HOW DO YOUNG CHILDREN RESPOND TO MUSIC IN AN INFORMAL SETTING MUSIC CLASS

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by
Tzu-Yi Lee

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**Introduction**

“Children’s early years are a key time for musical growth.” (Levinowitz, 1999, p. 17) Flohr (1999) reviewed recent brain research on young children and provided a recommendation that early childhood is a crucial window of opportunity for music learning. The preschool age is a significant period for music learning and has been widely emphasized. Young children at this age are like sponges, they continually exposure to and absorb new stimulus around them and have wider range of acceptances to diversity then older children.

Educators and researchers have tried to understand more about how young children learn music and use different approaches to promote young children’s learning in more effective ways. Gordon (2003a) coined a term “audiation” and indicated that audiation is the process through organized music context. Audiation is most recently defined as, “Hearing and comprehending in one’s mind the sound of music that is not or may not been physically present .” (p. 361) However, before trying to understand the sequence of music learning of young children, it is necessary to understand more about how they interact with music in order to acknowledge the better methodologies to help them learn.

The following vignette represents the story of a young educator and her first encounters with music for young children.

When I was student teaching in a kindergarten classroom, I often found some unexpected behaviors and responses from the young children I was working with. They presented their thoughts and ideas through their speech, movement and art work in their own ways. As they know less about how to behave to the precepts of society, their responses had much more variety than those of adults. If we pay more attention to the natural behaviors of young children, we may find new ways in which to provide musical opportunities in an age appropriate and meaningful way. Recently, I participated in a music class for young children. It was
a great opportunity to observe how those children interacted with music in the class. I have a vivid recollection of one little boy who, while walking around the classroom, improvised a rhythm pattern in response to one chanted by the teacher. He had been in the music class for about one year and that was his first time giving rhythm patterns as a response to the sound the teacher produced. How exciting it was! We were thrilled and surprised by his action, mainly because it had happened suddenly and was beyond our expectation. When seeing a small child walking around the classroom, it may appear that he is just wandering about and not participating in the activity or he is off-task. However, it maybe that he is participating, but in his own unique way. Sometimes even slight movements from the children may represent meaningful responses and some actions that we think are not related to class may be a type of participation. This idea sparked my interest in learning more about how young children participate in music class.

Since the limited ability in verbal expression and short concentration span of young children, it would be a challenging to determine whether a young child participate or not in the activity. Even he or she gives a specific response, it is still hard to tell if this response is totally related to the musical stimuli. Kellett (2000) suggested that young children’s true level of musical ability was often underestimated due to research and assessment strategies neglected their lack of concentration skills, their concentration span and their lack of the language skills required in the test procedures. She also mentioned that instead of exploring children’s responses for their own intrinsic value, research on music often used the judgments of professional adult musicians to norm reference children’s responses.

All of these raise investigator’s perspective of young children’s uncultivated responses deserved serious attention, and would provide more aspects for music educators if we observe them more close in a holistic view. The purpose of the present study was to describe how young children respond to music in an informal setting music class. Research questions to guide this investigation include the following:
- What kind of verbal responses will young children provide?
- What kind of non-verbal responses will young children provide?

**Definition**

- Non-verbal responses included movements and facial expression.
- Music here indicated all musical stimulus such as rhythmic or tonal patterns, chants, songs, and musical recordings.
Literature review

Young children’s musical perception could be affected by different music content. Feierabend, Saunders, Holahan and Getnick (1998) stated that when songs are presented with lyrics, melodic recognition is more successfully developed in preschool children. Marshall and Hargreaves (2007) investigated young children aged from three and four years old their sensitivity to musical styles and suggested that many young children do seem able to distinguish different musical styles. Do young children respond to different musical styles in different ways? Sims and Cassidy (1997) conducted a research investigating the presence and absence of lyrics in musical sections and indicated that young children’s music preferences and attitudes do not seem to be based on specific musical characteristics and that children may have very idiosyncratic responses and listening style.

To examined this phenomenon, Sim and Nolker (2002) designed to continue the line of previous research but with older children and found that when children were free to choose how much time they would spend listening to four different pieces of music, most children had very consistent listening patterns.

