

The Common Core and Music

One of our greatest advocacy tools is to be proactive in demonstrating how music fulfills the mission of educating youth. The most recent attempt to define this mission is seen in the recently adopted Common Core. At first glance, concerns emerge that this legislation may devalue music in the context of schooling and possibly diminish music teachers' ability to teach. Upon more careful review, the Common Core reinforces the learning that is authentic in our music classes.

What is the Common Core?

They are educational standards that are meant to help teachers ensure that students have the skills and knowledge needed to be successful in beyond primary and secondary school.¹ The Common Core standards are also designed to help ensure that students are receiving a consistently high quality education, from school to school and state to state, in the foundations of learning important for any discipline.² The intentional design of the Kansas Common Core Standards serves to stimulate cross-curricular, cross-grade-level connections that facilitate enhanced learning. The Common Core Standards should not be viewed as a checklist of skills but rather as a kind of a topographical map that reveals the "lay of the land" of what we teach. The Common Core standards are designed to address general, cross-disciplinary literacy expectations for college and workforce prep.³

The Common Core English Language Standards are designed for literacy in communication valuable for any discipline. The integrated model of literacy includes four strands: reading, writing, speaking and listening, and language, which are intended to be woven together. The description of the Core Outcomes under the title of Mathematics explains processes and proficiencies in problem solving that are equally important in music. These are problem solving, reasoning, communication, representation, and connections.⁴

*A musician must be able to **read, write, speak, listen, and effectively use all appropriate means to communicate** their depth of musical understanding, responsiveness, and creativity. Literacy skills are an important facet to success in music programs, as well as success as a musician beyond educational training.*

¹ "Common Core Standards Initiative," <http://www.corestandards.org/> (December 2012).

² "About the Standards." <http://www.corestandards.org/about-the-standards> (December 2012).

³ "A Cautionary Note about Unpacking, Unwrapping, and Deconstructing the Kansas Common Core Standards." <http://www.ksde.org/LinkClick.aspx?fileticket=6-dMtO0Q0oE%3d&tabid=4754&mid=12664>, p.3 (December 2012).

⁴ "Standards for Mathematical Practice," <http://www.ksde.org/LinkClick.aspx?fileticket=NrF2sZEzKQI%3d&tabid=5276&mid=13067>, p.6 (December 2012).

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The Common Core standards are not meant to replace music content standards but rather to reflect how learning can be demonstrated in context of the discipline and to guide deeper consideration of music. Kansas' focus for reading, writing, speaking, listening, and language is a shared responsibility across the school to be incorporated with content area literacy, which means a component of literacy as an educated musician. Each of the following statements describes learning that should occur as a result of the Common Core. It is important to recognize how the learning that occurs in our music classes contributes to the overall expectations of an educated student. Consider how these goals excerpted from the Common Core documents apply to music learning.⁵

Students demonstrate independence:

Students can comprehend and evaluate complex texts (*print and non-print including arts-based content*) across a range of disciplines, and construct effective arguments to convey intricate or multifaceted information. Students can discern key points, request clarification, ask relevant questions, articulate their own ideas, and confirm they have been understood.

Students build strong content knowledge:

Students establish a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They read purposefully and listen attentively to gain both general knowledge and discipline-specific expertise.

Students respond to the varying demands of audience, task, purpose, and discipline:

Students adapt their communication in relation to audience, task, purpose, and discipline.

Students comprehend as well as critique:

Students are engaged and open-minded—but discerning.

Students value evidence:

Students cite specific evidence when offering an oral or written interpretation of a text (*our text is usually the musical piece, but sometimes something written about the piece or an interpretation in other's performance*). They use relevant evidence when supporting their own points and they constructively evaluate others' use of evidence.

⁵ “Students Who are College and Career Ready,” <http://www.ksde.org/Default.aspx?tabid=4778#StanDoc>, p. 7 (December 2012).

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Students use technology and digital media strategically and capably:

Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use (about music). They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline.

Students come to understand other perspectives and cultures:

Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively.

In music, the texts that students read occur in language, iconic, and/or notational formats. Students listen and communicate in music through musical performance, oral and/or technology-based formats. Writing in a music class may be through notational, written language, and/or symbolic means. The thinking skills associated with all Common Core Standards, including mathematical processes, are to be experienced and exhibited as appropriate for musical development. On the following pages are specific Common Core Standards and ideas of how they could be taught and assessed in music classes. As you read forward into the ideas presented, it is important to recognize that the notions presented are neither prescriptive nor exhaustive. As you think about the ideas presented, consider which of these standards are currently addressed in your class and across your music program; how development and proficiency are demonstrated through music; and if and how you might assess these standards as authentically representing musical learning.

