LIBERTY UNIVERSITY

SCHOOL OF MUSIC

The Theory of Multiple Intelligences in a Special Education Music Classroom

Submitted to Dr. Newman and Dr. Schmal

in partial fulfillment of the requirements for the completion of

MUSC 687

Master's Thesis and Proposal and Research

by

Daniel Passadino

August 11, 2021

This page was intentionally left blank

The Theory of Multiple Intelligences in a

Special Education Music Classroom

By Daniel Passadino

A Thesis Presented in Partial Fulfillment Of the Requirements
for the Degree Master of Arts in Music Education

August 11, 2021

APPROVED BY:

_____
Dr. Jerry L. Newman, D.W.S, Ed.S, Committee Advisor

_____
Dr. David K. Schmal, D.M.A, committee Reader

Sean Beavers, D.M.A., Dean of the School of Music

Abstract

Special education students involved in music classes currently face a lack of inclusivity. Various methods have been used to promote inclusivity in the music classroom. This paper focuses on how Howard Gardner's multiple intelligence theory promotes inclusivity in the special education music classroom. The multiple intelligence theory streamlines a special education music curriculum by highlighting each child's strongest intelligence. To assess a child's intelligences, they must participate in music-related tests. The tests include mini lessons which cater to the multiple intelligences. For example, when children are taught using visuals, some will not be able to learn as effectively if they are strongest in linguistic learning or mathematics. Teachers must differentiate instruction so each student can learn to the best of their ability. The students will in turn benefit by learning more easily, leading to a more productive classroom.

Contents

CHAPTER 1

Introduction

It is difficult to include everyone in a music classroom based on the variety of learning styles of each student and the various musical topics covered. It is a challenge for every teacher to include every student's learning style into an activity or lesson. This issue is magnified in a special education setting. Students have different learning styles, and each student presents their unique problems for teachers to solve. The way people with special needs learn is still being studied to this day. There is currently a need for inclusivity in the music classroom for special needs students.

The theory of multiple intelligences (MIT) can help teachers effectively differentiate their instruction. It was written by Howard Gardner in the 1980s and has challenged the traditional theory that there is only one single intelligence.[1] The theory provides evidence that there are eight intelligences in humans. The intelligences are naturalistic, spatial, musical, bodily-kinesthetic, linguistic, intrapersonal, interpersonal, and logical.[2] The theory is used to incorporate and understand all students' learning styles and abilities in the music classroom. Howard Gardner's multiple intelligence theory promotes positive inclusive learning for students with special needs in the music classroom.

Research Questions

This paper examines the effect of Gardner's multiple intelligence theory in the special education music classroom. There is a curriculum project reflecting the use of the theory in the

[1] Michele Marenus, "*Gardner's Theory of Multiple Intelligences*," Creative Commons, last modified June 9, 2020, https://www.simplypsychology.org/multiple-intelligences.html

[2] Ibid.

classroom. The curriculum project shows a clear outline of how the theory can be used to create certain activities which promote inclusivity in the classroom. There are two research questions that must be answered. The first question is: how can the use of Howard Gardner's multiple intelligence theory promote inclusivity for special needs students in music-focused classrooms? If the multiple intelligence theory is used in the music classroom, then educators can focus on all students strongest learning styles and adjust lessons to meet the needs of all students. The second question is: what kinds of processes can music educators utilize to incorporate multiple intelligence theory in the classroom? If music educators take advantage of processes utilizing multiple intelligence theory, then educators can differentiate instruction to meet the needs of all students.

Development of the Theory

Howard Gardner's multiple intelligence theory was developed in the 1980s. The intelligences Gardner describes can be seen in children at a young age. Thomas Armstrong states, "Children begin showing what Howard Gardner calls proclivities toward specific intelligences from a very early age."[3] Since children exhibit a strong intelligence from a young age, the MIT must be used by teachers who work in these early childhood grades. If teachers understand that students have multiple intelligences and different learning styles, then they can understand why they might find certain topics harder to learn than other people. These students can improve their weaker intelligences and learn more effectively in the classroom. Howard Gardner states, "An

[3] Thomas Armstrong, *Multiple Intelligences in the Classroom, 4th edition*, (VA: Association for Supervision & Curriculum Development, 2017).

intelligence is a computational capacity – a capacity to process a certain kind of information – that originates in human biology and human psychology."[4]

Gardner introduced eight criteria for determining intelligences. The criteria helped Gardner and his colleagues create the set of eight intelligences in the MIT. Susan Baum lists the eight criteria needed for identifying an intelligence:

- "Potential Isolation by brain damage (Neurological evidence)"[5]
- "Evolutionary history and evolutionary plausibility"[6]
- "Identifiable set of core operations"[7]
- "Susceptibility to encoding in a symbol system"[8]
- "Recognizable endstate and distinctive developmental trajectory"[9]
- "Existence of savants, prodigies, and other individuals distinguished by the presence or absence of specific abilities"[10]
- "Support from experimental psychological tasks"[11]
- "Support from psychometric findings"[12]

---

[4] Howard E. Gardner, *Multiple Intelligences: New Horizons in Theory and Practice*. (New York: Basic Books, 2008), pg. 6.

[5] Susan Baum, Julie Viens, and Barbara Slatin, *Multiple Intelligences in the Elementary Classroom,* (New York: Teachers College Press, 2006), pg. 11.

[6] Baum, Viens, and Slatin, *Multiple Intelligences*, pg. 11.

[7] Ibid.

[8] Ibid.

[9] Ibid.

[10] Ibid.

[11] Ibid.

[12] Ibid.

Thomas Armstrong states, “MI theory is not a type theory for determining the one intelligence that fits each person. It is a theory of cognitive functioning, and it proposes that each person has capacities in all eight intelligences.”[13] Some examples of people who possessed expertise in one intelligence are Mozart, who was strongest in the musical intelligence and composed complex piano music at age 4, and Albert Einstein, who was strongest in the mathematics intelligence and conceived the theory of relativity. Most people fall into the category of having some experience with each intelligence with the ability to strengthen them.

Those who exhibit traits of a stronger intelligence usually lack in other areas, such as interpersonal and intra-personal. This is common amongst students with special needs. According to Jennifer D. Walker and Colleen Barry, “Many students would benefit from improved social competence. In fact, up to 55% of special educators reported they teach social skills on a daily basis.”[14] The eight intelligences possessed by each student can be improved. In the music classroom, social skills are used while making music, rather than speaking. Students need to listen to each other play while making music to show great musicianship. Playing music in a group setting is just like having a conversation. For example, in a band setting, one student might play a melody that another student must echo. These students must display significant social intelligence to have this musical conversation.

Definition of Terms

Gardner’s theory proposes everyone possess all eight intelligences:

[13] Ibid.

[14] Jennifer D. Walker, and Colleen Barry, *Assessing and Supporting Social-Skill Needs for Students with High-Incidence Disabilities*, (SAGE Publishing Company, 2018), pg. 1.

Linguistic (word smart)[15] - refers to children who think in words and enjoy literature and writing.

Logical (number/logic smart)[16] - applies to children who are good with numbers. They are good at solving equations and using deductive reasoning. Children strong in this intelligence are strong in math and science.

Spatial (picture smart)[17] - refers to children who learn visually. They can watch someone do an activity and copy it.

Bodily-kinesthetic (body smart)[18] - means a child is strong in physical activity and using their hands. A child strong in this intelligence could benefit from physical activity.

Musical (music smart)[19] - Applies to children who can copy melodies and rhythms they hear.

Interpersonal (people smart)[20] - Deals with children who learn effectively in group activities and communicate with others.

Intrapersonal (self- smart)[21] - Refers to children who are in touch with their feelings and like working alone. These children can make their own goals and making their own choices.

---

[15] Armstrong, *Multiple Intelligences in the Classroom*.

[16] Ibid.

[17] Ibid.

[18] Ibid.

[19] Ibid.

[20] Ibid.

[21] Ibid.

Naturalistic (nature smart)[22] - Refers to children who love being outside. They love animals, the Earth, and just being in nature.

Incorporating MIT in the Classroom

Incorporating MIT into the music curriculum helps special needs students succeed. A teacher should set up his or her classroom to reflect the eight intelligences. The following are examples of how a teacher can set up his or her music classroom and curriculum to reflect MIT:

Musical- The teacher can have posters/charts on the walls that show musical notation and solfege syllables. The students can use these charts to help them if they are having trouble reading music.

Spatial- While listening to a piece of music, the students can draw and color what they picture in their minds. Students with spatial intelligence should also be challenged by memorizing their music.

Mathematical-logical- Students strong in this intelligence are strong in rhythm. The teacher can assign these students to figure out musical elements, such as rhythm, time signature, beat patterns and note values.

Bodily-kinesthetic- Students who like to move and use their bodies should play an instrument that reflects this, such as percussion. If the student plays a different instrument, the teacher can have the students stand while playing, or dance.

Naturalist- A child who is better at understanding their environment can learn better when their environment contains helpful tools such as posters and charts with musical notation, solfege syllables, and a rhythm value on them.

---

[22] Ibid.

Linguistic- Students strong in this intelligence are great storytellers. These students should be given an assignment where they must write lyrics for a piece they have composed. The student can express their linguistic intelligence through music.

Intra-personal- These students possess strong self-esteem and are great musicians. These students practice often and realize they have the potential to do great things when they try hard enough. These students can also motivate other students who are not as motivated.

Interpersonal- These students have a sensitivity to facial expressions and gestures. They respond well to a conductor in an ensemble setting and make great conductors themselves.

