The Development of Lesson Plans to Enable Diversity and Collaboration (II):
Focusing on Ways to Elicit Unique Modes of Expression of Each Student

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Abstract: In this study, the authors aimed to develop lessons in which diversity and collaboration were ensured through children’s cooperative involvement in a special class for students with intellectual disabilities. To bring out unique modes of expression for each student, the authors framed two practices and analyzed, as a lesson study, children’s activities and the teacher’s support in an unformulated communicative learning process. The authors found three key results. First, children’s expressions deepen through a combination of both imitation and exploration, and collaboration emerged through this deepening process. Second, the pursuit of a teaching practice oriented toward diversity and collaboration contributes to the growth and development of both children and teachers, through discussing the learning environment, the teacher’s actions, and the processes through which children explore their expressions. Third, children’s motives for expression can be encouraged through intellectual curiosity and interest in musical instruments, the creation of an atmosphere where children can feel comfortable and the creation of positive relationships and a sense of partnership among the children and teacher. Their need for competence, then, can be stimulated by activities such as imitating each other’s expression.

1. Introduction

In this study, the authors aimed to develop lessons in which diversity and collaboration are ensured through children’s cooperative involvement in a special class for students with intellectual disabilities. Today, teachers are expected to foster the development of children who can learn within a diverse group. Through collaboration children can actively contribute to building an inclusive society in which different people accept each other and exercise their own abilities.

The literature on special needs education includes studies that examine individual approaches to personal learning plans. However, if a classroom is supposed to be the place where diversity and collaboration are fostered, further research is required to develop such lessons. In previous research, Kimura (1994), who explored course-planning for special classes that integrated children’s collaboration using a song by Nordoff and Robbins, suggests that children’s expressive activities follow a spiral process of “perceive,” “feel and experience,” and “express.” Sakurai (1997) states that learning activities are driven by two concepts: intellectual curiosity and the need for competence. He uses a framework of need (i.e., intellectual curiosity, need for competence), learning activities
(active exploration, thought and action, achievement of independence), and recognition of feelings (interest, fun, perceived competence) to describe the manifestation of voluntary motive for learning. He also states that an environment where children can feel comfortable learning is necessary to support the process of the emergence of that motive. The findings in these studies suggest that this process should have characteristic factors and a specific structure, and that this will lead to a collaborative lesson in which eliciting the unique modes of expression of each student is ensured.

The authors of this article framed course planning according to children’s difficulties as seen in the findings of Enjoji et al. (2017). Their key results were as follows: to use children’s handmade instruments as the accommodated learning environment, to adopt learning through imitation of others as learning approach, and to accept children’s own ideas for playing the instruments, reducing their difficulties and helping them communicate with each other.

The research question posed in this study, therefore, asks how a learning process that is designed to be enable diversity and collaboration should proceed in order to elicit unique modes of expression among intellectually challenged students in a music class while utilizing means proven to be effective, such as the learning environment and the teacher’s support.

The authors of this study consist of researchers and teachers whose majors are music and special needs education and they collaborated in conducting the practices discussed. The research was accomplished in the form of a lesson study on collaboration between researchers’ etic perspectives and teachers’ emic perspectives. First, the researchers and teachers designed the lesson plans together. Then the teachers implemented and reflected on the lessons, while the researchers collected field notes through first-hand observations as well as data recorded with a digital camera installed in the lesson room. Finally, the researchers and teachers analyzed and discussed the practices together from their own perspectives using transcriptions of the dialogue and records of the lessons. As Tagami (2016) pointed out, children should be understood as independent and distinctive beings in collaborative learning. The authors, therefore, analyzed the children’s unformulated communicative learning to explore the processes that enable diversity and collaboration while effectively eliciting unique modes of expression.

