiciously active instruction can use effectively to teach dance to both hearing and hearing impaired dancers. However, teaching dance to deaf students requires special consideration and some adjustments in the use of repetition, sequential teaching, and judiciously active instruction.

In the use of repetition for deaf students, educators should aware that deaf students require more time to learn dance movement as well as to prepare a piece of performance on the stage. Because deaf students perceive rhythm by visual way instead of hearing, so they
requires more time to observe and coordinate rhythm and movement together than hearing dancers. Educators should demonstrate a routine for five or six times continuously and should provide more individual time to confirm their movement and rhythm. These learning processes require more time to process and coordinate dance movement, so at least six months of rehearsal schedules should be allowed for deaf dancers to perform a piece of performance on stage. During rehearsals, repetitive practice of movement leads deaf dancers to build appropriate movement skills for the performance.

Especially in the use of sequential presentation, teachers should demonstrate routine with slower tempo than regular tempo. If teacher demonstrate movement with fast tempo, deaf dancers may be not able to understand the rhythm of each movement. Therefore, teacher should provide demonstration with slower tempo than regular tempo first, and then provide demonstration with regular tempo when deaf students completely understand movement and rhythm. Moreover, teacher should provide a short routine at a time. If teacher designed a lesson with two minutes routine, two minutes routine should be broken into about 30 minutes. Rather than providing a long routine at a time, breaking into several small routines step by step would be better to make them memorizing and performing a long routine. The most important consideration to teach deaf students is that teacher should provide visual counts such as pre-count and finger-count and visual demonstration such as physical demonstration or physical cues or physical direction all the time in teaching. With visual counts, deaf students can learn all kinds of dance. Effective dance instruction with teacher’s consideration and adjustment for the deaf can provide deaf students opportunity to learn dance, but also can teach deaf students effectively.
Sequential Presentation leads to Sequential Learning

The sequential presentation presented in this study supports Weikart’s (2003) teaching model for a sequential approach to rhythmic movement. Weikart (2003) introduced three categories of the teaching model that creates success for students in rhythmic movement: engaging the learner, enabling the learner, and extending the learner. These three categories of the teaching model are connected sequentially and developmentally. According to Weikart’s (2003) theory, at first, the teacher should choose a presentation method between acting on movement directions and describing movement that should help the students perform movement and dance activities successfully and without fear of failure; secondly, the teacher should support the student’s development in major movement; finally, the teacher should lead the student to have proficiency in major movement. The three categories of the teaching model lead students to have success in movement and dance activities for people of all ages, with and without disabilities. From the data and the literature, Weikart’s (2003) teaching model is applicable to deaf students too. The sequential presentation teaching model seems to lead to dancer’s learning sequentially and developmentally. The sequential presentation explained in this study followed three categories: first, the teacher initiated movement by using visual and kinesthetic ways that helped the students perform them successfully and without fear of failure; secondly, the teacher spent time to demonstrate the separate movement onto the united movement to support the dancers’ development in movement; third, the teacher led students to develop detail skills and the quality of the movement. Furthermore, this study found that the sequential presentation teaching model resulted in the deaf dancers’ sequential learning. The dancers could effectively learn movement through the sequential
steps of perceiving movement and rhythm, confirming movement and rhythm, keeping inner rhythm, developing the quality of movement.

Repetition is powerful

The findings on the power of repetition to solve problems and develop skills of movement support Bernstein’s theory (1967). As Bernstein (1967) has suggested, practice does not consist of repeating the means of the solution to a motor problem but in repeating the process of problem solving by techniques which are changed and perfected from repetition to repetition. The process of practice then can be seen as the search for optimal motor solutions to appropriate problems (Au, 1984). The present study found repetition makes deaf dancers develop various skills of movement as well as discover solutions for their dancing problems.

