Response to

MONTGOMERY
COUNTY PUBLIC
SCHOOLS

Rubric Evaluation

May 26, 2020

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Katie Murphy
Montgomery County Public Schools
850 Hungerford Drive
Rockville, MD 20850

Dear Ms. Murphy and MCPS Teachers,

QuaverEd (Quaver) is pleased to respond to Montgomery County Public School's call for General Music Resources. Our team is ready and able to support MCPS music educators and administrators in their mission to "ensure every student has the academic, creative problem solving, and social emotional skills to be successful in college, career and community, regardless of background."

Since 2015, we have worked closely with MCPS teachers and administrators to create resources that will integrate with the outstanding district curriculum your teachers have written based on the NCCAS standards. We are confident that our resources are the perfect partner to assist teachers and students in MCPS classrooms. We are excited for every school to have QuaverMusic tools as a resource to enhance the district curriculum objectives.

At QuaverEd, we are committed to developing engaging curriculum content that supports teachers in engaging their students with interactive, pedagogically-sound resources. Our PreK-5 general music curriculum resources include ready-to-use standards-based lessons accessible online, plus print materials, and a searchable library of over 6,500 resources. Lessons are customizable and aligned to NCCAS standards, addressing the needs of MCPS teachers while connecting them with our network of 10,000 plus educators around the world. Teachers repeatedly report that our resources are easy to use and enhance their job satisfaction!

In the pages that follow, we offer evidence to support each requirement in your evaluation rubric, along with additional information on our capabilities for distance teaching and learning and the results of a national survey of our users. We believe you will find QuaverMusic directly addresses your desire to adopt high-quality, evidence-based teaching resources that truly engage today's students. We welcome your questions throughout this review and look forward to the opportunity to continue to serve the teachers and students of MCPS.

Sincerely,

Kirk Maddox
Director of Sales
QuaverEd
65 Music Square West
Nashville, TN 37203

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Distance Teaching and Learning Capabilities

As districts across the country prepare for an uncertain start to the 2020-21 school year, it is crucial that curriculum decisions consider the implications on distance teaching and learning. Although not explicitly stated in your rubric, we understand this is on your minds. We wanted to let you know that we are on top of all developments in Distance Teaching and Learning. We want to provide districts with the resources to make the transition from learning in the classroom to distance learning as smooth and easy as possible.

QuaverMusic is designed to equip teachers with easy-to-use tools to continue their instruction without interruption and to stay connected to students when learning from home. Students are also empowered with tools to continue learning on their own or with the support of parents or caregivers.

QuaverMusic includes a variety of options for student access, content delivery, and accommodations to ensure that all students receive an equitable education regardless of where they are learning.

Easy Student Access

Individual student accounts open a world of distance teaching and learning possibilities and are free to all students in a licensed school.

QuaverMusic supports seamless student account creation for MCPS through Single Sign On (SSO). Students can access Quaver directly from their district SSO portal,LMS, or Google account, auto-provisioning an account in Quaver. Students can enter a Class Code to enroll in a Quaver Class, or be automatically enrolled via roster integration.
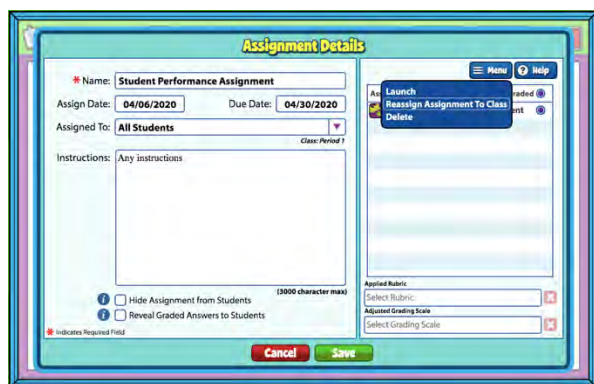
The QuaverMusic team will work with MCPS IT administrators to ensure the process is as seamless as possible.

Flexible Content Delivery

However student accounts are created, they give teachers the ability to deliver a variety of instructional content to students learning at home, even differentiating content to individual student needs.
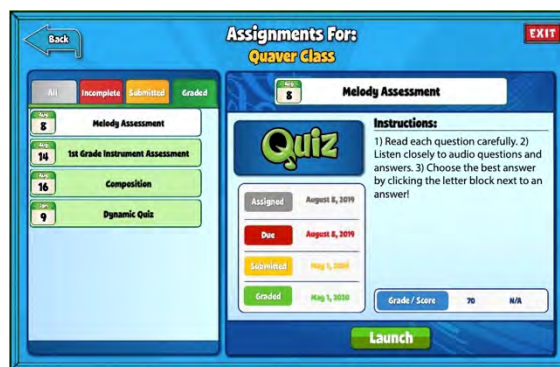
Distance teaching and learning is best facilitated by the use of ready-to-use or customized Assignments, using the following basic steps:

Step 1: Create an Assignment from any existing Quaver Lesson, or can build their own using any content from the Quaver Library of 6,500+ resources.
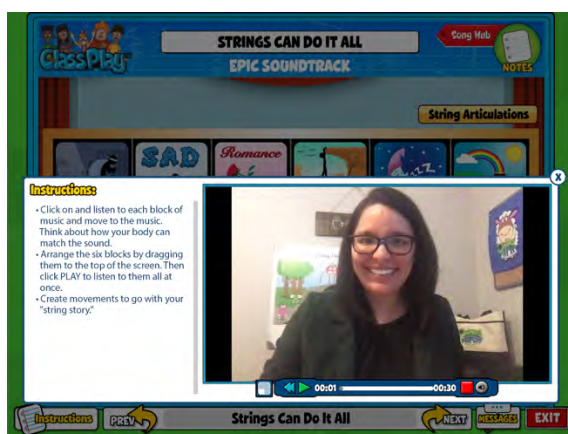
Step 2: Customize the Assignment with additional activities. Teachers might add activities that check for comprehension (like a custom quiz), collect a student response (like a student video recording), or invite student creativity (like a composition tool). Teachers can even include video instructions on each activity in an assignment! You can even share assignments across your district.
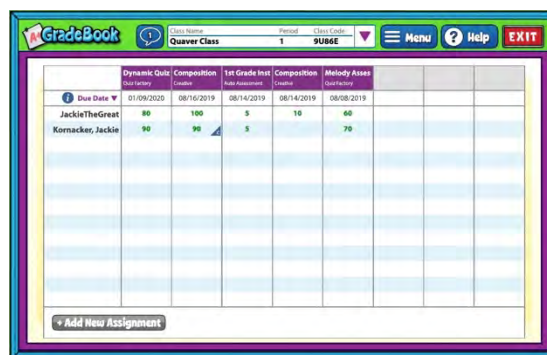

Step 3: Distribute the Assignment to one or more students. Students will find the Assignment in their personal Student Dashboard, along with any additional instructions from the teacher. You can make the same assignment to multiple classes if desired.

	Step 4: Communicate with Students during the Assignment process using Messaging, keeping communication open between students, parents, and teachers. Student to student messaging options are also available for potential group projects, but are disabled by default. Teachers will also be able to create a video for each screen in the assignment that students can watch.
Step 5: Grade the Assignment using Quaver's easy grading panel. Scorable content can be graded automatically, and rubrics are available to help give constructive feedback on subjective work such as performances or compositions.	

So you have the tools with QuaverEd to create assignments and reach all your students very easily and engage them in messaging or video recordings.

Accomodations for All Students

While technology opens a world of opportunities for distance teaching and learning, it is not always equally accessible in all corners of a community. QuaverMusic supports teachers in reaching all students learning at home with printable resources that can be distributed to students without access to technology or internet connection.

Student Materials/Interactions

1. The lessons and activities are aligned to the MCPS Standards for Fine Arts (Creating, Performing, Responding, and Connecting)

QuaverMusic lessons are completely aligned to MCPS Standards for Fine Arts, which mirror the National Coalition for Core Arts Standards (NCCAS). Standards are embedded in the lessons in each grade to create a comprehensive General Music curriculum. See *Exhibit 1-1: NCCAS Standards within a Quaver Lesson Plan* for an example.