2. Prerequisite Condition for the Practices

2.1. Teaching Materials

The concept of “universal design” has attracted attention in many fields in recent years. It consists of seven principles as follows (Connell et al., 1997): PRINCIPLE ONE: equitable use; PRINCIPLE TWO: flexibility in use; PRINCIPLE THREE: simple and intuitive use; PRINCIPLE FOUR: perceptible information; PRINCIPLE FIVE: tolerance for error; PRINCIPLE SIX: low physical effort; and PRINCIPLE SEVEN: size and space for approach and use. According to these principles, particularly principles three, five, six, and seven, we made the decision to use manual percussion instruments as the prerequisite condition for lessons. These simple and intuitive instruments make it easier for children with different disabilities to play and enjoy music. Their design, which tolerates error well, allows children to play the instruments willingly without detailed explanations from the teacher. Furthermore, the minimal physical effort they require
expands opportunities for children to participate in class activities and instruments of appropriate size increase children's willingness to approach them.

2.2. Teacher's Actions

The structure of “call and response” can focus on musical collaboration. It is regarded as one of the most basic elements of music. Inada (2003) states “it is the first step for children to open themselves to society,” emphasizing the idea that “call and response” is not only musical but also social in effect (pp.108–110). In a study of collective music and improvised musical expression with preschool children, Koma (2013) revealed that the “response” serves as an essential element of collaboration (p.156). In addition, Young (2005) considered the role of the adult to encourage collaborative skills among children. He emphasized the importance of the teacher’s role not only in terms of teaching content but also in terms of acting as a partner in “musical conversation” with children. These studies provide suggestions about how to improve student's collaborative abilities.

On the other hand, students must be given many opportunities to express themselves individually. A clear example of these objectives in operation is found in “Oto Asobi no Kai,” a group consisting of both individuals with disabilities and professional musicians. It is a unique collective due to the simultaneous mixing of a wide variety of musicality by all the members of the group. Numata (2007), who observed the group’s activities, outlined the relationship between professional musicians and individuals with disabilities who are strongly conscious of the role of the professional musicians. These activities suggest approaches teachers can take to have a positive effect on students in terms of encouraging diversity of musical expressions, that is, to be an equal partner of improvisation, highlighting the great importance of collaborative effort in collective music making, rather than merely teaching specific musical skills.

2.3. Specific Measures

In this study, the authors framed two practices using different musical instruments and imitative activities implemented through units on improvisation with instruments. The first practice (5 hours total) was held from October to November, 2017, in the music room in the G primary school in Hiroshima. In this practice, the teacher used acoustic instruments that reduced physical burden, created many kinds of sounds, and had a variety of colors and forms. The second practice (3 hours total) was held in March, 2018, in the classroom provided for the special class in the G primary school. In this practice, the teacher used electronic musical instruments that have the property that the same input always produces the same sound. During these activities, the teacher was attentive in order to bring out the unique modes of expression of each student. That is, the teacher did not showcase any particular style of music, but rather indicated only rules and ways to use the instruments, and played as an equal partner with the children.

The special class, consisted of 12 children in total, eight boys and four girls, aged 6 to 11. The class was for children with intellectual disabilities, but their individual ability levels varied. They received two types of music lessons: one was for all of the children together, and the other split the children into three smaller groups, each combining two grade levels. Practice 1 was the former,
and Practice 2, for only three of them, aged 6 to 7, was the latter. The researchers observed children who required special attention in the music classes and conducted this study based on contact between the research collaborator and the G primary school.

3. Lesson Practice and Results

3.1. Practice 1 "Let's express music with your favorite instrument and rhythm"

3.1.1. Lesson Goals for Practice 1

(1) With percussion instruments and bodily expressions, children will be able to find their favorite color tone and mode of expression.

(2) With percussion instruments and bodily expressions, children will be able to play music while imitating or changing the tone and rhythm of their friends.

3.1.2. Observation of the Children

There were 12 children total in the class, but the authors discussed the learning process with a focus on three children who required special attention. Child A is a boy with a mild intellectual disorder who is in the second grade and sometimes struggles to follow the classroom rules. He is interested in singing and handling musical instruments and feels strongly that he wants to try himself. Child B is a girl in the third grade diagnosed with Down Syndrome. She prefers to sing and dance, and actively engages in activities when she is interested in them. It takes time for her to describe her thoughts or express herself verbally. Child C is a boy with mental retardation who is in the sixth grade. He likes moving his body to music and singing his favorite songs. He can express his thoughts confidently.