Gender differences in responses to music was also studied by researchers. Pollatou, Karadimou and Gerodimos (2004) investigated whether there are any differences between girls and boys at age of five in the aspects of their rhythmic ability, musical aptitude, and performance in gross motor skills. The results indicated that children at the age of five do not differ in music potential and gross motor development while girls performed better than boys in most movements of rhythmic ability test.
Within the early childhood music classroom, there are multiple kinds of responses from children. These responses, being highly active or barely recognizable often manifest through oral or physical means. Verbal responses take place in young children’s interactions with musical stimulus. Holahan (1984) observed one hundred and fifty children who were provided with informal music activities in a day care center and a nursery school suggesting three stages of music babbles: (1) At the first level of babble, the child performs discrete music elements and a musical stimuli at the same time. (2) At the second level of music babble, the child performs combination of discrete music elements arranged synchronically “in time” but those discrete elements do not give rise to tonal or rhythmic organization. (3) At the third level of music babble, the child’s spontaneous performances become more coherent. It was concluded that informal exposure to music can facilitate the music learning for young children, and this exposure should begin before kindergarten.

Reynolds (2006) documented vocal interactions during informal early childhood music class and found that “children performed a higher percentage of tonal vocalizations after unfamiliar vocal tonal events than after familiar vocal tonal events.” (p. 42) The types of children’s vocal events also fit the first four stages of Gordon’s preparatory audiation theory.

Young (2004) described young children’s spontaneous vocalizing during their free-play hour and categorized then into chanting and intoning, free-flow vocalizing, reworkings of known songs, movement vocalizing and vocalizing to animate. When observed children singing, it was noted that children sang portions of songs they remembered instead of singing the entire song.
There are many kinds of bodily dialogues in different music activities as well. In musical movements the body is not just a medium, but very articulated expression, based on motor functions, musical imagination, and conceptions of music and body (Kirsten, 2007). Metz (1989) investigated preschool children’s movement responses to music in a free-choice participation setting and three theoretical core categories emerged: conditions, interactions and outcomes. It was suggesting that music educators can enhance students’ musical perceptions by choosing the musical objectives that based on student’s natural movement performances.

Movement could be physical forms of emotional communications. Research has shown that preschool children can decode emotional meaning in expressive body movements, but could they encode emotional meaning in music through body movement? Boone and Cunningham (2001) investigated children age from four to five years old their ability to encode the emotional meaning of a music segment by moving a teddy bear in ways they have seen before to indicate one of four target emotions—happiness, sadness, anger or fear. Results from the study concluded that children as four and five years old were able to portray emotional meaning in music through expressive movement.
Methodology

Participants in this study were four young boys aged from two years and two months to three years old and their caregivers who registered for the early childhood music class in 2009 Winter program. All of them were white American and were from at least middle-class socioeconomic backgrounds. Besides one experienced instructor who taught the class, there were three graduate students (one was the investigator of this study) participated in the class and sometimes led part of the class.

The early childhood music class in this study was a non-profit community music school situated in central, Pennsylvania. Each class lasted about forty-five minutes per week including fifteen to twenty minutes percussion instruments free play which did not take part as this study. Children’s caregivers would accompany them and participate as well during the class. Instructor and graduate students provided musical activities such as singing (songs or patterns), rhythmic chanting and chanting with movements…etc. The class structure was informal allowing children to sing, move, and play freely. Children were encouraged to participate in class but there were no expectation for their participation. Children were allowed to sit to watch or move around the classroom at their will.

This study was a qualitative single case study of an intact early childhood music class. After got IRB permission, the study took place between the months of February to April in 2009 and observations were made a total of five times. The main data collection strategy in this study was observation. The investigator acted as a participant observer in the classroom, and took quick notes during the class in order to minimize the interruption and avoided distraction to children. After each class session, the investigator used a
journal to record and reflect about the class. A video recorder was operated on a tripod at the edge of the classroom to provide a detailed description of what might have been missed when observing the class live.

In order to augment data through observation, the investigator also conducted interviews with children’s parents, the instructor and two of the graduate students who participated in the class. Questions included their observation about children’s responses in the class and their interactions with the children. The other data in this study consisted of gathered materials including lesson plans, advertising materials, and online class related resources.

Five segments of class videotapes and six interview audio digital files were transcribed into narrative. All of the above data were coded and interpreted by investigator and then categorizing into two border types according to the research questions- what kinds of verbal responses do children provide? What kind of non-verbal responses do children provide? Following two border types of children’s responses to music (verbal and non-verbal response) were subcategories that identified to provide more specific and detailed information.
Results

Verbal responses

Babbling

“Babbling is a stage in child language acquisition, during which an infant appears to be experimenting with uttering sounds of language, but not yet producing any recognizable words” (Baron, 1992, p. 41). Voice is the best and easiest instrument for human, especially for younger children. When children’s vocalizing was not mature enough to express themselves by words, their babbles might be a good source for adults to understand more about their ways of expression. From investigator’s observation, children often babbles when they move. For example, Charles made some sounds like “wu wu wu” when he scrawled on the floor. In addition, he also babbled when he was running.

