

Lindenwood University

Digital Commons@Lindenwood University

---

Theses

Theses & Dissertations

---

Spring 5-2020

## Leveraging Non-Traditional Notation and Technology to Enhance a Fourth Grade Recorder Unit

Stephenie Mokriakow

Follow this and additional works at: <https://digitalcommons.lindenwood.edu/theses>



Part of the Music Education Commons

---

LEVERAGING NON-TRADITIONAL NOTATION AND TECHNOLOGY TO ENHANCE A  
FOURTH GRADE RECORDER UNIT

by

Stephenie Mokriakow

Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Music Education  
at  
Lindenwood University

© May 2020, Stephenie Mokriakow

The author hereby grants Lindenwood University permission to reproduce and to distribute publicly paper and electronic thesis copies of document in whole or in part in any medium now known or hereafter created.

Stephenie Mokriakow June 4, 2020

Author's Name Date

 6-4-2020

Author's Signature

Katherine Herrell 6/4/2020

Committee Chair Date

**Katherine Herrell** Digitally signed by Katherine Herrell  
Date: 2020.06.08 08:11:25 -05'00'


Committee Chair Signature

Ryan Curtis 6/8/2020

Committee Member Date

  
Committee Member Signature

Committee Member Date

  
Committee Member Signature

## ABSTRACT

Title of Thesis: Leveraging Non-Traditional Notation and Technology to Enhance a Fourth Grade Recorder Unit

Stephenie Mokriakow, Master of Music Education, 2020

Thesis Directed by: Dr. Katherine Herrell, Associate Professor Music School of Arts, Media and Communication

This action research project analyzes the traditional methods of teaching recorder to fourth grade students to expand upon these traditional methods and create a unit that leverages technology and non-traditional notation as well as introducing students to traditional music notation. The unit includes lessons that are scaffolded to meet the desired end results. The learning objectives include understanding of basic rhythm patterns and beginning notes on the recorder. The culmination of the lessons will end with a series of songs that the teacher will use to assess students.

### **Acknowledgements**

I would like to express my deepest gratitude to my Advisory Committee. They have helped me throughout each step of this process. Dr. Kate Herrell for being my Committee Chair and providing me with great feedback on how to make this project and project report the best that it can be. Thank you also to Dr. Ryan Curtis and Dr. Matthew Hoormann for helping with additional editing and feedback that I was able to use to make this project and report even better. They have been supportive of my Research Project from the beginning. They were there to listen to my concerns, as well as providing feedback on everything. I would also like to thank Dr. James Hutson for all of his support and guidance throughout this Thesis project. Besides these wonderful professors, I would like to thank my family for keeping me motivated to continue working hard to complete the requirements to graduate with my master's in music education.

## Table of Contents

Acknowledgements .....	4
Introduction .....	6
Literature Review .....	8
Methodology .....	17
Production and Analysis .....	19
Conclusions.....	22
References.....	24
Appendix 1 .....	30

## Introduction

The recorder is a small woodwind instrument taught in school to students in grades three through five. There are different types of recorders such as the alto and bass recorders but the one commonly used in the general music room is the soprano recorder. The soprano recorder is approximately 12 inches in length and is usually made out of hard plastic. These recorders are generally inexpensive and a great way to get students playing music on an instrument of their own. Depending on a school's socioeconomic factors, classroom instruments may be scarce. Learning the recorder is an excellent foundation for other woodwind instruments. (Nosowitz, 2015) Teaching students the recorder is essential for their basic knowledge of music. (Nosowitz, 2015) "It's an accessible instrument... which gives young students a big step up in the learning of the recorder... It is the perfect size for a small child's hand." (Nosowitz, 2015) The air needed to create the sound needs to be a warm and steady stream flowing through the instrument.

Recorder, like other instruments, can be taught using a method that based upon the teacher's preference. There is a method called Recorder Karate. In this method the students will learn to play different songs in an order that progresses in difficulty. Once students master a song, they earn a colored string to dangle at the bottom of their recorder. With this method, students will have the music in front of them to learn and prepare each song.

Another recorder curriculum is called Recorder Monster. The goal of this method was to teach recorder and incorporate technology into the lessons. While this method used technology as a tool to assist with learning, there are not many examples for students to play along with before the song is introduced.

The goal of this action research project was to create a unit to teach fourth grade recorder that leverages alternative approaches such as using technology to aid with instruction outside of the classroom, providing time within the classroom to perfect those skills. Technology is used synchronically to assist with student's knowledge of music notation. The method in the beginning was learning by rote and then moved into a more technology encompassed lesson, beginning with notation introductions and illustrating how notes are to be produced on the recorder. The method in this project differs slightly by beginning recorder lessons with a non-traditional approach. The idea was to create warm-up activities that guide students to how the notes are produced on the recorder. This looks like a diagram of the recorder with the holes that are to be covered to produce the desired note filled in.

After these various warm-up activities, basic music notation is added to what they have already practiced. The notes on the staff appear along with the iconic notation of how the notes are to be played. Once students are more comfortable with playing the notes and where the notes are located on the staff; the notes then become combined to create a basic song. The basic songs progress into the introduction of more notes and new rhythm patterns.

