

Studying Music

Preschool Classroom

Evaluation, Reflection, and Assessment

The criteria for developing high quality project investigations include making sure that the topic is worthy of study and meaningful to the students. Not only was this topic worthy of study because music is so prevalent in students' lives, but music is deeply rooted in family and cultural traditions. Students had opportunities to share music that was familiar and personally meaningful to them, and they were exposed to music that expanded their horizons.

In the fall, a few parents shared their musical talents with the class. Students heard a flugelhorn, accordion and a guitar. Students brought instruments from home including a ukulele, zither, guitar and flute. The daily morning schedule included singing and movement in large group meetings. Some parents commented that their children would like to do a project to study more about music. To the teachers, the music topic seemed like the right choice for the spring semester.

Teacher Reflections

The teachers enjoyed having students share instruments from home. With their instruments, students created rhythm or sound patterns to dismiss each child from the large group meeting. For example, a student might tap the drum twice for a two-syllable name or shake a maraca three times to dismiss a child with a three-syllable name. The students truly enjoyed creating a variety of shakers, drums, guitars, autoharps and flutes from the boxes and junk materials. They shared their handmade instruments at large group. The class, being culturally and linguistically diverse, was fortunate to have families and staff share instruments from India and Korea. This expanded the knowledge base for the children.

Students knew that instruments made sound. However, they were very curious to learn how sound was made. Thus, the music project included abstract principles of physics. Students explored these concepts with first-hand inquiry and a "hands-on" approach. The physicist gave students experiences so they could feel vibrations and demonstrated sound waves with a slinky. Students raced the slinky as it illustrated how sound travels. This sparked creative experimentation and strengthened the students' dispositions to inquire as they designed new experiments with straws, yarn, string, paper cups and plastic cups. They manipulated variables to produce sound waves.

The music project provided opportunities for many people to get involved, including parents with musical talents, staff members with connections to musical groups, local professional music ensembles, and the students themselves who were eager to share their instruments from home. Each guest expert shared their knowledge and answered the students' questions. Most of the musicians let the students touch or play their instrument. One speaker left his French horn in the

room for several days so that students could create observational drawings. The musicians played familiar and not so familiar tunes. This exposed the students to more genres and styles of music.

The teachers prepared the music experts for coming to the class by informing them about the age of the students and what they were studying. In some cases, the teachers helped the guests transform difficult concepts to ones that could be understood by a three or four year old by choosing familiar music, interpreting students' questions for them, and providing materials when necessary. The teachers also asked students to brainstorm their questions ahead of time and to make predictions about how the speaker would respond to their questions. Not only did this encourage critical thinking on the part of the students, but it also gave the teacher some questions to give the guests ahead of time.

The field experiences were particularly rich with new information for the students. The teachers were pleasantly surprised to find the pipe organ repairperson on the visit to the church to see the pipe organ. He shared detailed information about how an organ pipe works. Field trips also introduced students to how pianos made sound, how recording artists made CD's and videos and how choreographers created dances.

Vocabulary greatly expanded during the project. The students first referred to "sticks" used for violins and cellos. By the end of the project they were calling them bows. "Conductor" was a new word for some. The "word wall" in the classroom grew as new vocabulary became apparent to the group. Some of the literature that the teachers read during group times inspired not only musical nomenclature but also rhyming nomenclature. The preschoolers loved coming up with rhyming words.

The Teachers Balance Between Leading and Facilitating

During initial planning, the teachers thought one idea for the culminating event of the music project would be the creation of a musical. The students enjoyed writing plays in the fall and the teachers thought that the music project provided an avenue to extend play writing by adding music and lyrics. However, the students did not seem to want to pursue that path. At one point they made a disco ball and turned their dramatic play room into a party room. The teachers thought that the disco party room would remain open for the final open house. However, after two weeks of playing in the party room during project/activity time, students lost their initial enthusiasm. Instead, students became enamored with their creation of instruments and turned the dramatic playroom into an instrument museum. (The culminating activity for the fall project on "Balls" was a "Ball Museum"). The model of the pipe organ and rhythm instruments were housed in the instrument museum.