Research Plan

The curriculum project presented in the appendix section of this thesis demonstrates how Howard Gardner's Multiple Intelligence Theory can be utilized in the classroom to promote inclusivity for special needs students. The curriculum developed shows various activities that utilize each of the eight intelligences. The practicum for the course includes active learning such as performing, creating, composing, improvising, and listening. The curriculum also provides various assessments, which utilize the eight intelligences. For example, a quiz given to the students has a visual for those students who learn more effectively with visuals. The assessments use colors to differentiate various elements of music, such as piano fingerings.

Conclusion

There is a need for inclusivity in the special needs music classroom. Teachers can take advantage of the theory of multiple intelligences by differentiating their instruction to meet the needs of all learners. Gardner's theory provides a way for all students to learn most effectively. Teachers can explore their students' strongest intelligences and create a curriculum that best suits

their needs. The curriculum presented in this thesis contains elements of all learning intelligences, but it can be adapted to suit the needs of specific classes.

CHAPTER 2: LITERATURE REVIEW

Introduction

The need for inclusivity in the special education music classroom is high. Educators can utilize Howard Gardner's theory of multiple intelligences in the classroom. The theory provides a method to differentiate instruction for all students based on various learning styles and abilities. There are eight intelligences present in the multiple intelligence theory. These include naturalistic, spatial, musical, bodily-kinesthetic, linguistic, intrapersonal, interpersonal, and logical. Gardner's theory provides eight intelligences with the possibility of more, challenging traditional theory by not focusing on one intelligence factor, and presents a method for creating an inclusive music curriculum for special education students.

More Than Eight

Howard Gardner has had proposals for the possibility of more intelligences over the years. The new intelligence would be called emotional intelligence. This new intelligence was proposed by "Salovey and Mayer (1990) and publicized by Goleman (1995)." Goleman's concepts of emotional and social intelligence are akin to the interpersonal and intrapersonal intelligences."[23] If more intelligences were discovered, it would open the possibility for new lessons and teaching methods. Takahashi states, "Emotional intelligence theory is defined as the capacity to process emotional information accurately and efficiently, including information relevant to the recognition, construction, and regulation of emotion within oneself and others."[24] The emotional intelligence can be tested in three main ways: "the Mayer-Salovey Caruso

---

[23] Robert J. Sternberg, *The Nature of Human Intelligence*, (Cambridge: University Press, 2018), pg. 116-129.

[24] Junichi Takahashi, *Multiple Intelligence Theory Can Help Promote Inclusive Education for Children with Intellectual Disabilities and Developmental Disorders: Historical Reviews of Intelligence Theory, Measurement Methods, and Suggestions for Inclusive Education, (*Creative Education, January 2013), pg. 607.

Emotional Intelligence Test, Emotional Quotient Inventory, and Self-Report EI Test."[25] There are few ways to assess MIT, however. Teachers can observe their students to figure out what their strongest intelligences are. For example, if a teacher notices a child is excellent at counting rhythms, that child shows stronger mathematical intelligence. If a child does well with drawing what they imagine when listening to a piece of music, that child shows their strongest in visual intelligence. Gardner has proposed two additional intelligences: "an existential intelligence, the capacity to pose and ponder large philosophical questions, and a pedagogical intelligence, the capacity to impart knowledge effectively to others."[26]

Traditional Theory

There were various intelligence theories before Gardner's was developed. Charles Spearman's theory of intelligence, referred to as the *g* factor or general intelligence, is the opposite of Gardner's MIT. According to Kendra Cherry, general intelligence is "a construct that is made up of different cognitive abilities. These abilities allow people to acquire knowledge and solve problems."[27] The g factor includes tests which show how a person performs in certain educational areas. This g factor is measured by a single number that can be expressed through a test such as an IQ test.

The g factor cannot apply to every person, especially students with special needs. Someone who is strongest in mathematics or vocabulary performs better on an IQ test than someone who is skilled in music or bodily-kinesthetic. General intelligence uses an inequitable

[25] Ibid.

[26] Ibid.

[27] Kendra Cherry, *What is General Intelligence (G Factor).*

way of thinking. With over seven billion people in the world, there cannot exist one singular intelligence. Some people learn better in other ways such as through music, writing, or visually.

Another argument against Gardner's theory comes from author Bennett Reimer. In his book *A Philosophy of Music Education: Advancing the Vision,* Reimer argues against some of the points Gardner makes about musical intelligence. Reimer proposes a new definition for intelligence. He defines the word by saying, "Intelligence consists of the ability to make increasingly acute discriminations, as related to increasingly wide connections, in contexts provided by culturally devised role expectations."[28] Reimer argues that people develop their intelligences over time, depending on one's culture or lifestyle. Gardner's theory also concludes that people can learn or strengthen an intelligence over time, but Gardner suggests children show signs of a specific intelligence from a young age. Reimer states, "Unlike Gardner, however, I connect ways to be intelligent to roles people play rather than to frameworks of mind."[29] Rather than a person being restricted to learning one way, Reimer suggests that everyone is unique and cannot simply boil it down to just eight intelligences. Gardner argues that intelligence is not as simple as taking a test and finding out what grade one earned. Gardner states, "It is the capacity to do something useful and valued in society, the ability to respond successfully to new situations and to learn from past experiences and the ability to resolve problems encountered in life."[30]

Gardner's theory challenges the ideas of traditional intelligence theory. Susan Baum states, "MI theory challenges the notion of IQ in at least three significant ways. MI maintains

---

[28] Bennett Reimer, *A Philosophy of Music Education: Advancing the Vision,* (Upper Saddle River, New Jersey, Pearson Education, Inc, 2019).

[29] Ibid, 208.

[30] Tobias O'Niel, *Foundation of Education – Psychology of Education The concept of distributed intelligence in Gardner's theory of Multiple Intelligences, (*2009).

that: (1) several intelligences are at work, not just one; (2) intelligence is expressed in our performances, products, and ideas, not through a test score; and (3) how the intelligences are expressed is culturally defined."[31] Traditional intelligence theory is lacking in its approach to intelligence. Takahashi states, "since traditional intelligence theory assessed students' maximal performance in situations related to school settings, there was little focus on the most valuable aspects of cognition within real life settings."[32] Intelligence should be based on cultural and social backgrounds, not how well someone can perform on novel tasks.

The traditional theory is lacking when it comes to teaching students with special needs. Having one or two factors of intelligence is not enough for children with special needs. The problem lies with the IQ test. Takahashi states, "Children with developmental disorders, such as high functioning autism spectrum disorder, attention deficit hyperactivity disorder, and learning disorders, generally display normal IQ levels."[33] These children generally score normally on an IQ test, but it does not consider the child's diverse abilities. These children are also being tested using traditional paper and pencil tests. These tests cannot measure their abilities that are "relevant to their everyday environment."[34] The two-factor model is limited. Gardner's eight intelligences account for all types of learners, making for an inclusive system. Students with special needs can benefit from MIT when their teachers learn how to use it in the classroom.

---

[31] Susan Baum, *Multiple Intelligences in the Elementary Classroom*.

[32] Takahashi, *Multiple Intelligence Theory Can Help Promote Inclusive Education for Children with Intellectual Disabilities and Developmental Disorders*.

[33] Ibid.

[34] Ibid.

Assessing Multiple Intelligences

The traditional g factor theory of intelligence assesses students with abstract concepts that do not consider cultural differences and various learning styles. The assessments also make learning interesting for learners as opposed to traditional theory assessment exams. Gardner's theory of multiple intelligences instead takes place in a classroom setting. Leandro S. Almdeida states, "the assessment of intellectual capabilities is done in a classroom context through practice activities, with attractive material, without time constraints and giving children the freedom to manipulate this material."[35] Gardner's assessments focus on learning rather than outcomes. The process takes time and allows educators to decide best what learning processes are best for their students.

Intelligence assessment for multiple intelligence theory should contain various elements. There are six elements that Leandro S. Almeida gives for MIT assessments. The first is, "MI should turn to diverse and attractive material to evaluate the different intelligences."[36] To make assessments interesting for young children, educators must create ways to make the tests engaging. In music, this could mean having students read poetry or song lyrics for linguistic intelligence. The second factor in a MI assessment is to "identify the strengths and weaknesses of several intelligences through the use of observation scales, portfolios, working styles and inventories."[37] Educators should observe their students over the course of the school year to adapt their curriculum to best suit the needs of their students. The third element to consider is to "help identify abilities and forms of taking advantage of these abilities in order to overcome the

---

[35] Leandro S. Almeida, *Intelligence Assessment: Gardner Multiple Intelligence Theory as an Alternative,* (The Spanish Ministry of Science and Technology, 2009).

[36] Ibid.

[37] Ibid.

discrepancy between strengths and weaknesses."[38] Educators should first decide what strong and weak intelligences their students have before adapting their curriculum. A curriculum should be created to best suit the needs of all learning styles. However, adapting a curriculum should take place over the course of a school year. This is only possible once a teacher has met and learned their students' cultural backgrounds, learning styles, and capabilities.

MI assessments should also "inform teachers about students' competencies in order to foster the transfer of those competencies to curriculum domains."[39] By focusing on students' abilities, such as problem solving, leadership, and communication, educators can better create a curriculum that benefits all learners. Teachers can transfer their students' competencies to the curriculum so it can be adapted to fit the current classroom environment. MI assessments should "create the conditions that allow the child commitment and expertise."[40] The classroom environment is vital in the learning process. Students learn most effectively in a classroom where they feel safe and welcomed. Students in a safe learning environment can feel free to make mistakes and learn effectively from those mistakes. Finally, MI assessments should "[f]ocus on gathering information which is relevant for the teaching and learning process."[41] If the information gathered from these assessments is not related to the curriculum and does not benefit student learning, then it is not essential to consider when creating an inclusive special education music curriculum.

---

[38] Ibid.