## Literature Review

This literature review investigates five different aspects of teaching recorder in the elementary classroom. This will begin with the rationale for teaching recorder to fourth-grade students followed by a short discussion on traditional versus non-traditional notation. Following that, there will be discussion about the pros and cons of teaching students by rote. The fourth section discusses appropriate uses for technology in the music classroom and how technology can be used to enhance lessons in the music classroom. Before finalizing the literature review, we will discuss asynchronous learning and how that can be used in the music classroom.

Teaching elementary aged students to play the recorder is typical in the curriculum. Kuijken reflects back on his elementary music education in his book *The Notation Is Not the Music: Reflections on Early Music Practice and Performance*. In his book, he begins by discussing his personal experiences as he learned to play the recorder in school. (Kuijken, 2013, p.5) He stated when he later began to play the flute, how his flute teacher dismissed his passion for the recorder by giving the recorder the title of nothing more than a mere toy. (Kuijken, 2013, p.5) That was something that appeared to stick with him well into adulthood.

The book *Analyzing Influences: Research on Decision Making and the Music Education Curriculum* by Thompson and Campbell discusses “the tension and difference between theories of curricular design.” (Thompson, 2015, p.23) They remind the reader that Curriculum is “the ground between” educational theory and practice. (Thompson, 2015, p.23) They go further on to notate the importance of deciding on the objectives and then move on to the pedagogy: *how* the objectives are to be taught. During their constructed research they found that some participants believed planning must be a more responsive approach. When discussing a responsive approach they mean to have your lesson planned, but to be ready to adjust the lesson as it is being delivered based upon interactions with students. (Thompson, 2015, p.23) Other experienced



educators felt the importance of matching lesson planning to the contextual demands of field experiences. (Thompson, 2015, p.32). Knowing the curriculum and how it is changing is the most important guide any teacher has for framing their units and lessons into a cohesive plan. (Thompson, 2015, p.32)

In Watson's article, he reminds his readers of the beginning of the MENC (Music Educators National Conference) national standards which teachers use as their guideline for teaching their curriculum. (Watson, 2011, pgs.8-9). The MENC standards have since been adapted and changed as newer movements came through. MENC was changed to NAfME (National Association for Music Educators) on September 1, 2011. (NAfME, 2015). They have created the National Core Arts Anchor Standards, where there are four main ideas: creating, performing, responding and connecting.

These standards are grouped into smaller common anchors with an enduring understanding and an essential question. Upon deeper inspection on the 2014 Music Standards, teaching the recorder connects to each of the main ideas listed for the music standards. A recorder lesson that's main idea is creating; the enduring understanding being: "The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources." (2014 Music Standards, p. 1) The essential question being "How do musicians generate creative ideas?" (2014 Music Standards, p. 1) Looking at the fourth grade specific content that is to be understood, students' are to understand the following: "Improvise rhythmic, melodic and harmonic ideas..." and "Generate musical ideas (such as rhythms, melodies, and simple accompaniment patterns) within related tonalities... and meters." (Music Standards, p. 1) Creating a lesson with all of this in mind, students' can be taught to improvise a short melodic pattern on their recorder.

The second main idea is performing. Performing is another standard to which a music teacher can utilize the recorder as a tool for teaching and engaging students. The common anchor is number four. (2014 Music Standards, p. 7) The enduring understanding for this common anchor is “Performers make interpretive decisions based on their understanding of context and expressive intent.” (2014 Music Standards, p. 7) The essential question for this common anchor is “How do performers interpret musical works?” (2014 Music Standards, p. 7) This connects to playing the recorder, because this allows time for reflecting upon individual and group recorder performances.

The third of the four main ideas, Responding, and the common anchor number nine can connect to a recorder lesson. (2014 Music Standards, p. 12) The essential understanding is “The personal evaluation of musical work(s) and performance(s) informed by analysis, interpretation, and established criteria.” (2014 Music Standards, p. 12) The essential question for this common anchor is “How do we judge the quality of musical work(s) and performance(s)?” (2014 Music Standards, p. 12) Grade Four is to “Evaluate musical works and performances, applying established criteria, and describe appropriateness to the context.” (2014 Music Standards, p. 12) Students are able to evaluate their performance and the performance of others.

The final main idea is connecting. The common anchor number ten is the one that would apply to teaching the recorder. (2014 Music Standards, p. 13) The enduring understanding is “Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing and responding.” (2014 Music Standards, p. 13) The essential question for this anchor standard being “How do musicians make meaningful connections to creating, performing and responding?” (2014 Music Standards, p. 13) The grade level expectation for fourth grade is to “Demonstrate how interests, knowledge, and skills relate to personal choices and intent when

creating, performing, and responding to music.” (2014 Music Standards, p. 13) The recorder can also sufficiently cover this standard.

“It’s an accessible instrument. It is the perfect size for a small child’s hand.” (Nosowitz, 2015, p.1) Students can do music theory worksheets and understand the concepts, but if not given the opportunity to play, they will not be able to extend their knowledge further and apply it. By applying the music theory to an instrument, students are able to create a connection between musical notation and how that applies with their recorder. (Nosowitz, 2015, p.1) Once students understand how to play the recorder, those basic skills can then be shifted to another instrument within the woodwind family making the transition seamless.