There will be a clinic Session titled “Assessing Student Learning for the Common Core” at the KMEA ISW on Saturday, 2/23/13 from 9:00-9:50 a.m. in 207 Osage presented by Frederick Burrack, Director of Assessment at Kansas State University and Associate Professor of Music Education.

Also don't forget the advocacy session titled “Important Issues for Kansas' School Music Programs” by Frederick Burrack and Phillip Payne on Friday, 2/22/13 in room 206 Oak from 8:00-8:50 a.m.

Assessing Standards in Music Class for Reading Common Core

#1-3 Key ideas and details.

Summary of Standards for Reading	Student actions that lead to Reading Skills
<ol style="list-style-type: none"> 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. 2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. 3. Analyze how and why individuals, events, or ideas develop and interact over the course of a text. 	<ul style="list-style-type: none"> • Uses information within the music to understand compositional constructs and infers meaning within the music. • Recognizes musical and textual themes and summarizes what the composer does to develop those themes throughout a composition. • Grade-level appropriate reading skills of text and notation, on-sight and with practice.
Assessment Possibilities:	
<p>Task: <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Develop program notes that will provide an audience clear examples of the composer's musical intent. • Define musical vocabulary provided in the parts and/or score. • Describe the programmatic intentions of a composer with supporting information from within a composition. • Write a new set of lyrics to a choral composition that fits within the current context. • Identify the primary musical themes in a musical piece and describe how they were developed by the composer. <p>Teacher: <i>actions that further the development of reading skills within their students</i></p> <ul style="list-style-type: none"> • Selects resources with sufficient complexity for students to read that will enhance understanding and expand intellectual consideration of the music. • Encourages students to read about music independently. • Guides students individually/small group/ensemble to identify compositional elements. • Asks questions that will encourage deeper thinking about the music compositions/styles/composers. • Provides a variety of musical examples from which students can make comparisons to the musical piece in study. • Directs students to explain the reasoning behind their interpretation of a composition (T-chart could be used). • Uses graphic organizers such as Music Maps, Form Charts, or T-charts. • Exposes clues in the printed music to prepare for successful sight-reading. 	

Assessing Standards in Music Class for Reading Common Core

#4-6 Craft and structure.

Summary of Standards for Reading	Student actions that lead to Reading Skills
<p>4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.</p> <p>5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.</p> <p>6. Assess how point of view or purpose shapes the content and style of a text.</p>	<ul style="list-style-type: none"> Recognizes how compositional elements contribute to the meaningful and expressive nature of a musical composition. Explains how compositional elements and text contributes to understanding the music. Demonstrates meaning of cause-effect (tension-release) relationships of text and music. Demonstrates advanced phonic-analysis skills by identifying and manipulating phonemes in diction and pronunciation. Uses appropriate vocabulary.
Assessment Possibilities:	
<p>Task: <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> Cite the evidence of how the compositional elements in the composition. (i.e. musical phrases, dynamic shapes, expressive articulations, stylistic components, text) contribute to the musical affect. Clearly describe the form (macro/micro) of a musical composition in writing/verbally describe/through performance/graphically. Evaluate or infer the expressive purpose of a composition/performance from the composer's view, performer's view, or audience (listener's) view. Scan through a composition (and associated text) and effectively perform. Highlight specific compositional/textual elements that impact expressive performance and describe the affect. <p>Teacher: <i>actions that further the development of reading skills within their students</i></p> <ul style="list-style-type: none"> Models skimming and scanning of a composition and discusses the observable features that assist in sight-reading and discovering expressive content. Offers repeated opportunities for students to demonstrate diction and pronunciation with peer feedback. Provides visual/graphic representations of expressive meaning within music/text. Guides students to analyze and discover compositional components and discuss the contribution to the overall form. 	

Assessing Standards in Music Class for Reading Common Core

#7-10 Integration of knowledge and ideas.