[39] Ibid.

[40] Ibid.

[41] Ibid.

How MIT Helps Teachers

One problem teachers face when making their classroom inclusive is that they must teach the material quickly to get through everything in their curriculum rather than focusing on inclusivity and quality of the material. MIT provides an easier method for including students with special needs into the music curriculum. Teachers illuminate each child's strongest intelligence within each lesson. According to Junichi Takahashi, "Traditional intelligence theory assessed students' maximal performance in situations related to school settings, there was little focus on the most valuable aspects of cognition within real life settings."[42] If teachers focus more on how a student learns rather than teaching quickly, then the students can have a more positive, well-rounded educational experience.

MIT can help music teachers with teaching students involved in small and large ensembles. For example, if a student in band is having trouble playing a part in the music, the teacher can surround this student with children who exhibit high musical intelligence. By surrounding the student with more musically adept children, the struggling student hears his or her instrument part without having to ask the teacher.

The teacher can also use MIT while helping individual students. When going over specific parts with the students, the teacher can address their stronger intelligences. For example, if a student struggles with singing a voice part in choir, the teacher can utilize the student's strongest intelligence to help them learn. If the student is strongest in mathematics, it would be beneficial to have the student count the rhythm of their part.

---

[42] Takahashi, *Multiple Intelligence Theory Can Help Promote Inclusive Education for Children with Intellectual Disabilities and Developmental Disorders*.

Teachers can ask themselves questions when making a lesson. Teachers should make their lessons more effective for students because the lessons cater to the intelligences of all students. For example, instead of having students listen to a piece of music and do nothing else, a teacher can have the students draw a picture of what they imagine when listening to the song, thus differentiating instruction for the musical, visual and bodily-kinesthetic learners.

Classroom Management

Classroom management can also be influenced by the multiple intelligence theory. Various strategies can be incorporated into the classroom to quiet a rowdy class. Using one's voice to scream to quiet a class is ineffective. An effective way to quiet a class is to utilize the musical intelligence. Thomas Armstrong suggests teachers "clap a short rhythmic phrase and have students clap it back."[43] This simple strategy helps not only the teacher maintain their leadership role, but helps the students learn in a positive environment.

Another way to get students to pay attention is to utilize the visual intelligence. A teacher can use a visual symbol to quiet a class. Using a red stop sign to symbolize quiet and a green sign to symbolize the opposite, a teacher can effectively manage a class. If there was a student who was color blind, the signs could also have words written on them, such as stop and go.

A study done by Suleyman Celik in Duhok city, Iraq shows how 8th and 9th grade teachers can use the MIT to control a classroom. By incorporating MIT activities, the students will stay engaged in the lesson and not misbehave. Questionnaires and interviews were used in this study to ask teachers how they control their classes. Celik concluded that "teachers who use different types of teaching activities could control their classes easier than the way they used traditional

[43] Armstrong, *Multiple Intelligences in the Classroom.*

teaching approaches and the students' engagement to the lessons are so high."[44] Teachers who use a single management style could also be seen as boring and their students will be inattentive and bored.

The study was conducted with teachers who complained about their students misbehaving. The students were not told they were participating in a research study. Celik first used Walter McKenzie's MI Inventory survey to find out what the students' strongest intelligences were. Meetings with parents and teachers were also used to determine the students' intelligences. Weekly lessons were then prepared, including "different types of teaching activities to different intelligences."[45] The students were permitted to learn at eight different learning centers. Each center represented one of the eight intelligences. Students were told they did not have to visit every center if they did not feel they could benefit from a specific intelligence. The study concluded that "multiple intelligence teaching activities build up a positive teacher-student relationship, the teachers kept the class moving from activity to activity and interjected fun activities throughout the class, teachers could communicate the school and classroom rules, and multiple intelligence teaching activities promote many types of group and pair working based on relevant intelligences."[46]

Listening is a vital part of music making and creating. The musical intelligence comprises of performing, listening, and creating. Howard Gardner provides a quote from composer Aaron Copland: "The intelligent listener must be prepared to increase his awareness of the musical material and what happens to it. He must hear the melodies, the rhythms, the harmonies, and the

---

[44] Suleyman Celik, *Managing the Classes by Using Multiple Intelligence Instruction*, (Ishik University, Iraq, 2015).

[45] Ibid.

[46] Ibid.

tone colors in a more conscious fashion. But above all he must, in order to follow the line of the composer's though, know something of the principles of musical form."[47] Teachers can utilize this aspect of the musical intelligence by having students compose their own pieces of music, listen to different styles of music, and perform in an ensemble setting.

Teachers can use MIT to analyze their teaching strategies and improve them. Thomas Armstrong says, "Multiple Intelligence theory provides a way for all teachers to reflect upon their best teaching methods and to understand why these methods work."[48] For example, a music teacher might do a lesson where the students must learn to play rhythms on bongo drums. This is an excellent lesson for musical and mathematics learners but might be difficult for other types of learners. To make this lesson inclusive for students with special needs, the teacher can have the students compose their own piece of music and draw pictures of what they imagine when playing. The lesson now caters to linguistic and visual learners.

Culture and MIT

The multiple intelligence theory is affected and influenced by one's own culture. Bennett Reimer explains that one's culture influences how one grows and uses their intelligences. "Culture largely determines how the general factor of intelligence plays out functionally."[49] Thomas Armstrong gives examples of other cultures using the MIT. He explains, "In Norway, nature smart as experiences through outdoor education is given much greater emphasis than it is in the United States."[50] The children are given opportunities to spend time in

---

[47] Howard E. Gardner, *Frames of Mind: The Theory of Multiple Intelligences*, (New York: Basic Books, 1993).

[48] Armstrong, *Multiple Intelligences in the Classroom*.

[49] Reimer, *A Philosophy of Music Education.*

[50] Armstrong, *Multiple Intelligences in the Classroom*.

nature, whether they are hiking, skiing, or just having class outside. In Korea, “Children who have a weakness in linguistic and mathematics consider themselves as helpless at school.”[51] The achievement of mathematical and linguistic intelligence is so high in Korea, children cannot expand their other intelligences because of their culture. These children may have strong musical or spatial intelligence; however, they cannot grow in these other ways of learning.

Creating a MIT Curriculum

Music teachers do not have a sustainable curriculum to include special needs students. The trouble with music class is there is usually one class for everyone to join. For example, there might only be one band, orchestra, or choir. Some students have a choice of all three. This can be problematic for special needs students who need extra time to learn. Music teachers struggle with choosing music that every student enjoys playing, teaches important elements of music and challenges the students. Educators can incorporate the multiple intelligence theory into the curriculum to help their students learn more effectively.

In the special education music classroom, the need for inclusivity is high. Teachers can implement the MIT in the classroom by catering their lessons to suit the needs of all students, and thus creating a more inclusive classroom. Author Thomas R. Hoerr suggests using a report card that gives parents the opportunity to view their child's strengths and weaknesses. "Not only in understanding how a child is developing academically and socially but also for furthering the understanding of teachers, parents, and students about a child's MI strengths and the areas needing additional focus."[52]

Curriculum development is influenced by the multiple intelligence theory in various ways.

---

[51] Ibid.

[52] Thomas R. Hoerr, Sally Boggeman, and Christine Wallach, *Celebrating Every Learner: Activities and Strategies for Creating a Multiple Intelligences Classroom*, (Hoboken: John Wiley & Sons, 2010), pg. 294.

A teacher may improve their lessons using the theory and improving the curriculum. By utilizing the aspects of the theory, teachers can influence their students to perform and learn better, thus improving student learning. For example, a teacher may have students who are strong in the social intelligence. This teacher might choose to take advantage of this and have the students do a lot of group projects throughout the year. Gardner states, "Meaningful projects taking place over time and involving various forms of individual and group activity are the most promising vehicles for learning."[53] Gardener's statement also includes individual activity as being effective for the students. David Elliott explains that in the music class, "Self-growth and enjoyment in the practicum depend on interacting with musical products or projects that embody the best musical thinking of the music praxes selected for study."[54]

If parents, students, and teachers understand the MIT, they can implement it at home as well. When students are working on their assignments at home, their parents can help them use their strongest intelligence to help them understand their work better. When students can learn effectively at home, then this positive learning carries over to the classroom.

Conclusion

The issue with using traditional theory in the classroom is it provides one intelligence for all people that is based on various educational aspects of school. If a person failed an IQ test, then they would be deemed unintelligent by traditional theory standards. Assessments can be given to students to figure out their strongest and weakest intelligences. Factors must be

---

[53] Howard Gardner, *The Unschooled Mind*, (New York: Basic Books, 1991), 204.

[54] David J. Elliott, and Marissa Silverman, *Music Matters: A Philosophy of Music Education*, (New York: Oxford University Press, 2015), pg. 429.

considered when creating assessments, such as benefits to students learning, cultural background of students, and how interesting and engaging the activates are. Assessing intelligences must also take place over the course of a school year. This way, a curriculum can be created and adapted to best meet the needs of all students. Gardner's theory presents various ways of learning for each student. Utilizing the multiple intelligence theory in the classroom allows students to learn more effectively. The classroom also becomes an inclusive environment for students to learn. Educators can create a music curriculum that benefits all students by making use of each students' strongest intelligence. By presenting each topic in various learning styles, students can develop a better understanding of the curriculum.

CHAPTER 3

Introduction

The purpose of this chapter is to see how students with special needs respond to a classroom curriculum that incorporates multiple intelligence theory. The lack of inclusivity in the special education music classroom is the reason for studying multiple intelligences (MI). The inclusion of MI in a music curriculum allows special education students to learn most effectively. Educators can differentiate instruction to meet the needs of all students. Incorporating MI into a curriculum allows students to learn in a safe and positive environment. The effects of using MI in the classroom are positive and improve student learning.