The idea of an orchestra expanded and grew as the project progressed. It started with videos that linked a story to a selection of music. The students were particularly intrigued with the role of the conductor. The teacher, taking the students' interests seriously, invited a conductor to come and talk to them. Conducting became an opportunity for leadership. Student conductors wanted to write music for other students to play. The students formed small rhythm groups during

project/activity time. The teacher facilitated their growth in writing music by suggesting students add counts to their music and notate how long specific instruments should be played. It was interesting that students interpreted the length of playing by writing instead how many times an ensemble member should strike a specific instrument. For example, the sentence strips had icons of instruments and numbers next to the icons standing for the number of times the conductor wanted the person to play the instrument. Led by a student conductor, ensembles rehearsed during project/activity time for weeks. Three of the ensembles performed during the culminating open house.

Authentic Literacy

Writing music became the rage for some students. It was very interesting to watch the growth from colored scribbles to actual musical notes on staff paper. One student used a computer program to make staff paper and added notes to the creation. Student composers had an authentic need to write down their music because they wanted the members of the ensemble to understand when to play their instruments. Each time the student composers played their music at a large group meeting, they were reading the music from left to right, even though the teachers did not explicitly teach left to right progression.

Growth in Knowledge About Instruments

Evidence in students' growth of knowledge about instruments was present in the comparison of the beginning and ending student topic webs and in the numerous detailed drawings and three-dimensional representations of instruments. The students focused more on particular instruments when they brainstormed what they had learned about music (Student [Music Topic Web 2](#)). Six students mentioned the guitar. In the first web ([Student Music Topic Web 1](#)), only two people mentioned the guitar. RA mentioned that the conductor uses a baton to lead the orchestra. The words, "conductor" and "baton" were not on the first web. WG noted that flutes have to have holes to make sound.

Students also revealed new understandings about instruments through conversations, predictions, and discussions after field experiences. Before the trip to the piano store, the teacher asked pupils as they were greeted in the morning "How many legs does a grand piano have?" Most answered that a grand piano had four legs. Students observed at the piano store that the grand piano only had three legs. Before the trip, one student remarked that a bicycle could carry a piano. He changed his opinion after he saw the large size of the piano at the piano store.

If not for the fact that school was ending for the year, the teachers and students could have engaged even longer in the study of music. The students' interest remained at a high level throughout the course of four months. This was an excellent project for participation. Everyone created instruments to share at large group meetings and take home. Some expressed their creative thinking by composing and writing music. All enjoyed performing in the ribbon dance and using their imaginations to move to the music.

This study made the students aware of music and instruments from around the world. Students had an in-depth look at several unique instruments such as the pipe organ, Jang-gu drum and hand bells. Students experimented vigorously with different patterns of rhythm. They enjoyed creating patterns using their bodies as well as the rhythm sticks. They came to a deeper understanding and a greater appreciation of the role that music plays in their daily lives.

Student Reflections

On the very last day of school, May 31, 2002, the teacher asked the students in the final group meeting what they liked about their music project. She passed a tape recorder and a microphone around the circle to elicit responses from the students. Their responses indicated that they enjoyed many different aspects of the project, and particularly the different instruments.

- WG: I like trumpets.
CB: My dad brought a trumpet.
WG: There are two kinds of trumpets - a flugelhorn and a trumpet.
BL: I like trumpets. He makes a sound.
MP: I like flute. It plays music. I have a flute. I have a flute made of wood.
My daddy plays the flute and my daddy doesn't play a flugelhorn.
AW: I like trumpets. I like how it makes sound.
LB: Different instruments make different sounds. A flute makes a high sound. A drum makes a low sound.
CB: I like a trombone. Because they make music. With the ear. No I mean the air. It comes out of your mouth.
KM: I like autoharps. You just get a pick and start playing. You don't have to carry it. You just start playing it.
DS: I want to talk about vibration. All the instruments vibrate. Like when you hit a drum it vibrates. When you pluck a guitar string, you can see the string vibrates. When you strum the string and press the button, the string vibrates. Music comes from everywhere. You can play music with everything. Everything can turn into an instrument, bottles, cans, everything! Your shoelace, everything. Even that clock ticks and that's how it makes music.
CW: I know about French horns. They vibrate. Jim played a hose, a French horn the pretend one.
RS: I like trumpets.
EG: I like drums because they are so, so noisy.
WK: I like instruments.
IP: I like a trombone and everything.
EM: I like everything in the whole wide world and cellos.
NW: I like everything in the whole world. Uh cellos.
MJ: I like piano because I like the sound how they play it. My sister plays the piano.