Summary of Standards for Reading	Student actions that lead to Reading Skills
<ol style="list-style-type: none">7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.10. Range of reading and level of text complexity	<ul style="list-style-type: none">• Generates and responds logically to literal, inferential, and critical thinking questions before, during, or after listening/rehearsing/performing a musical piece.• Uses prior knowledge about music and content from other musical sources to understand and analyze music and text.• Summarizes compositional (music/text) information in a logical order that reflects the composition.• Uses external sources that enriches understanding of the music/composer/historical background/cultural influences/programmatic meaning.
Assessment Possibilities:	

Assessing Standards in Music Class for Reading Common Core

Task: *these are a few possibilities and are not to be considered definitive examples*

- Alone or in cooperative groups, students compare and contrast between texts and other musical examples (i.e. styles, periods, genres, or composers) and share their ideas with the class.
- Each student will generate their conception of the expressive meaning within music/text with supportive evidence and discuss peer feedback.
- While following the printed music, evaluate a rehearsal or performance recording using a reflection form that focuses on compositional/textual elements.
- Write a critical review of a musical performance of a studied composition providing evidence to support the evaluation.
- Analyze the impact of the composer's choices regarding the development and relationship of musical elements to the text or program.
- Describe if and how historical, cultural, or stylistic background might have influenced the composer.
- Describe the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on the expressive affect of the music.
- Each student will evaluate the expressive potential/hindrane that occurs when music has been combined with visual media (i.e. images, video, etc.).

Teacher: *actions that further the development of reading skills within their students*

- Discusses with the students the expressive meaning they believe the composer intended then discusses responses.
- Models questioning of the influence of text, compositional elements, and historical/cultural context on expressive meaning.
- Encourages students to visualize meaning behind the text/music with and without the incorporation of visual media.

Assessing Standards in Music Class for Writing Common Core

1-3 Text types and purposes.

Summary of Standards for Writing	Student actions that lead to Writing Skills
<ol style="list-style-type: none"> 1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence. 2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. 3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. 	<ul style="list-style-type: none"> • Clearly recognizes and describes problems experienced in individual/ensemble rehearsal and identifies improvement goals. • Communicates musical expectations inherent in the music. • Finds meaning through music listening/performance that connects to aesthetic experience. • Organizes relevant information to support central ideas, concepts, and themes. • Communicates with appropriate vocabulary, word choice, sentence structure, context, grammar, and mechanics.
Assessment Possibilities:	
<p>Task: <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Through analysis of score/individual parts/lyrics, identify specific areas of challenge and opportunities for expressive performance with practice strategies to achieve musical goals. • Describe where the composer implemented a musical application of programmatic themes. • Compose a composition and provide comprehensive program notes to inform a performer/conductor/audience. • Create an additional verse to the text that complements the meaning of the original text. • Create a concert program by selecting literature and provide rationale for the choices. • Write a rehearsal or concert critique/evaluation of self or peer performance specifically identifying: successful aspects; areas for improvement; and strategies for improvement. <p>Teacher: <i>actions that further the development of writing skills within their students</i></p> <ul style="list-style-type: none"> • Allows students to work in pairs to discuss and revise content. • Provides access to a variety of media sources. • Provides examples of expectations for written communication. • Encourages consideration of meaning behind the music, infers influences upon composer, finds and supports cultural or historical connections. 	

Assessing Standards in Music Class for Writing Common Core

#4-6 Production and distribution of writing.

Summary of Standards for Writing	Student actions that lead to Writing Skills
<ol style="list-style-type: none"> 4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. 5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. 6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. 	<ul style="list-style-type: none"> • Clearly and constructively communicates appropriate feedback. • Locates appropriate print and technology-based information to learn more about the music studied. • Organizes relevant information to support central ideas, concepts, and themes.
Assessment Possibilities:	
<p>Task: <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Using a discussion blog, have students discuss ensemble improvement needs, set rehearsal goals after listening to posted rehearsal segments, share perceptions of the music studied, post what has been learned about the musical pieces from personal research, individual practice strategies, etc. • Have students provide a peer-assessment of a compositions individual or section performance that communicates in a constructive fashion possible improvement and useful strategies. • Write an advocacy article for the newspaper: “Why Music is Important in Schools.” • Write and send a letter to a composer/arranger/publisher. • Individually or collaboratively, use technology (e.g., computers with notation software, iPad, etc.) to compose, produce a recording or performable manuscript, and/or to distribute student compositions. <p>Teacher: <i>actions that further the development of writing skills within their students</i></p> <ul style="list-style-type: none"> • Provides feedback to assist in revision that will lead to clearer communication. • Expects appropriate use of musical terminology and proper use of the English language (e.g., grammar, punctuation, mechanics, clarity). • Demonstrates music technology for composition and production. 	