Design

This study uses a qualitative design with a historical approach to research. This study reviews the work of others and builds upon the information given. Studying the effects of Gardner's MIT in the classroom gives an idea of how educators could utilize students' strong intelligences. One can analyze the work of other and experiments that have been done on MIT in the classroom to hypothesize if Gardner's theory promotes inclusivity in the special education music classroom.

Procedure

The curriculum project includes various MI activities with the intention of teaching students with special needs how to play the piano and compose music. Various activities throughout the curriculum comprised of ways to differentiate instruction for all types of learners. The eight different intelligences are accounted for, including linguistic, kinesthetic, spatial, mathematical, musical, natural, intra-personal, and inter-personal. The activities presented keep the students active and engaged throughout the semester.

The curriculum consists of a 12-week course that teaches students with special needs how to write songs and play the piano. The action learning verbs associated with the curriculum are name, locate, demonstrate, compose, and evaluate. These action verbs allow students to use all eight of their intelligences. Naming the notes in piano sheet music allows students to use linguistic and spatial intelligence because they are reading notes and using visuals to name them. Locating the notes on the piano allows students to utilize linguistic, kinesthetic, and mathematical intelligences because students must remember how far apart piano keys are from each other. To develop the muscle memory necessary for playing piano, the students can utilize their kinesthetic intelligence. Demonstrating proper piano techniques allows students to showcase their musical intelligence. Composing original music allows students to be creative and utilize all intelligences including natural, inter-personal and intra-personal. Students can have the freedom to write song lyrics about subjects that are personal to them and could be about anything, which is why all intelligences can be used. Lastly, evaluating one's own piano skills allows students to use inter-personal and intra-personal learning because they can critique and analyze their own work, as well as the work of others.

Summary of Curriculum

There are twelve weeks in this course, and each week builds on top of the previous one. In week one the students learn how to name notes on the grand staff, rhythmic values, clefs, and the parts of a song, such as intro, verse, chorus and the bridge. Activities for week one include playing songs from a piano lesson book to learn kinesthetically and visually. In week two, the students can learn the parts of a song, where middle C is on the piano, and name the notes on the grand staff. Activities for week two include playing recordings of popular songs, showing a

visual representation of song form on the classroom smartboard, and having the students place colored stickers on the piano keys to easily identify notes.

Weeks three and four utilize the action verb “locate”. Students learn how to locate notes on the piano by using stickers as a scaffold but removing the stickers in week four. Activities for these two weeks include playing and locating every note on the piano, playing songs from the lesson books, and reading pages from a theory textbook.

In weeks five and six, students should demonstrate proper piano technique by playing individual and group praxis. The students can learn how to play more advanced music in their lesson books. The students learn simple chords with their left hands as well, using stickers if necessary. In week six, students should begin to learn how to write sheet music. The students can practice drawing treble clefs, bass clefs, and notes from their lesson books. Theory quizzes and performance praxis can also be given to assess student learning.

In weeks seven through ten, students use the action verb compose to write original music. Students learn to write original melodies, compose a verse, chorus and bridge, and work in small groups. Activities include writing a song as a class, showing examples of famous songs, picking topics for song lyrics, and playing original compositions for the class.

Finally, in weeks eleven and twelve, the students evaluate themselves and other students on their piano skills, composition, and performance. The students can evaluate their progress over the semester. The feedback and assessments are important for the students to see how far they have come since the beginning of the semester. Activities include performing a final project for the class in small groups.

Data Analysis

Students with special needs are mostly not included in the music classroom for various reasons. One reason they are not included is their peers and teachers do not think they can achieve aspects of being a great musician. A study conducted by Judith A. Jellison examined adult's and children's attitudes towards the inclusion of special needs students in the music class. Over a 30-year period, thousands of students and teachers participated in studies related towards inclusivity of special needs students. The study showed that people responded negatively to videos of a special needs choir performing. All the adults and only some of the children were told the students were special needs, while other children were not. However, knowing the students had special needs did not make a difference in the results. Jellison states, "When children were asked if they would want to join this choir, most responded negatively - not because the children in choir had disabilities but because of the quality of the music performance. Higher ratings by adults for the music performance suggests that adults may have had lower initial expectations for the music capabilities of children with disabilities."[55]

Knowing students are special needs influences peoples' decisions on including them in music class. Some teachers might be striving for a professional level of musicianship in their performing ensembles. Overall, special needs students might not be able to meet these criteria, and this is the problem. Instead of aiming to have the world's best ensemble, teachers should aim to have an inclusive classroom where everyone is welcome. As Howard Gardner states, "Assessing multiple intelligences is not a high priority in every setting. But when it is necessary

[55] Julia Gallegos, *Music and Children With Special Needs,* (Texas: University of Texas, 2006).

or advisable to assess an individual's intelligences, it is best to do so in a comfortable setting with materials (and cultural roles) that are familiar to that individual."[56]

Conclusion

This chapter presents the curriculum design that incorporates multiple intelligence theory. This curriculum allows students with special needs to learn most effectively in the music classroom. The curriculum also promotes inclusivity for special needs students in the music classroom. Educators can use this course to utilize their students' strongest intelligences and learning styles. Educators can differentiate instruction when they understand how their students learn most effectively. The study by Judith A. Jellison showed that people had a bias towards typical students in the music class. This is due to educators' lack of knowledge on how to differentiate instruction for special needs students. By incorporating Gardner's theory of multiple intelligences into any curriculum, educators can take advantage of their student's strongest intelligences and allow them to learn in a safe learning environment.

[56] Howard Gardner, *Reflections on Multiple Intelligences: Myths and Messages*, (Phi Delta Kappa International, 1995), pg. 2.

CHAPTER 4

Introduction

The curriculum project presented focuses on incorporating Howard Gardner's multiple intelligence theory into the music curriculum. The aim of the project is to create an inclusive learning environment specifically for special needs students in the music classroom. By utilizing students' MI in the classroom, educators can create a positive and inclusive learning environment. Students will learn most effectively when teachers incorporate their strongest intelligences into the curriculum. Teachers must look at their students' various learning styles to create a curriculum that best fits their students' needs.

Research Question 1

Research question 1 asks, "how can the use of Howard Gardner's multiple intelligence theory promote inclusivity for special needs students in music-focused classrooms?" The curriculum project presented is crafted for the inclusivity of special needs students in the music classroom. The project aims to include action learning and MI activities that create the most effective learning environment for special needs students. By using MIT in the classroom, educators can include all students in a lesson because they can change the way they teach to differentiate instruction effectively.

Research Question 2

The second question is: "what kinds of processes can music educators utilize to incorporate multiple intelligence theory in the classroom?" Music educators can include various activities in the curriculum that caters to the eight intelligences. Educators must survey their students to figure out their strongest intelligences. Activities presented in the curriculum can be adjusted based on class size, students' strong intelligences, and the subject being taught.

The processes used in the classroom reflect student achievement throughout the semester. If students are struggling with the material, then the teacher should adjust the curriculum accordingly. For example, if the students are having trouble learning how to find the notes on the piano in week 1, the teacher should continue reviewing this topic in week two before moving on to the next topic. The teacher should also take into account the students' other intelligences to create activities which allow students to learn most effectively.

Research Findings

The curriculum project examines the potential of utilizing Gardner's multiple intelligence theory in the special education music classroom. By using different learning styles and strategies to teach, students can learn more effectively. A teacher can use visual aids in their classroom to increase learning potential. For example, having posters around the room on the walls showing piano hand position or finger numbers to help students remember these elements of music.

An important part of the curriculum is to write an original composition. The composition is to be completed in a small group. This helps the students who are strong in interpersonal and intrapersonal intelligence because they work best with other people and can communicate strongly what they feel should go into a project. Mathematical intelligence is covered by having the students count rhythms on quizzes throughout the semester. Spatial intelligence is used when students memorize their music and can figure out the form of a song in their heads. Natural intelligence is used by allowing students to work outside on some class days while they think of lyrics for their composition. Bodily kinesthetic learners benefit from days where class is outside because they can move around. They also benefit from playing the keyboard because they learn most effectively by using body movements and developing muscle memory. And lastly,

linguistic learners benefit from this curriculum by creating lyrics and examining lyrics from their favorite songs.

A Holistic Approach

A holistic approach to teaching must be utilized to create a positive and effective learning environment. Authors Kirsi Tirri and Petri Nokelainen explore the effects of holistic teaching, saying, "A Holistic approach to teaching and learning includes the whole learning profile of the learner with his or her multiple intelligences and personality."[57] When teachers utilize a holistic approach in the classroom, they can then unlock a student's true potential as learners. The students can learn more effectively because they realize that their teachers are utilizing the student's whole learning profile.

Conclusion

Multiple Intelligence theory should be utilized in the music classroom to create an inclusive learning environment. This can be done if educators analyze their students' strongest intelligences. Educators must adjust the lessons taught throughout the semester according to student achievement. If teachers move on to another topic without assessing student learning first, then students will not learn effectively.

Teachers should incorporate MI into the curriculum throughout the year. Not every intelligence has to be covered in every lesson. However, if a student is struggling a teacher can adjust their lesson to differentiate instruction to meet the needs of all students. This will create an inclusive music education classroom. Teachers can also adjust the classroom environment to help all students. Having visuals on the classroom walls, having a hands-on learning center, and

[57] Kirsi Tirri, and Petri Nokelainen, *Measuring Multiple Intelligences and Moral Sensitivities in Education*, Vol. 5, (Springer Science & Business Media, 2012).

having students work in groups are just some of the ways educators can create a MI environment for their students. When educators utilize MIT in the classroom, the effect is be positive because educators keep students engaged, interested and active throughout the school year.

