

***The Power of Music***  
**Unit 7: Getting Rhythm**  
**Transcript**

**VOICEOVER:**

Music educators in all kinds of learning contexts help students to learn the basics of rhythm and notation. In Juneau, Alaska, Lorrie Heagy incorporates narrative and movement to help make such abstract concepts accessible to her diverse general music class of third graders. True to the ideas embedded in *El Sistema*, learning is done in an ensemble. Getting rhythm through a group composition is a collaborative endeavor.

**JUNEAU ALASKA MUSIC MATTERS (JAMM), GLACIER VALLEY ELEMENTARY SCHOOL, JUNEAU, AK**

**LORRIE HEAGY AND STUDENTS (singing):**

Oh, when the saints go marching in...

**LORRIE HEAGY, MUSIC TEACHER, JUNEAU ALASKA MUSIC MATTERS, GLACIER VALLEY ELEMENTARY SCHOOL, AK:**

One of the goals starting an *El Sistema*-inspired program here in Juneau, Alaska, was to bring music to all kids and make it accessible and equitable for those students who might not be able to afford it. We're a Title I school, which means that we have over forty percent who are eligible for free and reduced lunch. And our makeup, we have Alaska Native, Filipino, Tongan, Pacific Island, we have a high percentage that are multiethnic. *El Sistema* uses music for a larger goal and that goal is to create and help develop exceptional human beings. I have some background in Waldorf, where you teach with head, hands, and heart. And so that has permeated a lot of what I do and so when I became connected with *El Sistema*, it was a perfect match, because you use the arts to help bring out those capacities that children already have, and just helping them to find avenues in which to express it.

So today... I have third-grade goals up here.

Who can tell me what the first one is? Chance, can you tell us?

**CHANCE:**

Rhythm family.

**LORRIE HEAGY:**

It's the rhythm family.

So remember big brother Ta? He stands tall. And he always likes to set the rules, right? Or in this case, set the beat. So, if this was his beat for "Hot Cross Buns," it would be like this.

**LORRIE HEAGY AND STUDENTS (singing):**

Hot cross buns, hot cross buns...

**JUDITH HILL BOSE, DIRECTOR OF EDUCATIONAL INITIATIVES, LONGY SCHOOL OF MUSIC OF BARD COLLEGE:**

Lorrie Heagy is serving a diverse group of learners in her classrooms, some of whom are struggling learners, and she's really creatively bringing together various ideas. She's using narrative. She's using movement. She's using lots of different ways to engage the entire community in learning about quarter notes and half notes and whole notes.

**LORRIE HEAGY AND STUDENTS (singing):**

Hot cross buns, hot cross buns...

**LORRIE HEAGY:**

The five things that get the brain's attention are emotion, movement, relevance, pattern, and novelty. And story embodies all five of those things. So when you're trying to teach something that's abstract, like a quarter note, and you expect students to just memorize that, you're not giving them many entry points to remember it.

And story is a great way to do that. I developed the rhythm family story, where each notation is a character in a family. The quarter note tends to set the beat, at least in elementary music — 4/4, 3/4, 2/4 time — the quarter note gets the beat. So I looked at it, and it looked like, well, big brother. Big brothers kind of set the rules. And so big brother Ta will be the one who sets the beat. And so I used a familiar song like "Hot Cross Buns" to demonstrate that, by changing the tempo, but always say that Ta is the one who sets the beat. And when they're standing, we have it in their bodies where they actually step on each beat.

Now, if he decides to go like this:

**LORRIE HEAGY AND STUDENTS (singing quickly):**

Hot cross buns, hot cross buns, one-a-penny, two-a-penny, hot cross buns.

**LORRIE HEAGY:**

If he decides to set the tempo this way ... Wait till we set... the... tem... po.

**LORRIE HEAGY AND STUDENTS (singing slowly):**

Hot cross buns...

**LORRIE HEAGY:**

Well, I have a little brother, Mike. And when I was your age, Mike would always come running by me, "Lorrie, Lorrie, can I play with you and Colleen? Can I play? Please, please, please?" In the rhythm family, there's a little brother — actually, two little brothers — and they are the...

**LORRIE HEAGY AND STUDENTS:**

Ti-Ti's.