The finding that repetition is effective in increasing dancers’ movement confidence supports Rotella & Cullen’s theory (1996) that a way to start building self-confidence is to improve physical skill through practice. According to Rotella & Cullen (1996), there are two general types of practice that can improve physical skill: blocked practice and random practice. Blocked practice means the athlete practices the skills over and over. It is a great technique used by beginners to help build self-confidence. Random practice means the athlete practices different skills randomly, and this method tends to be used with more skilled athletes (Rotella, 1996). From the data and the literature, repetition not only allowed deaf dancers to develop the physical and mental skills needed to perform the movement, but also reduced the dancers’ fear on rhythm issues and generally increased the dancers’ self-confidence.
In the present study, the type of blocked practice was only observed. After deaf dancers have repeated the routines over and over, deaf dancers begin to get familiar with the various routines and rhythms, and thus begin to develop the confidence needed to perfect and perform their dancing. The theory of blocked and random practice was applicable to the practice process of dancers. However, blocked practice was a mainly used type of practice in their learning and it was a great technique used by both novice and processional dancers to help build self-confidence.

Judiciously Active Instruction is Beneficial

The findings from this study support Gardner’s Theory of Multiple Intelligence (1983). According to Gardner’s Theory (1983), application of one or more of eight intelligence categories maximizes the learning process, so determining which intelligence categories the deaf dancers best process can help educators to know the best active learning and teaching instruction. This study found that deaf and hard-of-hearing dancers used all eight intelligences to learn dance, but they mainly learned dance through visual, kinesthetic, linguistic, intrapersonal intelligence. The deaf and hard-of-hearing dancers learned a dance movement by watching and copying the teacher’s demonstration. They recognized their problems by their intrapersonal intelligence and found solutions with the assistance of the teacher’s demonstration, explanation with sign language, or individual practice. From the data and the literature, the best active learning and teaching instruction for the deaf is education by visual, kinesthetic, linguistic, and intrapersonal intelligence. The application of all these four intelligence is essential to maximize the effectiveness of teaching dance to deaf and hard of hearing dancers.
Friendly Environment is Essential

Pesetsky and Burack (1984) emphasized factors to consider when using dance movement to the handicapped participants. Handicapped participants encourage joy in dancing. But teacher must adapt dance movement to the needs of your individual situation of group, students, and to each individual in particular. Observe closely what works and does not work for teacher and for the handicapped participants. Make adjustments on teacher’s activities to facilitate changes in individuals’ needs, frustration, and accomplishments. In the same vein, findings from this study supports friendly environment in dance lessons for the individuals with hearing impairment and making some adjustment to build more effective emotional and physical environment for the deaf, meeting individual’s need, reducing frustration of deaf and hard of hearing dancers, therefore, accomplishing the successful result of teaching dance for the deaf.
CHAPTER 10

IMPLICATION FOR RESEARCH AND PRACTICE

Implications for Dance Education for the Deaf

Based on the findings of the present study, the researcher expects the following implications are made to the field of dance education for the deaf:

1. In various school settings, educators can open dance classes to deaf students because deaf students have historically exhibited that they can learn dance with appropriate instructional techniques, such as physical demonstration, finger-count, and simple signs. To enhance the learning experience for deaf and hard-of-hearing students, the recruitment of an ASL interpreter should be undertaken, if at all possible. Another implication of this study is that hearing and deaf dancers can become interdependent in a dance class setting. Therefore, it should not be difficult, from a functional learning viewpoint, to open dance classes to both deaf and hard-of-hearing students, and it should not be necessary to further divide dance classes into separate sections for the deaf student and the hearing student. Educators only need to 1) make some additional teaching preparations which will enhance the learning experience for their deaf students, and 2) retain an open mind concerning the unique challenges and benefits of teaching and including the deaf student in the classroom.

2. Educators can understand some consideration and adjustment in teaching deaf students in dance classes. Teacher should 1) allow more time to deaf students in learning dance movement; 2) providing physical demonstration five or six times
continuously; 3) Providing more individual time to confirm their movement and rhythm; 4) provide physical demonstration with slower tempo; 5) providing a short routine at a time rather than providing a long routine; 4) Providing visual counts and visual demonstration all the time in teaching.

3. Educators can build friendly environment in dance classes or rehearsals involving deaf and hard of hearing dancers as educators provide dance classes or rehearsals with friendly emotional and physical environment for the deaf.