CHAPTER 5

Introduction

The research presented shows how Gardner's MIT promotes inclusivity in the special education music classroom. The curriculum presents various action learning activities that can be utilized to meet the needs of all students. Educators can utilize the findings in this study by incorporating MIT in the classroom. Using action learning MI activities keeps students engaged throughout the school year. This creates a positive and inclusive learning environment where students learn most effectively.

Summary of Findings

The findings show that Howard Gardner's MIT can promote inclusivity in the music classroom for special needs students. The findings also show how MIT can create a positive learning environment where students learn more effectively. By incorporating MI activities into the curriculum, educators can effectively differentiate their instruction to meet the needs of all students. Utilizing MIT in the classroom also keeps students active and engaged, because the educators utilize holistic learning. Educators can analyze how their students learn most effectively and incorporate the needed intelligences into a curriculum.

Significance

The results of this study are beneficial and important to the field of music education for various reasons. One reason is that MIT can be used to promote inclusivity in the special education music classroom. Educators can utilize their student's different learning styles to include everyone in each lesson. Another reason this study is beneficial to educators is that students will learn more effectively in the classroom. Teachers can adapt their lessons to cater to

the needs of all students. This differentiates instruction and makes a positive learning environment.

Limitations

There are several limitations that must be examined. The fact that all eight of Gardner's intelligences cannot be combined into every lesson is one limitation. Educators must include as many intelligences as they can that suit the needs of their students. All eight intelligences do not have to be utilized in each lesson. Another limitation is that every teacher has different teaching styles. Adding Gardner's MI into the curriculum will not suddenly change a classroom dynamic and make students learn more effectively. However, it is the teacher's job to incorporate MIT in the classroom as much as possible. Lastly, MIT must be tested more in various types of classrooms, not just music. Doing so is beneficial to music educators because MIT can be incorporated into any classroom to improve student learning.

Recommendations

There can be future studies conducted on the topic of multiple intelligences. Educators can research the effect of other subject areas besides music that utilizes MIT. The effects could mean the use of MIT in school curriculums for all educators and students. MIT can also be studied in other grade levels and in general education environments. Researchers can conduct similar experiments where younger children are exposed to MIT in the classroom. Researchers can then see if a more inclusive environment is created from the inclusion of MIT. Though MIT is used with younger learners, researchers can see how it works with college level students in various subjects.

Conclusion

The incorporation of multiple intelligence theory in the special education music classroom helps teachers better understand how to adapt their classrooms to be inclusive. Teachers and students benefit from having a positive learning environment in their classroom. Having visuals on the walls of the classroom and assigning class jobs to students are just some of the many ways teachers can differentiate their instruction. As Howard Gardner states, "Art education is too important to be left to any one group, even that group designated as art educators. Rather, art education needs to be a cooperative enterprise involving artists, teachers, administrators, researchers, and the students themselves."[58] A community should be involved in the creation and teaching of the arts and music.

Teachers must learn how to cater to all their students' needs, but they can also teach them MIT. Teaching children how to strengthen their weaker intelligences help them learn more effectively. For example, if there is a lesson where the children must count rhythms in their heads, the students who are strongest in mathematical and spatial intelligence might perform better than children who are strongest in linguistic learning. If children can be taught what their strong and weak intelligences are, then they can better understand why they may struggle with learning a certain topic. They can communicate why they are having trouble more effectively to their teachers and parents. The teachers can either adapt the lesson so the struggling student can use their stronger intelligences to complete a task, or the teacher can train the students' weak intelligences so they can complete tasks that would otherwise be too challenging.

---

[58] Howard Gardner, *The Development and Education Of The Mind: The Selected Works Of Howard Gardner*, (New York: Taylor & Francis Group, 2005).

Bibliography

Almeida, Leandro S, *Intelligence Assessment: Gardner Multiple Intelligence Theory as an Alternative,* The Spanish Ministry of Science and Technology, 2009.

Armstrong, Thomas. *Multiple Intelligences in the Classroom, 4th edition*, VA: Association for Supervision & Curriculum Development, 2017.

Baum, Susan, Viens, Julie and Slatin, Barbara, *Multiple Intelligences in the Elementary Classroom,* New York: Teachers College Press, 2006.

Celik, Suleyman, *Managing the Classes by Using Multiple Intelligence Instruction,* Ishik University, Iraq, 2015.

Cherry Kendra, *What is General Intelligence (G Factor),* 2021.

Elliott, David J, Silvermna, Marissa, *Music Matters: A Philosophy of Music Education*, New York: Oxford University Press, 2015.

Gardner, Howard E. *Frames of Mind: The Theory of Multiple Intelligences*, New York: Basic Book, 1993.

Gardner, Howard E, *Multiple Intelligences: New Horizons in Theory and Practice*. New York: Basic Books, 2008.

Gardner, Howard, *Reflections on Multiple Intelligences: Myths And Messages*, Phi Delta Kappa International, 1995.

Gardner, Howard. *The Development And Education Of The Mind: The Selected Works of Howard Gardner*, New York: Taylor & Francis Group, 2005.

Gallegos, Julia, *Music and Children With Special Needs,* Texas: University of Texas, 2006.

Hoerr, Thomas R, Sally Boggeman, & Christine Wallach. *Celebrating Every Learner: Activities and Strategies for Creating a Multiple Intelligences Classroom*, Hoboken: John Wiley & Sons, Incorporated, 2010.

Michele Marenus, "*Gardner's Theory of Multiple Intelligences*," Creative Commons, last modified June 9, 2020, https://www.simplypsychology.org/multiple-intelligences.html

Nelson, Kristen N, *Developing Students' Multiple Intelligences,* New York: Scholastic Inc. 1998.

Nilson, Linda B, *Teaching at its Best*, San Francisco: Jossey-Bass, 2016.

O'Niel, Tobias, *Foundation of Education – Psychology of Education The concept of distributed intelligence in Gardner's theory of Multiple Intelligences,* 2009.

Regleski, Thomas A, *Teaching General Music in Grades 4-8,* New York: Oxford University Press, 2004.

Reimer, Bennett, *A Philosophy of Music Education: Advancing the Vision,* Upper Saddle River, New Jersey, Pearson Education, Inc. 2019.

Sternberg, Robert J, *The Nature of Human Intelligence,* Cambridge: University Press, 2018.

Takahashi , Junichi, *Multiple Intelligence Theory Can Help Promote Inclusive Education for Children with Intellectual Disabilities and Developmental Disorders: Historical Reviews of Intelligence Theory, Measurement Methods, and Suggestions for Inclusive Education,* Creative Education, January 2013.

Tirri, Kirsi & Nokelainen Petri, *Measuring multiple intelligences and moral sensitivities in education*. Vol. 5, Springer Science & Business Media, 2012.

Walker D. Jennifer, & Barry Colleen, *Assessing and Supporting Social-Skill Needs for Students with High-Incidence Disabilities,* SAGE Publishing Company, 2018.

Appendix A – Curriculum Project

COURSE SYLLABUS

NAME OF COURSE: PLAYING PIANO AND SONGWRITING

COURSE DESCRIPTION

A BEGINNER LEVEL COURSE THAT WILL HELP STUDENTS WITH SPECIAL NEEDS WHO WANT TO START PLAYING THE PIANO AND WRITE ORIGINAL MUSIC, BUT DO NOT KNOW WHERE TO START. THIS COURSE WILL INVOLVE THE LEARNING OF BASIC PIANO TECHNIQUE, PERFORMANCE, SONGWRITING SKILLS, AND MUSIC THEORY THROUGH THE USE OF TECHNOLOGY AND MULTIPLE INTELLIGENCE THEORY.

RATIONALE

I. PREREQUISITES

STUDENTS MUST BE KNOW THE ALPHABET UP TO G

II. REQUIRED RESOURCE PURCHASE(S)

Nancy Faber and Randall Faber, *Primer Level – Lesson Book: Piano Adventures 2nd Edition, Faber Piano Adventures, 2nd edition*, January 1, 1996.

Nancy Faber and Randall Faber, *Primer Level – Theory Book: Piano Adventures 2nd Edition, Faber Piano Adventures, 2nd edition*, January 1, 1996.

III. ADDITIONAL MATERIALS FOR LEARNING

MANUSCRIPT BOOK
PENCIL

IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

A. Name the notes on the grand staff as well as rhythmic value, clefs and the parts of a song including intro, verse, chorus and bridge.

B. Locate the notes on the piano using colored stickers or stickers with letters placed on the piano keys.

C. Demonstrate proper piano technique by playing individual and group praxis.

D. Compose original music individually and in small groups.

E. Evaluate themselves and other students on their piano skills, composition, and performance.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings

B. Praxis (10)

Students will be asked to perform pieces on the piano from their textbooks as well as their original compositions.

C. Assignments (10)

Students will be asked to complete theory assignments based off the textbook.

D. Quizzes (5)

Quizzes will cover the notes on the piano as well as theory. The quizzes will be multiple choice and matching.

E. Final Project

The final project will be a group praxis. The students will have to perform their original songs in groups and hand in a score for their piece using the program Finale. The song must be at least 16 measures. They will be graded on technique, neatness, and musicianship.

VI. COURSE GRADING AND POLICIES

A. Points

Praxis (10 at 30 pts each)	300
Assignments (10 at 30 pts each)	300
Quizzes (5 at 20 pts each)	100
Final Project	300

B. Scale

A = 940–1010 A- = 920–939 B+ = 900–919 B = 860–899 B- = 840–859

C+ = 820–839 C = 780–819 C- = 760–779 D+ = 740–759 D = 700–739

D- = 680–699 F = 0–679

C. Late Assignment Policy

All work must be completed on time. If an assignment is late, the student will get 10 points off for each day late. If an assignment is over a week late, it will get a 0.
If a student cannot be in person for a praxis, they must let the teacher know at least a day before hand. They will then need to make up the performance at a later date. If

the student cannot make up the performance more than a week after it is due, than they will receive a 0.
All students must be present for the final project.