**LORRIE HEAGY:**

They're the twins. And they're twice as fast because they're little. They're like, like... like little ones nipping at your heels, going, "Can I play? Can I play? Can I play? Can I play?" So there's two Ti-Ti's to every Ta. So it goes something like this. Let's have our Ta. The Ti-Ti's are like, Ti-Ti, Ti-Ti, Ti-Ti, Ti-Ti, Ti-Ti...

**Because two eighth notes are often paired together, why not that be twins? So it's a way to help give them multiple ways of learning an abstract concept like notation. And so the story goes: the annoying twins bother big brother Ta and it's Ta Rest who comes to the rescue by quieting them down.**

Ready? Here we go.

**LORRIE HEAGY AND STUDENTS:**

Ti-Ti, Ti-Ti...

**LORRIE HEAGY:**

You keep going.

**They love Ta Rest. So we actually use the symbol of Ta Rest to be how he quiets the twins. So we do it with attitude. And so every rhythmic notation has a personality.**

**STUDENTS:**

Ti-Ti, Ti-Ti, Ti-Ti, Ti-Ti, Ti-Ti...

**LORRIE HEAGY:**

Luckily Ta Rest comes to the rescue. Ready? He's gonna shush them up. Here he goes and...

(whispering) Keep your Ta's going. With attitude. Thank you, Ta Rest.

Finally Mom and Dad come. They're holding hands. They were going for a walk.

**LORRIE HEAGY AND STUDENTS (singing):**

Two Ta's for every half note. Two Ta's for every half note.

**LORRIE HEAGY:**

Here's our half note.

**LORRIE HEAGY AND STUDENTS (singing):**

Half note, half note. Half note, half note. Half note.

**LORRIE HEAGY:**

Well, there's the parents, there's two of them. And they're holding a baby. And they all know what it feels like to have somebody say, "Oh! What a cute little baby!" and make that dotted half note equal three beats.

When they hold the baby, that's the dot, that's them just "dotted half note. Dotted half note." So let's get our Ta ready, so they can set the beat.

**LORRIE HEAGY AND STUDENTS (singing):**

Dotted half note, dotted half note.

**LORRIE HEAGY:**

Who remembers the last one? Aidan.

**AIDAN:**

The monster.

**LORRIE HEAGY:**

The monster. We talk about this meaning that this monster's so big and fat that it's the only one in the house, right? It's just, it fills up the whole space. So let's make our set of Ta's.... Oh, I see some good monster faces. We're going to say...

**LORRIE HEAGY AND STUDENTS (singing):**

Whole note, hold it. Whole note, hold it.

**LORRIE HEAGY:**

Then, switch. Whole note, hold it...

**Every rhythmic notation has a personality. So when they are seeing those notes up on the board, it's no longer just seeing them without personal connections.**

Who can ... point to one of the Ta's? McKenzie, can you point to one of the Ta's? Great. Yep.

Actually, who can raise their hand and tell me how many Ta's they see in this entire rhythm? So we have one measure, two measures, three measures, four. How many Ta's total? Chance?

**CHANCE:**

Three.

**LORRIE HEAGY:**

There's three. So I'm going to go across and you say when it's a Ta. Ready, and...

**STUDENTS:**

Ta, Ta ... Ta.

**LORRIE HEAGY:**

Nice job... nice job, take a bow. You were correct there are three Ta's.

CJ, can you tell us how many pairs of Ti-Ti's you see?

**CJ:**

Two.

**LORRIE HEAGY:**

How many think two? Yep, you're right. Nice job. So no Ta's this time, just the Ti-Ti's. Ready?

**STUDENTS:**

Ti-Ti...Ti-Ti

**LORRIE HEAGY:**

So who can tell me who we haven't recognized yet in the rhythm family who's in this composition?

**STUDENT:**

I forgot the name, but it's the silent one.

**LORRIE HEAGY:**

It's the silent one, it's his friend...

**LORRIE HEAGY AND STUDENTS:**

Ta Rest.

**LORRIE HEAGY:**

Ta Rest. That's one of the most important ones because music, what makes music so beautiful is that there's sound and there's also silence.

Who has something different? Aidan?

**AIDAN:**

The half note.

**LORRIE HEAGY:**

The half note.

**STUDENTS:**

Half note, half note.

**LORRIE HEAGY:**

Good. I saw Sammy move to that last one. So Sammy, can you tell us what it's called?

**SAMMY:**

Whole note, hold it.

**LORRIE HEAGY:**

That's it. Everyone say it.

**LORRIE HEAGY AND STUDENTS:**

Whole note, hold it.