In Kuijken’s book, *The Notation Is Not the Music: Reflectionson Early Music Practice and Performance*, he describes early music and how composers wrote music to be performed with a precise sound each time the music was played and re-created. He described this experience as the “mind’s ear”. (Kuijken, 2013, p.1) He stated that even before a performer would pick up their instruments, they knew how the music was supposed to sound. Musicians are able to hear how the music is going to sound based solely upon the written notation. (Kuijken, 2013, p.1) It takes some of the musical freedoms away from the musician, but by breaking out of the box and using more non-traditional approaches to music, we are allowed a new sense of musical freedoms. Thus, relying on ear training.

When teaching students in a non-traditional manner, we are opening them up to more opportunities to listen more carefully to the rhythms and pitches that we are wanting them to learn and play. (Kuijken, 2013, p.1) By playing by rote, teachers play a short musical phrase and having students listen and re-create what they heard. By doing this, they are expanding upon their musical knowledge and creating a more solid foundation for them to build their

instrumental and vocal skills, while also building their ear training skills. (Kuijken, 2013, p.1)

Teaching students to play familiar folk songs, they are building upon their prior knowledge.

Since most of these songs are familiar to students, they are then able to connect how the song is supposed to sound and how it actually is sounding. Thus, making the tune easier for them to hear while learning the notes on traditional notation and creating the pitches on their recorders.

(Kuijken, 2013, p.1)

When approaching non-traditional learning, Challis provides information on using technology within music education. Challis (2009, p. 426) discussed traditional notation and stated that “Standard graphical notation is difficult for students whom are visually impaired and presents challenges for individuals with dyslexia. In this case, teaching by rote would be beneficial for student retention of information. “Notation provides for the memorizing and subsequent recollection of musical patterns, and therefore for the transmission of sound-making possibilities from person to person. As a means of communicating among musicians, it is a sure sign that music is a collective endeavor.” (Bennett, 1983, p.217) While teaching beginning recorder it is important to teach the basics of the recorder before attempting to have students read notation and play their instrument simultaneously. (Bennett, 1983, p.217)

Traditional music notation dates back to 1800 B.C. (Gaare, 1997, p. 17) However, the traditional system of music notation was further developed at the end of the eleventh century, with the creation of the modern keyboard. (Gaare, 1997, p. 18) This leads into the creation of digital music in 1989 when MIDI sequencers “rendered musical expression virtually instantaneous.” (Gaare, 1997, p. 21)

New technology with music notation provides newer ways to teach music. “There are many successful pop musicians who have never learned to read music...teachers can direct

students to a program where alternate notational systems are taught.” (Gaare, 1997, p. 23)

Teaching by rote is one of these alternate systems. Teaching by rote in the beginning stages of learning is beneficial for gaining a strong foundation for playing the recorder. (Gaare, 1997, p. 23) Students are learning to multi-task in ways that they may not have experienced before through a multi-sensory experience. (Today’s, 2013, p.1) They are learning to breathe in a correct pattern, while moving their fingers to produce a variety of pitches. By learning notes by rote, teachers are eliminating one aspect of this process for students. This method is similar to the Suzuki Method. The article “Today’s Suzuki Methods” they discuss how even children as young as the age of three are able to learn how to play an instrument. Although Suzuki was known for teaching violin, the method is valid for learning other instruments as well, such as the flute or clarinet. (Today’s, 2013, p.1) Marilyn Kesler states that the memorization and imitation aspects are all about having students listen to music and create a tonal center that they can emulate. (Today’s, 2013, p.1) This is the goal behind teaching students by rote first and then moving them into a form of non-traditional musical notation. The end of the unit goal is for students to learn traditional music notation and perform on the recorder with accuracy using both methods of notation, traditional and non-traditional.

Musical notation is simply a form of communication to the musician from the composer. “Formal music education has a long record of success in producing musically literate performers... many teachers dismiss learning music by ear as a simplistic and inefficient alternative to doing it the right way, through notation.” (Woody, 2012, p.1) Woody is focused on ear training versus using traditional music notation. Woody discusses how Suzuki and Orff are guides for American music educators of today. Suzuki teaches music through teacher modeling. (Woody, 2012, p.1) Modeling is a common way for music teachers to introduce new ideas and

concepts to elementary aged students. This concept applies to teaching the recorder as well. In the beginning stages of playing the recorder, this method is important for students to gain access to the basic skills of playing the recorder, which is breath of control and basic hand position. “The Orff approach emphasizes opportunities for children to learn by ear on instruments and voice, realize familiar folk songs and chants, and improvise music in various contexts. (Woody, 2012, p.1) The unit plan will apply both the Suzuki method and the Orff method into one cohesive approach to teaching students to play the recorder. Teacher modeling is very important in the beginning stages of teaching in both of these methods. (Woody, 2012, p.1)

The Orff method uses folk songs, which will allow students to gain confidence by playing a familiar tune on the recorder. Students will learn to hold the recorder and produce these pitches on their instrument. Once they are able to play each note, producing a clear tone, the lessons will progress into learning written notation. Beginning with the note names B-A-G. This will be accomplished using technology as a colorful way to assist with learning and remembering the music notation and how to produce that on their recorder.