Parent Reflections

During the open house, teachers placed a parent questionnaire on the table and asked parents to please complete the questionnaire before they left. Only a few parents returned it. In retrospect, they were probably too busy during the open house to complete it. The following responses although not representative of the whole group, provided valuable feedback to the teachers:

1. What evidence have you noticed at home to show that your child is studying music at school?
 - WK recognizes instruments, enjoys music and movement now.
 - MJ talks about notes, sheet music, different instruments, and sings songs.
 - He has been dancing more and singing new songs. He shows increased interest in music where he is already very tuned in.
 - She is more interested in music and can identify different sounds of instruments.
 - Playing of ukuleles, accordions, etc. singing and asking for piano lessons.
 - He plays a small drum at home.
2. What new language or vocabulary has your child used during our music project?
 - Some with parts of different instruments from field trips and visitors.
 - Wide range of types.
 - Lots of new words. Heard him singing while playing.
 - Saxophone is certainly a new and often used term.
 - None noticed
 - Pitch, mode, keys.
 - To be honest, not too much.
3. What new information has your child gained through the project?
 - He pays more attention to music.
 - Learned names of instruments and can draw their pictures.
 - I think that she finds it interesting that the notes can be read to make music. She is also enjoying Lawrence Welk on PBB more than usual.
 - I think he's gained a greater appreciation for music in all its forms, including singing songs he's learned for all of us.
 - Loads. MJ had limited exposure to music and instruments so he learned a lot.
 - Range of types of music he hadn't listened to before. Saw so many instruments and experienced such variety. Learned how to do the orchestra group thing.

Student Portfolio – DS

DS is a highly verbal child who turned five early in the fall and was reading at the fourth grade level in January. This was his second year in the preschool classroom and he was well beyond

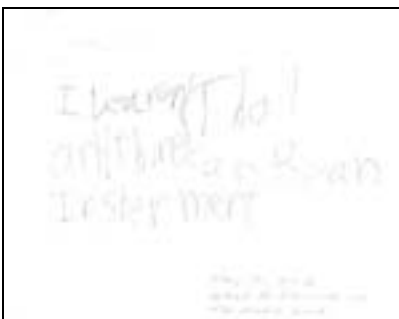
most of his classmates academically. His father was the visiting expert on sound and throughout the project DS had an intense interest in the physics of sound. His mother was one of the parents who suggested that the class pursue a project on music.

The teachers felt that DS knew a great deal about music before they started the project. In the beginning topic web he mentioned the words duet, trio, quartet, and quintet. He also was familiar with making rhythms with his bodies and mentioned the flute and the paper drum. However, the teachers continually presented new information and challenged him throughout the study of music.

During the presentation on tablas, DS verbalized that he did not think the voice was an instrument. At the end of the project, an adult volunteer questioned the students about what they had learned. DS responded, "I learned that anything can be an instrument."

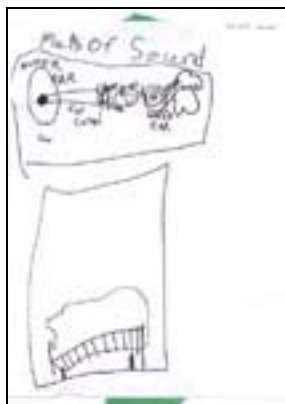


Is the voice an instrument?



DS writes a response to the question, "What have you learned during the music project?"

DS also had an interest in mapmaking. In the previous project on vehicles, he created all kinds of maps of how to get to his house, maps of his vacation routes, treasure maps and even a map of the systems of the human body. During the music project, DS illustrated for the other students how the ear works by drawing a map of sound.



DS labels parts of the ear
and how sound travels.

DS grew significantly in his ability to collaborate and socialize with his peers. The music project gave all students new experiences and new vocabulary to share. With the introduction of instruments from different countries, students had common ground to explore and extend their knowledge base. DS performed in and conducted ensembles, giving him authentic opportunities to engage in camaraderie with his peers. At parent conference time, his parents were pleased and noted an increased engagement with other students in the classroom.

