



Lesson Plan for Implementing NETS•S

(More Directed Learning Activities)

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Grade Level(s)	Third Grade
Content Area	General Music
Time line	Three 45-minute class periods

Standards (What do you want students to know and be able to do? What knowledge, skills, and strategies do you expect students to gain? Are there connections to other curriculum areas and subject area benchmarks?) Please put a summary of the standards you will be addressing rather than abbreviations and numbers that indicate which standards were addressed.

By the end of this assignment, students will have a better understanding of musical form, a variety of online tools and apps, and the cross-curricular connection between Music and Art. Students already know how to compose melodies and rhythms on paper, and through this assignment they will learn how to use a web-based application to do the same thing. Students have also already had experience with reading melodies by singing and performing on instruments, and this assignment will give them the experience of recording themselves while doing so. Students will learn how to work together to create a simple form (e.g., AB or ABA) by collaborating with classmates. Students will not only create connections between music and technology through the varied online tools they will use, but they will also gain an understanding of the interdisciplinary connection between Music and Art, as they will be creating original photographs or digital illustrations to match their desired form.

3rd Grade General Music (Content) Standards:

- M3GM.1d: Sing and identify a simple sequence of pitches which include low Sol, low La, Do, Re, Mi, Sol, La, and high Do (via Audioboo)
- M3GM.2c: Perform pentatonic and other melodic patterns using instruments with appropriate technique (via Audioboo)
- M3GM.3c: Read melodic patterns within a treble clef staff which include low Sol, low La, Do, Re, Mi, Sol, La, and high Do (via Audioboo)
- M3GM.5b: Compose rhythmic patterns in simple meter including quarter notes, beamed sixteenth notes, quarter rests, half notes, paired eighth notes, and whole notes (via Noteflight)

- M3GM.5c: Compose simple melodic patterns (via Noteflight)
- M3GM.5d: Arrange rhythmic patterns creating simple forms and instrumentation (via Thinglink)
- M3GM.8a: Describe the relationship between music and the other arts (via Thinglink)

NETS-S Standards: (All achieved via Noteflight, Audioboo, and Thinglink)

- 1a: Apply existing knowledge to generate new ideas, products, or processes
- 1b: Create original works as a means of personal or group expression
- 2a: Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- 2b: Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- 2d: Contribute to project teams to produce original works or solve problems
- 4b: Plan and manage activities to develop a solution or complete a project
- 5a: Advocate and practice safe, legal, and responsible use of information and technology
- 5b: Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- 6a: Understand and use technology systems
- 6d: Transfer current knowledge to learning of new technologies

Overview (a short summary of the lesson or unit including assignment or expected or possible products)

This assignment for third graders will be a culminating project for the unit on “form,” and in addition, students will draw on knowledge and skills they gained in earlier units from third grade. Students will use an online music notation website called Noteflight to apply their knowledge of melody, rhythm, and composition to create a short, original piece, either independently or with a partner. Using an online podcasting website called Audioboo, they will record themselves performing their short compositions either by singing or playing them on a melodic instrument of their choice (xylophone, piano, recorder, etc.). They will collaborate with another student or pair to apply their new knowledge of form by creating an arrangement of their compositions/recordings in a simple form of their choice, such as AB or ABA. They will make cross-curricular connections with Art when they either photograph or use an online paint program called Sketch n Paint to draw a picture that matches their chosen form. Finally, they will upload their image onto Thinglink, where they will link in their Audioboo recordings to connect their image to their desired form. They will add a text blurb to their Thinglink image to explain how the image matches the form that has been created from combining these recordings.

Essential Questions (What **essential question** or learning are you addressing? What would students care or want to know about the topic? What are some questions to get students thinking about the topic or generate interest about the topic? Additionally, what questions can you ask students to help them focus on important aspects of the topic? (Guiding questions) What background or prior knowledge will you expect students to bring to this topic and build on?) Remember, essential questions are meant to guide the lesson by provoking inquiry. They should not be answered with a simple “yes” or “no” and should have many acceptable answers.