Technology is becoming increasingly more prominent in our students’ lives. There are many social media platforms that students use, which opens the door for more learning opportunities, such as Google Classroom or YouTube. Today there is a variety of social media outlets, and it does appear that is where students these days tend to “live”. (Albert, 2015, p. 1) Students talk about the different things that they are learning on the different social media platforms that vary from a variety of topics and ideas. Then there are the ‘how to’ videos instructing students how to play a musical instrument.

That is when the idea came to mind to create something to assist students learning how to play the recorder, using YouTube as a means of alternate instruction. Students will learn the

material in a flipped classroom situation. A flipped classroom is when students learn the material at home and class time becomes a place for discussion and practice of materials. Albert discusses the same when he stated, “Through these communities hosted by YouTube and online forums, students of all ages have been able to learn about musical performance practices at home.” (Albert, 2015, p.1) He then says that students are able to create and post videos and also search for feedback through different community groups. (Albert, 2015, p.1) This resulted in positive musical experiences and learning experiences. Confidence and knowledge over musical concepts were then strengthened through these positive interactions. (Albert, 2015, p.1) Students are then able to learn the material at home and the classroom becomes the space for students to explore what they had learned.

Albert suggests that music educators branch out and give these different social platforms a try, but to be conscious of district policy. “Similar to monitoring in real-time, face-to-face class discussion, teachers need to monitor asynchronous online discussions for possible inappropriate comments.” (Albert, 2015, p.1) The preference would be to share the videos with the class using a platform such as Google Classroom so that if they wanted to practice skills at home, they would have these videos to assist in their learning outside of the classroom.

In Bauer’s article “Transforming Music Teaching via Technology”, he states how MENC (now NAFME) has established benchmarks for using technology in music in regard to the impact on curriculum. (Bauer, 2003, p.291) By using technology, teachers are able to expand even further on their lessons. “Technology is used not only to simplify classroom management, but it also is integrated seamlessly and naturally into instruction. Teachers become excited about the instructional possibilities technology avails, and design lessons that include learning goals that would not have been possible without the use of technology.” (Bauer, 2003, p.291-292)

Technology opens up many possibilities for teaching. Music teachers are able to use YouTube and Google Classroom to their advantage. Bauer stated that professional development for teachers assists in their knowledge and comfort level with technology which allows for them to use technology more in their lessons. (Bauer, 2003, p.297) Through the use and expansion of teacher knowledge of the available software programs, teachers are then able to use this technology with more comfort and reliability.

Gallou discusses different 21<sup>st</sup> century-blended learning models. “Gallou advocates for a mixed use of traditional and new teaching and learning models, combining face-to-face learning with online learning.” (Gallou, 2018, 167). Gallou (2018, p. 167) stated that the learning gained from lessons with asynchronous learning doubled in knowledge retention over traditional instruction. This project will combine techniques from traditional instruction with newer technological music instruction and assess the learning gained from this combination. In previous school years, traditional instruction was the only form of instruction used.

Technology is an important addition to traditional instruction. Technology “can be used to enable them to overcome their difficulties and limitations.” (Schaik, 2010, p. 27) Technology use will further student learning and enhance lessons by providing harmonies to play along with.



## Methodology

For this project the research methodology that was applied is Action Research. In music education the recorder is a commonly taught instrument. There are different types of curricula that assist teachers with teaching the recorder, such as Recorder Karate, Recorder Monster and The Suzuki Method for Soprano Recorder. With the increase in technologies available music teachers can create a way for students to learn the recorder in a new manner.

There were five different categories of research. The first of these being the rationale for teaching the recorder and a more in depth look into the instrument itself. Once that was established, taking a look into the differences between traditional and non-traditional music notation was essential to the research. There are different pedagogies behind teaching the recorder. There are also different technique methods to teach the recorder, such as *Recorder Express* (Almeida, 2007) and *Recorder Method* (Riposo, 1998). Teaching by rote was a famous method of the pedagogue, Shinichi Suzuki (Today's Suzuki Method, 2013). While researching these a combination of these techniques of teaching was what was decided upon to create these lessons.

Bringing technology in the music classroom and asynchronous learning are the final components of research. Both of these were important to the project since the project plan was to use and incorporate technology, such as YouTube and GarageBand into the music classroom to further engage students. GarageBand was used to create the music that students would play along with. YouTube is the method in which students will access the materials.

This project applies research to recorder and music technology. The project is a cohesive unit of lessons directed to a fourth-grade classroom through a series of lessons using technology as an asynchronous source to assist students in playing the recorder. The beginning of the unit teaches students about the basic music theory needed to understand to begin playing the recorder.

The unit progressed to showing students how to hold the recorder and correctly produce the desired pitches. Students learn to play a variety of rhythms on desired pitches. Students begin playing by rote following the lead of the instructor. The following lesson integrated the call and response method; the teacher produces a pitch and the students respond with the same pitch. The lessons begin by showing images of note values and an image of the recorder of the note shall be played along the side. The lessons follow the order of playing by rote, playing call and response and then a lesson where the notes are tied together into an exercise. The note B was taught first and was followed by the note A. The lesson after call and response using the note A was a lesson which combined the notes B and A on the staff. That lesson provided extra practice for students to play through with guidance to transition between the note B and the note A.