This type of babbles was generated when children were moving and often happened when they were excited about something that was not directly related to musical stimuli. Another type of babbles was more like hum or babble-singing. This type of babbles slightly related to pitch but was not in singing quality neither within any rhythmic structure. For example, when we sang the resting tone after a song, Allen made a sound “hum” with pitch slightly relative to the resting tone for few seconds in a speaking quality and then turned into non-pitch babbles.

Chanting

In some finger plays and chants like “Bee Hive” and “Higgety-Piggety Bumble Bee”, some children would chant with adults in the class. As they chanted, they did portion of the chant instead of whole of it. They also came out some words related to the chants by
themselves. In these chanting activities, there are some purposeful pauses for children to fill in, engaging them to participate in the activities. For example, in one chant that related to move with body, they chanted eyes, hands, nose and arms most often. Among these words some were very clearly presented while some sounded very vague and blurred. These words might not always be correctly recognized as what they actually wanted to say.

Investigator also observed another kind of chanting: rhythmic patterns using neutral syllable “ba”. When the instructor chanted some rhythmic patterns as the same meter as the song just sung using neutral syllable “ba”, some children responded it by chanting rhythmic patterns back. Allen did a lot of chanting using neutral syllables. Sometimes he imitated what instructor or assistant did but more often, he improvised new rhythmic patterns.

The other type of chanting observed in the class was very close to singing. It displays tonal quality but was in speaking voice quality. Differing from babble-singing, this type of chanting is more related to musical stimuli and is more structured within the content of the song. Rutkowski (2009, p.3) categorized singing voice development and described the second stage as “inconsistent speaking range singer—sometimes chants, sometimes sustains tones and exhibits some sensitivity to pitch but remains in the speaking voice range (usually A2 to C3)” and the third stage as “speaking rang singer—sustains tones and exhibits some sensitivity to pitch but remains in the speaking voice range (usually A2 to C3).” Both of these two stages portrayed the characteristics of this kind of chanting. When the song “Wiggle” was sung: “Touch your…?” and then a purposeful sustention lasting for children to fill in, some of the patterns responded by children were fitted in
this type: with sensitive to pitch but still in speaking voice range, a unstable area between non-pitch chant and singing.

**Singing**

As the investigator observed, some children sang resting tone in the class. Resting tone is the tonic of the song and was usually sung twice after each song in this music class. The instructor would sing the dominant of the song first and leave a purposeful silence to see if children would sing the resting tone. Charles did not sing a lot in the class, but sometimes he would sing the resting tone. Allen even sang the dominant by himself when the instructor did the “resting tone gesture” (sat tall and hands up). Except for the resting tone, he also sang short melodic pattern and portion of songs in the classroom. When the instructor sang short melodic patterns in tonic chord of the song and left a silence moment, sometimes Allen would sang it back. Overall, he sang a lot in the class. Although he sang some phrases or specific words of the songs, he never sang the whole song completely as Young (2004, p. 63) described “I noted that children rarely sung the song in their entirely, but selected portions which they had remembered.”

Allen’s pitch matching was still in an unstable stage, sometimes he sings in tune while sometimes his pitch was a bit higher or lower.

**Mimic animals’ sounds**

In the activity “Look for an animal”, children were encouraged to mimic some animals’ sounds as those animals like dog, cat, cow and duck were shown in the book. They seemed very enjoy making sounds of the pointed animal and can mimic or make different animals’ sounds. This activity seemed to be the most popular activity in the
class. Every time when the instructor held the book and started to sing the song, children would leave their caregivers and sit closely to the instructor.

**Talking**

Most talking behaviors in this study seem like did not relate to the music or the ongoing activity. Children talked to their caregivers, peers, and instructor in the class and this response functioned more like communication. For example, when Allen and Charles were chasing around the classroom, Allen said, “come on! Charles.” He tried to tell Charles what he wanted through talking. Another example was Chris talked to his mom that “I want to go out.” to convey his thoughts during music class.

**Non-verbal responses**

**Facial expression**

Chris spent a lot of time sitting on his mom’s lap during class. He looked around, observing what was going on for a consistent of time but did not give many overt responses. However, he smiles very often during the class. For example he sat on the floor by himself watching people danced with scarf and music, and when he saw people waved the scarf in front of him he smiled. In the activity “Hide and Seek,” one person would cover a scarf on another person’s face. When people lifted the scarf and found out whom the person was, children smiled and showed their emotions.