Exhibit 1-1: NCCAS Standards within a Quaver Lesson Plan

In addition to identifying the standards met in each lesson, we have laid out the Enduring Understandings and Essential Questions tied to each related artistic focus (creating, performing, responding, connecting) for each grade. These are easily accessible to teachers for planning purposes from our Curriculum Features and Best Practices Menu.

Our curriculum development team is also committed to representing and balancing different approaches to musical instruction within our resources with support for all of the major pedagogies used in music education, reflecting the artistic processes at the heart of the NCCAS.

The artistic process of **Performing** is encouraged in the following ways:
- Performances with voice, percussion instruments, recorders, and found instruments are prevalent throughout the curriculum.
- Multiple opportunities for improvisation and performance are included throughout the program - including fully-developed Musicals in grades K-3 and special projects in grades 4-5. For example, our 5th Grade project directs students in groups to create a product, write and produce a commercial jingle, and then perform for the class.

The artistic process of **Creating/Composing** is encouraged in the following ways:
- Students are engaged in composition activities both in the classroom, utilizing interactive whiteboards, tablets, computers, and/or printable manipulatives.

- Composition activities can continue at home through our free student website at QuaverMusic.com.

The artistic process of **Responding** is encouraged in the following ways:
- Music is a subject that is naturally personal and therefore amenable to open-ended questions. Students can explain their feelings and reactions to musical concepts, musical styles and musical performances. In our curriculum we provide multiple opportunities for teachers to ask open-ended questions that have multiple solutions and subjective responses.
- Special Team Projects invite each group to examine musical concepts and project goals, analyze and evaluate examples, explain reasons for choices, develop and refine chosen themes with related tasks, present Group Projects, and evaluate theirs and other group's presentations based on predetermined criteria.
- Active Listening Maps, like Tchaikovsky's "The Nutcracker: Chinese Dance" pictured in *Exhibit 1-2: Active Listening Map*, encourage students to listen and respond to music independently and as a class.

Exhibit 1-2: Active Listening Map
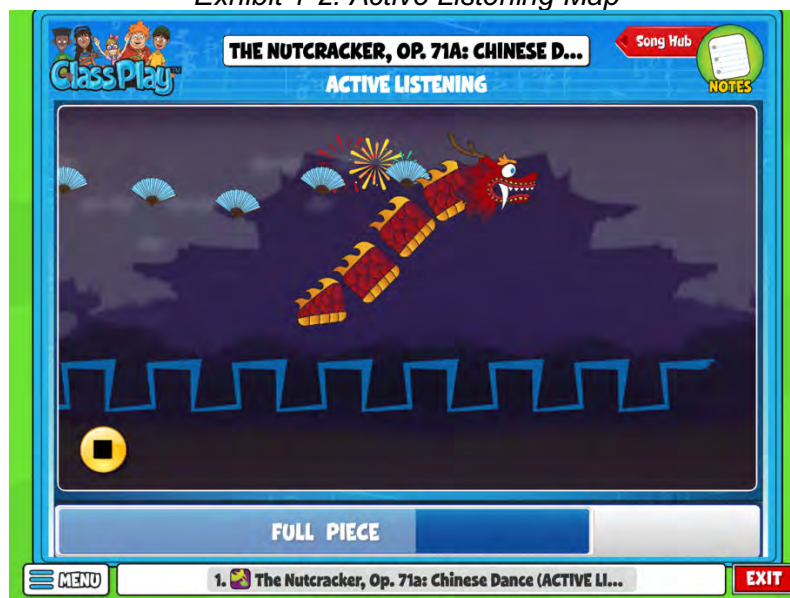
2. Provides culturally diverse materials and resources

QuaverMusic provides culturally diverse materials and resources. Our song catalog includes a robust list of songs from cultures around the globe. Each song is supported with activities to help students engage with the history, language, and geography of the country of origin. Here's just a sample of the songs included:

- *A Ram Sam Sam* (Morocco)
- *Bandar Mama* (India)
- *Lime Juice Tub* (Australia)
- *Ti Fi Anro* (Haiti)
- *Zhao Peng You* (China)
- *Mi Cuerpo* (Mexico)
- *Frère Jacques* (France)

For example, in ClassPlay, teachers can search for music from around the globe and find songs like "Taba Naba," a song from the Eastern Torres Strait Islands. From the ClassPlay menu, you can easily launch a number of activities pictured below including: Lyrics in Meriam Mir with English translations, Geography of Australia, and About the Song which houses many cross-curricular connections. Teachers can also print lyric pages in either or both languages with many different scores.

Exhibit 1-3: Taba Naba Activities in ClassPlay

Additionally, our resources host a number of holiday songs from various cultures, a few of which are seen below.

Exhibit 1-4: Holiday Songs in Quaver Curriculum

In partnership with the National Museum of African American Music we have created lessons devoted to the African and African American contributions surrounding two contemporary folk instruments the banjo and the spoons. These six lessons are rich with historical content and offer students the opportunity to sing, compose, and play as they learn.

3. Allows for multiple approaches and/or methodologies for learning (e.g., Orff, Kodály, etc.)

QuaverMusic curriculum resources help develop a strong foundation for general music concepts and skills through a complete year of lessons aligned to NCCAS and state standards. Organized into three-lesson modules, each lesson includes opportunities for teachers to incorporate their own style or training, while specific song-based lessons embrace each of the following teaching approaches more fully:

Exhibit 1-5: QuaverMusic Support for Common Teaching Approaches

|	
Kodály-inspired lessons use traditional folk songs to help develop understanding of melodic and rhythmic concepts in three stages–Introduce, Identify, and Implement. Each stage is represented by a complete lesson sequence and combines singing, rhythm, movement, critical thinking, and aural skills to help students discover fundamental musical concepts in a fun, pedagogically sound and interactive way.	
	Orff-inspired lessons encourage creativity! Each lesson allows teachers to lead students through the transition of speech, to body, to instrument–a fundamental learning process of Orff Schulwerk. Our Orff lessons also have lots of great cross-curricular connections such as poems that promote reading and literacy!
Music Learning Theory-inspired lessons develop strong musicians by introducing songs in a variety of tonalities. Activities using tonal and rhythm patterns are designed to support audiation and independent musical thought.	

4. Activities and lessons are engaging for students

In a National Survey distributed to 2,364 music teachers asking them to assess the impact QuaverMusic had on student engagement, 98% reported that they saw a significant increase in student engagement. The composite grades for student impact are unpacked in *Exhibit 1-6: National Survey Results - Student Impact.* You can also review the full results in *Attachment A: National Survey Results.*

Exhibit 1-6: National Survey Results - Student Impact
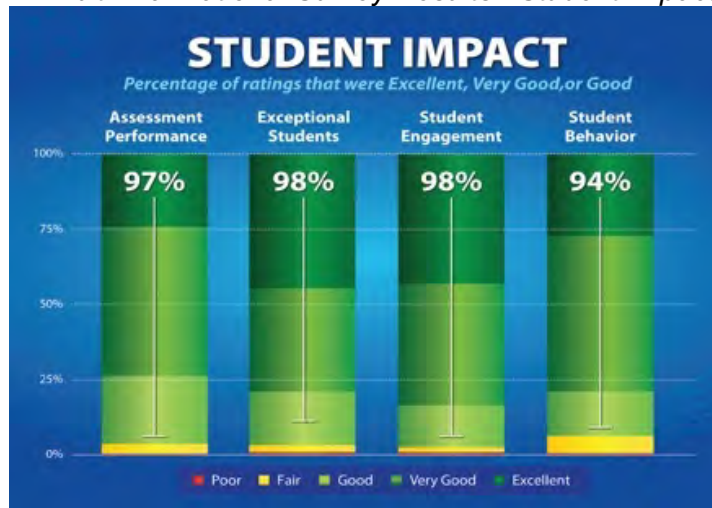
The ability to integrate technology into the classroom presented many exciting possibilities for student engagement.