Student Portfolio – RS

RS was three years old when he entered University Primary School in the fall. Like most three year olds entering the program, it takes some time getting used to signing up for choices for project/activity time and becoming engaged in project activities. Although he participated in teacher-guided groups during the fall project investigation about “Balls,” he became totally engaged and initiated activities that related to the music project.

Even at three years old, it was obvious that he had numerous previous musical experiences and that he had a real interest in the topic. He mentioned that he had taken movement classes at the Ballet Academy and at Kindermusic. He answered in the music survey that the students developed that he had a guitar, drum, piano, bells, sticks, recorder, dulcimer and glockenspiel at home. He shared many of his own instruments at group time. During the semester long project RS also became intrigued about instruments from other countries.

When the group sent home a survey about musical instruments, RS helped tally and create a number graph to show the data collected. The group found out that the most common instruments found in their homes were a guitar and drum.



RS works on the survey about instruments found at home during project/activity time.

Simple to Complex

RS demonstrated his increased attention to detail in his observational drawings of the French horn. Notice in the second drawing that RS dictated labels for the teacher to place by his instrument and he added more details. His growth in literacy is evident. He began to add his name in late April.



4/3/02 – Time 1 Drawing
RS draws lines to represent the French horn.



4/23/02 – Time 2 Drawing
RS draws more details and dictates labels to parts of his French horn drawing.

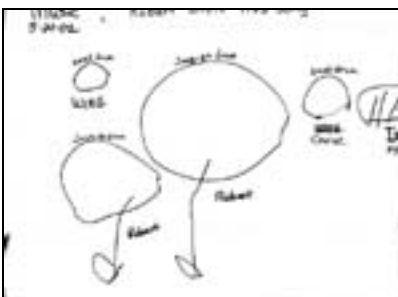
RS drew a memory drawing after going to the Ballet Academy for a movement experience. RS stated, “I used to take classes there,” when talking about the Ballet Academy. His favorite part of the trip was the batons “because they are shiny.”



RS remembers moving like a snake at the Champaign-Urbana Ballet Academy.

Few Facets to Multifacets

RS designed ways to write his own music so that he could be a conductor and have a group of students play his song. The preparation to be a conductor included many tasks. First he had to decide what instruments he wanted to include in his music. His music included drums and cymbals. Then he had to design a way to notate his intentions. Notice the small and large pictures representing the instruments. Then, with a teacher's guidance, he assembled the group for rehearsals and finally, conducted his ensemble for the class during large group meetings.



RS composed music that he conducted at a large group meeting.

Smaller Leap to Greater Leap

RS participated in the music project from day one. During the fall project, RS was not as motivated. In this project, he progressed from sharing instruments he brought from home to writing music that he conducted during the culminating activity. When he brought an instrument, RS liked to be the one to dismiss group by beating out a rhythm or blowing the child's name into the instrument.



RS shares an instrument with the large group.



RS demonstrates the different sounds coming from the different size drums.

Disposition to Inquire

The music project provided opportunities for very young children like RS to develop questions to ask experts. Initially, RS asked general questions such as “Where were you born?” When an older elementary aged sibling brought a cello and played it for the class. RS asked him, “How do you play cello?” He wanted to know specific answers to questions about instruments.



RS creates an observational sketch of MJ's violin.

Student Portfolio - SS

SS entered the preschool program at four years old and turned 5 in the early fall. For most of the four year olds it is their second year at University Primary School because they continue after their first year. However, being new to the program, project investigations were still relatively new to SS.

Extending the Comfort Zone

SS went beyond her comfort zone by playing an instrument that was familiar to her to exploring the new instruments in the classroom. Initially, SS brought her mother's viola to share with the class. She sat for several days and played it by herself at project/activity time. She progressed to

trying other instruments. The hand bells are an excellent example. When the bells were placed as a choice for project/activity time, she tried them out. Soon she chose the hand bells daily. She also participated in the group activities such as making sound waves with water and plastic cups, and creating artwork that detailed the instruments shared in the classroom.