1. How do composers work together to create form?
2. How can artwork help demonstrate different types of form?
3. Which simple forms can we create with our own compositions?
4. How can we take a simple composition and arrange it into a simple formal structure?
5. How can we use our knowledge of melody and rhythm to create a composition?
6. How can we use digital tools to demonstrate our knowledge of melody, rhythm, and form?
7. How does collaborating with others make us better musicians?
8. How can we use our prior musical experiences to create something new and original?

Assessment (What will students do or produce to illustrate their learning? What can students do to generate new knowledge? How will you assess how students are progressing (*formative assessment*)? How will you assess what they produce or do? How will you differentiate products?) You must attach copies of your assessment and/or rubrics. Include these in your presentation as well.

To demonstrate learning of different musical and technological skills and concepts, students will create a different product for each step of the project, each of which builds upon the one before it. I will assess students' progress at each step so that they can go back and correct mistakes as needed before moving onto the next step (formative assessment).

Step 1: Students will show their knowledge of rhythm and melody by creating their own original compositions on Noteflight. They will use the lyrics tool to label the pitches with Solfege note names (Do Re Mi) and/or letter note names (A B C) depending on if they plan to sing and/or play an instrument in Step 2. The compositions will be graded according to a rubric based on set parameters for melody and rhythm but will allow for differentiation in the product as well. For example, I will ask students to use only notes from the pentatonic scale without explicitly stating how many different pitches they should use; students with less confidence or skills can stick to using 2-3 pitches while more advanced students can use pitches from the extended pentatonic scale in addition to the basic pentatonic scale.

Step 2: Students will demonstrate their ability to read and perform rhythm and melody by using Audioboo to record themselves performing their own composition, either by singing or performing on a melodic instrument of their choice. As some students feel more comfortable with their singing voices and others feel more comfortable with playing an instrument, I will allow students to choose how they will perform their composition (differentiate products). This recording will be assessed with a rubric that states specific parameters for pitch and rhythmic accuracy. Since these performances will be recorded in a podcast on Audioboo, I will be able to assist students in the classroom while other students are recording themselves and then assess those recordings after the fact, rather than being available only for assessment.

Step 3: Students will demonstrate their understanding of simple form (e.g., AB, ABA) by combining their recording/compositions with that of another student or pair. They will choose to either use an online paint tool to draw a picture or use iPads to capture a photograph that matches their form (differentiate product). They will upload this image to an online tool called Thinglink. Then they will link their recordings to different parts of the image in order to display their form and the recordings together. They will also link a comment that explains how the image is related to the musical form they created. This product will be assessed with a third rubric that states guidelines for images that appropriately match the stated form and accurate recording incorporation to match the form. Students from both groups will be assessed with the same rubric.

See attachment for rubrics.

Resources (How does technology support student learning? What digital tools, and resources—online student tools, research sites, student handouts, tools, tutorials, templates, assessment rubrics, etc.—help elucidate or explain the content or allow students to interact with the content? What previous technology skills should students have to complete this project?)

Students will use four digital tools in this project. For Step 3, students will choose one of two digital tools to use depending on how they decide to create the image for the final product.

- Noteflight – online music notation software for composing melodies in Step 1
- Audioboo – online podcasting tool for recording themselves perform their compositions in Step 2
- Sketch n Paint (option 1) – online paint tool for students who wish to draw their own image that matches their form in Step 3
- iPad Camera (option 2) – built-in camera on iPads to take photographs of images throughout the school that match their form in Step 3
- Thinglink – online image interaction tool for linking podcasts to images to show form in Step 3

Students should have prior experience with basic typing skills, saving files, and uploading files to a website. Students will use my username with a common password rather than creating their own usernames for the tools that require a login (Noteflight, Audioboo, and Thinglink).