**Movement**

**Walk**

Mostly children walked toward something that was not directly related to the ongoing activity. They walked toward the door and played with the doorknob; walked to
the corner and to leaned against the wall; walked to the piano and touched it. However, in
the activity “Skittery Mouse,” people sang and in the meanwhile walked sneakily on
downbeat to act like the skittery mouse. Greg imitated this movement and walked very
closely on the downbeat.

Run

Children ran a lot during the music classes. Mostly, they ran as a circle outside the
rug. Sometime they chased each other. Allen would run and sing or chant neutral
syllables simultaneously. It was also found that his running and stop have some
connections to the music. He ran when people sang the song and he stopped when people
stopped singing the song.

Movement of limbs

The instructor would do some movements such as hands flow-move freely with
melody, hands up and down gesturing for the resting tone, touch part of your body with
hands, clap hands, wave, and wiggle when sang the songs. Allen did many of these
movements very similar to what the instructor did, and among them some movements
were on the macrobeat of the song while some were not. In general, when he did these
hands movements, the frequency of his motions was quite steady. Chris waved the scarf
with music like the way adults did in the class, and he changed his way of waving when
he heard different themes of music. He looked down and waved gently when the music
was softer while holding the scarf and jumping when the music was more cheerful. In
addition to some intentionally movements with limbs like children did in the song of
“wiggle” there were some spontaneous movements observed. For example, Chris kicked
and trembled his leg when people sang in the class and Greg bended on the floor and stretched his legs.

Spin

Different from running within a big circle, spin was whirling around within a small circle in the same place. Allen occasionally sang and spud during class.

Interact with parents

There were some physical movements happened when children interacted with their parents, for example, hug, holding their parent’s legs or hands, and sitting or lying down on their mom’s lap. When children were more motionless, they usually sit on caregiver’s laps.

Others

Children sometimes tried to crawl to some targets instead of walked to. They also like to lie down or bend over on the floor.
Discussion

Individual behavioral dispositions

Four individual participants had very different participation patterns but each of their participation patterns was quite similar throughout the study. Metz (1989) indicated “not only did the degree of participation remain consistent throughout the study, but the type of behaviors also remained consistent” (p. 51). Throughout the five music classes, Allen did a lot of singing, chanting, improvising rhythmic patterns, and moving. His responses to music were overt in a variety of ways while Chris spend most of his time sitting on his mom’s lap but every time when the instructor held an animal book he would stand up and sit close to her. These individual behavioral modes were quite steady and might be influenced most by children’s individual personalities. Music educators should know each child’s participation patterns and interact with them in ways that most suitable for them. From investigator’s observation, Chris and Greg spent most of their time watching. They looked at particular people for a period of time but did not give any responses. It seemed like that they were getting acquainted with the music or activities in the music class but were not yet prepared to respond to them. This kind of behavior was similar to “absorption,” the first stage of Gordon’s (2003b) preparatory audiation. Children in this stage hear the sounds of music in the environment. Due to the time limitation, this research was not focus on children’s musical development stages. Although it was noticed that children’s responses to music had some levels of relationship with the time children spent in this program. The child who gave most responses in the class had been in this program for the longest time.
**Sensitive to contrast**

Children gave more responses like rhythmic patterns and eye contacts during purposeful silence or pause. They seemed to know it is their turn to make some sounds in these moments. Many times when there was a pause they turned their heads and gave eye contact to the activity leader. It is recommended that leaving some spaces for young children to freely express themselves would be a great opportunity to encourage their responses.

It was also found that there were some connections between children’s movements and the existence of music. They would run a circle through the classroom when we sang and stop when we stop singing. This phenomenon could also indicate their sensitive to the existence of sound with their physical movements. Holahan (1984) found that infants and young children engaged in all types of movement responses to music. He described a boy’s movement response to music and found that “his swaying was not synchronized with the tempo of the music, however, he swayed only when music was being performed” (p. 7).

Investigator also found that children can recognize different levels of dynamic, tempo, tonality, and music style and would respond them differently. For instance, when the instructors chanted the rhythmic pattern with different tempi or dynamic levels, children could discriminate them and chanted it back with different tempi or dynamic levels in response. In the activity of moving scarf with music, children changed their movements when different types of themes were being performed. They also sang resting tones of different modes. It can be inferred from these observations that exposure young
children to a rich variety of music would increase their sensitive to different musical elements.