3.1.3. Outline of Planning and Activities

In Practice 1, the teacher’s goal was for the children to be able to enjoy various types of musical expression by introducing their own performances and communicating with each other through mimicry. Most of the children became absorbed in the activities they found interesting, such as rhythmic play accompanying bodily expression and musical instruments, and in the course of learning the children were observed interacting with each other as well as with the teachers. This approach to teaching supported their interactive learning. Therefore, the teacher arranged time in the lesson for interactions in which they could introduce, imitate, and change their rhythms or styles of expression as they interacted with each other (for example, clapping, or beating their rhythms with their favorite instruments).

3.1.4. Lesson Plan (5 school hours in total)

Practice 1 consisted of three units. UNIT 1 (1 school hour), UNIT 2 (2 school hours), and UNIT 3 (2 school hours). The practice was implemented from mid-October to late November 2017.

<table>
<thead>
<tr>
<th>UNIT 1 (1 hour): Let’s explore timbre with instruments</th>
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<tr>
<td>Lesson goal: By carefully touching the instrument they have chosen, the children can become familiar with a variety of styles and tones.</td>
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<tr>
<td>Outline of activities: The children select their favorite instruments, freely create sounds, explore the manner and tone of their favorite sounds, and introduce these sounds to everyone. The</td>
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teacher demonstrates the sounds of instruments that the children have introduced and expressed interest in.

UNIT 2 (2 hours): Let’s beat out the rhythm as you like
Lesson goal: The children can create a rhythm of their choice.
Outline of activities: The children imitate the rhythm created by the teacher with the bongo as the central instrument. Next, the children imitate the rhythm of one child on the bongo.

UNIT 3 (2 hours): Let’s imitate each other’s expressions
Lesson goal: The children can imitate or change the rhythm of friends.
Outline of activities: The children imitate the rhythm by clapping and through bodily representation in pairs.

3.1.5. Learning Process
The theme of Practice 1 has two features. The first is that the children freely explored the timbre of instruments, talked about how to sing their favorite songs and how to express themselves, and set aside time to play. The second is that the children learned by imitating the teacher who structured the flow of activities so that even the last pair had a turn. The authors infer that the children would enjoy the sounds and musical expressions of the instruments while interacting with each other, but that part of their enjoyment would stem from being able to individually instruct their friends about how to enjoy the instruments.

3.1.6. Results
In UNIT 1, the teacher began the lesson by allowing time for the children to touch the instruments freely for about ten minutes. The authors observed that Child A and B stuck to one instrument and enjoyed it. Child C took in hand various types of musical instruments and tried to play them. Next, the children were able to tell their friends what they discovered during the activity, how they liked their favorite tone and how to make sounds. After the introduction, Child B now began to touch other ones introduced by friends. The authors observed another child who was trying to learn how to play the instruments introduced by Child A. By allowing the children to handle the instruments freely, the authors noted ingenuity among the children and exploration of how to play the instruments and produce sounds. In addition, Child B, who was only interested in one instrument initially, began sharing instruments with other children and approached other instruments as well.

In UNIT 2, the children performed rhythms to the music that the teacher played. However, Child A and Child B were tapping a rhythm freely without listening to the music and ignored the rhythm being played by the teacher. Therefore, the teacher changed the instructions and sang to them, "Listen to the rhythm" in a call-and-response style, and then both children began to consciously listen to the rhythm and responded by beating the rhythm.

In UNIT 3, Child A, who was in the second grade, was paired with Child C, who was in the sixth grade, for collaborative learning. However, Child A was hindered because he could not imitate the expressions of Child C. At first, Child C tried hard to teach his partner but, over the course of
time, he noted that it was difficult for Child A to imitate his expression. Then, Child C thought this over and modified his rhythm to make it easier for Child A to imitate, and finally Child A was able to imitate the rhythm successfully. Child A was delighted with his success, and Child C was satisfied with both A’s successful performance and his own accomplishment. In this case, by pairing children of different ability levels, the partnership led them to collaborate with each other in exploring and imitating their expressions, to wish to adjust their need for competence to the required level for their partner, and to change behaviors to make their partner feel at ease.