Instructional Plan

Preparation (What student **needs, interests, and prior learning** provide a foundation for this lesson? How can you find out if students have this foundation? What difficulties might students have?)

Students have already completed units on rhythm and melody earlier in the year before completing this assignment; however, students will need a brief recap of these concepts before applying them again. I will assess their knowledge and memory of these concepts with informal formative assessments in the review lesson, e.g. read a melody from the board, aurally transcribe a rhythm they hear, etc. Students may have difficulty applying their knowledge of rhythm and melody to an online composing platform (Noteflight), as we did not practice using that tool during those units. I will go over the tool in detail with the students, explaining many different aspects such as how to change the pitch, how to change the rhythm, how to undo a mistake, how to add lyrics, how to control playback for their compositions, how to save, etc.

They will have just learned about musical form in a lesson prior to this project. I will use informal formative assessments when teaching about musical form in that introductory lesson to gauge students' understanding of the concepts. This project will serve as a culminating project for the form unit to formally assess student learning.

Management Describe the classroom management strategies will you use to manage your students and the use of digital tools and resources. How and where will your students work? (Small groups, whole group, individuals, classroom, lab, etc.) What strategies will you use to achieve equitable access to the Internet while completing this lesson? Describe what technical issues might arise during the Internet lesson and explain how you will resolve or **trouble-shoot** them? Please note: Trouble-shooting should occur prior to implementing the lesson as well as throughout the process. Be sure to indicate how you prepared for problems and work through the issues that occurred as you implemented and even after the lesson was completed.

Before beginning this project, I will give students a brief overview of the whole process, including the digital tools they will use in each step. This will be an in-school project to ensure equitable access to technology devices. Students will also have equitable access to technology in that *all* students will be using the same digital tools for the purpose of higher-order thinking and creativity, rather than delegating only some students to this type of experience and having others use technology for lower-order thinking skills and tasks, such as drill-and-kill activities. Because all students will use a common login and password (my own), we will not need to create individual accounts, which is another way to ensure equitable access. I will make myself available to assist students as needed while they take the learning and creativity into their own hands. Students know from previous practice not to get out of their seats or call out my name if they need help, but rather to raise their hand to let me know, and in the meantime move onto something else they can do on their own while waiting for me to come to them. In order to save time and to ensure safety, all students will use my username and a common password for the tools that require a login (Noteflight, Audioboo, and Thinglink). We will work in my classroom, making use of the student laptop cart and iPad cart. For the iPads, I will use the Guided Access feature, which disables students from exiting a given app and instead locks them into only the app they are currently using. For students to quickly access all the digital tools, I will create a bookmark folder on the student computers so that they do not have to worry about typing in the correct URL address.

In order to offset a potential technical issue of blocked student access, I have gone ahead and asked our school technology specialist to unblock the websites involved in this project (Noteflight, Audioboo, Thinglink, and Sketch n Paint). I have also spent time becoming personally familiar with these tools so that I can best facilitate the lesson and guide students through using these tools. This familiarity with the tools will also help me troubleshoot as unforeseen problems arise. A potential technical issue is that the network can sometimes unexpectedly go down for extended periods of time. If this were to happen, I would have different backup plans for each step. For Step 1 (composing), I would ask the students to use staff paper and pencils to hand write their compositions which they could transfer to Noteflight at a later time. For Step 2 (recording), I would have students use the built-in microphones on the student computers and/or iPads to create their recordings and then upload the audio file to Audioboo when the network comes back online. For Step 3, I would have students who wish to draw their image do so using paper and crayons, colored pencils, and/or markers. I have a scanner in my classroom, so I would scan these images and upload them to Thinglink when the network is back up. Students who wish to photograph a visual representation of their form can do so with the built-in cameras on the iPads without having to be connected to the network; these images could be uploaded to Thinglink at a later time. I will make backups of all the students' work on my computer's hard drive at the end of each step so that if part or all of a student's work is lost, including after the project is over, then we can recover the work and put the pieces together again.