QR Code Delivery of Content

We've found the easiest way to incorporate mobile devices in the music classroom is through QR Codes. By scanning these digital links with any mobile device, or entering a unique code on a personal computer, students can access any screen in the Quaver curriculum. Teachers simply pull up a QR Code on the projected screen and students can access the content individually or in small groups or centers. This eliminates the challenge of app management or behavior issues that can occur when technology becomes a distraction. *Exhibit 1-7: Scannable QR Codes throughout Quaver Resources* below illustrates the act of scanning a QR Code in Quaver resources.

Exhibit 1-7: Scannable QR Codes throughout Quaver Resources
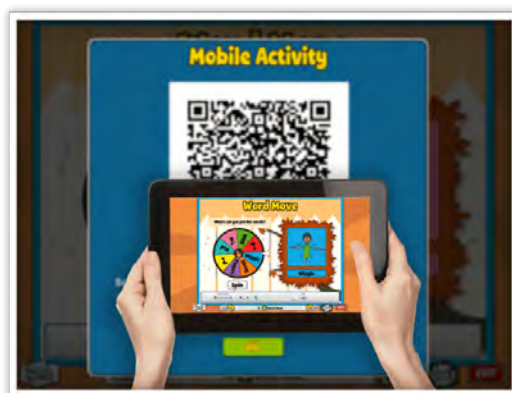
Free Student Accounts

Quaver licenses also include an unlimited number of free student accounts, which students can use to access individualized content online. Once logged in, they can access a Student Dashboard full of assignments, assessments, and other content to support classroom teaching. *Exhibit 1-8* below shows a Student Dashboard for a sample student.

Exhibit 1-8: Quaver Student Dashboard

Teachers can also deliver customized assignments and auto-graded assessments to students via their Quaver accounts. *Student a*ccounts can be created in a number of ways: 1) students can manually create their own accounts, 2) teachers can create accounts in bulk by uploading a student list to Quaver's system, or 3) the Quaver Implementation team can assist with automatic student rostering and Single Sign-On integrations. Once accounts have been created, students can use any device to access their assignments and Student Interactives and can communicate with the teacher via messaging. This opens up a world of personalized and blended learning for a teacher to customize to each student's needs. It also empowers parents to be engaged in the student's arts education, as they can access the resources at home and communicate with the teacher if needed.

No longer will administrators need to decide which students have access to instruments or special arts programs—all students will have equitable, consistent, access to high-quality arts education resources to extend their learning after the school day ends.

5. Images and content depict racial and social diversity

QuaverMusic provides culturally-appropriate resources representative of the diverse backgrounds and experiences of today's students. Our resources feature a diverse set of scenarios and characters from a variety of ethnic backgrounds, shown in *Exhibit 1-9: Diverse Characters and Scenarios*. The content allows students to gain a deeper understanding of cultural practices as they experience the music. As they experience QuaverMusic in different grade levels, students will see these aspirational students grow up and will meet characters from many cultures.

Exhibit 1-9: Diverse Characters and Scenarios

1st Grade Students

5th Grade Students

Diversity in Lyric Screens

Diversity in Lyric Screens

In addition, we believe that students succeed because of their teachers. To support teachers in this work, Quaver professional development includes discussion of Culturally Relevant Pedagogy. Our trainings allow instructional coaches to become true thinking partners with the teachers to evaluate best practices when teaching diverse learners. This includes creating classroom policies that set up a safe environment for all students, individualizing multiple assessment opportunities, aligning goals to intentional grouping, code-mixing in Music classrooms for EL students, using dance as a cultural expression, and exploring procedural ideas to ensure that best practices are indeed effective in their classrooms, for diverse students and in their instruction.

6. Images and content are age-appropriate and appealing

QuaverMusic is designed to meet students where they are with age-appropriate graphics, materials, and language. Our staff includes curriculum writer, artist, and developer experts who have collaborated on a universe of intentional characters and content that grow up with students throughout grades K-5.

Age-Appropriate Content
Quaver Curriculum lessons follow a logical scope and sequence, designed with NAfME, NCCAS, and State Standards in mind. Lessons present age appropriate content to students at each grade

level. Lesson content in grades K-5 is organized in nine-week increments with three modules in each lesson. The content in a module focuses on grade-appropriate concepts, such as Beat, Meter, or Tempo, with lessons that scaffold one another. The final lesson in each module includes an assessment of the concepts and skills covered. This structure allows students to have content presented one week, developed the second week, and finally assessed in the third week.

Concepts also scaffold across grade levels with appropriate review to build upon previously learned knowledge and skills. Teachers retain final control of pacing, as lessons can be easily abbreviated or extended via customization tools. We encourage you to also explore the full K-5 Scope and Sequence available for download at **ReviewQuaver.com/documents** with the password **musiced**.

Age Appropriate Language
To ensure all these resources use age-appropriate language, we have literacy experts on staff who review the keywords and phrases in the lessons for each grade level. Are these grade-appropriate keywords? Are these coherent scaffolding of terminology and assessed skills? What vocabulary should be added for differentiation? We also provide recorded readings of phrases for early grade students, EL learners and adaptive learners who benefit from audio recordings and pronunciations. Our songs have both sung lyrics and written lyrics highlighted so students can learn the words, follow along visually, and for the teacher to pre-teach or review concepts on the lyric screens. In addition, we include printable lyrics for analysis of the text, phrasing, and literacy goal. *Exhibit 1-10: Grade-Appropriate Vocabulary* shows two examples of highlighted lyrics and important keyword definitions.

Exhibit 1-10: Grade-Appropriate Vocabulary
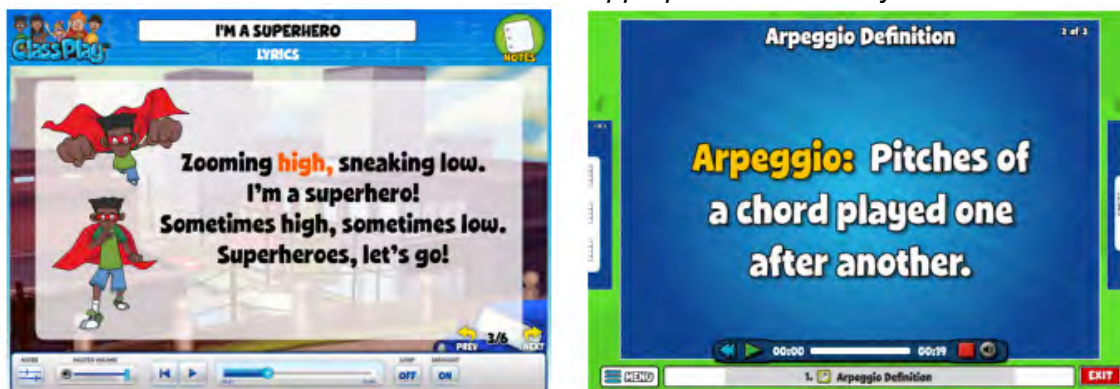
7. Where appropriate, cultural connections are made that go beyond the music (e.g., maps, videos, etc.)

QuaverMusic provides numerous opportunities for cultural connections that go beyond music. Our World Music resources allow students to click on a map of the world and find folk songs and instruments from that country in *Exhibit 1-11: World Music Map.*

Exhibit 1-11: World Music Map

Song activities also include videos that extend the learning. Movement videos introduce students to traditional choreography for the song, and How to Play videos feature interviews with musicians who play instruments from around the world. Each World Music Instrument includes an introduction video, 360° view, how to play it, and a challenge.

Exhibit 1-12: How to Play Video

QuaverMusic also makes cultural connections by how music can be used to educate students on important events and people in history. For example, our Song-Based Lesson "He Had a Dream" incorporates orff resources. Within the lesson students are introduced to the life and work of Dr. Martin Luther King Jr. At heart of the lesson is the Quaver original song "He Had a Dream," shown in *Exhibit 1-13*, that provides students the opportunity to discuss the historical context of the lyrics.

Exhibit 1-13: "He Had a Dream" Lyrics

8. Activities lead students through all steps of the creating process (Imagine, Plan and Make, Evaluate and Refine, Present)

Students are asked throughout the QuaverMusic curriculum to create and envision the musical process that composers and artists go through to be able to fully experience their musical ideas. *Exhibit 1-14: Quaver Creatives* shows the interactive resources students can use to compose, create animation scores, arrange backing tracks, dances, and skits.