3.1.7. Reflection by the Teacher

Mimicking expressions was important in collaborative activities during which thoughts subconsciously change. Imitation need not mean perfect copy. The imitative actions began when children were interested in others’ movement. The teacher supposed that by having children with different personalities work together, they can mutually improve their skills, awareness, and ideas, regardless of grade. She found that the children came to accept others and to have sympathy with each other in the learning process of this practice.

3.2. Practice 2 "Sound play"

3.2.1. Lesson Goals for Practice 2

(1) Children will be able to enjoy ensemble play with the electronic instruments.

(2) Children will be able to sing and play music together with their classmates.

3.2.2. Observation of the Children

There are three children in the class. In terms of daily circumstances, it seems they care about each other’s activities. However, there are not many instances where imitative play is involved. Child D is a girl with mental retardation who is in the first grade and has some characteristics of autism. She has difficulty singing and dancing and only partially participates in the activities. Her motivation to learn is influenced by her interest in and concern about the activities. Child E is a boy with a mild intellectual disorder who is in the second grade. He tends to be interested in anything new but has difficulty with imagination. Child F is a boy with a mild intellectual disorder who is in the second grade. He enjoys moving his body to music, likes percussion instruments such as drums, and is often observed tapping a rhythm.

3.2.3. Outline of Planning and Activities

In Practice 2, as shown in 2.1., the teacher uses an electronic musical instrument. The children had never used one before. The teacher encouraged the children to find the sounds they like, to enjoy playing, and reproducing, and to interact with others through imitation. Thinking about their own representation might lead to concern for others’ expressions and to interest in new ways to express themselves. In this practice, the teacher uses the keyboard WORM MINI by KORG. Items that are connected by the attached pads will become the input surface of the signal, creating communications from the children as they play. In this case, the teacher uses cardboard to signify a guitar, and they create a guitar and drum session on the keyboard. In addition, they use an electronic organ that is permanently installed in the classroom. The teacher also payed attention to his own actions, as shown in 2.2., and determined the following guidelines to follow: first,
incorporate the children’s learning process flexibly with suggestions only about the rules of activities, while not leaving too much up to the children, thus avoiding having activities fall into chaos; second, allow children to develop performances positively, let them share between themselves without the teacher over-managing the details, and arrange the environment so as to bring out children’s performances naturally; and third, join the children’s session and enjoy performance and communication with them.

3.2.4. Lesson Plan (3 school hours in total)

Practice 2 consisted of three units. UNIT 1 (1 school hour), UNIT 2 (1 school hour), and UNIT 3 (1 school hour). The practice was implemented on 9, 13, and 14 March 2018.

| UNIT 1 (1 hour): Let’s play the electronic drum |
| Lesson goal: Become familiar with a musical instrument |
| Outline of the activity: Use the electronic drum and attached pads; find favorite sounds and enjoy them. |

| UNIT 2 (1 hour): Let’s imitate with the electronic organ and the electronic drum |
| Lesson goal: Become interested in the sounds of friends |
| Outline of the activities: The children are divided into two roles, the leading role and the following (imitation / responding) role. They use the percussion mode of the electronic organ and electronic drum. They try playing. |

| UNIT 3 (1 hour): Let’s enjoy a session |
| Lesson goal: Enjoy playing with friends |
| Outline of activities: The children are divided into the roles of “electronic drum,” “attached pad,” and “listeners.” They perform improvisational playing. |

3.2.5. Learning Process

The theme of Practice 2 has two features. One is that the environment is arranged so that the children can use the electronic musical instruments to produce the sounds they want to produce. The children will perform actions such as hitting, rubbing, shaking, and playing. This is to encourage children in repeat trial and error so that they create sounds of their own or enjoy the act of accidentally making new sounds. The other is that the teacher connects children’s personal interests with group interactions. The teacher set aside time to listen to other children’s performances, which helps the children to become aware of new sounds and ways of playing.