After the lesson which practiced the notes B and A, the note G was introduced. The note G was introduced in the same fashion as the notes B and A were. There was a lesson with call and response on the note G. Following that lesson there were two lessons which provided students with extra opportunities to practice the notes B, A and G. Giving them many chances to practice these notes, allowed for more repetitions of reading the notes and producing the desired note on their recorder. The lessons also included opportunities for students to practice going from the note B to the note G, which is challenging for beginner players. The note B is played by using the thumb and first finger covering their key holes on the recorder. The note G also requires the thumb and first finger covering the key holes, but the addition of the second and third fingers are required to create the tone G. With the addition of more fingers, more warm air is necessary to create a clear tone, free of squeaking. The unit ends with students playing familiar folk tunes written in traditional notation, which was practiced throughout the unit.

## Production and Analysis

There are recorder methods that teach students the basic and beginner methods of how to play this instrument, such as *Recorder Express* (Almeida, 2007) and *Recorder Method* (Riposo, 1998). Each of them offering a valuable lesson for beginner recorder students. Before this project there was not a set recorder curriculum that used technology to teach recorder. After using other methods such as Recorder Express, Recorder Monster and Recorder Karate, each being an excellent curriculum individually as well as using them combined, this project became important so that these different methods could be combined in the form of video lessons that the teacher can play the video and assist with individual needs on a more one-on-one basis. The videos also give the teacher the freedom to explore a flipped classroom, assigning a video lesson to the students as a homework assignment and then during class being able to practice and expand upon those skills.

The project as a whole is a total of fifteen lessons, each in the form of videos and the links to each of these videos are listed in a booklet that was created. Fifteen seemed to be an appropriate number that would encompass an entire unit, which was decided upon breaking down the information that was going to be taught. Once looking at *Recorder Express* (Almeida, 2007) and *Recorder Method* (Riposo, 1998) and seeing how each of those methods began, the plan of what was necessary to teach came into form allowing for the breakdown of each lesson to be created. The initial unit idea was not completely set to fifteen lessons. It was after thinking of the objective of each video lesson, did that number come into being.

The breakdown of each lesson is as follows: The first three lessons discussing the basic music theory, also discussing posture and playing positions before playing the recorder. Three lessons discuss the note B: one to introduce the note and where B is at on the staff, one to play

the note using the call and response method and finally a lesson that reviews the note B. The total of lessons with theory and the note B now equaling six in total. The note A is then introduced in the same manner: one lesson to introduce the note A, one lesson using the call and response method and the final lesson reviewing the notes A and B together. The lesson count now totaling nine in number. The note G was then introduced in the same manner: One lesson to introduce the note, one lesson using call and response, and the final lesson in that set reviews the notes G, A and B. Then final three lessons are focused on the notes B-A-G and putting them together to create a song. The final lesson total is then equaling fifteen.

While deciding on the outline for these lessons *Recorder Express* (Almeida, 2007) and *Recorder Method* (Riposo, 1998) were a guiding point of reference, which included a very short introductory lesson which discussed the basic music theory that was needed to play the recorder. They also spoke very briefly about embouchure and proper tone production. The thought was to create a longer lesson devoted to basic music theory and then another lesson devoted to posture and embouchure.

During the middle lessons while students were beginning to play the notes on their recorder, the amount of measures was chosen to build stamina in the students' playing. Having students copy the short five measure rhythms at first was designed to assist them in their playing stamina. The repetitions allowed for them play along only using their fingers, without creating the tone on their recorder and then having them play along producing the tones on their recorders. That was designed to get them playing longer pieces at a time so that they would have the stamina to begin to play more complex pieces.

This project is intended as a supplement to traditional recorder instruction. There may be a time where watching the lesson at home to gain the basic skills in a flipped classroom situation. Students would then be able to come into the classroom with any questions or issues that they had faced while learning the material at home. Class time would be used to reinforce what they learned during the flipped classroom time, also providing students with the time to experience group ensemble playing. The teacher would be able to assess their knowledge of the notes, by using class time as a time to review what they watched on their own at home to reinforce their new skills.

After creating the beginning lessons, I felt that using non-traditional notation was best while used in a small portion of the lesson. While researching non-traditional notation felt to be what would work best. But after researching more into the current materials that are available such as *Recorder Express* (Almeida, 2007) and *Recorder Method* (Riposo, 1998), the need to begin note reading from the beginning was prominent. For example, when each note was introduced there was the image of the recorder and how that note is produced on the screen while teaching where the note is placed on the staff. The plan of exposing the students in a slow manner to the traditional music notation was to assist in their abilities to remember each of the notes and where they are placed on the staff in addition to how they are produced on their instrument.

The project as a whole was designed to introduce students to musical notation and to an instrument in a manner that was slower in pace to assist students with learning both how to play the recorder and how to read traditional music notation. Doing so with opportunities with repetitions of each note value and placement on the staff.