Assessing Standards in Music Class for Writing Common Core

#7-10 Research to build and present knowledge.

Summary of Standards for Writing	Student actions that lead to Writing Skills
<ol style="list-style-type: none">7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.	<ul style="list-style-type: none">• Demonstrates a curiosity of the music studied beyond the technical performance.• Seeks and documents multiple data sources to gain new understandings about the music studied.• Clearly outlines information into topics and sub-topics.• Uses musical and contextual vocabulary appropriately.• Asserts and supports an arguable opinion, logically communicating their considerations about the music.
Assessment Possibilities:	

Assessing Standards in Music Class for Writing Common Core

Task: *these are a few possibilities and are not to be considered definitive examples*

- Create a web-quest, video documentary, group presentation, study guide, information pamphlet, web-site, etc. that will communicate the most important information about the music studied.
- Search internet sources and share new information about the piece, composer, style, genre, historical period, cultural influences, etc. on a class wiki.
- Compose a composition in a specific historical period, style, or genre based on knowledge gained from documented sources.

Teacher: *actions that further the development of writing skills within their students*

- Provides opportunities for the students to consider various sides to a topic, issue, or argument.
- Exposes students to articles or editorials to issues related to the music studied.
- Helps students understand appropriate citing of information and fair-use in relation to plagiarism.
- Expects reflection and revision following peer/teacher feedback.

Assessing Standards in Music Class for Speaking/Listening Common Core

#1-3 Comprehension and collaboration.

Summary of Standards for Speaking/Listening	Student actions that lead to Speaking/Listening Skills
<ol style="list-style-type: none"> 1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. 2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally. 3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric. 	<ul style="list-style-type: none"> • Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners. • Offer information from various sources discussing decisions and problems. • Consider other's point of view in the process of supporting evidence for informed decisions.
Assessment Possibilities:	
<p>Task: <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • In a small group such as a sectional, students will suggest, rehearse, and document the expressive performance options, then perform the rehearsed decision for the full ensemble. • In a classroom blog, students will attach technology-accessed information sources about the music studied with a short description as to its value for the class understandings. • Students respond with constructive feedback to peer/teacher options for musical decisions. <p>Teacher: <i>actions that further the development of writing skills within their students</i></p> <ul style="list-style-type: none"> • Provides opportunities for the students to share considerations of musical options in class/rehearsal. • Creates a format for students to document discussion that occurs in small groups/sectionals. • Includes discussion in the course expectations. 	

Assessing Standards in Music Class for Speaking/Listening Common Core

#4-6 Presentation of knowledge and ideas.

Summary of Standards for Speaking/Listening	Student actions that lead to Speaking/Listening Skills
<ol style="list-style-type: none"> 4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience. 5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations. 6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate. 	<ul style="list-style-type: none"> • Initiates interest in music beyond technical proficiency. • Explores multiple venues for attaining and presenting learning/skills/application. • Seeks a variety of performance opportunities on and beyond a performance stage.
Assessment Possibilities:	
<p>Task: <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Students will introduce a solo/ensemble in performance to share valuable information that will enhance the listener experience. • Create program notes for solo/ensemble performance. • Develop a personal music website/ePortfolio with supportive documentation of learning/achievements/contributions. • Create a web-quest, video documentary, group presentation, study guide, information pamphlet, web-site, etc. that will communicate the most important information about the music studied. • Compose/perform a composition in a specific historical period, style, or genre based on knowledge gained from documented sources. <p>Teacher: <i>actions that further the development of writing skills within their students</i></p> <ul style="list-style-type: none"> • Provides opportunities for the students to present individual learning/skill development/knowledge application. • Includes student presentation into course expectations. • Offers opportunities for discussion/feedback/revision of student ideas. 	

Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#1 Make sense of problems and persevere in solving them.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Make sense of problems and persevere in solving them.</p> <ul style="list-style-type: none"> Interpret and make meaning of the problem looking for starting points. Analyze what is given to explain to themselves the meaning of the problem. Plan a solution pathway instead of jumping to a solution. Monitor the progress and change the approach if necessary. See relationships between various representations. Relate current situations to concepts or skills previously learned and connect ideas to one another. Students ask themselves, “Does this make sense?” and understand various approaches to solutions. 	<ul style="list-style-type: none"> Describe a musical or performance problem in their own words. Describe the relationship to musical events. Define improvement strategies. Outline steps already taken to solve a musical problem and the extent to which they were successful. Explore a variety of options for solving a rhythmic or musical problem and infer the anticipated outcomes. Compare current performance/compositional problem to former problems experienced. Apply formerly experienced solutions to the current problem.
<p>Assessment Possibilities:</p> <p><u>Task:</u> <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> Through peer/group/self-assessment of a performance/rehearsal/composition, describe problematic areas using appropriate musical terminology. After listening to a recorded segment from a rehearsal and the same recorded segment from a professional recording, identify the differences and set goals as to how they could improve their performance. Explain why two or more musical solutions to a musical problem might be appropriate. Document improvement during your individual practice as you work toward making improvements to an identified performance problem. Rationalize your decision in solving a musical problem. <p><u>Teacher:</u> <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> Allows students time to initiate a plan; uses question prompts as needed to assist students in developing a pathway. Continually asks students if their plans and solutions make sense. Questions students to see connections to previous solution attempts and/or tasks to make sense of current problem. Consistently asks to defend and justify their solution by comparing solution paths. Differentiates to keep advanced students challenged during work time 	

Modified by Frederick Burrack, Kansas State University, adapted from M. Hancock, 2012

Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#2 Reason abstractly and quantitatively.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Reason abstractly and quantitatively.</p> <ul style="list-style-type: none"> • Make sense of quantities and their relationships. • Able to decontextualize (represent a situation symbolically and manipulate the symbols) and contextualize (make meaning of the symbols in a problem) quantitative relationships. • Understand the meaning of quantities and are flexible in the use of operations and their properties. • Create a logical representation of the problem. • Attend to the meaning of quantities, not just how to compute them. 	<ul style="list-style-type: none"> • Demonstrate a clear application of understanding related to note duration in rhythmic reading/performing/composing. • Compose rhythms accurately using multiple note/rest durations in a variety of meters. • Organize note/rhythm groupings accurately in notation. • Perform note groupings accurately at first sight. • Describe the relationship between printed rhythms, pulse, and musical phrasing. • Develop, modify, and explain selected musical ideas in relation to motif, phrase, and/or form.
<p>Assessment Possibilities:</p>	
<p>Task: <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Accurately perform/analyze/compose a short piece that includes multiple note/rest durations. • Appropriately organize notes/rests so they are visually accurate for standard notation. • Sight-read a piece of rhythmic complexity with accuracy. • Analyze melodic/rhythmic material in a composition explaining the relationship to pulse and phrasing. • Describe the relationship of rhythms to musical motives, phrases, and/or formal qualities in writing/verbal explanation/performance. <p>Teacher: <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> • Expects students to interpret, model, and connect multiple representations. • Asks students to explain the meaning of the symbols in the problem and in their solution. • Expects students to give meaning to all quantities in the task. • Questions students so that understanding of the relationships between the quantities and/or the symbols in the problem and the solution are fully understood. 	

Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#3 Construct viable arguments and critique the reasoning of others.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Construct viable arguments and critique the reasoning of others.</p> <ul style="list-style-type: none"> Analyze problems and use stated mathematical assumptions, definitions, and established results in constructing arguments. Justify conclusions with mathematical ideas. Listen to the arguments of others and ask useful questions to determine if an argument makes sense. Ask clarifying questions or suggest ideas to improve/revise the argument. Compare two arguments and determine correct or flawed logic. 	<ul style="list-style-type: none"> When solving a musical problem in performance/composition/analysis the student refers to traditional rules of rhythmic duration and construction. Students can justify answers/musical choices that are related to note duration/rhythmic accuracy/organization of phrases/compositional form. Asks informed questions when discussing/peer-assessing/evaluating rhythmic/durational/formal aspects of music. Provides suggestions for improved accuracy or options for revision of musical performance/composition/analysis. Makes informed decisions in musical performance/composition/analysis relating to rhythmic/durational/formal aspects of music.
<p>Assessment Possibilities:</p> <p><u>Task:</u> <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> Analyze the accuracy of a printed/performed rhythmic phrase with justification. Explain the traditional rules supporting rhythmic notation/performance. Following self/peer/group-assessments, provide feedback related to note duration/rhythmic accuracy/organization of phrases/compositional form. In rehearsal, ask a student to provide suggestions for ensemble improvements. <p><u>Teacher:</u> <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> Encourages students to use proven understandings, (i.e. definitions, properties, conventions, theories, etc.), to support their reasoning. Questions students so they can tell the difference between assumptions and logical conjectures. Asks questions that require students to justify their solution and their solution pathway. Prompts students to respectfully evaluate peer arguments when solutions are shared. Asks students to compare and contrast various solution methods. Creates various instructional opportunities for students to engage in discussions (i.e. whole group, small group, partners, etc.). 	