Instructional Strategies and Learning Activities – Describe the research-based instructional strategies you will use with this lesson. How will your learning environment support these activities? What is your role? What are the students' roles in the lesson? How can you ensure **higher order thinking at the analysis, evaluation, or creativity levels of Bloom's Taxonomy**? How can the technology support your teaching? What authentic, relevant, and meaningful learning activities and tasks will your students complete? How will they build knowledge and skills? How will students use digital tools and resources to **communicate and collaborate** with each other and others? How will you facilitate the collaboration?

Through the duration of this project, the learning environment will be transformed into one of student collaboration and creativity. I will support this learning environment through my role as facilitator. After I introduce the project and describe each of the steps to the students, I will monitor the classroom and assist as needed (see "Management" above). The students' roles in this project will be producer. They will create three different, accumulating products throughout the project to demonstrate their learning and creativity. Students

will be operating at the highest level of Bloom's Taxonomy – creating – as they produce these three original products to combine them together to create something totally unique. They will be operating at Depth of Knowledge (DOK) levels 3 and 4 as they apply many different concepts they learned to create their original products.

The project will be engaging because it calls for student-directed creativity and decision-making at every step. Students must rise to the challenge and contribute to their own project rather than taking a backseat to their learning. They will also be engaged because of the wide variety of tasks and skills in this project – there is something for everyone! This project will be authentic because they will be operating at such high levels of thinking and creating musical products (composition and recording) as real composers and recording artists would do, as well as collaborating with others to create their product. Students will have a choice of working either individually or with a partner for Steps 1 and 2 (Noteflight composition and Audioboo recording), and all students will team up with another student or pair of students to arrange the form and create visual representation in Step 3 (Thinglink image). This task will be relevant because it incorporates many different concepts we have covered in class this year (melody, rhythm, singing, playing, reading), including a direct connection to the last unit of form. In addition, it will incorporate Art concepts that they are learning in that class as well as technology skills that they are always excited to put into practice.

The creation of these products will give students ownership of their learning by applying concepts to create something unique. Students will use technology to create these original works, and to collaborate with others. Some will start collaborating right away in Steps 1 and 2 if they choose to work with a partner for composing and recording. Students who worked independently in those steps will still collaborate with classmates in Step 3 when they combine with another student or pair to create their form and images. The digital tools in this project each support a different skill or concept: Noteflight allows students to demonstrate knowledge of melody and rhythm, Audioboo allows students to demonstrate singing or playing skills along with reading skills, and Thinglink gives students the opportunity to connect their learning to the new concept of form by allowing students to combine different pieces of music together to create an original composition with a specific formal structure.

Differentiation (How will you differentiate **content and process** to accommodate various learning styles and abilities? How will you help students learn independently and with others? How will you provide extensions and opportunities for enrichment? What assistive technologies will you need to provide?)

Students are truly the producers in this project. As such, students will make their own artistic and personal choices about how they want to create their products at every step. For Step 1, they must choose to either work with partner or alone to compose their melody and rhythm. They must also choose how simple or complex to make their composition (e.g., extended pentatonic vs. basic pentatonic vs. 2-3 different pitches; easy rhythms or more difficult patterns). For Step 2, students will have a choice between either using instruments or singing their composition for the Audioboo recording. For Step 3, students will choose which form they want to create (AB or ABA). They will also choose to either draw or photograph a picture that visually represents their desired form for their Thinglink image.

For students wishing to work with a partner, I will encourage them to form pairs that can be helpful for students needing extra help. I will provide optional "cheat sheets" to help students remember basic melodic and rhythmic patterns. For students needing extension and/or enrichment, I will assign them the role of peer helper and assign them a particular student or pair of students to assist. For students with disabilities or other learning needs, I will ensure access to assistive technology such as text-to-speech for writing lyrics and description of form, zooming in the screen to see bigger and in more detail, using headphones, allowing students to listen to their recording as they sing or play on an instrument to guide their performance, teaming with a classmate and

translating or simplifying vocabulary for ELLs.