4. From this present study, educators can begin to comprehend what constitutes effective instruction for the deaf and how best these methodologies can be employed to enhance the learning experience for the deaf. In deed, with some research on their own initiative, educators can play a major role in creating the best possible, active learning and teaching environments for the deaf.

**Recommendations for Future Research**

Based on the findings of the present study, the following recommendations are made for future study:

1. Conduct a study similar in scope and methodology to the present one, but spend an entire school year with the subject(s). The conduct of a more in-depth and comprehensive case study would yield data of even greater trustworthiness and reveal deeper insights into the effectiveness of existing instructional methods for teaching dance to deaf or hard to hear students. A long-term study would provide information well beyond the scope of the present study.
2. Conduct a study similar in scope and methodology to the present one, but conduct the study in deaf or and mainstream schools. The academic analysis of school environment, school culture, and school systems would provide unexplored information for the better understanding of effective instructional methods for the deaf.

3. Conduct a study similar in scope and methodology to the present one, but the interest subject would be expert teachers who are trained and presently working with deaf dancers. Expert teachers would provide a wealth of data concerning time-tested and field-tested methods, already in existence, for teaching dance in various environs and systems, especially to the deaf student. Such data and the resulting conclusions from academic study would be invaluable information in developing curricula for teaching novice dance teachers.

Recommendations for Dance Education for the Deaf

Based on the findings of the present study, the following recommendations are made to educators working with deaf dancers:

1. Deaf and hard of hearing dancers can productively absorb and retain information by visual, kinesthetic, and linguistic instructions. These dancers perceive movement by watching and understand rhythm by copying movement. Also, they develop their movement technique and understanding from their teacher’s signs and explanations of movement. Moreover, repetition is an important teaching method which helps the dancers solve their individual dance problems and further develop the movements required for a successful
performance. Therefore, educators can develop better and more interesting learning environs for the deaf student by the usage of visual, kinesthetic, and linguistic, repetition instruction than would be developed if only more traditional instructional methods were employed.

2. Teachers should present a sequential teaching structure that leads to effective sequential learning for the deaf. Teachers should be engaged with their classes by personally giving physical demonstrations of the aspects of dance, by always offering a visual count for their students, by giving extra time for learning, and by explaining detail skills and the quality of the dance movement.

3. Teachers should understand that, often, deaf and hard of hearing dancers are slow learners, comparatively, for the following reasons: 1) they understand movement and rhythm by observing and copying teacher’s demonstrations; 2) they memorize (rather than hear) rhythm and movement; 3) they confirm their inner counts with others (rather than by hearing). In all learning processes, repetition is necessary for the deaf student to learn and to succeed. The students require an adequate amount of demonstration time, executed at a slower-than-normal pace, as well as an adequate amount of time for the practice the movement.

4. Teachers should use judiciously active instruction: i.e. visual instruction, kinesthetic instruction, linguistic instruction, encouragement, music usage, and various instructional styles that lead dancers to learn dance effectively. However, teachers who seek to use judiciously active instruction for their deaf students should consider few prerequisites in adequate and prudent manner.
5. Teachers should build friendly environment in dance classes for deaf and hard of hearing students as providing some emotional environment; understanding deaf culture, dancing with hearing and hearing impaired dancers together, concentrating on deaf dancers’ performance and as providing physical environment; keeping small size of class, placing mirrors on front and side walls, speakers on floor or ceiling, and proper teacher’s position.

Researcher’s Reflection

In bringing this dissertation to a close, I would like to share some thoughts about people whom I met for this study. Doing so may make for a deeper appreciation for their dancing and their lives, which has filled these pages.

Most deaf and hard of hearing dancers first danced at Royal Dance Company. They were rejected and isolated by many reasons at schools and at communities. They have been starving to have choices and opportunities about activity with others, and they want to jump over the barrier of their deafness as they participate with others. Dance is a method that they connected to the other world and dance is evidence that they jump over the barrier of their deafness. Therefore, I could see their happiness and their affection on dancing, and they believe that they can do everything without doubt. They very satisfied with their dance teacher and his teaching instruction and communication.