Exhibit 1-14: Quaver Creatives

Within the composition projects and activities included throughout multiple grade levels, students are challenged to not only create music but also critique and refine their pieces. This evaluation process is often accompanied with a rubric students use to better focus on certain areas of improvement.

9. Activities lead students through all steps of the performing process (Select, Analyze, Interpret, Rehearse, Evaluate, Refine, Present)

The performance process and expectation that students will continually strive for excellence in their performances is evident within the QuaverMusic resources. Students are provided opportunities to not only learn a performance piece but they are also asked to compare what they have learned to other pieces of music as a way of expanding their knowledge on the musical concept most prevalent in their performance piece. A great example of this is the Choral Resources lessons, shown below in *Exhibit 1-15*, in which students are guided through physical and vocal warm-ups and sight-reading exercises before rehearsing their performance piece. They are then given another piece of music to compare or an additional descant part to add and enhance their performance piece. All of these activities allow students time to refine and analyze their performance before the presentation.

Exhibit 1-15: Choral Resources

10. Activities lead students through all steps of the responding process (Select, Analyze, Infer, Judge)

Whether within a whole-class discussions or individual activities, the QuaverMusic resources are constantly asking students to respond to the resources they are exposed to. This may include listening and analyzing the instrumentation of a piece of music or inferring when and how the music might be used in the world around them. Critical thinking skills are a vital component of the QuaverMusic curriculum. *Exhibit 1-16* highlights a few activities where students are able to go through the respond process by listening and analyzing a musical piece.

Exhibit 1-16: Respond Activities
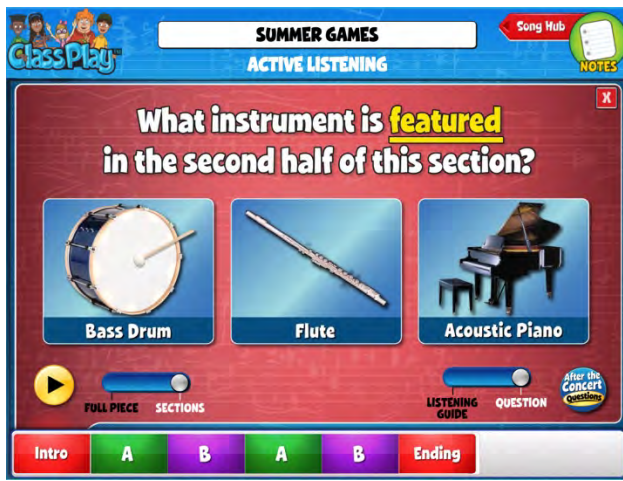
11. Listening selections engage students in active participation

Active music making and engagement are a top priority of the QuaverMusic curriculum. Lessons are embedded with opportunities for students to move and experience the musical concepts they are learning in that moment. This includes, but is not limited to, creating student-led movements to match the music students hear or creating listening maps to follow along with a melody, shown in *Exhibit 1-17*.

Exhibit 1-17: Movement Activity Examples
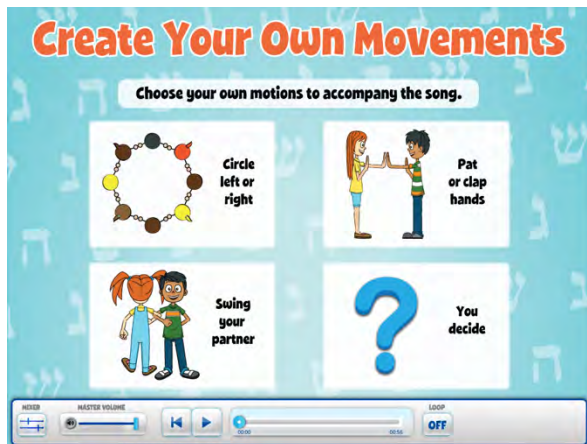
Students create their own movements to accompany a piece of music with Create Your Own Movements

Classes use the Beat Move spinner to make a fun game out of keeping a steady beat using body percussion

Active listening activities and maps, pictured in *Exhibit 1-18*, encourage students to listen and respond to music independently and as a class.

Exhibit 1-18: Listening and Movement Activity Examples

Students watch and move with an interactive performance of "Carnival of the Animals" then respond to questions in Active Listening.

Students listen to, analyze, and discuss a familiar Mozart melody with a Listening Map.

12. Music reading opportunities are plentiful and easy to find

With the goal of music reading and notating, Quaver resources allow students to use iconic notation as a way to lead up to composing with actual notation. This also gives students a fun way of trying new rhythms and meters, as shown in *Exhibit 1-19: Rhythm Selectah!*.

Exhibit 1-19: Rhythm Selectah!

Quaver also provides sight-reading activities to build student's ear and reading abilities. *Exhibit 1-20: Sight-Reading Olympics* shows how these activities can be "leveled-up" depending on the needs of the student.

Exhibit 1-20: Sight-Reading Olympics
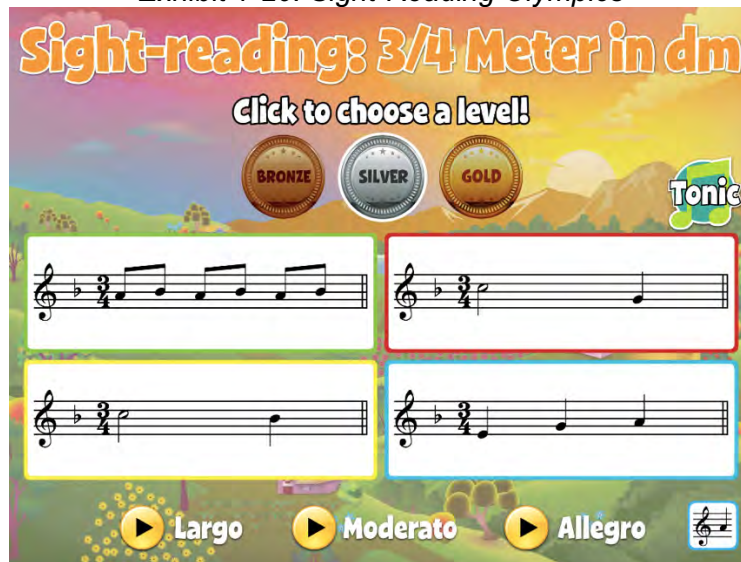
13. Higher-order thinking questions are provided throughout

Critical thinking and higher-order thinking questions are placed throughout our curriculum in screens, teacher notes, and quizzes. *Exhibit 1-21: Lesson Notes Within The Activity* shows higher order thinking questions in the notes section of an activity screen. These help the teacher to lead discussions in the classroom that promote the exploration of the topic being learned rather than knowledge-based answers. Higher-order thinking questions encourage students to go beyond recall of information and invite them to apply the information to their lives through analysis and evaluation.

Exhibit 1-21: Lesson Notes Within The Activity
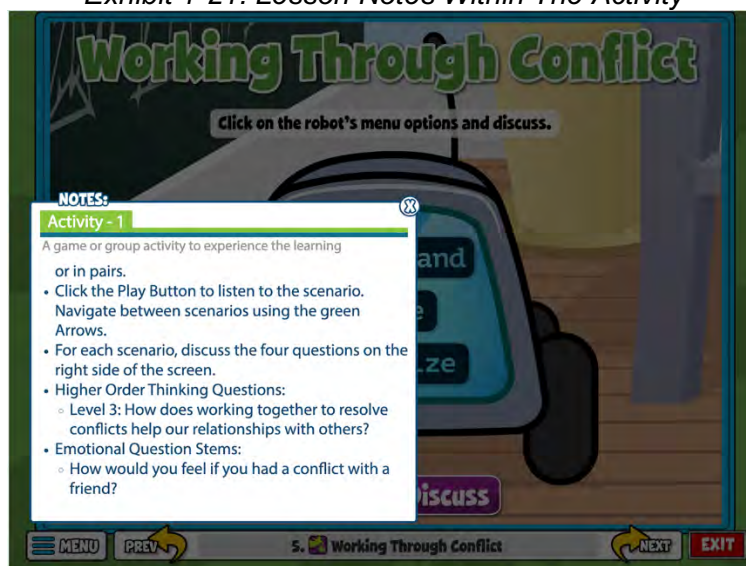
Our higher order thinking questions combine Bloom's Taxonomy and Depth of Knowledge levels and progress these levels through the screens in the lessons. What this means is that student creations and designs through musical compositions are not the first thing our curriculum asks students to do; instead, we first check comprehension and recall, then ask students to analyze examples on the screen or debate and respond to listening examples before they will then apply this information to their own creations.