CURRICULUM PROJECT – ANALYSIS CHART

PART I: CURRICULUM INFORMATION

Student: Daniel Passadino	**Course for which you are creating curriculum:** Piano and Composition for Special Needs Students
Required Textbook for Class: Nancy Faber and Randall Faber, *Primer Level – Lesson Book: Piano Adventures 2nd Edition,Faber Piano Adventures, 2nd edition,* January 1, 1996. Nancy Faber and Randall Faber, *Primer Level – Theory Book: Piano Adventures 2nd Edition, Faber Piano Adventures, 2nd edition,* January 1, 1996.	
Identify the problem: *(What does the student not know how to do? What is the student's gap in the training or experience?)*	
The students must perform various songs on the piano at a beginner level and demonstrate the understanding of music theory concepts.	
Who are the learners and what are their characteristics? *(Age, major, pre-requisites, residential, online, or a hybrid of the two)*	
Upper Elementary/Middle School (3-8) special needs students Pre-requisites- students must know the alphabet up to letter G. This will be an in-person course	
What is the new desired behavior? *(Overall, what is the main change or new addition to the student's demonstrated ability?)*	
The student will be able to play the piano at an amateur level, compose music and understand basic theory.	
What are the delivery options? *(Explain the materials you will develop for the course.)*	
Learning Outcomes **At the end of the course, the student will be able to:** 1. Name the notes in piano sheet music. 2. Locate the notes on the piano	

3. Demonstrate proper piano technique
4. Compose original music
5. Evaluate one's own piano skills
This course will be part of a general music curriculum of a 10-month school year. The required materials will be a manuscript notebook and a pencil. The classroom will need keyboards, music stands, and a smart board.
What are the pedagogical considerations? *(Describe your general content and methodology for the course.)*
The course will focus on piano technique, note reading and basic music theory.
What learning theory applies to your curriculum? Why? Multiple Intelligence Theory will be used in this course because each students' strengths will be accounted for when the teacher differentiates instruction.

Part II: Learning Outcomes

CURRICULUM PROJECT – DESIGN CHART

I. Evaluate the Analysis Chart and Learning Outcomes and include a full twelve weeks of curriculum. Make sure that you include praxial activities for your students.

Student: Daniel Passadino	**Course for which you are creating curriculum:** Piano and Composition for Special Needs Students
Concept Statement: This course is meant to encourage students with special needs to express themselves through music when other mediums for personal expression might not be achievable.	

Learning Outcomes *(List in the order you plan to address in 12 weeks)*	**Content** *(What must be learned to reach this objective?)*	**Learning/Training Activity** *(How will you teach the content?)*	**Assessment** *(How will you know that the student has met the objective?)*
1. Name the notes on the grand staff as well as rhythmic value, clefs and the parts of a song including intro, verse, chorus and bridge.	Week 1: • Play songs in Faber lesson book using black keys only. This will establish the concept of finger numbers. • Name the other parts of the staff (treble and bass clef) • Name rhythmic values (quarter, half, whole) Week 2: • Name and write down the parts of a song (intro, verse, chorus, bridge) • Find middle C. • Name the notes on the grand staff, Left and right hand. (Right hand CDEFG, Left hand CBAGF) • Review note names and rhythms. Add dotted half if students are understanding.	Week 1: • Using the Faber lesson book, practice pages 10-15, only black key songs. • Teach students the music alphabet (ABCDEFG) • Have projection of teacher's hands on smart board so students can see visual. • Students will learn kinesthetically by playing the pieces on their own. Week 2: • Play recordings of popular songs the students know and identify the intro, verse, chorus, bridge. • Show a visual representation of song form on smart board. • Have the students write down the song structure in their books. • Place red stickers on middle C on all keyboards so students can easily find it. If a student does not	Week 1: • Asking students to name the finger numbers • Asking students to play groups of 2 and 3 black keys. Week 2: • Asking students what the parts of the songs are. • Having the students write down the song structure of song examples played in class. • Seeing if students can play middle C with no sticker.

		need the sticker, then take this scaffold away. • Place different color stickers on new notes the students learn. • Play through pages 15-20 of Faber Lesson book.	
2. Locate the notes on the piano using colored stickers or stickers with letters placed on the piano keys.	Week 3: • Locate the notes on the piano. Students will use colored and labeled stickers to locate the notes as a scaffold. These will be removed as the weeks go on. Week 4: • Locate the notes on the piano without stickers (unless students are struggling)	Week 3: • Have students notice that middle C is always to the left of 2 black keys. F is always to the left of 3 black keys. Have them practice finding C and F as a class and alone. • Have students play and name every note on the piano starting with A0. • Play through pages 20-25 of Faber Lesson Book. • Write in the form of each song. Week 4: • Play through pages 25-30 of faber lesson book. • Read pages 1-10 of faber theory book.	Week 3: • Praxis performance. Students will play as a class and individually. • Ask students how many keys are on piano • Ask students what the last note on the piano is. • Ask students to name specific notes on the keyboard that don't have stickers. Week 4: • Praxis performance. • Students will play assigned text songs individually. • Finishing up to page 10 for homework of faber theory book.

3. Demonstrate proper piano technique by playing individual and group praxis.	Week 5: • Play more advanced music in the textbook including learning left hand simple chords (C major, F major and G major) Week 6: • Students will learn how to write sheet music (clefs, and notes)	Week 5: • Use stickers to show students where to place left hand fingers for simple chords. • Show students how they can play simple chords with songs in faber book. Week 6: • Have students practice drawing treble and bass clef, notes by copying them from faber book.	Week 5: • Theory quiz (note rhythmic values and note names. Naming simple chords. • Praxis performance-playing songs in faber book with simple chords. Week 6: • Theory quiz • Praxis performance
4. Compose original music individually and in small groups.	Week 7: • Write original melodies and lyrics using the piano and optional voice. Week 8: • Review parts of song • Students will write their own songs in groups of at least 3 students. • Think of song titles and lyrics. Week 9:	Week 7: • Write a song as a class (verse and chorus only) • Have students pick notes for the melody (only white keys and notes close to middle C) Use stickers to show students what notes they can use. • Have students come up with a song topic and rhyming words. Week 8:	Week 7: • Theory quiz Week 8: • Praxis performance. Week 9: • Praxis performance. Week 10: • Praxis performance.

	• Compose an original Verse and Chorus Week 10: • Compose an original Bridge and finish up other sections of the song that need fixing or review.	• Explain how each part of a song is different. • Teacher will demonstrate how to write a 4 bar into and outro by showing examples of actual songs from Youtube. A famous intro includes, “Let it Be,” by The Beatles. A famous outro would be, “Layla,” by Eric Clapton. • Have students say their song topics for the class • Students who are ready can play their piano melodies for the class. Week 9: • Use “Let it Be” and “Imagine” demonstrating song structure for the class. • Play original works for the class. Week 10: • Practice original works on piano. • Get together with other groups to compare each other’s works. • Students can choose to perform	

		a part of their song for the class to get feedback.	
5. Evaluate themselves and other students on their piano skills, composition, and performance.	Week 11: • Practice full original songs, add any final touches. Students can add more to the songs, but maximum length is 32 bars. • Week 12: • Review rubric for the final project with the class.	Week 11: • Practice full original songs, add any final touches. Students can add more to the songs, but maximum length is 32 bars. Week 12: • Students will grade each other's performances using a rubric. • Perform final projects.	Week 11: • Listen to student's compositions Week 12: • Listening to class perform final projects. • Assess students using rubric.

II. Enter each learning outcome according to Bloom's Taxonomy and describe what you believe the sequence is most effective.

Learning Outcomes *(List them in the order you plan to address during the 12 weeks of curriculum.)*	**Rational for Sequence** *(Describe why you believe this sequence is the most effective.)*
1. Name the notes on the grand staff as well as rhythmic value, clefs and the parts of a song including intro, verse, chorus and bridge.	Students need to develop proper note reading skills before they can begin to transcribe a melody they come up with for a song. They also need to develop the skill of playing an instrument to be able to perform their piece.
2. Locate the notes on the piano and using colored stickers or stickers with letters placed on the piano keys.	Practicing the piano will help the students figure out the notes they sing for their pieces but will also help to create melodies on the piano.

3. Demonstrate proper piano technique by playing individual and group praxis.	By becoming sufficient at an instrument, accompanying oneself on the piano or accompanying another person helps the students develop good ensemble skills as well as great musicianship. This stage will also be used to correct any little mistakes the students are making, but by this point, they should be playing simple songs at a moderate tempo.
4. Compose original music individually and in small groups.	The students will begin to write music for their final project. They will hand write the music into their manuscript books and garage band to record it.
5. Evaluate themselves and other students on their piano skills, composition, and performance.	Being able to critique oneself is important so the students can take what they have learned and continue improving and practicing at home. They can also self-reflect to see how far they have come over the course of 12 weeks.