Dr. Haynes has a strong philosophy for teaching deaf dancers and he is an experienced great teacher for teaching deaf dancers. He understands their difficulties as much as deaf dancers and always encourages them to overcome their barrier of deafness. Therefore, I convince that I visited a right place to conduct this study and this study exactly
indicates what they do and how they learn. Both dancers and teachers generously accepted my study because they were appreciated for this study that may proceed to the development of dance instruction for the deaf. They want to speak up what they do and how they dance to out there. Dance is not easy to deaf dancers, but they can do everything with sign. If teachers can use simple sign, they will be able to learn dance anywhere without difficulties. It depends on the teacher’s effort to deaf dancers. Teachers shouldn’t leave them in the negative myth. This dissertation includes a hope that all deaf dancers can learn dance everywhere in the world.
REFERENCES


Gallaudet Dance Company. Dance techniques for deaf and hard of hearing dancers. from:
http://depts.gallaudet.edu/dance/techniques.html


Interview: Thomas Riedelsheimer discusses stretching the senses in “touch and sound.” (2005, September 20), *NPR News*.


To boost IQs, aid is needed in first 3 years. (1994, April 12). *The Wall Street Journal*.


APPENDIX A

REQUEST LETTER
Dear Professor, Haynes:

I am a PhD candidate in Physical Education at the University of Georgia, Athens, who would like to complete a doctoral dissertation focusing on how deaf dancers learn various dance techniques.

I have 10 years of dance background and completed my undergraduate degree in dance at KyungHee University in Seoul, Korea and my M.A in dance education under Dr. Miriam Roskin Berger at New York University. During my undergraduate studies, I was able to perform on stage and focus on dance education for my master’s degree.

My professor, Dr. Michael Horvat, feels that the RIT/NTID dance company is the premier program in the country and we welcome the opportunity to study the dancers and teachers of an elite program. We welcome any input in developing my proposal and appreciate any guidance you can provide to facilitate my dissertation. My committee includes Dr. Michael Horvat as well as Dr. Mark Wheeler (Former Chair of the Dance Department) and Dr. Bryan McCullick (an expert in teacher expertise). If you consent, I would like to present a proposal for your input and human subject approval and try to complete the work during fall semester. I would appreciate your permission to work with you and the dancers in the Company because it has a long history of performing art for the hearing impaired and a number of distinguished dance instructors. It also has superb instructional facilities for hearing impaired students.

I am eager to have the opportunity to work with you and your dancers, observe practices, and to interview you and your dancers. I would like observe your dance lessons for a month and conduct an interview of approximately one hour to both instructors and dancers. If necessary, 30 minutes recall interview will be conducted. Therefore, my research requires one and half hours of interview per person and would be relatively uninvasive.

Enclosed is vita which clearly documents my teaching, choreographic, and performance experiences. It is my hope that I will be granted this opportunity; it would play a significant part in my doctoral research. Thank you for your consideration. I will be calling you in the near future to discuss this possibility more.

Sincerely,

Young Ha Park
115 Ramsey Room 323
University of Georgia, GA, 30606
(706) 201-5470
APPENDIX B

CONSENT FORM
Consent Form

I agree to allow my child, ______________________, to take part in a research study titled, the effect of adapted dance program to develop social competence and self-esteem for student with mental retardation and with physical disabilities, which is being conducted by Young Ha Park, who is doctor candidate in department of physical education and sports studies and who can be reached at phone number (706) 372-4119. I understand this participation is entirely voluntary; I can withdraw my consent at any time and have the results of the participation returned to me, removed from the experimental records, or destroyed.

The following points have been explained to me:

1. The purpose of this study is to measure the effect of adapted dance program to develop social competence and self-esteem for students with mental retardation and with physical disabilities.

2. The procedures are as follows. Participants will be asked to participate dance program every per a week and will be interview about particular behaviors and activities related to self-esteem and social competence at school, home, and playground. Also, I will ask some typical activities that participants generally like to do. What the parents think about how your child acts during school activities and what participants specifically feel their emotional and social limitation while spending time with other students, and new environment. All the specific questions are related to subject of social competence and self-esteem in personal aspect. But this research will not directly ask on the participants’ social competence and self-esteem such like how do you think your or your child’s self-esteem? and you will not list your name on the data sheet. All the data and tapes will be reviewed by only researcher, Young Ha Park, and will be only used for the purpose of this study. It will not share with other researches and researchers. The data and tapes will be secured and stored in my office cabinet and will be destroyed after I complete this research. I will use pseudonyms in the entire name and no one but myself will have access to the name. You will be asked to sign two of these consent forms. One form will be returned to the investigator and the other consent form will be kept for your records.

