

Overview

This lesson will use a part of [Music Ace](#) (a music instruction application) called Doodle Pad to introduce my fifth grade students to writing music with the aid of a computer. Writing music with this software will allow my students to be successful much faster than by using paper. One of the best parts of using this program is that students can playback what they have composed and immediately hear what they have entered into the program; this will allow them to revise their compositions quickly and accurately. I have created a template that will allow my students to enter notes into blank measures that echo notes in previous measures. After they enter the echoes into the composition, they will go back to the beginning and modify their echoes into unique melodies.

Analysis

My fifth grade students know basic note and rest values, and can clap these rhythms using Kodaly syllables or numbers to count each beat. They can also recognize pitches on the treble staff (A through G) and can play simple melodies on classroom instruments. This knowledge is the basis of music composition, but it is only the beginning. They still do not understand keys, scales, key signatures, chords, or how all of these elements of music fit together. It would be difficult for my fifth graders to compose anything beyond a very simple melody on paper with any success. Even if they did, they may struggle to play it correctly and know for certain how it really sounds. In past attempts at composition, my students have created something in their head or with an instrument, but wrote that creation down incorrectly. They do not recognize this inconsistency because when they play their melody, they repeat what they had composed, not what they had notated on the paper. Pointing out the difference between what they composed and what they wrote down required me to play exactly what they wrote down so that they could hear any differences. At that point, they were able to go back and make corrections before I played it again for them. Although this process eventually works, it is slow in a classroom with multiple composers.

My students need the opportunity to create music now, rather than waiting until they know everything about music theory. When students create visual art, they know how the picture looks at any given time. When creating music, all they see are dots and symbols on a staff—the visual does not translate into sound. Using Music Ace for this lesson will give my students a way to quickly experience success because the software will provide immediate feedback whenever they press play. If they hear something wrong, they can make changes and play it again. The process of revision is much faster, efficient, and individually paced. This lesson will be facilitated in the library computer lab, and each student will have their own computer where they will be able to work independently. The program will set the scale, key signature, and meter signature, allowing the students to create music without dealing with every detail of music theory. The students will be able to use what they know about music theory without feeling frustrated with all that they do not know. Even students with limited knowledge will be able to manipulate the graphic interface to create their own composition. The focus of this lesson is not entirely on the specifics of music theory such as what pitches or rhythms they use, but also the creative process of writing music and revising what is written. I want them to understand that you do not have to be a professional musician or know everything about music to create your own music. Doodle Pad is one of many programs that allow a user to create or remix music with limited knowledge of music

theory. Even if they do not own it or a similar program at home, there are many web-based applications for creating music if they wish to explore composition further. Just as drawing programs allow anyone to quickly create art or graphics, computer-assisted composition is a tool that partially levels the playing field between amateur and professional musicians. Their limited knowledge of music theory should not inhibit them from creating and experimenting with sound, and I want to provide them with a positive experience of exploring their creative abilities.

Design and Development

Outcomes

Show Me Standards

Knowledge Standards

Fine Arts: process and techniques for the production, exhibition or performance of one or more of the visual or performed arts

Process Standards

Goal 1: Students will demonstrate within and integrate across all content areas the ability to

4. use technological tools and other resources to locate, select and organize information
6. discover and evaluate patterns and relationships in information, ideas and structures
8. organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation

Missouri GLE

Improvise short rhythmic and melodic patterns

Improvise short songs and instrumental pieces, using a variety of sound sources

Notate rhythmic patterns presented by the teacher in 4/4 meter signature using bar lines

District Objectives

Employ the 'stages' of composing: prewriting, drafting, revising, editing, and publishing

Use standard notation for rhythm and pitch to record musical ideas of 2 to 4 measures

Resources

This lesson will be conducted in the library computer lab. Each student will have their own computer with headphones. I will utilize the library's shared network folder to distribute templates and collect completed assignments. Technology plays a crucial role in this lesson because it will lower the frustration factor as students work on their compositions. The computer will take care of many of the details of writing music, allowing my students to experiment with the combinations of sounds that are represented by the notes on the screen. The program also facilitates creativity by playing back what the students have composed on the staff. The immediate feedback is probably the biggest advantage over composing with paper. Mistakes are immediately heard, and the revision process is much easier as a result. The computer will play the piece as many times as the student wishes to revise it.

Media

Each computer has Music Ace installed. This program will be the only application necessary to complete the assignments in this lesson. I have created a template that each student will open, rename, and save to the shared network folder. The template contains short musical phrases that the students will echo in blank measures that follow each short phrase. When the student has entered the echo portions, the melody will be complete.

Learning integration strategies

Marzano's Instructional Strategies

Nonlinguistic Representations

Since music notation is a nonlinguistic representation of sound, the entire project will utilize this strategy, although perhaps not in the way originally intended by Marzano. My students will be given the task of arranging notes onto the lines or spaces of a staff to assign pitch and rhythm into organized sound, or music.