## Conclusions

The project began by taking a look into the many resources that was available. The format of both *Recorder Express* (Almeida, 2007) and *Recorder Method* (Riposo, 1998), were similar. I wanted to create a video for students to follow along with. It provides more than students playing along with the sheet music in their book. I wanted to create something that students could use at home to either make up a missed music class or to practice the skills that they are working on. Both of these resources provided insight on how the preliminary lessons were going to look and the information that they needed to include.

The preliminary three lessons needed to include basic music theory, a lesson focused more on musical notation and note values and a lesson demonstrating proper playing techniques for the recorder. Each of these were created to take time to review things that most students may overlook. The purpose behind each of these were to give students a way to hear note lengths in addition to detailed images on how to properly produce each tone on the recorder.

The following nine lessons were created using keynote to create the video background that shows students note values. Those were created using the shape creator key. The purpose of creating each note lesson in a set of three was to give students an extra opportunity to practice each note individually before adding a new note for them to learn. They were to learn the note initially by rote, teacher (video) plays and they were to play after. The middle lesson was designed for students to learn in the call and response method, where the teacher plays a short passage and they respond with the same rhythm passage. The third of the lessons was designed to be a review for students to continue to practice their new skills. The first three of the nine taught the note B and rehearsed that in different rhythms. The middle three lessons taught the note A. Before moving on to a new note, the notes B and A were placed together in an exercise

to provide students an opportunity to work those two notes together before learning a new note. The last three lessons taught the note G. The final of those lessons was a review of the notes B, A and G. Allowing time for students to practice and review all three of these notes. Prior to the practice exercise, there was time to rehearse the difficult jump between the notes B and G. This is difficult because the note G requires more fingers covering the key holes on the recorder in addition to more warm air to produce the tone. There were two different types of practice exercises with the notes B and G. The first portion helped students go from the note B to the note G. The second portion helped students go from the note G to the note B.

Then the final three lessons of the unit are more opportunities for students to practice what they rehearsed in the prior lessons, putting everything together creating songs. There was an additional opportunity to rehearse the difficult jump in notes from B to G and then from G to B. Once students are comfortable with that, they will be more comfortable with producing those tones within the songs. Each lesson in this unit was thought out thoroughly before created into a video. Once each of the videos were created the booklet was created to keep them each together to make viewing simple.

## References

2014 Music Standards. (n.d.). Retrieved from

<https://nafme.com/my-classroom/standards/core-music-standards/>

Albert, D. J. (2015). Social Media in Music Education: Extending Learning to Where Students “Live.” *Music Educators Journal*, 102(2), 31-

38. <https://doi.org/10.1177/0027432115606976>

Alexandraki, C., & Akoumanakis, D. (2010). Exploring New Perspectives in Network Music Performance: The DIAMOUSES Framework. *Computer Music Journal*, 34(2), 66-83.

Retrieved January 7, 2020, from [www.jstor.org/stable/40731283](http://www.jstor.org/stable/40731283)

Almeida, A. (2007). *Recorder Express: Soprano Recorder Method For Classroom Or Individual Use*. Place of publication not identified: Alfred Pub Co.

Bauer, W. I., Reese, S., & McAllister, P. A. (2003). Transforming Music Teaching via Technology: The Role of Professional Development. *Journal of Research in Music Education*, 51(4), 289–301. <https://doi.org/10.2307/3345656>

Bennett, H. (1983). Notation and Identity in Contemporary Popular Music. *Popular Music*, 3, 215-234. Retrieved January 7, 2020, from [www.jstor.org/stable/853101](http://www.jstor.org/stable/853101)

Bright, K. (2018, September 28). Steps to Prep the Recorder. Retrieved from

<https://teachingwithorff.com/steps-to-prep-the-recorder/>

Burnard, P., & Finney, J. (2007). *Music Education with Digital Technology*. London:

Continuum. Retrieved from

<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=265482&site=ehost-live>

Cardew, C. (1961). Notation: Interpretation, etc. *Tempo*, (58), 21-33. Retrieved January 7, 2020,



from [www.jstor.org/stable/944250](http://www.jstor.org/stable/944250)

Carnes, B. (2012). *Making ELearning Stick : Techniques for Easy and Effective Transfer of Technology-supported Training*. [Alexandria, Va.]: American Society for Training & Development. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=529500&site=ehost-live>

Challis, B. (2009). Technology, Accessibility and Creativity in Popular Music Education. *Popular Music*, 28(3), 425-431. Retrieved January 7, 2020, from [www.jstor.org/stable/40541516](http://www.jstor.org/stable/40541516)

Covey, P. (2015). "No Restrictions in Any Way on Style": The Ford Foundation's Composers in Public Schools Program, 1959-1969. *American Music*, 33(1), 89-130.  
doi:10.5406/americanmusic.33.1.0089

Creating. (n.d.). Retrieved from <https://www.nationalartsstandards.org/>

Dannenberg, R. (2005). Interactive Visual Music: A Personal Perspective. *Computer Music Journal*, 29(4), 25-35. Retrieved January 7, 2020, from [www.jstor.org/stable/3681479](http://www.jstor.org/stable/3681479)

Dorfman, J. (2013). *Theory and Practice of Technology-Based Music Instruction*. New York, NY: Oxford University Press. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=642152&site=ehost-live>

Ergur, A., & Doğrusöz, N. (2015). Resistance and Adoption towards Written Music at the Crossroads of Modernity: Gradual Passage to Notation in Turkish Makam Music. *International Review of the Aesthetics and Sociology of Music*, 46(1), 145-174. Retrieved January 7, 2020, from [www.jstor.org/stable/24327332](http://www.jstor.org/stable/24327332)

Escrivan Rincón, J. d'. (2012). *Music Technology*. Cambridge: Cambridge University Press.