We are committed to creating and maintaining curriculum resources that promote this work in students with high-interest readability, critical and creative thinking, and the development of higher-order thinking skills through questioning and group projects.

14. **Information about diverse composers and musicians (racial, gender, cultural, age, historical era) is available to students**

QuaverMusic provides opportunities for students to learn about diverse composers and musicians. Digital QuaverBooks, like the one exploring John Philip Sousa in *Exhibit 1-22*, are available to students in both Basic and Advanced versions throughout the curriculum. The books vary in reading difficulty and content matter. This encourages student choice, or teacher suggestion, while allowing for self-exploration and challenge.

Exhibit 1-22: QuaverBooks
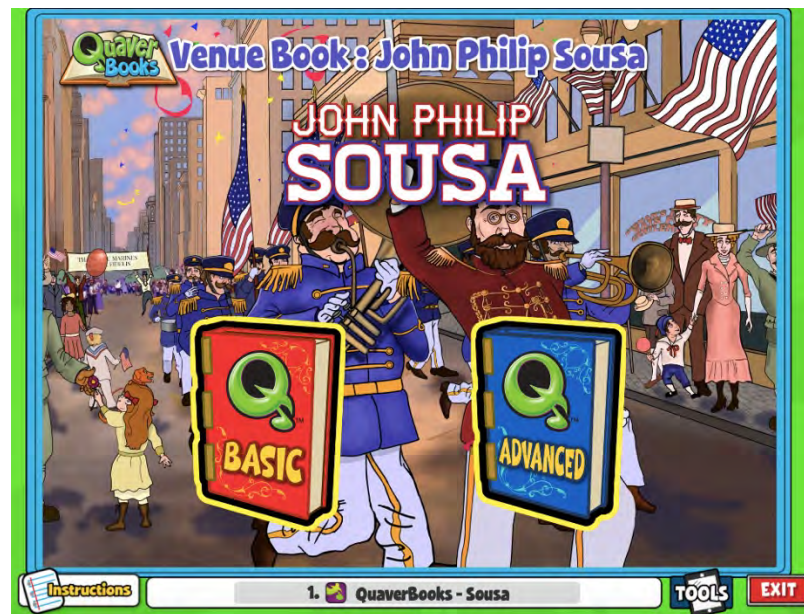
Also, many of the songs in the Quaver curriculum include an informational screen called "About the Song" as seen in *Exhibit 1-23*. These interactive informational activities allow teachers to lead discussions on the history of the song and composer. There are different areas covered in "About the Song" including composer profile, information about where and when the song was written, fun facts and a timeline. The timeline serves as a way to show students the relevance of the song at the time it was written.

Exhibit 1-23: Lean on Me - About the Song

Recordings

1. Recordings and performance tracks are authentic and appealing

With an in-house team of graphic artists, songwriters, musicians, audio engineers, and more, the Quaver team is able to produce songs, videos, and animations of the highest quality available. Our curriculum development team places a high priority on excellence in sound pedagogy, authenticity of resources, and accuracy of content. Modern music and animation engage today's students, while an easy-to-navigate platform gives teachers the confidence to do what they do best—teach.

Within the QuaverMusic curriculum, teachers have access to more than 1,200+ songs, with new songs added every quarter. Each song is accompanied by engaging digital activities for use in the music classroom. Including Full Score screens that make it easy for students to follow along with, Solfège/Rhythm activities that break down the song into its component parts, and printable score and lyric sheets to share with students. *Exhibit 2-1: Song Activities* shows a few of these song resources.

Exhibit 2-1: Song Activities

2. There are a variety of genres and styles

The Quaver resources include a variety of musical genres for students to experience, as well as, a deeper dive into musical styles and influential composers through QuaverBooks. Another section of the resources called "Bach's Brain" includes fun video intros to several popular composers for teachers to use in conjunction with their lessons. Students are also given the opportunity to experience many genres of music throughout active music-making and experiential learning activities. *Exhibit 2-2: Song Styles* shows how students can listen to a song in various styles.

Exhibit 2-2: Song Styles

3. Vocal models are age-appropriate and of high quality

QuaverMusic is designed to meet students where they are with age-appropriate graphics, language, and recordings. Our staff includes curriculum writers, artists, and developer experts who have collaborated on a universe of intentional characters and content that grow up with students throughout grades K-5.

Our team of music producers and engineers make sure the vocal quality of each track and song is of the highest standard and can be used as a vocal model for students in the classroom. The majority of our songs utilize children's voices. For variety and stylistic reasons we have also used solo child, solo female, or solo male voices. Listening to children and adult vocal models is important for the development of student listening and aural skills in early music education.

4. Voice and instrumental tracks can be isolated

Teachers have the ability to adjust the volume or isolate both the vocal and instrumental track of any song using the mixer button located in the bottom left-hand corner, shown in *Exhibit 2-3: Lyrics Screen Mixer*, of all song-based teaching activities.

Exhibit 2-3: Lyrics Screen Mixer

In addition, teachers can use the Options and Part buttons at the top of the Full Score screen to hide or solo parts if they want to focus on a specific part. *Exhibit 2-4: Full Score* shows these different isolating options.

Exhibit 2-4: Full Score

Our interactive screen also makes it easy to adjust the key, tempo, and highlighting so students will be able to follow along more closely.

5. Spoken pronunciation guides are provided for songs in foreign languages

For songs in foreign languages, our pronunciation screens, shown in *Exhibit 2-5*, assist teachers in breaking down each phrase of the song in its' native language.

Exhibit 2-5: Pronunciation Screen

General Questions

1. Content is platform independent (Windows, iOS, Mac, etc.)

QuaverMusic resources are platform independent and are accessible on devices running Windows, Mac, or iOS systems using any browser, including mobile browsers. All system requirements can be found below in *Exhibit 3-1: System Requirements* or at Help.QuaverEd.com.

Exhibit 3-1: System Requirements

	PC	Mac
Operating System	Windows 7+	OSX 10.6+
Browser	Internet Explorer 11+ Firefox 13+ Chrome Edge	Safari 10+ Firefox 13+ Chrome
Screen Resolution	1024 x 768	1024 x 768
Flash Player	Not Required – Optional*	Not Required – Optional*
Javascript	Enabled	Enabled
Cookies	Allowed	Allowed
Popup Windows	Allowed	Allowed
Memory (RAM)	4 GB Required, 8 GB Recommended	4 GB Required, 8 GB Recommended
CPU	1.3GHz	1.3GHz
Bandwidth	5 Mbps Required, 10 Bbps recommended	5 Mbps Required, 10 mbps recommended

Students can also use iPads or other mobile devices in 1:1 classrooms or access resources at home through their personal QuaverMusic accounts. In fact, teachers can deliver content to student devices via a simple QR code, which students scan to access any activity on a personal device.

2. Curriculum, resources, and song tracks are available off-line

Each school license to QuaverMusic includes backup resources for the possibility of an Internet outage in the classroom. Our Quaver Unplugged Kit, included with every license, contains DVD copies of all 30 award-winning, topic-based episodes from the Quaver program, and a USB drive packed with printable content including every musical score, worksheet, lesson plan, and quiz from the entire program, along with MP3s of a key song in each module for each grade. With a multiple-year commitment, teachers will keep this resource, seen in *Exhibit 3-2: Unplugged Kit*, after the license expiration, as the residual value of the program.

Exhibit 3-2: Unplugged Kit

3. Product is user-friendly and easily navigated for teachers and students

As mentioned earlier, we surveyed 2,364 music teachers on the impact QuaverMusic had on their students and themself, the teacher. When asked about ease of use, 98% of the teachers said QuaverMusic was easy to navigate and implement into the classroom. *Exhibit 3-3: National Survey - Teacher Impact* shows the composite grades, including that 97% reported a significant increase in job satisfaction while using QuaverMusic.