3. This study will provide a benefit to check your child in the aspect of different view and also will provide an opportunity to see the improvement of their development and to lead them to have dance activities as a life-long activities.

4. You may find that many questions are invasive or personal. If you become uncomfortable answering any questions, you may cease participation at that time. No discomforts or distresses will be faced during this research.

5. No physical, psychological, social or legal risks exist in this study.

6. The results of this participation will be anonymous and will not be released in any individually identifiable form without my prior consent unless required by law.

7. The researcher will answer any further questions about the research, now or during the course if the project, and can be reached by telephone at: (706)372-4119.

8. In addition to the above, further information, including a full explanation of the purpose of this research, will be provided at the completion of the experiment.
I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Signature of Investigator

Date

Signature of Participant

Date
APPENDIX C

INTERVIEW PROTOCOLS
Dancer Interview Protocol: A Case Study of Effective Dance Instruction for Deaf dancers

Introductory remarks: Thank you for taking the time to talk with me today. This interview will probably take about 60 minutes to complete. As I mentioned to you before, we are doing these interviews with deaf dancers in RIT/NTID Dance Company who have participated in a case study of effective dance instruction for deaf dancers. The information from these interviews will be pulled together and used to inform the researcher and to improve professional development of dance instruction for the deaf. This interview will be used for this purpose only and will be confidential. (I will not identify you by name in the report or in any conversations with other people).

Obstacle Factors
The following questions are for deaf dancers to ask which factors prevent you from participating in dance activities both in the school setting and in the professional field. Please take enough time to reflect on your experiences of dance and answer.

Q1. Based on experiences in learning dance, what factors or circumstance are seen as the greatest obstacles to engage in dance activities? How are these obstacles to dance instruction best prevented?

1. Please tell me about your beginnings in dance until now.
2. Please tell me what was the most difficult when you began to learn.
3. Based on all your experiences at school, please tell me about difficulties you encountered in learning dance.
4. Describe obstacles that you encountered participating in dance activities.
5. How did you overcome these obstacles?
6. Specifically, tell me what kinds of dance activities you had in school and describe dance instruction teachers provided you.
7. Take your time to remember your experiences in dance, what do you think were the differences between learning dance in the school setting and the professional field (NTID Dance Company)?
8. How have these differences helped you learn dance?
9. Based on your experiences at NTID Dance Company, please tell me any difficulties you’ve experienced in learning or performing dance?
10. Please tell me your opinion on teachers’/choreographer’s instructional abilities.
11. Give me an example of what types of instructions are helpful and not helpful.
12. How do you think teachers and instructors try to overcome your hearing impairment when teaching you dance?
13. How do you overcome your physical disability when learning and performing dance?

Process of Learning and Performing Dance
The following questions are to know your process of learning dance. Take time to think and track your dance movements and learning.
Q2. What factors allow you to learn dance technique and routines? How do deaf dancers perceive and interpret emotional dance movements and import them into their own dances?

1. Describe how teachers or choreographers use special instruments, facilities, or instruction to teach dance?
2. How do you use them?
3. What factors allow you to learn a dance technique?
4. When you learn a new technique, how do you process all the information and how do you perform?
5. Based on question #4, please tell me, in order, how you process all the information in order to make a complete dance movement.
6. When you perform a routine movement that is familiar with you, please tell me, in order, how you process information in order to do a routine movement.
7. When you learn a new movement, how do you recognize rhythm?
8. How do you recognize rhythm in music?
9. How do you recognize rhythm on the performance stage?
10. How do you recognize the timing of in and out of stage?
11. How do you recognize rhythm changing in the middle of sequential dance movements?
12. Please tell me an example of how you interpret emotional movements and import it into your dance.
13. Please tell me a story where you used special instruction to help you interpret emotional movement and import them into your own dances.
14. Please tell me the special instruction to obstacle you interpret emotional movement and import them into your own dances?
15. What is difficult about performing emotional movements?
16. What instruction takes helpful to assist you perform emotional movements?