CURRICULUM PROJECT – DEVELOPMENT CHART

Student:	**Course for which you are creating curriculum:**
*Consider the 3 advance organizer methods below. You must create an advance organizer for **each** method below to use as a pre-instructional strategy (to prepare the student to link what they **do** know to what they **do not** know).*	
Expository *(You are verbally describing the new content you are about to cover. enter below what you will say to the class as though it is in a script format)*	
Good afternoon everyone. Last week we covered black key songs in the lesson book. Let us play through the songs from last week before we learn the new topic today, which is playing songs on the white keys. We also discussed the music alphabet which was (ask class what letters are in the music alphabet). Very good. Let us review our finger numbers using our hand chart (review finger numbers with class). Now today we will be learning how to play songs on the white keys. Each key on the piano has a letter name. (Show the class where middle C is). This is middle C. To find it, you need to find a group of two black keys, then move one key to the left, like this (show them). I am going to give all of you a red sticker to place on middle C. (Walk around the class and make sure each student has placed	

their sticker in the right spot). Excellent job everyone. Now, can someone tell me what letter comes after C? Good it is D. What comes after D? E, very nice. And after that? F, excellent, and finally? G. Very nice work. So, as you can see, (play the 5 keys on the piano while speaking) the 5 letters, CDEFG, are these 5 keys on the piano. Can everyone put their right-hand thumbs on middle C? Notice how our other four fingers fall into place on the next four keys. Now let's play slowly C, D, E, F and G our 1, 2, 3, 4, 5 fingers. Excellent work everyone. Now let us try to play a song in our lesson books using finger numbers and letters. This song we are going to play is called, "Mary Had a Little Lamb." Has anyone heard this song before? Great! We will need to use our 1, 2, and 3 fingers. Who can tell me what notes those are? Yes, C, D and E very good. The teacher will go slowly, saying one letter at a time. Practicing the song in chunks. Great job everyone! I will see you all next time. Practice this song at home.

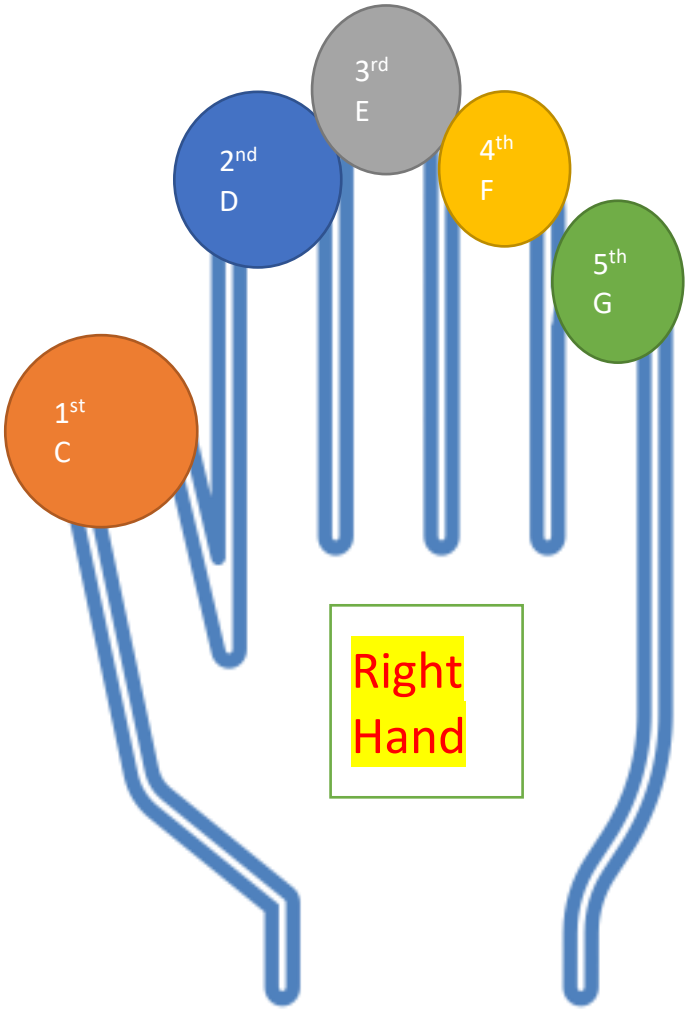
Narrative *(You are presenting the new information in a story format; enter below what you will do or say.)*

I began the class by reviewing the finger numbers with the class to reinforce this old material. I then introduced the new material (learning middle C, D, E, F and G) by demonstrating where middle C was on the piano. Middle C will be labeled with a red sticker to match the graphic of the right hand showed later. I then reinforced finger numbers by asking the students to place 1st finger or thumb on middle C. Once I saw that everyone did this successfully, I then introduced the next four letters, D, E, F and G. We then used the rest of our fingers to play the notes using 2 on D, 3 on E, 4 on F and 5 on G. We then played these five notes up and down, while I walked around the room checking to see if everyone was using all of their fingers and not just poking the piano with their pointer fingers. After the class was successful at this exercise, I taught them how to play Mary Had a Little Lamb by having everyone turn to the appropriate page in their lesson books. We then performed the song as a class using finger numbers first, then letter names, which was the new information learned. Now the students could use these two methods to play future songs.

Graphical Organizers *(You are presenting an original visual pictograph, chart, or concept pattern.)*
Describe the visual below and then copy and paste your original graphic.

The picture below shows the right hand and depicts each finger with a number as well as a letter. The students will learn finger numbers first then begin to associate them with letters. The colors of each circle also match the stickers that will be placed on the students' keyboards with each corresponding letter.

Copy and paste your original visual pictograph, chart, or concept pattern below:



Gagne's Nine Events of Instruction

Instruction Event	**Describe how each instructional event will be addressed in your instructional unit. Cite a reference from you text as to why this approach will be effective.**
1. Gain attention	I will start the class by having the class play through some songs from the previous class using finger numbers. This will ensure the class is paying attention using the students learning goal orientation and performance goal orientation. (Nilson, 96)
2. Inform learners of objectives	I will explain to the students that we will be learning new notes on the keyboard on the white keys. This will be done by using the expectancy theory. I will show the students one note at a time and show them how the new notes and song are played. (Nilson, 97)
3. Stimulate recall of prior learning	Students will need to perform praxis assignments from their lesson books thus recalling finger numbers learned in week 1 and letter names learned in week 2-3. (Nilson, 6)
4. Present the content	The content will be presented through teacher demonstration and by showing the students the graphic of the right hand with finger numbers and letters. This will, "facilitate comprehension, transfer, and retention of course material." (Nilson, 258)
5. Guide learning	Using inquiry-guided learning, I will have the students play simple songs and use stickers on the keyboard a scaffold. (Nilson 194)
6. Elicit performance (practice)	I will inform the students of the final group project, which will elicit practice by engaging the students in project-based learning. (Nilson 197)
7. Provide feedback	The students will self-assess their knowledge and skills when playing individually and in groups. (Nilson, 273)
8. Assess performance	The teacher will use summative assessments each week to listen to the students play a new song and ask them what fingers are assigned to which numbers and letters. Students will also evaluate each other's performances when working in groups. (Nilson, 289)
9. Enhance retention and transfer	I will ask the students to write down the muddiest points in the class, so they are reviewed at the end of each class to enhance retention. (Nilson, 277)

CURRICULUM PROJECT – IMPLEMENTATION CHART

Part I: Evaluate and revise the analysis, design, and development charts and the learning objectives

For this assignment, identify all items and tasks that must be prepared before you begin teaching your instructional lesson

List at least 6 necessary, physical items and provide a rationale for its use (e.g., flashcards, PowerPoint presentations, handouts, activity sheets, flipcharts, etc.)

Student:	**Course for which you are creating curriculum:**
Physical Item	**Rationale for Use** **Cite a reference from your text for each item indicating its effectiveness**
Keyboards	**The keyboards are the most important part of the lesson. Without them, the students would not be able to learn praxially or actively. (Reglski, 14).**
Colored Stickers	**The colored stickers provide a necessary scaffold for the students, so they know where to put their fingers on the piano. (Regelski, 61).**
Chart of Right Hand	**By having this chart available in the class at all times, the students will be able to correct mistakes on their own. The teacher can, "familiarize them with the uncertainties and the standards of comparison in our disciplines." (Nilson, 11).**
Lesson Books	**The students can look ahead in their lesson books to see what they will be learning next and what they need to prepare. They can also look back at old songs to see how far they have come and give them the sense of measurable progress and performance. (Nilson, 19.)**
Musical Praxis	**The musical praxis is a great way for the teacher to easily assess each students' skill level and give them appropriate summative feedback on their playing. (Nilson, 275).**
Sheet Music	**The sheet music can be used to practice performing as well as theory. The students can self-assess their playing and theory abilities with this sheet music as well. (Nilson, 273).**

Part II: List at least 6 necessary tasks and provide a rationale (e.g., jobs to be done in advance, such as arranging chairs in a specific formation, photocopying, etc.).

Task	**Rationale for Task** **Cite a reference from your text for each task indicating its effectiveness**
Photocopy Extra Sheet Music	The sheet music for the class will be easy at first so they can have an activity where they can, "retrieve, articulate, and organize what they already know," about the course material. (Nilson, 9).
Only hand out stickers. Don't actually put them on the piano. Allow students to place stickers on their own.	The colored stickers provide a scaffold for the students and an easily understood visual for them to see the correct notes to play on the piano. (Nilson, Regelski, 61). This provides a visual for learners who perform better with visual scaffolds.
The class can only happen if the classroom size and environment allow it.	Having the class structured in this way will allow the students to focus on the teacher and the task at hand. (Nilson, 7).
Choose pianos that have limited buttons and sounds.	The students might have a hard time figuring out this technology, so it is best for the teacher to turn them on before they arrive. The limited buttons will keep the students focused and they will be less distracted by all of the buttons on the keyboard. (Nilson, 46).
Arrange desks and pianos in groups of four	By having the students in groups, this will enhance their, "achievement/productivity, positive attitudes and ethics, the quality of interpersonal relationships, and psychological health." (Nilson, 180). This arrangement also allows students to give feedback to each other and use their interpersonal intelligence.
Arrange teacher's piano so it is easily visible to all students.	Having the teacher's piano easily visible for all students to see will help them focus because it is a constant visual aide. (Nilson, 108).