Generating and Testing Hypotheses

Just as writing is a process of revision, so is composition. Students will have the opportunity to try various combinations of pitch and rhythm, instantly hear the results, and make any necessary changes before hearing the results of those changes.

Differentiated Instruction

The process-focused nature of the project allows for individual results, even if all students are using the same template. Students with more musical knowledge and creative abilities will be able to write more complex melodies, while students with less knowledge will also be able to complete the assignment with simpler melodies.

Depth of Knowledge

The activities in this project will fall in level two and three of the depth of knowledge spectrum. Since the assignment does not require them to start from scratch, they will not reach a level four understanding of the topic. They will have opportunities to organize (level two) pitch and rhythm to create (level two) a short piece of music. Revision and assessing (level three) their results will be also be necessary steps to show successful completion of the assignments.

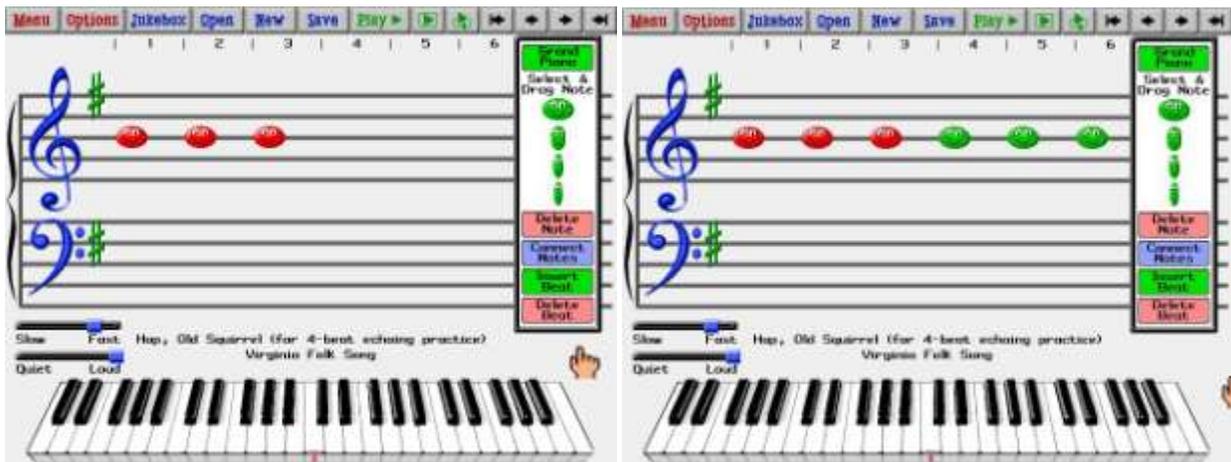
Structure and sequencing of the learning activity

I will begin by introducing them to the Doodle Pad module of Music Ace. They have used other parts of Music Ace, so they will be familiar with the process of starting the program. I will introduce Doodle Pad the week before we are in the computer lab to maximize the time we have in the lab. I will use the computer and SmartBoard in my classroom to demonstrate the basic functions of the program and introduce the assignment. I will explain how to open the templates and where to save their finished work. Each student will be given a written set of instructions containing this information when we are in the lab (it will be at least a week after they are introduced to the lesson in my classroom).

Once in the lab, I will briefly review the instructions from last week, point out the written instructions next to each computer, and then allow them to open and begin working on the template.

Week One:

The template for this assignment will contain a folk song with many repeats. The first statement of each repeated phrase will be already in the template (red notes), with blank measures following. The students will use the same rhythms and pitches to enter an exact repetition (in different colored notes) of what precedes the blank measures. While doing this, students will learn to enter notes, correct mistakes, delete notes, change instrument sounds, and navigate from measure to measure. I will encourage them to listen to the song to make sure the repetitions are exact and nothing is missing or added. When students say they have finished the assignment, I will ask if they have played the entire song and have listened for errors and made any necessary corrections.



Week Two:

Before they open their files from last week, I will instruct them to change a few things in the repetitions (non-red notes) they entered last week. They should start at the beginning of the song and alter the repeated phrases in order. I will tell them not to skip to another phrase until they are happy with the preceding one. This will hopefully keep them focused on one thing at a time rather than jumping around in the song. This is the creative component of the lesson; they will be given the opportunity to make decisions based on pitch, rhythm, and melody. They will only be able to alter the repetitions (not the first statement of each group), so they will have to make sure what they compose fits into the rest of the song. I will encourage them to listen to what they have composed often, and make changes based on what they have heard.

Assessment of Student Learning

My assessment of the assignment from the first week will be an objective survey of their composition. It will be easy to see if their entered notes are exact repetitions of the red notes preceding them. Since the purpose of the first activity is learning to use the program, there is not much room for creativity and the notes will either be right or wrong.