Exhibit 3-3: National Survey - Teacher Impact

TEACHER IMPACT

Percentage of ratings that were Excellent, Very Good, or Good

Ease of Use	Job Satisfaction	Impact on Lesson Planning	Cross-Curricular Connections
98%	97%	96%	95%

■ Poor ■ Fair ■ Good ■ Very Good ■ Excellent
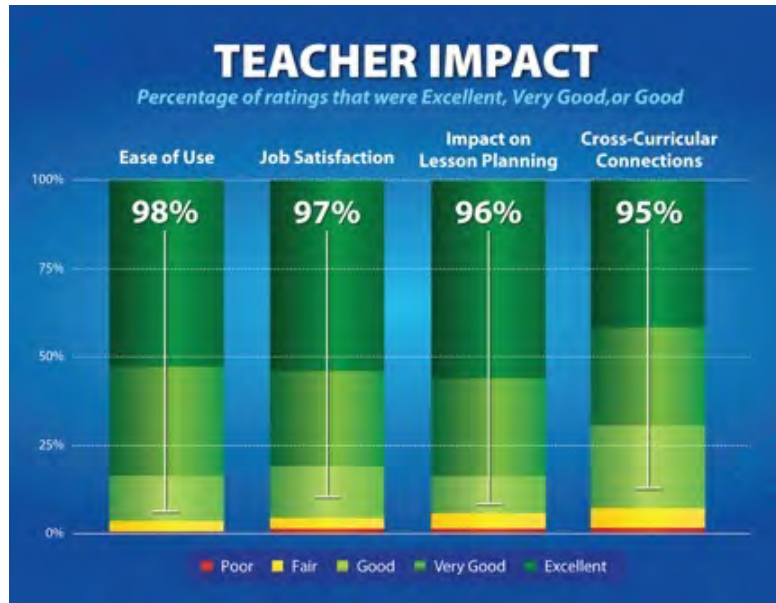
Teacher Resources:

All QuaverMusic Curriculum Resources are available online, on any teaching computer. Teachers simply log in with their unique QuaverName and password, or use the district's single sign-on capabilities, to access their account for planning and teaching. Once inside, the navigation is user-friendly, with icons representing each resource type, and help embedded at every turn.

For example, in the Curriculum category of resources, teachers will find a base of 216 fully-developed lesson plans, organized by grade level and topic, with an assessment every third lesson. See *Exhibit 3-4: Lesson Selection Menu* for an example of the easy-to-use menu.

Exhibit 3-4: Lesson Selection Menu

Each grade contains 36 lessons, organized in modules of three, and presented in a logical sequence on our easy-to-navigate Lesson Selection Menu. Additional lessons are located in similarly organized menus for Song-Based Lessons (45 and growing) and Essentials Classrooms (30). Lesson Plans and Curriculum Maps are provided for every grade level and spiral up through the grades to build on concepts previously learned.

Teachers can easily progress through the year in each grade level by following our Scope and Sequence or can customize the curriculum to meet their needs, adding resources from our extensive library or their own, and easily adjust their Lesson Plans to follow. Unlike a textbook, each Quaver lesson includes interactive screens that are easy to execute and provide ample opportunities for teacher creativity and differentiation.

All content is searchable in our library and can be used to customize, extend, and adapt the lessons to suit any need or schedule. Our Lesson Plan Presenter makes it easy for teachers to add resources from within the Quaver universe or from a teacher's own library of resources, including YouTube clips, mp3s, PDFs, URLs, and more into a seamless presentation. Teachers just have to click *Next* to continue leading their students through the lesson, as seen in *Exhibit 3-5: Lesson Plan Presenter*.

Exhibit 3-5: Lesson Plan Presenter

Lessons include supporting teacher notes, movement activities, scores, lyric pages, piano arrangements, Student Interactives for use on mobile devices, assessments, and worksheets. Activity notes prompt teachers to engage with students, ask questions, and begin a dialogue around the concepts at hand. Lesson Plans can be edited, printed, and even saved on the teaching computer for easy access.

Student Resources
Students also enjoy an easy-to-navigate QuaverMusic experience. From their Student Dashboard, they can select assignments, assessments, and any other content to support classroom teaching. Once they complete asn assignment or assessment they can submit it back to the teacher. *Exhibit 3-6: Student Dashboard - Assignments* shows the Assignment section

where students can see what assignments are due, along with the teacher's instructions provided, and ones they have already submitted.

Exhibit 3-6: Student Dashboard - Assignments
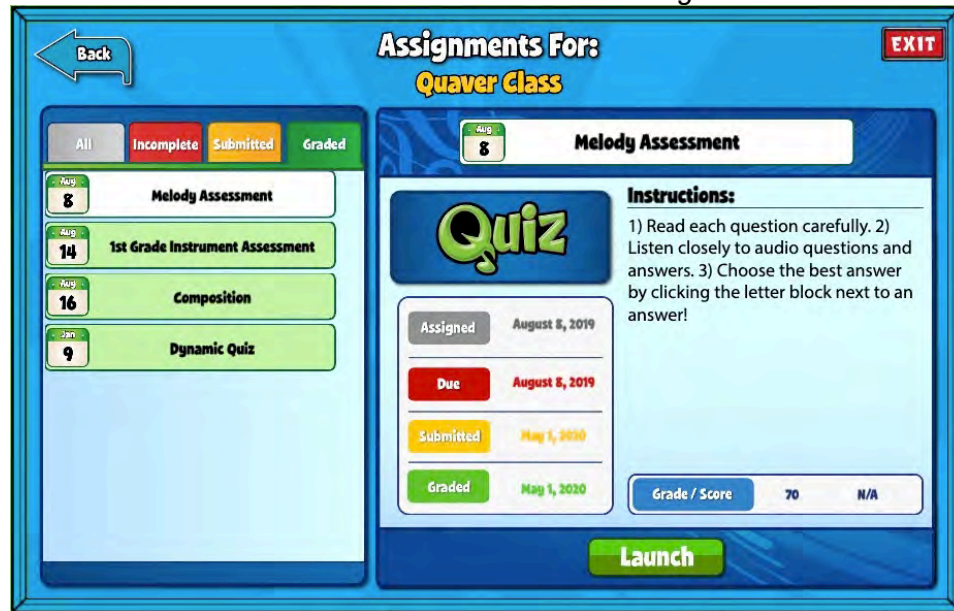
4. **Product provides effective search engine/index allowing teachers to search by concept, song genre, skill, etc.**

Teachers will find a powerful search engine in Quaver's Resource Manager. Here they can search by keyword, concept, song genre, or skill, as shown in *Exhibit 3-7: Resource Manager Search.*

Exhibit 3-7: Resource Manager Search

They can also use the Topic Index to the left of the screen to browse by Musical Element or NCCAS Artistic Process, and can organize their findings into folders for easy access and planning.

Resource Manager also includes powerful customization functionality that allows teachers to rearrange and adapt Quaver lessons or create their own digital lessons from scratch, then share them with other teachers in their school or district.

5. Strategies are provided for meeting the needs of special learners, gifted and talented, and English language learners

Through the use of technology, QuaverMusic provides teachers with the resources to make all learners feel included and valued. Multiple learning styles are accommodated by the visual, aural, and kinesthetic activity suggestions. Students can even use iPads or other mobile devices in 1:1 classrooms or access resources at home through their personal QuaverMusic accounts.

Students Receiving Specialized Services
At QuaverMusic, we have harnessed the power of technology to help educators individualize instruction for students who receive specialized services. Our customization tools allow music teachers to create custom assignments for students in keeping with their IEPs. This allows the teacher to focus on individual student needs either to accelerate or to bolster learning.

Teachers can put specific activities together with instructions for a student who may need more time on a given subject or is ready for a challenge. When logged into his or her student account, the student will find instructions from the teacher and can click the green Launch button to dig into each activity presented in a sequenced lesson format.

This individualization can be done for groups, individuals, or whole classes. The students can use this enhancement at home or in school depending on what resources are available to them. If assessment is needed, the assignment can even be graded and entered in the teacher's digital gradebook.