**LORRIE HEAGY:**

I didn't put one of the family members up here that we talked about. So Dawson, can you tell me what family member we forgot?

**DAWSON:**

Dotted half note.

**LORRIE HEAGY:**

That's it. How many beats is a dotted half note? Who can show me with their fingers? There's three.

Can you tell how many beats we have in each measure? Can you show me on your fingers how many beats? Good. So if we are already using three, how many beats left to complete this measure? Can you show me on your fingers? Good. So who can show me with their body what you want to put there that could be one beat?

A Ta? All right.

**I use levels for a lot of my teaching. And oftentimes our students will say, "Well, how many levels does this piece have?" because — like video games — they want to know what the highest level is.**

**And I'll say, "I'll let you know when we get there," and I'll just keep making up more levels as they accomplish them. And it's amazing how far we can get in a class.**

The last level is I don't do anything other than point the beats. Here we go:

**STUDENTS (singing):**

Dotted half note, Ta, Ta, Ta, Ta, Ti-Ti ... half note, half note, Ta, Ti-Ti ... whole note, hold it.

**LORRIE HEAGY:**

Take a bow. That was great. So, can I put a star next to the rhythm family?

**STUDENTS:**

Yes.

**LORRIE HEAGY:**

All right. Good job.

Today our goal is to create a class composition using our rhythm family. And then if we can get past that level, we will add our recorders and add some pitches.

Each one of you will be able to pick two cups.

**ERIK HOLMGREN, FORMER DIRECTOR, SISTEMA FELLOWS PROGRAM,  
NEW ENGLAND CONSERVATORY:**

One of the great things that Lorrie does in teaching rhythm is that she solidifies it with an exercise. Not only do the students learn rhythm, they then take it to the next level and create music together. They begin to be composers very early on in their musical training. Using cups to represent notes is an effective strategy to help students struggling with the abstract concept of notation.

**LORRIE HEAGY:**

So much of what I do in recorder is to reinforce mathematical concepts as well as literacy concepts. And using symbols is a complex strategy in math. And music is all about symbols. So why don't we have those symbols become cups so that we could create a class composition first?

Who can tell me who this character is going to be? Talon.

**TALON:**

The monster.

**LORRIE HEAGY:**

The monster, right. Everybody say, whole note, whole note, hold it. All right, that's the monster.

These little ones ... I already hear you say it, so everybody go, "Ti-Ti." Those are the twins. This one will be the...

**LORRIE HEAGY AND STUDENTS:**

Half note, half note.

**LORRIE HEAGY:**

Good.

Now remember, big brother Ta likes to be, you know, he's the one that sets the beat. So he's the same size, but he's not the same color. So guess who this is? The blue is...

**LORRIE HEAGY AND STUDENTS:**

Ta, Ta, Ta, Ta.

**LORRIE HEAGY:**

Good. And then this clear one. Show me what you think that one is. Nice job.

So what I'm going to do is, I'm gonna ask you to just pick two cups. So if Miss Heagy was to pick two cups, I put them right in front of me and I just put my hands in my lap.

**I think creating your own piece of music can be a little intimidating for kids. So by modeling it first as a class would make it seem less intimidating and also gives us an opportunity to see if they are making those connections of what is a Ta, what is a rest, what is a whole note. And so we use the different colored cups to represent each one of those notes.**

I see just taking a look, who do you think is most represented in our class composition?  
Cecilia.

**CECILIA:**

The monster, because everybody pretty much has one monster or two monsters.

**LORRIE HEAGY:**

There's a lot of monsters here. So what are we going to say when we see that?

**LORRIE HEAGY AND STUDENTS:**

Whole note, hold it.

**LORRIE HEAGY:**

**The reason why I decided to use the cups instead of going directly to the notes is to help them begin to see that music is symbols. I also feel that the idea of using symbols reinforces the mathematical aspect of music. And learning how to think in symbols and in abstract ways will support their growth academically in both math and in reading.**

This is equal to one beat, right? But what are we gonna do for this one? Ti-Ti. And then Ta. So you'll still do one beat, right, because two Ti-Ti's fit in one Ta. Here we go:

**LORRIE HEAGY AND STUDENTS (singing):**

Half note, Ta, whole note, hold it, Ta, whole note, hold it, Ta, Ta, half note, Ti-Ti ... half note, Ti-Ti, Ti-Ti.