Retrieved from

<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=408830&site=ehost-live>

Fox, C. (2014). Opening Offer Or Contractual Obligation? On The

Prescriptive Function Of Notation In Music Today. *Tempo*, 68(269), 6-19. Retrieved

January 7, 2020, from [www.jstor.org/stable/43932614](http://www.jstor.org/stable/43932614)

Freeman, J. (2008). Extreme Sight-Reading, Mediated Expression, and Audience Participation:

Real-Time Music Notation in Live Performance. *Computer Music Journal*, 32(3), 25-41.

Retrieved January 7, 2020, from [www.jstor.org/stable/40072645](http://www.jstor.org/stable/40072645)

Freeman, J. (2011). Bringing Instrumental Musicians into Interactive Music Systems through

Notation. *Leonardo Music Journal*, 21, 15-16. Retrieved January 7, 2020, from

[www.jstor.org/stable/41416816](http://www.jstor.org/stable/41416816)

Gaare, M. (1997). Alternatives to Traditional Notation. *Music Educators Journal*, 83(5), 17-23.

doi: 10.2307/3399003

Gallou, E., & Abrahams, P. (2018). Creating space for active learning: (Opportunities from)

using technology in research-based education. In Tong V., Standen A., & Sotiriou M.

(Eds.), *Shaping Higher Education with Students: Ways to Connect Research and*

*Teaching* (pp. 165-175). London: UCL Press. Retrieved January 7, 2020, from

[www.jstor.org/stable/j.ctt21c4tcm.27](http://www.jstor.org/stable/j.ctt21c4tcm.27)

Kuijken, B. (2013). *The Notation Is Not the Music : Reflections on Early Music Practice and*

- Performance*. Bloomington: Indiana University Press. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=615521&site=ehost-live>
- Kučinskas, D., & Kennaway, G. (2014). *Music and Technologies*. Newcastle upon Tyne, England: Cambridge Scholars Publishing. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=939599&site=ehost-live>
- Krout, R. E. (2015). *Evaluating Electronic Music Technology Resources for Music Therapists*. Dallas, TX: Barcelona Publishers. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=1289585&site=ehost-live>
- Lech, J. (2017, February 12). *How To Put Music Notation In Your Videos W/Imovie And Logic Pro X*. Retrieved March 9, 2020, from <https://www.youtube.com/watch?v=6t6V4M01qVE&t=192s>
- NAfME's History, the Evolution of Music Education—and Taylor Swift! (2015, April 9). Retrieved from <https://nafme.org/nafmes-history-the-evolution-of-music-education-and-taylor-swift/>
- Nosowitz, D. (2015, December 17). Why Every Kid in America Learns to Play the Recorder. Retrieved from <https://www.atlasobscura.com/articles/why-every-kid-in-america-learns-to-play-the-recorder>
- Nieberle, R., & Freericks, M. (1991). Extending an Interactive Music Environment. *Computer Music Journal*, 15(2), 41-48. doi:10.2307/3680915
- Phillips, S. L. (2013). *Beyond Sound : The College and Career Guide in Music Technology*. New

- York: Oxford University Press. Retrieved from  
<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=597531&site=ehost-live>
- Reese, S., & Hickey, M. (1999). Internet-Based Music Composition and Music Teacher Education. *Journal of Music Teacher Education*, 9(1), 25. Retrieved from  
<https://link.gale.com/apps/doc/A64732749/PROF?u=sain20269&sid=PROF&xid=1fe1aa7e>
- Riposo, J. (1998). *Recorder Method: A Complete And Comprehensive Method for the Beginning Recorder Student*. JR Publishers.
- Sanders, Paul. (1992). Technology in Music Education. *The Musical Times*, 133(1795), 440-441.  
 doi:10.2307/1002363
- Schaik, P. van, & Barker, P. (2010). *Electronic Performance Support : Using Digital Technology to Enhance Human Ability*. Routledge.
- Thompson, L. K., & Campbell, M. R. (2015). *Analyzing Influences : Research on Decision Making and the Music Education Curriculum*. Information Age Publishing.
- Today's Suzuki method: a conversation with Marilyn Kesler of the Suzuki Association of the Americas. (2013, November). *School Band and Orchestra*, 16(11), 16+. Retrieved from  
<https://link.gale.com/apps/doc/A361553214/PPFA?u=sain20269&sid=PPFA&xid=ab4bc b05>
- Watson, S. (2011). *Using Technology to Unlock Musical Creativity*. New York: Oxford University Press. Retrieved from  
<https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=nlebk&AN=376529&site=ehost-live>

Woody, R. H. (2012). Playing by Ear: Foundation or Frill? *Music Educators Journal*, 99(2), 82–88. <https://doi.org/10.1177/0027432112459199>