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Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#4 Model with mathematics.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Model with mathematics.</p> <ul style="list-style-type: none"> • Understand this is a way to reason quantitatively and abstractly (able to decontextualize and contextualize). • Apply what students know to solve problems in everyday life. • Able to simplify a complex problem and identify important quantities to look at relationships. • Describe a situation either with an equation or a diagram and interpret the results of a mathematical situation. • Reflect on whether the results make sense, possibly improving/revising the model. • Ask themselves, “How can I represent this mathematically?” 	<ul style="list-style-type: none"> • Use a musical or visual model to represent musical duration, form, rhythmic organization, etc. • Model a rhythm for another student through performance. • Segment complex rhythms into their component groupings.
<p>Assessment Possibilities:</p> <p><u>Task:</u> <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Write a melody in such a way that it follows the rhythmic movement from a line of a poem or lyric. • Using icons or graphic notation, visually represent the durational relationships of a rhythmic phrase. • Use physical movement to represent rhythmic durations/phrase structure/compositional form. • Design a form map of a composition. <p><u>Teacher:</u> <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> • Demonstrates and provides student experiences with the use of various musical models. • Questions students to justify their choice of model and the thinking behind the model. • Asks students about the appropriateness of the model chosen. • Assists students in seeing and making connections among models. • Gives students the opportunity to evaluate the appropriateness of the model. 	

Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#5 Use appropriate tools strategically.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Use appropriate tools strategically.</p> <ul style="list-style-type: none"> • Use available tools recognizing the strengths and limitations of each. • Use estimation and other mathematical knowledge to detect possible errors. • Identify relevant external mathematical resources to pose and solve problems. • Use technological tools to deepen their understanding. • Use models for visualizing and analyzing information. 	<ul style="list-style-type: none"> • Use available tools to solve musical analysis/performance/compositional problems. • Infer a solution prior to applying a solution to detect possible problems. • Use external resources in finding solutions to musical challenges. • Select and use appropriate technology to aid in solving musical problems. • Uses a notational or visual model of music to enhance audiation.
<p>Assessment Possibilities:</p> <p><u>Task:</u> <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Demonstrate the use of appropriate tools to improve rhythmic accuracy in reading/performing/composing/analyzing. • While sight-reading, use a metronome to internalize a rhythmic phrase and demonstrate application through accurate performance. • Create body percussion for a rhythmic phrase that appropriately demonstrates the durational value inherent in the phrase. • Explain how a solution to a rhythmic problem will work in advance to applying the idea in performance. <p><u>Teacher:</u> <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> • Demonstrates and provides students experiences with the use of various musical tools. A variety of tools are within the classroom learning environment and readily available. • Allows students to choose appropriate learning tools and questions students as to why they chose the tools they used to solve the problem. • Consistently models how and when to estimate effectively, and requires students to use estimation strategies in a variety of situations. • Asks student to explain their thinking with the chosen tool. • Asks students to explore other options when some tools are not available. 	

Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#6 Attend to precision.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Attend to precision.</p> <ul style="list-style-type: none"> Communicate precisely with others and try to use clear mathematical language when discussing their reasoning. Understand meanings of symbols used and can label quantities appropriately. Express numerical answers with a degree of precision appropriate for the problem context. Calculate efficiently and accurately. 	<ul style="list-style-type: none"> Use precise vocabulary (in written and verbal responses) when communicating musical ideas. Use appropriate notation that accurately represents rhythmic movement of a musical line. Use numbers or another system to describe combinations of rhythmic duration. Combine multiple rhythmic phrases that complement each other in performance.
<p>Assessment Possibilities:</p> <p><u>Task:</u> <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> Compose an 8 measure rhythmic phrase using appropriate notational symbols. Describe how to count a complex rhythmic pattern using appropriate musical terminology. Accurately perform a rhythmic phrase against another. Compose two contrary rhythmic phrases that fit together in performance. <p><u>Teacher:</u> <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> Consistently demands and models precision in communication and in solutions (e.g., uses and models correct content terminology). Expects students to use precise vocabulary during mathematical conversations (e.g., identifies incomplete responses and asks students to revise their response). Questions students to identify symbols, quantities, and units in a clear manner. 	

Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#7 Look for and make use of structure.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Look for and make use of structure.</p> <ul style="list-style-type: none"> • Apply general rules to specific situations. • Look for the overall structure and patterns. • See complicated things as single objects or as being composed of several objects. 	<ul style="list-style-type: none"> • Applies rules of performance/composition/analysis to specific situations. • Identifies structure within the music in order to solve the problem. • Identifies and uses component parts to solve problems. • Looks for alternative or unconventional ways to solve problems.
<p>Assessment Possibilities:</p> <p><u>Task:</u> <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Compose/perform/analyze a piece of music using conventional rules. • Diagram the overall formal structure of a piece and its component parts. • Lead a sectional rehearsal documenting how they improve rhythmic complexity by working on individual parts. • During rehearsal make suggestions for alternate options that can lead toward performance improvements. • Demonstrate how they rehearse similar patterns (phrases) in the process of individual practice. • Work together in groups to understand the form of a musical piece. <p><u>Teacher:</u> <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> • Encourages students to look at something they recognize and have students apply the information in identifying solution paths (i.e. composing/decomposing and figures, identifying properties, operations, etc.). • Expects students to explain the overall structure of the problem and the big idea used to solve the problem. 	

Assessing Standards for Mathematical Problem Solving Practices in Music Classes

#8 Look for and express regularity in repeated reasoning.

Summary of Standards for Mathematical Practice	Student actions that lead to Mathematical Thinking
<p>Look for and express regularity in repeated reasoning.</p> <ul style="list-style-type: none"> • See repeated calculations and look for generalizations and shortcuts. • See the overall process of the problem and still attend to the details. • Understand the broader application of patterns and see the structure in similar situations. • Continually evaluate the reasonableness of their intermediate results. 	<ul style="list-style-type: none"> • Reveals patterns or repetition in music to make generalizations demonstrated in musical decisions. • Recognizes patterns and relationships in music supporting understanding of musical conventions that are exhibited in musical performance/composition/ analysis. • Discovers the underlying structure of a musical problem.
<p>Assessment Possibilities:</p> <p><u>Task:</u> <i>these are a few possibilities and are not to be considered definitive examples</i></p> <ul style="list-style-type: none"> • Demonstrate through performance/composing/analysis or verbally explain how musical decisions are based on patterns, relationships, and/or repetition in music and supports musical decisions. <p><u>Teacher:</u> <i>actions that further the development of problem solving practices within their students</i></p> <ul style="list-style-type: none"> • Encourages students to connect task to prior concepts and tasks. • Prompts students to generate exploratory questions based on current tasks. • Asks what relationships or patterns can be used to assist in making sense of the problem. • Asks for predictions about solutions at midpoints throughout the solution process and encourages students to monitor each other's intermediate results. • Questions students to assist them in creating generalizations based on repetition in thinking and procedures. 	

Resources for Music and Common Core

Kansas English Language Common Core - <http://www.ksde.org/Default.aspx?tabid=4778#StanDoc>

Kansas Mathematics Common Core - <http://www.ksde.org/Default.aspx?tabid=4778#StanDoc>

Five Common Core Standards to the Curriculum -

http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CDcQFjAA&url=http%3A%2F%2Fgrantwiggins.files.wordpress.com%2F2012%2F09%2Fmctighe_wiggins_final_common_core_standards.pdf&ei=bwfSUIiJG4qM2gXZ2YHYDQ&usg=AFQjCNGF3J9B4r576hlxC44Wq70FA3xZtA&sig2=bMWHIGOH8TdIlkx7q7zYHw&bvm=bv.1355534169,d.b2I

Common Core Connections with Core Arts Standards (found on nccas.wikispaces.com)-
<http://nccas.wikispaces.com/Common+Core+Connections+to+Arts+Standards>

Transition to the Common Core – Music - <https://transitiontocommoncore.wikispaces.hcpss.org/Music>

Common Core Standards and Arts Education - <http://www.rolandmusiced.com/spotlight/article.php?ArticleId=1538>