Effective/Ineffective Teaching Instructions or Methods

The following questions are to ask about the effectiveness of instruction, instruments, facilities, and other elements used in teaching dance. Take enough time to think about those questions.

Q3. Which teaching instructions or methods do deaf dancers feel are most/least effective and comfortable?

1. When you learn dance, please tell me specifically which instructions or methods help you most effectively?
2. In order to maximize effectiveness, what do you suggest for change or elimination?
3. Please tell me what practices are ineffective in teaching you dance?
4. How can teachers teaching lower skilled deaf dancers effectively do so?
5. Pretend that you will teach deaf dancers in the future, tell me how you are going to teach them in order to maximize teaching and learning dance?
Ending Questions
The following question is the final question. Please feel free to answer frankly.

Q4. Please add any comments to what we’ve filled about? Feel free to tell me whatever you want to tell me about learning dance and performance.

For asking further questions, please give me your e-mail address.

Thank you very much for your cooperation.
Teacher Interview Protocol:
A Case Study of Effective Dance Instruction for Deaf dancers

Introductory remarks: Thank you for taking the time to talk with me today. This interview will probably take about 60 minutes to complete. As I mentioned to you before, we are doing these interviews with teachers in RIT/NTID Dance Company who have participated in a case study of effective dance instruction for deaf dancers. The information from these interviews will be pulled together and used to inform the researcher and to improve professional development of dance instruction for the deaf. This interview will be used for this purpose only and will be confidential. (I will not identify you by name in the report or in any conversations with other people).

Obstacle Factors in Teaching Dance
The following questions are for instructors to ask which factors make it hard to teach deaf students in dance. Please take enough time to reflect on your experiences of teaching dance.

Q1. Based on your experiences, what factors or circumstance are seen as the greatest obstacles to engage in dance activities? How are these obstacles to dance instruction best prevented?

1. Please tell me your experience about dancing and teaching.
   When did you start dancing?
   What was motivation to be a dancer?
   How long have you taught deaf dancers?
   Please tell me your seminal moment to teach dance?
   What was your motivation to be a dance teacher especially for deaf dancers?
   What is your teaching philosophy in teaching deaf dancers?
2. Which factors are most prohibitive for deaf students engaging in dance activities?
3. From the deaf dancer’s point of view, what do you think is most difficult in learning dance?
4. What is most difficult in teaching deaf dancers?
5. How do you overcome the difficulty?
6. What do you most concern in teaching dance for the deaf at school?
7. What are best practices to do this?
8. Please explain how schools and teachers cope with this issue?

Process of Teaching Dance
The following questions are to know the process of teaching dance to deaf dancers. Take time to think and track your teaching.

Q2. What factors allow deaf dancers to be learning dance technique and routines? How do deaf dancers perceive and interpret emotional dance movements and import them into their own dances?
1. In order to teach dance technique to deaf dancers, which instructions, instruments, and facilities you provide?
2. What do you think how above methods work for the deaf dancers? Please give me examples how those methods work for deaf dancers. Please give example of their failing.
3. Please tell me your procedure for teaching a new dance technique to deaf dancers.
4. Please tell me your procedure for teaching a routine movement to deaf dancers.
5. In order to develop movement qualities, which instructions or methods do you use most often?
6. Please tell me how you teach emotional movements to deaf dancers.
7. Please give me examples of which instructions or methods are effective to teach emotional movements?
8. From the deaf dancer’s point of view and your experience teaching them, how do deaf dancers interpret emotional movement and import it into their own dance?
9. Please tell me what factors make deaf dancers perform successfully on stage.

**Effective/Ineffective Instructions or Methods**

The following questions are to ask about the effectiveness of instruction, instruments, facilities, and other elements used in teaching dance. Take enough time to think about those questions.