Reflection (Will there be a closing event? Will students be asked to reflect upon their work? Will students be asked to provide feedback on the assignment itself? What will be *your process* for answering the following questions?)

- Did students find the lesson meaningful and worth completing?
- In what ways was this lesson effective?
- What went well and why?
- What did not go well and why?
- How would you teach this lesson differently?)

Even though I tried to troubleshoot problems well before the implementation stage of this project, I still wasn't quite sure how it would turn out since I had never used technology in this way with third graders before. So, I implemented this lesson plan with only one class of third graders so that I would have time to make adjustments before I saw them again a week later. I knew that the students who were involved in the project were having a great time with when my other third grade classes, who had heard about this project from their friends, asked me why they didn't get a chance to try it as well. I promised them that they would get a chance before the end of the year!

This lesson was effective because my students walked away with a very thorough understanding of musical form and how we can use artwork to connect our ideas of aural music to a visual image. It was fascinating to watch students make those connections. When students were working on creating their visual representations of their chosen form, I heard one group talking about a weaving project they did in first grade Art that followed an AB pattern, and how cool it would be to use it again for this project. I told them they were welcome to take a picture of their artwork at home and use it for their image, and they were thrilled!

The part that went the smoothest was Step 2 – Audioboo recording. This is because I had actually introduced Audioboo for podcasting to all my classes earlier this year and last year, so they were already familiar with the website and how to create their own recordings. Hardly any students needed my help to record themselves and save their recordings to my Audioboo page, and all the recordings turned out really well.

As expected, Step 1, Noteflight composition, was very difficult for my third graders (see "Preparation" above). They had not had any experience with a computer-based notation tool before. The problem with this tool is that it is designed to be capable of in-depth composition skills, many of which my third graders do not yet possess. For example, there are several rhythms that my students have never seen that are available on the rhythm notation tool. I spent a lot of time with individual students and pairs of students erasing whole measures of their compositions because they had made a mistake so early in their composing that it wasn't going away with the "undo" button. Unfortunately, many of the compositions turned out with rhythms that were much simpler than the students were capable of making, simply because they didn't know how to use the website to create those rhythms.

At the end of the project, students were able to reflect on their learning when the students took turns showing their final product (Thinglink image) to each other. They played their recordings and showed what they had written about how their image matches their form, and other students took turns offering compliments and constructive comments. It was great to hear the students using new music vocabulary terms to discuss each other's work. I was able to reflect on this project too, and I already have ideas of how I would do it again. Next year when I teach this lesson/implement this project with a new group of third graders, I will make some adjustments. First, I will be sure to introduce Noteflight *while* we are working through the rhythm and melody

units next year, rather than four months after those units have passed, so that they have a clearer idea of how to use the website. I will collaborate more with the Art teacher to see if there are any projects that she implements with third graders that might work for the purposes of this project as well.

Closure: Anything else you would like to reflect upon regarding lessons learned and/or your experience with implementing this lesson. What advice would you give others if they were to implement the lesson? Please provide a quality reflection on your experience with this lesson and its implementation.

This was a very interesting experience, both for the students and for me. I had to learn how to be patient and relinquish my role as leader in order to take on the role of facilitator so that the students could be the producers. Since Music in an ensemble class and I am the leader of the group, I am not used to taking on this role. However, the students rose to the challenge and impressed me with their creativity, skill, and enthusiasm. If other Music teachers were to implement this lesson, the biggest piece of advice I could give would be for them to become familiar with these three tools so that they can guide students through using them. For example, if I hadn't known the particulars of Noteflight, then I wouldn't know (a) how/why the students kept making the common mistake with the rhythm tool, or (b) how to help them fix it. I would also encourage Music teachers to take a step back and enjoy the ride – the students are capable of great work, if we let them.

Screencast presentation: <https://www.youtube.com/watch?v=nzmDEREYAqU>