3.2.6. Results

In UNIT 1, to start, the teacher presented an electronic drum and made it easy to play. All the children were interested in the sound and said unanimously, “I want to beat the drum,” or “I want to do it.” After that, three children played in turn. While waiting for his turn, Child E was interested in the sounds made by a friend. He said, “It sounds like that.” He compared the sounds he heard with familiar sounds. Child F was seen to enjoy the feeling of hitting the electronic drums and the sounds he made. He tried different ways of doing it, but also repeated his favorite rhythm. He then enjoyed the sampling mode of the instrument. Child D found a sound she liked from the
built-in sound. She memorized the number of the sound and gave it a personal name that she used for the next performance. Thus, the three children were each able to find a sound they liked. In the second half of the lesson, Child E and Child D used simple drum pads to exchange simple musical conversations.

In UNIT 2, one pair established interactive communication through imitating each other, but the other pairs could not. That is, the combination of children influenced the success level of their activities. In the pairing between Child D and Child E, they listened to each other and counted the number of taps. The researchers saw interactions that appeared to be imitation and response. On the other hand, imitation was not sufficiently established when Child F partnered with Child D or Child E. Child F seemed to be playing happily, according to his own feeling. To motivate them to imitate each other, the teacher joined the session as a partner, called out "yes!" in a call-and-response style, and encouraged the children to respond to his performance. Slowly, they began to enjoy imitating.

In UNIT 3, Child D and Child F seemed to play as if they wanted to perform or to be absorbed in finding a sound. Suddenly, Child E began singing his own improvised song “Let's take a bath.” The teacher joined the session singing Child F’s favorite songs and Child E's "Let's take a bath." Then he pointed a microphone to encourage the three children to continue the session. Although it was only for a short time, the three children collaborated in the performance with each creating their own unique modes of expression to the music together.

3.2.7. Reflection by the Teacher

The teacher found that the children were singing and playing the songs that everyone was familiar with and that they created their own songs on the spot, which was a great accomplishment for them. In addition, the children often seemed to be absorbed in their own sounds. They were also proactively looking for and making sounds. The electronic musical instrument was more effective for them because it could reproduce the same sound repeatedly. The teacher supposed that this characteristic of electronic musical instruments lowered barriers to performance and sound-searching. In addition, the sound of the instrument, the atmosphere of the session, and the easygoing nature of the situation are also important factors. Such a setting brought out the children’s ideas more freely.

4. Discussion

This study investigated course planning for primary school music lessons for students with intellectual disabilities, in which children with varying degrees of curiosity, interest, and learning experience worked together in classes designed for “getting involved and making connections.” The researchers discuss the learning process through the three aspects of “course planning to encourage expression (imitation, exploration, collaboration),” “mutual learning for children and teachers,” and “raising the desire for expression.”

4.1. Course-Planning to Encourage Expression (Imitation, Exploration, Collaboration)

The study showed that children’s capacity for expression deepened through a combination of
both imitation and exploration, and collaboration developed through this process.

Kimura (1994, p. 145) has described children’s sensitivity to music as shown in Table 1 and indicates four points that can help teachers to enrich children’s capacity for expression: first, teaching materials and tools that encourage children’s perception (a variety of musical activities and use of musical instruments); second, music that can be adapted to children’s activities; third, a space where children can attempt activities through imitation; fourth, a space where children can listen to each other and be expressive with each other. Thus, “feeling and experiencing” and “expressing” lead to imitation and exploration: children perceive their own and others’ expression and the differences between them. Then, imitation and exploration emerge as collaboration.

The structure and arrangement of the teaching materials and tools (musical instruments) and the role of teachers that were considered for this study overlap with the points indicated by Kimura (1994).