**Q3. Which teaching instructions or methods do deaf dancers feel are most/least effective and comfortable?**

1. When you teach dance, which instructions or methods help you most?
2. Please tell me your experiences with teaching strategies that were effective to teach dance technique for deaf dancers.
3. Please tell me specifically, in order to maximize teaching dance, which instructions, equipment, or facilities should be more developed? Why?
4. Please explain how they should be developed.
5. In contrast, please explain which instructions or methods are least effective when you teach dance.
6. Please tell me your experiences your teaching strategies were ineffective to teach dance technique for deaf dancers. Please give me a specific example.
7. Please provide some idea of what teachers and learners should do in order to reduce ineffectiveness in teaching and learning dance.

**Closing Questions**

The following question is the final question. Please feel free to answer frankly.

**Q4. Please add any comments to what we’ve filled about? Feel free to tell me whatever you want to tell me about teaching dance for the deaf.**

For asking further questions, please give me your e-mail address.

**Thank you very much for your cooperation.**
APPENDIX D

EXAMPLES OF ARTIFACTS
ARTIFACT I

Recruitment Letter for two field note takers

I am a PhD student in the department of physical education at the University of Georgia. This study is related to my doctoral dissertation and hopes to research how deaf dancers learn dance techniques through various dance instruction and what obstacles deaf dancers involve in school settings. This study will conduct class observations for a month and needs two observers to take field notes on dance class observations. Note takers should observe class activities and note all happens in classroom. This study will involve about 15 deaf students. Field notes takers should participate in class observations (4 hours per a week) Research will be conducted for a month at RIT campus. You can earn $160 for this work. Amount can be negotiable.

If you need more question and information please e-mail to kunghea@uga.edu
Recruitment Letter for an ASL interpreter

I am a PhD student in the department of physical education at the University of Georgia. This study is related to my doctoral dissertation and hopes to research how deaf dancers learn dance techniques through various dance instruction and what obstacles deaf dancers involve in school settings. This study needs an ASL interpreter to facilitate communication between researcher and deaf students. This study will involve about 15 deaf students. Interviews will be taken approximately one hour for a student. This study will conduct class observations for a month. I require ASL interpreter to participate in observation twice time per a week. Therefore, an ASL interpreter should participate in class observations (4 hours per a week) as well as interviews with deaf dancers (1 hour per a day during 2 weeks). Interview time can be manageable with deaf students. Research will be conducted for a month and two weeks at RIT campus. You can earn $700 for this work. Amount can be negotiable.

If you need more question and information please e-mail to kunghea@uga.edu
ARTIFACT III

Poster for Dance Festival 2005

DANCEFEST 2005

directed & choreographed by
Thomas Warfield

February 10-12, 7:30 pm
February 13, 2:00 pm
Robert F. Panara Theatre
(LBJ building, RIT campus)

$5 students/seniors
$7 all others

featuring members of the
RIT/NTID Dance Company
NTID Drama Club
RIT Swing Dance Club
Flux Fusion
Kara Dance Group
Dynamic Dymes and Dynasty

Ticket sales begin Monday, January 31. The NTID Box Office, located on the first floor of NTID’s LBJ building, is open weekdays 10-4, and one hour before concerts on the day of a show. For reservations send email to richts@rit.edu or call 475-9254 (voice or tty).

The RIT/NTID Dance Company, a cutting assembly of deaf, hard-of-hearing, and hearing dancers, presents Dancefest 2005, bringing together a variety of dance groups on campus to share their unique style and perspective on dance. From Step-Dance to Ballet, from Jazz to Hip-Hop, the festival will excite, educate, and electrify.

www.rit.edu/ntid/theatre
ARTIFACT IV

Poster of 20th Anniversary Dance Performance/OZ 2004

April 29-May 1, 2004 at 7:30pm
May 7-8, 2004 at 7:30pm
May 2 & 9, 2004 at 2:00pm

Robert F. Panara Theatre, RIT Campus

Conceived, Directed and
Choreographed by Thomas Warfield
Set by Ethan Sinnott
Costumes by Jennifer Guadagno
Lighting by Nic Minetor
ARTIFACT V

Poster of Visual Quest Dancing Performance