**Internal tempo**

When Allen interacted with the instructor using neutral syllables, it was found that each of the duration between the end of instructor’s rhythmic pattern to the beginning of Allen’s rhythmic pattern was quite the same but no one counted the beats at that time. When he waved his hands with music, the speed of his waving was quite steady although it was not always match the tempo of the songs. Investigator interpreted this as the internal tempo. It indicated young children’s ability of arranging the sounds or movements equally in their own pace. It might be a new strategy to help young children with their rhythmic development: having them find out their internal tempo first and then recognize the difference between their internal tempo and the external tempo of the songs.

**Different sound captured**

Investigator was from eastern culture background—Taiwan, and found an interesting point that there were some difference between how people capture animals’ sound with different cultural backgrounds. Young children in this study imitated cow’s sound as “mu” while generally in Taiwan children would imitate cow’s sound as “mo.” Others different sounds like “rough” and “wang” as dog’s sound, “bla” and “may” as sheep’s sound …etc. This might because people initially chose the word or spelling from their writing system that best described the sound of the animal. As time went by, more and more people used the same sound to describe the sound of the specific animal. In one class when people were waiting for children to imitate the sound of sheep, Charles came
out “may”, different from what we usually sound “bla” in class, but was the same as how people capture sheep’s sound in Taiwan. It might be his unique expression of imitating sheep’s sound or his changing of the original sound.

**Non-verbal decoding skill**

In this informal setting, the instructor interacted with children with songs, chants, eye contact and movements instead of traditional guides with talking. It was found that even without verbal explanations children were still aware of the guides through body language like gesture and facial expression. For example, when the instructor sang the “Hello” song and pointed to the person she would like everyone to name, children turned their head and looked at the pointed person. They knew what the instructor meant by pointing people. Aureli, Perucchini & Genco (2009) indicated that the majority of children in the middle of their second year of life recognized the declarative aspect of the pointing gesture compared to the minority who only recognized its referential aspect. Using body language is a good way to attract children’s attention in the process of their social and communicative development. Ping and Goldin-Meadow (2008) also pointed that including gesture in instruction could facilitates learning.

**Two dimensions of children’s responses to music— in class and at home**

From the interviews with children’s mothers, more information was provided about children’s musical behaviors at home. Greg’s mother said,

“He did a little bit phrases now he sang more since he started the class. He sings a lot now at home, but before the class it was just a little bit not much. I mean I knew it seems like he likes music but since he was been here he just progressed for more, now he sings a lot of the time.” “He used to sing little…, I mean he used to sing little songs like “Twinkle Twinkle Little Star ” he tried to do this kind of song, and he’s progressed now, he sings entire song in the Disney American Jungle book, like he would sing the whole song. And he would sing songs here, he would sing “Look for an
Animal” song for a lot or “Bee song”, or the “Mouse song”, he sings all of this. And yesterday he just started, he was sitting on the floor he started doing “ba ba ba ba ba” (with rhythmic pattern), we went back and forth for about five minutes, so he did a lot at home.”

Most of the time Greg in the class was watching others, occasionally he would initiate some babbles or hum the song. From the interview, it seems like he sings more at home than in the class and he did more singing at home after he was in the class. These kind of musical behaviors were not be able to observe in the class but were important process during children’s music learning. Charles’s mom also mentioned that Charles loved to watch the DVD we recorded during class when he was in the car. The other interview from the instructor said that,

“One week they might do a lot of it (verbal responses and chanting), but next week they might not do any of it. They just don’t feel like doing of them, but they will go home and do it, the parents told me they do it at home. ”

Teachers and parents could cooperate together to know more about how young children learn music and provide a rich musical environment for them. The deeper we understand children’s musical behavior the more we could promote their musical development.

As with other informal setting studies, the results of this study are not generalizable. In this study, investigator only set one video camera from one angle and did not capture all of children’s behaviors in the videotape. Two or more video cameras might be provided more detailed data. When investigator reviewed all of the videotapes and transcribed them into narrative descriptions, it was found that there were still some surprising behaviors that the investigator did not notice during the class. It was recommended that educator could take advantage of using technology to enhance their
teaching and get better understanding of children in the classroom. Future research might be studied about young children’s responses to music in a longitudinal aspect and look through the process of their responses. As there was only one gender in this study, it might be interesting to study and compare different gender’s responses to music and provide more informative resources to educators and practitioners.
Reference