Appendix 1

# **Leveraging Non- Traditional Notation and Technology to Enhance a Fourth Grade Recorder Unit**

**By: Stephenie  
Mokriakow**



## **Lesson 1: Introduction to Basic Music Theory**

### **Video Link:**

**<https://www.youtube.com/watch?v=wY42gwiiFNw>**

## **Lesson 2: Note Values**

### **Video Link:**

**[https://www.youtube.com/watch?v=fggcF8TjEQQ&list=PLPwlziB\\_fIBVvMQus9y19g7Qwls\\_qQm82&index=3&t=0s](https://www.youtube.com/watch?v=fggcF8TjEQQ&list=PLPwlziB_fIBVvMQus9y19g7Qwls_qQm82&index=3&t=0s)**

## **Lesson 3: Correct Posture, Hand Position and Embouchure**



**Video Link:**

**[https://www.youtube.com/watch?v=bxVKk2026lo&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=4&t=0s](https://www.youtube.com/watch?v=bxVKk2026lo&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=4&t=0s)**

**Lesson 4: Let's Learn the Note B****Video Link:**

**[https://www.youtube.com/watch?v=U-AcNnzF0do&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=4](https://www.youtube.com/watch?v=U-AcNnzF0do&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=4)**

**Lesson 5: Call and Response on the Note B****Video Link:**

**[https://www.youtube.com/watch?v=G0SxFYZncjM&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=6&t=0s](https://www.youtube.com/watch?v=G0SxFYZncjM&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=6&t=0s)**

## **Lesson 6: Review of the Note B**

### **Video Link:**

**[https://www.youtube.com/watch?v=rJky\\_RVomaU&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=7&t=0s](https://www.youtube.com/watch?v=rJky_RVomaU&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=7&t=0s)**

## **Lesson 7: Let's Learn the Note A**

### **Video Link:**

**[https://www.youtube.com/watch?v=aCNDWYgi3ZY&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=7](https://www.youtube.com/watch?v=aCNDWYgi3ZY&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=7)**

## **Lesson 8: Call and Response on the Note A**

### **Video Link:**

**<https://www.youtube.com/watch?v=8hQFY5jtFdE>**

## **Lesson 9: Review of the Note A and B**

### **Video Link:**

**[https://www.youtube.com/watch?v=6vp03x1x6CE&list=PLPwlziB\\_fIBVvMQUS9y19g7Qwls\\_qQm82&index=10&t=0s](https://www.youtube.com/watch?v=6vp03x1x6CE&list=PLPwlziB_fIBVvMQUS9y19g7Qwls_qQm82&index=10&t=0s)**

## **Lesson 10: Let's Learn the Note G**

### **Video Link:**

[https://www.youtube.com/watch?v=moU3oCnb7W8&list=PLPwlziB\\_fIBVvMQUS9y19g7Qwls\\_qQm82&index=10&t=0s](https://www.youtube.com/watch?v=moU3oCnb7W8&list=PLPwlziB_fIBVvMQUS9y19g7Qwls_qQm82&index=10&t=0s)

## **Lesson 11: Call and Response on the Note G**

### **Video Link:**

<https://www.youtube.com/watch?v=cPoTkxWhqGw>

## **Lesson 12: Review of the Note G, A, B**

### **Video Link:**

[https://www.youtube.com/watch?v=E0WWhD8GAHE&list=PLPwlziB\\_fIBVvMQUS9y19g7Qwls\\_qQm82&index=13&t=0s](https://www.youtube.com/watch?v=E0WWhD8GAHE&list=PLPwlziB_fIBVvMQUS9y19g7Qwls_qQm82&index=13&t=0s)

## **Lesson 13: Let's put the Notes BAG Together**

### **Video Link:**

**[https://www.youtube.com/watch?v=3vHJF2wrrfY&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=13](https://www.youtube.com/watch?v=3vHJF2wrrfY&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=13)**

## **Lesson 14: Song #1 (Hot Cross Buns-traditional)**

### **Video Link:**

**[https://www.youtube.com/watch?v=R8thbHgwZl&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=14](https://www.youtube.com/watch?v=R8thbHgwZl&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=14)**

## **Lesson 15: Song #2 (Name That Tune?)**

### **Video Link:**

**[https://www.youtube.com/watch?v=pxTVVbhyyCo&list=PLPwlziB\\_fIBVvMQuS9y19g7Qwls\\_qQm82&index=15](https://www.youtube.com/watch?v=pxTVVbhyyCo&list=PLPwlziB_fIBVvMQuS9y19g7Qwls_qQm82&index=15)**

## References

**Almeida, A. (2007). *Recorder express: soprano recorder method for classroom or individual use*. Place of publication not identified: Alfred Pub Co.**

**Lech, J. (2017, February 12). *How To Put Music Notation In Your Videos W/Imovie And Logic Pro X*. Retrieved March 9, 2020, from <https://www.youtube.com/watch?v=6t6V4M01qVE&t=192s>**

**Riposo, J. (1998). *Recorder Method: A Complete And Comprehensive Method for the Beginning Recorder Student*. JR Publishers.**

**Software used to create the videos include GarageBand, iMovie, and Keynote. I recorded myself playing the recorder as well as created my own images for every video.**