My assessment of the activity from the second week will be more subjective. As I walk around the computer lab, I can ask questions such as:

- Why did you decide to use those pitches?
- Why did you decide to use those rhythms?
- What effect were you trying to create?
- Is this exactly what you wanted, or were you unable to exactly duplicate what you heard in your head?
- Would this be harder or easier to accomplish if you were unable to listen to your composition?

Answers to these questions should give me insight into their thought process and decision making. Their answers should tell me if they truly understand the creative process of writing music with the aid of the computer or they are merely arranging notes on the screen. This interaction will be useful in accessing if they have met Goal 1.6 of the Show-Me Process Standards (discover and evaluate patterns and relationships in information, ideas and structures).

When I look at the completed files afterwards, I will use the following rubric to assign a final grade.

	1-Below Basic	2-Basic	3-Proficient	4-Advanced
Completeness (week 1) use technological tools to locate, select and organize information (Show Me Standards Goal 1.4)	No notes have been entered into the empty measures of the template	A few empty measures have been completed. The student used red notes (rather than a different color) to complete the assignment	Most empty measures have been correctly completed with different colored notes (not red).	All empty measures have been correctly completed with different colored notes (not red)
Completeness (week 2) organize data, information and ideas into useful forms (Show Me Standards Goal 1.8)	Nothing has been changed in the repeated phrases	A few changes have been made, but they appear random. Changes have been made to phrases out of order indicating the student skipped through the song rather than working from beginning to end.	Changes were made from beginning to end of the song. The student-composed melodies show evidence of organization.	Changes were made from beginning to end and the notes are clearly not repetitions of the first part of the phrase. The melodies show thought and musicality.
Creativity (week 2)	The student does not change the exact	The student makes a few alterations from the exact repetitions, and there is little creativity exhibited.	The student's additions to the song show evidence of	The student's additions to the song show evidence of creativity and thought. The student attempts to

	repetitions into a unique musical phrase.		creativity and thought.	create a relationship between the music that was provided in the template and what they composed.
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Implementation

I will present this lesson to 16 different groups of fifth graders. Since I often change details of lessons based on previous results, I fully expect to tweak this lesson as I progress through each section of fifth graders.

Possible areas needing adjustments may include:

- The amount of time it takes to get started on the assignment (re-explaining a week later).
- Navigating the menus to open and save the templates on the library's shared network folder.
- The amount of time I allow to complete the assignment
- Motivating them to actively listen to what they compose, rather than just hearing sound through their headphones.
- Helping them understand the relationship between what they compose on the screen and what they hear.
- Encouraging them to ask reflective questions about their composition.
 - Does this sound like music or random sound?
 - Is this as good as I can make it?
 - How can I make this better?

Possible challenges students may experience are:

- The temptation to “play” with the program rather than stay on task, or entering random notes without making musical decisions about their composition. If time remains after the assignment is completed, students will be allowed to begin a composition from scratch and explore more functions of the software.
- Becoming overwhelmed by feeling there are too many choices
- Not knowing how to get started

By using templates, I am hoping to avoid these problems by giving them a specific task with a clear starting point to limit off-task behaviors, and limiting their choices to keep this from appearing as an overwhelming task.

Of course, there are also technology based issues that can create problems. Music Ace is a networked application and when we have used the drill and practice portion of the program in the past, we have experienced slow performance and lock ups necessitating a restart of the program. The students will not log into the library computers with their unique logins—this will eliminate any problems resulting from forgotten IDs or passwords.

Evaluation

I will determine the value and feasibility of this learning activity based on the compositions that are turned in, as well as student reactions following the completion of the assignment. The compositions will indicate the level of success achieved by the students as they used the computer to compose music. I should see music that could not be composed on paper in the same amount of time. With the aid of the computer, my students should be able to create music using nonlinguistic music notation, even if they don't understand everything about this nonlinguistic system. I know some students would become easily frustrated with a blank piece of paper and an assignment to fill it with music; I should see a lower frustration level and higher a level of success than I have observed in previous paper-based class activities. When gauging student reactions following the assignment, I will look for things such as:

- Indicated comfort level with the activity
- Perceived success or failure in completing the activity
- Perceived ease or difficulty in completing the assignment
- Eagerness or reservations about composing with the same program again
- General excitement or enthusiasm about the project
- Pride in what they composed
- The level of ease or difficulty they experienced while generating and testing their ideas as they wrote and revised their composition

As with any creative process, there are many subjective goals and attitudes to assess. I want to offer my students an opportunity to feel successful using what they currently know about music to create music, rather than thinking of composition as something they can only do later after many years of study. This will be a successful lesson and worth the time to plan and implement if my students feel free to create and explore without feeling nervous or overwhelmed. By using the template, I am hoping that there is enough support to provide them a starting point, while allowing them to construct an understanding of the process of writing and revising music.