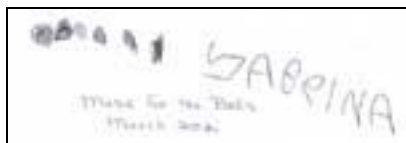
SS plays her mother's viola during project/activity time.



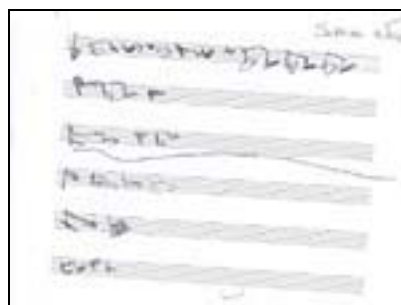
SS plays one of her compositions on the bells.

Simple to Complex

SS enjoyed playing and composing different pieces on the hand bells. She wanted to write down her music and was one of the first to do so in the classroom. Her first music contained notes that were colored pencil dots that matched the colors of the hand bells. She played her song for the others during the large group meeting. She wrote several more songs. Each one became more detailed. She wrote her final composition on musical staff paper. It contained eighth notes, quarter notes and whole notes.



SS attempts to write music for the bells.

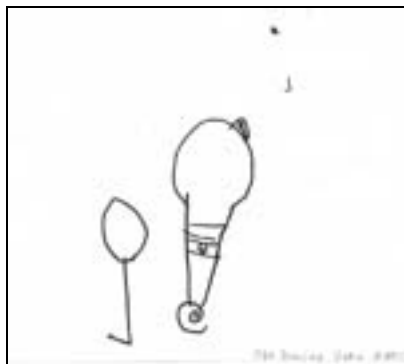


SS adds more details to the written music. Notice the eighth notes!

Few Facets to Multifacets

SS knew about violins and pianos. She commented before going to the Piano People store, "Pianos are bigger than violins." Her sketches of instruments became much more detailed. The February picture of a violin shows the bow and the violin. The memory drawing of instruments shows that she had knowledge of a few. The painting of the violin demonstrates a growth in

understanding about the shape and form of the instrument. Notice the greater detail of the strings and the bow at its side.

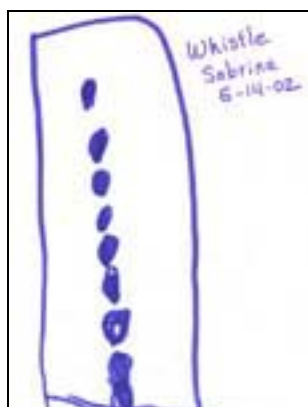


2/28/02
SS sketched a violin.



4/30/02
SS painted a violin with strings.

SS created an observational drawing of a train whistle. Notice the sharp corners and finger holes.



SS creates an observational drawing of a train whistle.

Smaller Leap to Greater Leap

SS typically gave comments about her own experiences in group discussions. In the music project, she began paying closer attention to what other students were sharing and began asking questions that had depth and some detailed knowledge of instruments studied. Here are some samples of comments and questions:

“I am so good, such a good job at my piano toy. My mom is going to give me Piano lessons. The next day and tomorrow. After tomorrow, I’m going to Kindergarten.”

SS asked the conductor, “What instruments do you play?”

SS asked the French horn expert, “Can you make a bad sound?”

SS wanted to know from a sibling, “Where did you get your music book?” After he played for us, she asked, “Why do you have color tape on your cello?”

SS asked the guitar player, “Where did you guys get the tuning pegs?”

She surprised the teachers and the French horn expert when she asked if he could make a bad sound with his instrument. She realized that instruments make sounds that listeners think are “good” and “bad.”

Growth in Initiative and Leadership

SS explored music and rhythm on her own, and then used her rhythm skills and knowledge to create her own music group during project/activity time. She gathered two friends for a percussion ensemble. One played various drums and the other the keyboard. SS grew in her confidence and ability to lead a group of children in an activity. Her disposition to socialize and make music with her peers also strengthened. She grew emotionally as well. In the beginning, she wanted to share every piece of music she wrote with the large group. Toward the end of the project, she gained self-satisfaction knowing that she had created her own music. She often just wanted to write it down for herself and take it home. SS certainly increased her interest in music. By the end of project, she wanted her mother to enroll her in piano lessons!



SS plays with a spontaneous percussion ensemble during project/activity time.