In creating an online curriculum, we knew it was important that our content also be accessible for students with specific disabilities. We have received great feedback from many teachers in this regard. Consider the following sample of unsolicited comments received from teachers using Quaver resources for students with disabilities or special needs:

> "I really can't imagine teaching music at Rochester School for the Deaf without Quaver. It would be like going back to the Dark Ages without this curriculum!" Pam McInerney-Rochester School For The Deaf, Rochester, NY

> "(Quaver) suits my kids perfectly as many have learning issues that make it hard for them to learn the conventional classroom way. I try to apply the concepts outside of the lesson, referring to something Quaver did specifically. The kids are really in love with the program and are retaining a lot more than they did in the past!" Marci Shegogue- McLean School Of Maryland, Potomac, MD

> "In my 30 years of teaching I have never seen a more well thought out curriculum. What really impacted me most was the fact that the curriculum meets the needs of my special learners/autism students– watching them want to get up and manipulate the music on

the SmartBoard was a 30-year dream come true. Without a doubt ALL learners are completely engaged from class start to class end." Drew Osborn- Elm Tree Elementary School, Bentonville, AR

"The Quaver Music program has been an effective and engaging tool to use for music training research with children diagnosed with Auditory Processing Disorder. Games in the Ear IQ Lab and the upbeat presentation of material keeps them looking forward to daily lessons." - Susan E. Fulton, Ph.D. CCC-A, University of South Florida Sarasota-Manatee

Gifted and Talented Learners

The Quaver Curriculum has multiple features for exceptional students. Some of these features include:

- **Extended Lesson Material** - All our lessons have two parts: standard lesson and an extended lesson. Exceptional students can be assigned work in the extended lesson.
- **Leveled Activities** - Many of our Student Interactives have different levels. These activities are accessible through a QR code that brings the student directly to the app. Games are leveled Easy, Medium and Hard or offer Teacher and Game Mode so students can challenge themselves against the clock like in *Exhibit 3-8: Note and Rest Grab.*

Exhibit 3-8: Note and Rest Grab
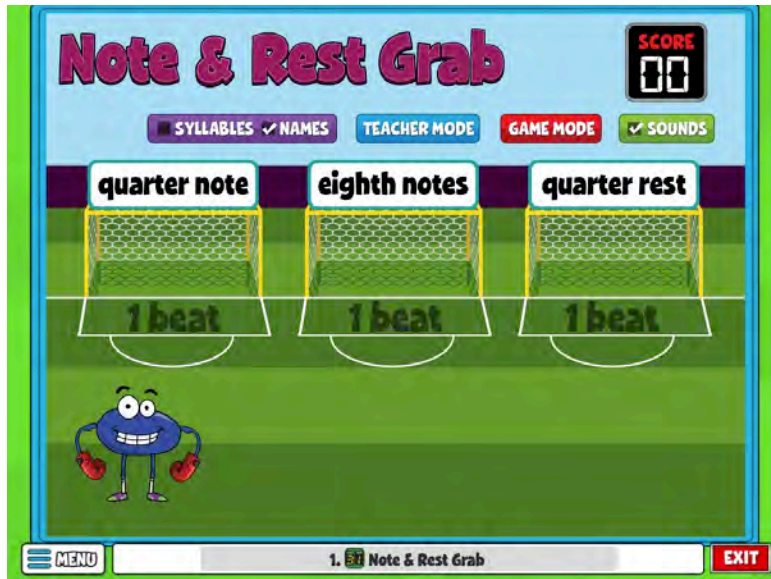
- **Multiple Opportunities for Critical Thinking** – We have embedded many critical thinking activities within our curriculum. The more gifted students will be challenged by these activities.
- **Creative Apps** – Quaver has creative apps for Piano, Fretted Instruments, a Garage Band type looping application, Percussion, Dance, Skits, Sound Effects, and even creating tones for a keyboard using sound waves. The more gifted students can explore these activities independently or teachers can craft assignments to challenge their composition skills.

- **Contests** – We even have a contest section where students can create their own musical pieces and enter them into peer-evaluated contests.

English Learners

Quaver curriculum resources have been designed to help EL students feel comfortable in the music classroom and to help teachers improve their comprehension and use of the English language through music. Some of the techniques we use to help English Learners are as follows:

- **Use of Technology:** Greater access to technology and computer-assisted learning can be effective in engaging ELs' motivation, developing writing and editing skills.
- **Simplified Vocabulary:** Quaver introduces keywords in each lesson using appropriate vocabulary for each grade level, so ELs are not required to learn above what is expected in a particular grade.
- **Closed Captioning on Videos:** Quaver provides closed captioning in English and Spanish in all our video episodes.
- **Lyrics Highlighting on Musical Scores:** To really improve comprehension, we highlight the lyrics of each song as the lyric is sung.
- **Multimedia Approaches**: Quaver uses videos and animations to convey the meaning of English words to students, speeding the learning of new words through a reinforcing multimedia approach as seen in *Exhibit 3-9* below.

Exhibit 3-9: Five Green and Speckled Frogs Lyrics Page

6. Meets accessibility requirements

We understand that MCPS adheres to the guidelines set by section 508 to provide equal accessibility to disabled users. While the core content of the curriculum is intended for teacher use, we have also considered various approaches to making web-based programs accessible for students with disabilities. Section 508 of the Rehabilitation Act of 1973 provides a number of standards with which we agree; but there are more to consider.

For the visually impaired, we use icons and color together, along with text, to help indicate important elements on the screen. We keep best practices of contrast and text size in mind to make directions clear for as many students as possible. We recommend that teachers:

- Administer assessments orally
- Use manipulatives for problem solving
- Offer students extended time

For the hearing impaired, we ensure that text accompanies all audio/visual media. We have included closed captioning on all our Quaver video episodes. Assessments that rely on questions posed verbally also have accompanying text. For pure audio media, text or even musical scores are provided to assist the student. We recommend that teachers:

- Used Closed Captioning options on video instructional materials
- Allow time for group discussions
- Avoid extensive note taking which requires listening, looking, and writing all at once
- Place the student close to the teacher and always look at the student when speaking to him/her

To develop a web-based program that is truly accessible by persons who are impaired either visually, by hearing, by physical movement, or mentally requires considerable thought and effort. We have strong partnerships with the Tacoma Public School for the Blind and Deaf and the Rochester School for the Deaf and have been excited to learn from them and respond to their students' needs.

2018 National Survey of Teachers Using Quaver Curriculum Resources

At QuaverMusic.com, we look at the sale of our curriculum as the beginning of a partnership with the individual teacher to deliver the finest in music pedagogy and technology available today. This partnership depends on our ability to deliver our "product" every time a teacher needs it. Every class. Every day. We therefore evaluate our performance not only on the quality of our content but also on how reliably we deliver it and how responsive we are to our customers needs. As teachers, our customers are professional graders and we take their assessments seriously. In this Report Card, we present the findings of an annual survey administered by Fine Arts Supervisors across the country. We believe the results speak volumes to the quality of our product, the consistency of our delivery, and our commitment to our customers.