Part III: Describe in 4–6 sentences 1 type of Formative Assessment that you would choose to implement and detail its effectiveness for your course.

Formative Assessment Type	Assessment Details
Musical Praxis	Students will need to play a song learned during the week from their lesson books individually. The students will then be able to give each other formative feedback and self-assess their playing before receiving a final grade. This will allow all of the students to help each other improve their performance skills and piano technique. (Nilson, 275)

CURRICULUM PROJECT – EVALUATION CHART

Part I

Your Evaluation Plan

In the chart below, describe your plan for a formative assessment for each learning outcome in this unit

(This is something you would do before a summative assessment or exam to gauge the learner's grasp of the learning objective)

Student:	**Course for which you are creating curriculum:**	
Learning Outcomes	**Your Formative Assessment Plan**	**Rationale for Formative Assessment Type** *(Describe why you believe this assessment is the most effective and cite a reference from your text for support)*
1. Name the notes on the grand staff as well as rhythmic value, clefs and the parts of a song including intro, verse, chorus and bridge.	Students will be given multiple choice theory quizzes at the end of each week. The quizzes will ask them to name notes on the staff They will also listen to a song and be able to name the song structure.	By using a multiple-choice quiz to have the students review theory, the teacher will assess higher-order thinking using interpretive exercises. (Nilson, 294)
2. Locate the notes on the piano and using colored stickers or stickers with letters placed on the piano keys.	Students will be given a matching quiz to show they know where the notes are on the piano. The students will have to match the color and finger number with the correct key on a picture of a piano. For example, they will have to remember that red 1 = C.	The matching quizzes will allow the teacher to assess a lot of material at once. The use of visuals and colors will also benefit the students' learning. (Nilson, 293)

3. Demonstrate proper piano technique by playing individual and group praxis.	Using musical praxis, students will perform the pieces learned from their lesson books individually.	By having the students in groups, this will enhance their, "achievement/productivity, positive attitudes and ethics, the quality of interpersonal relationships, and psychological health." (Nilson, 180)
4. Compose original music individually and in small groups.	Students will use songwriting program, Finale, to practice writing musical notation.	Using a short answer composition quiz will allow the students to apply the musical vocabulary, notes and techniques learned in class. (Nilson, 298)
5. Evaluate themselves and other students on their piano skills, composition and performance.	Students will engage in a final group performance in front of the class. Students will use rubrics to self-assess their performances as well as their peers.	According to Nilson, self-assessment benefits students in many ways, including, "raising their grades, increasing their motivation, lowering their stress, sharpening their focus on an assignment's key elements, and helping them pinpoint the strengths and weaknesses in their work." (Nilson, 273)

Part II:
Evaluation and Reflection

Consider all of the charts and stages of development in order to create your syllabus. List 6 issues or strategies that must be addressed to make your unit stronger and more concise. Provide a rationale for your choice.

Issue/Strategy	**Rationale for Changing**
1. Changed name of the course from, "How to Play Piano and Write Music for People with Disabilities," to "Piano and Composition for Special Needs Students."	By changing the name of the course from "disabilities, to "special needs," it includes all students with special needs and not just specifically with a disability. This will ensure that the classroom is inclusive and a, "safe, stimulating, learner-centered classroom environment." (Nilson, 81)
2. Changed two required textbooks to one piano lesson book and one theory book.	The two new textbooks will allow the students to easily practice their piano skills, theory knowledge and self-assess during class and at home. (Nilson, 273)
3. Changed pre-requisites from, "none," to "students must know the alphabet up to letter G."	The students must know the first seven letters of the alphabet to make it easier to, "connect new knowledge to what they already know." (Nilson, 6)
4. Changed course description to include the use of technology.	The use of technology, "increases student engagement, participation, interaction, and activity." The students will be able to easily compose and record their music during class. (Nilson, 46)
5. Generalized learning outcomes.	The outcomes were changed to reflect what the students will, "be able to do by the end." (Nilson, 17)
6. Changed activities to facilitate more critical thinking.	By advocating for more critical thinking activities in the classroom, the students will use it in everyday life. According to Nilson, "critical thinking is a life skill that pays off in many everyday settings." (Nilson, 43)

Summative Assessment Quiz:
This quiz will consist of 25 questions pertaining to the songs played in the lesson books, theory and song structure.

True or False (10 points)
1. The chorus always comes after the verse. **False**
2. A verse can come before or after the bridge. **True**
3. A song has to be 3 minutes long. **False**
4. A song can have lyrics or just be instruments. **True**

5. A song can be about anything. **True**

Multiple Choice (10 points)

6. Which finger is labeled with a red sticker?
a. 1st
b. 2nd
c. 3rd
d. 4th

7. Which finger would you use to play the note D?
a. 1st
b. 2nd
c. 5th
d. 4th

8. What color sticker goes with the 3rd finger?
a. grey
b. purple
c. red
d. green

9. What finger is labeled with a yellow sticker?
a. 3rd
b. 5th
c. 1st
d. 4th

10. Which finger is labeled with a green sticker?
a. 1st
b. 4th
c.3rd
d. 5th

Matching (10 points)

Match the note to the right finger number.

11. C	4
12. D	3
13. E	5

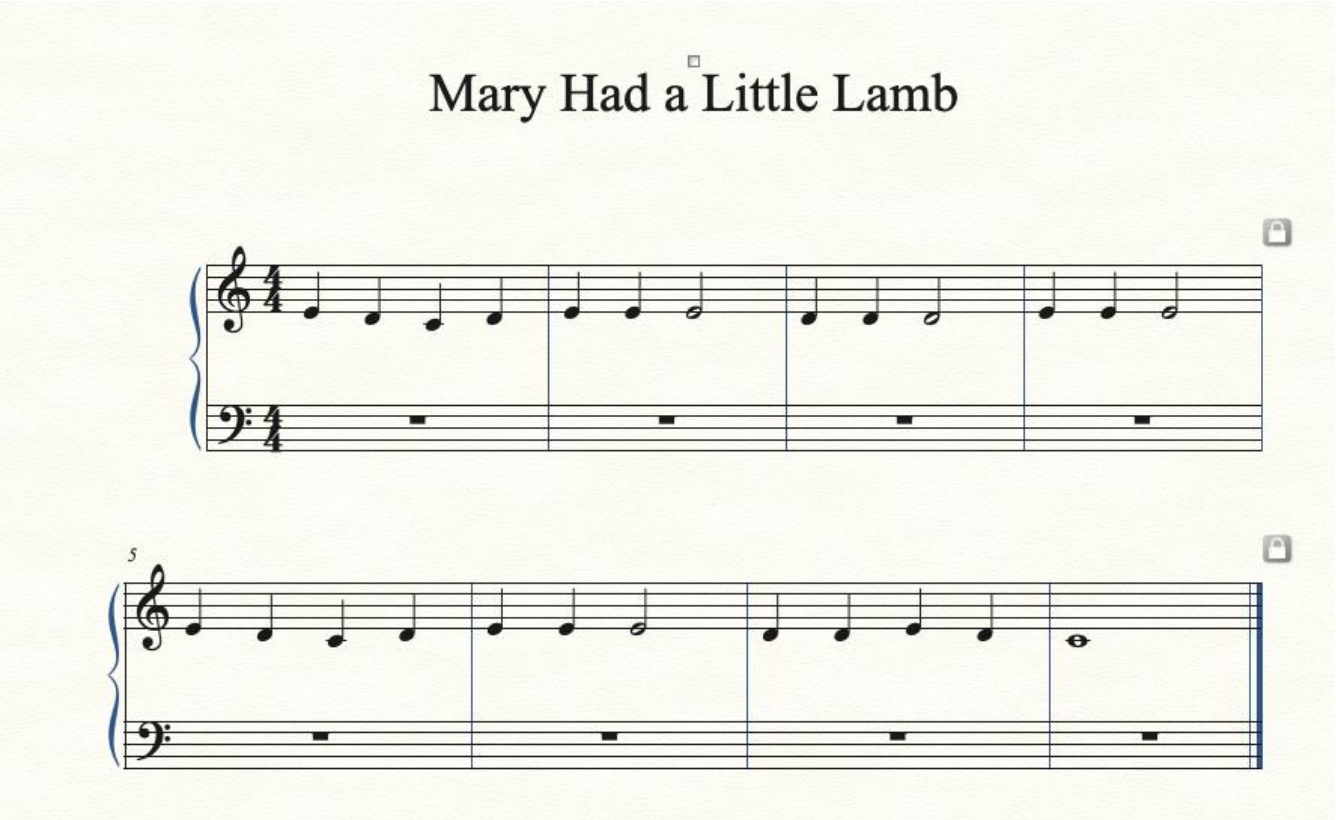
14. F 1

15. G 2

Fill in the blank (10 points)
Name the parts of a song:

16. _____ **Intro**
17. _____**Verse**
18. _____**Chorus**
19. _____**Bridge**
20. _____**Outro**

Fill in the blank
Be able to play “Mary had a Little Lamb” on piano, count rhythms orally, and label notes on music sheet.



1. What is the first note in measure 1? **E**

2. What is the first note in measure 5? **E**
3. What is the last note of the song? **C**
4. What is the 3rd note in measure 3? **D**
5. What is the note that appears most often? And how many times? **E, 12 times.**

Formative Assessment Quiz:
This quiz will be 10 questions. The students must label each finger with 2 items: finger numbers and color of sticker associated with said finger.

Can you label all of the **finger numbers** and colors in the picture below:
Each question is worth 2 points.