Table 1  Children’s Sensitivity to Musical Expression

| perceive | 1. Children are not conscious that music is playing or that musical instruments are present. |
|          | 2. Children are conscious of those playing music or that musical instruments are present. |
|          | 3. Children are attentive to playing music or those with musical instruments. |
| feel     | 4. Children show interest in the music, and they move toward those playing music or those with instruments. It starts to become clear which activities and sounds children like. |
|          | 5. Children sporadically move or vocalize in response to music or the sounds of the instruments. |
|          | 6. Children continuously move or vocalize in response to music or the sounds of the instruments. |
| express  | 7. Children move or vocalize along with the flow of the music. Children play the instruments with the knowledge of what kind of sounds they will make. |
|          | 8. Children express themselves by imitating the teacher’s and other students’ movements and methods of playing instruments. |
|          | 9. Children make their own movements along with the music and express themselves through musical instruments. |
|          | 10. Children express themselves along with the teacher and other students. Children create ensembles and take different musical roles in groups. |

Adapted from Kimura (1994, p.145)

4.2  Mutual Learning for Children and Teachers

The process of “perceive,” “feel and experience,” and “express” can be applied to the mutual learning of children and teachers in this study. Children’s learning can be considered as mutual learning achieved through curiosity and interest in musical instruments, imitation, and exploration. Children explore other students’ and the teacher’s musical expression, their own musical expression, and collaborative expressions with other students and teachers. Teachers’ learning can be considered as mutual learning alongside the children. It is achieved through the perception of children’s enjoyment of musical expression, through focus, and through expansion by way of the
verbalization of children’s feelings. In addition, teachers can learn from the children through the creation of an environment in which children can feel comfortable imitating and exploring their own expressions, and that makes collaboration possible by creating friendly relations between children, by creating a classroom space that is physically conducive to activities, and by providing musical instruments that are easy for the children to use to express themselves.

Furthermore, deepening a teacher’s own learning by assessing student–teacher learning experiences alongside other teachers is also a way of actualizing the collaboration which forms the basis of collegiality. By building collegiality, the execution of effective educational activities is promoted, and teaching competence is gained (Kurebayashi, 2007). The pursuit of a teaching practice oriented toward diversity and collaboration thus contributes to the growth and development of the teacher.

4.3. Enhancing the Motives for Expression

The children’s motives for expression were elicited and enhanced through intellectual curiosity (curiosity and interest in musical instruments) and the need for competence (such as imitating each other’s expression) through the use of imitation, exploration, and collaboration, as seen in the expressive learning activities carried out in the classes observed for this investigation. The motives for expression are also likely encouraged through the creation of an atmosphere where children can feel comfortable imitating, exploring, and collaborating, as well as through the creation of positive relationships among the children. These findings regarding the learning process are similar to the framework of Sakurai (1997), who suggested that learning activities are driven by voluntary motives for learning, such as intellectual curiosity and the need for competence.

For these practices, the teacher arranged prerequisite conditions for the children’s activities (i.e., the using adequate instruments, allowing unique modes of expression, and collaborating with children as a partner in the session). These arrangements encouraged the children to communicate with each other during their performances and to explore their expressions for their partner. Their motives for expression and need for competence were, therefore, enhanced by this learning process.

5. Conclusion

By examining the practices eliciting the unique modes of expression of each student in an unformulated communicative learning process, the authors found three noteworthy points. First, children’s expressions deepen through a combination of both imitation and exploration, and collaboration emerges through this deepening process. Second, the pursuit of a teaching practice oriented toward diversity and collaboration contributes to the growth and development of both children and teachers through discussing the learning environment, teacher’s action, and the processes through which children explore their expressions. Third, children’s motives for expression can be encouraged through intellectual curiosity and interest in musical instruments, through the creation of an atmosphere where children can feel comfortable, as well as through the creation of positive relationships and partnership among the children and teacher. Their need for competence can then be stimulated by activities such as imitating each other’s expression.
In this article, the discussion was centered on imitative improvisation with musical instruments. However, further research on the process to deepen each child's unique expression through collaboration should be done to develop lesson plans which enable diversity and collaboration.

References

Apportionment of Writing
This study was done by all the members. The first section was written by Gondo. The second section was written by Terauchi, Moriyasu, and Nagayama. Section 3 was written by Enjoji and Takahashi. Sections 4 and 5 were written by Chikurinji.