At the end of the 2017/18 School Year, the Fine Arts Supervisors from 87 school districts asked their music teachers to assess the impact of the Quaver Curriculum. Additionally, the Quaver team reached out to a wider audience of teachers individually in all 50 states across the country. The composite grades given by the 2,364 teachers who responded to the National Survey are unpacked in the following pages.
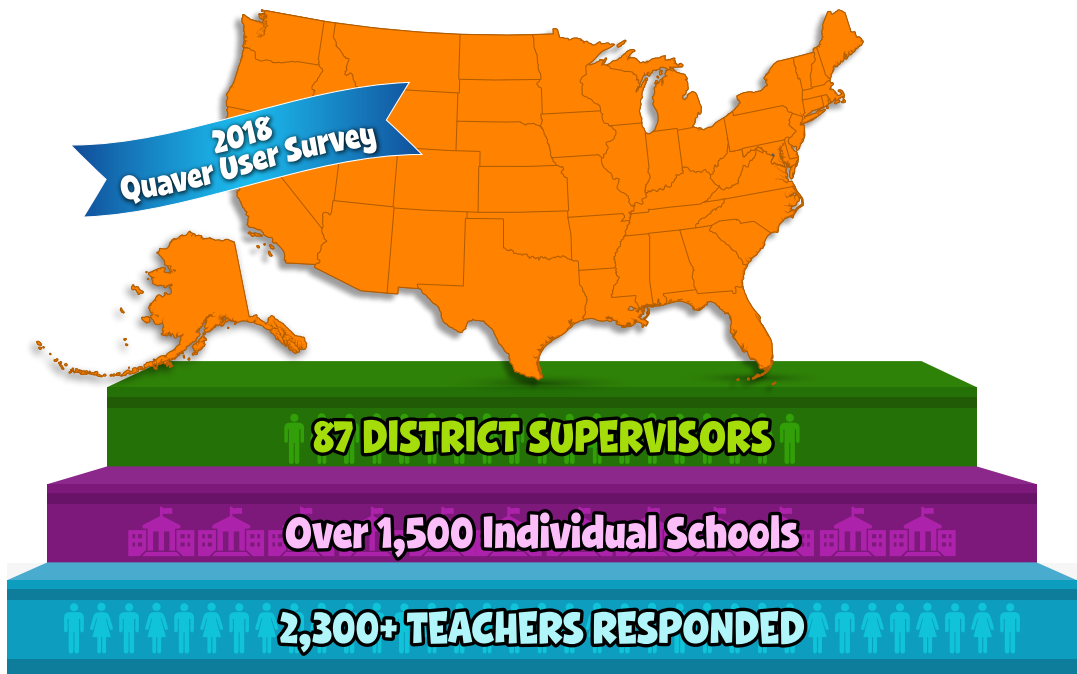
The teachers were asked to give ratings of excellent, very good, good, fair, or poor to 13 factors organized into the categories in the table below. Each of the 87 Supervisors was therefore given a candid, independent assessment of the impact of Quaver in his/her district. In addition to the quantitative ratings in the survey, teachers were invited to offer specific comments relating to the various factors and to the overall experience with the Quaver Program. Over 1,000 comments were received and cataloged. The Supervisors then shared with their teachers and with Quaver the summary results of the quantitative results as well as the verbatim comments.

This document details the 13 factors by category and shows the composite distribution of grades given by the 3,364 teachers who responded to the survey.

Category	Number of Factors
Impact of Quaver on Teachers	5
Impact of Quaver on Students	5
Quality of the Quaver Team	3

Survey Results

While the specific results can be displayed in many ways, we offer two exhibits that highlight the impact Quaver has had on music teachers and their students. Exhibit 1 • Quaver's Impact on Teachers and Exhibit 2 • Quaver's Impact on Students depict four key factors in each of these categories – what we call the Enthusiasm Index (shown in white text), which represents the percentage of ratings that were either excellent, very good, or good.

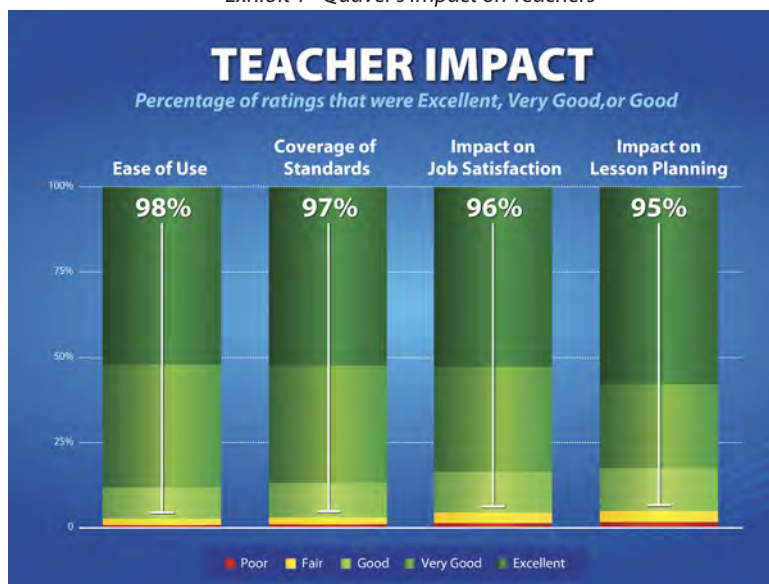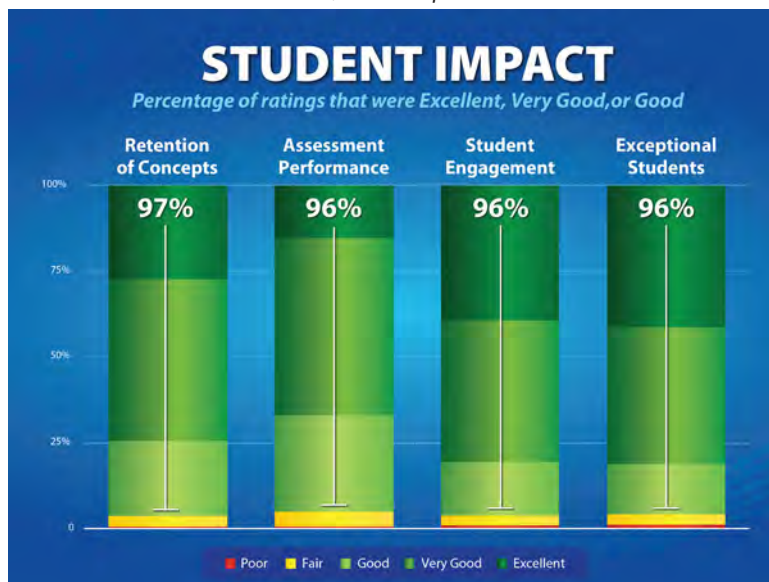*Exhibit 1 • Quaver's Impact on Teachers*

Exhibit 2 • Quaver's Impact on Students

The following pages contain more detailed breakdowns of each category teachers were asked to rate.

Impact on Teachers

To what extent did Quaver contribute to the job of the music teacher?

Quaver Impact on Teachers	Percent of the Ratings				
	Excellent	Very Good	Good	Fair	Poor
Ease of Use	52.56%	35.95%	9.11%	1.96%	.43%
Coverage of Standards	53.35%	33.98%	9.97%	2.15%	.56%
Enjoyment/Job Satisfaction	54.02%	30.26%	11.51%	3.08%	1.13%
Lesson Planning	58.93%	24.12%	12.28%	3.37%	1.3%
Connections w/other subject areas	39.89%	34.66%	20.26%	4.61%	.58%

Impact on Students

What impact did Quaver have on student learning, classroom behavior/engagement, and student enjoyment?

Quaver Impact on Students	Percent of the Ratings				
	Excellent	Very Good	Good	Fair	Poor
Retention of Concepts	29.55%	45.81%	21.25%	3%	.39%
Performance on Assessments	24.69%	46.06%	24.93%	3.99%	.33%
Impact on Student Behavior	24.47%	42.05%	26.08%	6.4%	1%
Engagement/Excitement for Music	40.3%	40.73%	15.41%	2.79%	.77%
Response from Exceptional Students	45.23%	37.41%	13.58%	2.88%	.9%

Quality of Quaver Team

How well did the Quaver Team serve the teachers after they implemented the Quaver Curriculum?

Quality of Quaver Team	Percent of the Ratings				
	Excellent	Very Good	Good	Fair	Poor
Quality of In-Person Training	48.46%	29.72%	15.6%	4.69%	1.54%
Quality of Online Training	41.67%	37.06%	16.89%	3.78%	.6%
Quality of Customer Support	55.22%	30.88%	10.71%	2.6%	.59%

Conclusion

We believe the data represented in this National Survey underscores each of our core values in that it demonstrates our commitment to:

- **Quality:** by being graded directly by our customers, the most professional graders in our society.

- **Integrity:** by keeping our promises to the people we serve.

- **Responsiveness:** by being there for our customers, hearing their concerns and suggestions, and taking the action necessary to address them.

- **Passion:** by staying focused on our mission of helping students learn to love music.

While we are greatly encouraged by these results, we know we must meet the challenge year after year. Like our customers and their students, we expect to be evaluated in an annual National Survey for the life of our relationship and hope your district will be a part of that process next year.