**LORRIE HEAGY:**

**I try to have the students go around and point so that there was a sense of conducting and that we could travel around the circle. And once I could see that we could go around the circle and the kids could act out each note, it was a quick way for me to assess if they had that knowledge and were able to move on to the next step, which is meter.**

You're ready for the next level?

**STUDENTS:**

Yes.

**LORRIE HEAGY:**

All right, here we go.

In our compositions for “Hot Cross Buns” or “Mary Had a Little Lamb,” do you remember how many beats we divide our measures into? I’ll give you a hint. It’s a multiple of two.

We see the music divided into groups of something, something. I’ll give you an example. Let’s see.

(singing) Mary had a little lamb, little lamb, little lamb. Mary had a little lamb whose fleece was white as snow.

Can you show me on your fingers what you think? I’m seeing fours. Yeah, that’s correct. ‘Cause we had, (singing) one, two, three, four. One, two, three, four. One, two, three, four. One, two, three, four.

If you sang and counted, and I saw some of you actually doing the beats on your fingers, take a bow. You just jumped several levels. All right. So guess what these are going to be? Our measures. We are going to separate our beats.

So if we started with Olivia, show on your fingers how many Olivia’s total beats she has. How many fingers would you put on for your half note? And then what would you put for your Ta? Good. So can you use both hands so we can add them together?

**We decided to divide our class composition into measures of four beats using the rhythm sticks. It’s a great way to do that. It also gives the class a chance to problem-solve.**

Now Puolena, how many is your whole note hold it? Could you put the number of fingers down? Whole note, hold it. Four. So can I make a measure of four beats? Three plus four is what? Seven.

So I can’t put a measure between you, can I? I’ll put a measure here to start our composition. Can I put a measure here?

**PUOLENA:**

No.

**LORRIE HEAGY:**

No, we need to have four beats. So Puolena, is there anything you can do with your two cups to help us be able to make a measure of four?

Will that work?

**STUDENTS:**

Yeah.

**LORRIE HEAGY:**

Yeah, we have two plus one plus one is...

**STUDENTS:**

Four.

**LORRIE HEAGY:**

Four, so can you put the measure down for us? All right. Can you tell us where the next measure would go, Puolena, if we're doing every four beats.

**The sequence of cups doesn't equally divide into four beats, and so students have to think about how can we alter the way that our cups are lined up so that we can make equal beats of four.**

One plus one plus two plus one is...

**LORRIE HEAGY AND STUDENTS:**

Five.

**LORRIE HEAGY:**

So where would you place it? There you go, now we have four.

**Some just had to change the order of their two cups. Others had to take a cup away. Another had to borrow a cup from someone else. So there was some great problem solving that the class had to do together to make that part of the activity work.**

**JUDITH HILL BOSE:**

That, to me, is a very *Sistema* idea. You don't yourself just get to sit and puzzle out how many half notes and how many quarter notes per measure, but you need to work with the people that are sitting on either side of you to figure that out altogether, so that the end result is that you're all responsible for this great group composition. And that you're all learning these concepts in a community, in an ensemble.

**LORRIE HEAGY:**

Caleb, can you trade one of your whole-note-hold-it for something that will complete this measure? 'Cause we have beat one, beat two. So what do you need that could make four beats?

Oh, so you're going to switch cups. Will that work? Ta. Everyone, let's count them. Now let Caleb put it in. Ready, Ta, that's Ta Rest, Ti-Ti, half note.

**STUDENT:**

Yep, that works.

**LORRIE HEAGY:**

**After we were able to accomplish dividing our composition into measures of four beats, I thought it would be another interesting level to add pitch and for them to begin to see that they could use their recorders to start creating their own pieces**

**of music, but to first model it as a class. And that's where color came in. I thought why don't we use Post-its?**

We're now moving on to not just making a composition with rhythm, but with pitch. And so you've noticed I have five colors. And I have to tell you that they are related to what we've been playing on the recorder.

So what note do you think represents the blue piece of paper?

**STUDENT:**

Blue, B.

**LORRIE HEAGY:**

B. How come you came up with the note B?

**STUDENT:**

Because blue starts with the letter B, so I thought it was B.

**LORRIE HEAGY:**

That's it. Nice job.

**A blue Post-it could be B on a recorder. A red Post-it for A, for apple. Green would be for G and then we got a little creative with orange for energy or energetic to get that sense for E. And then D, we get vitamin D from the sun. So I, again, tried to use some sort of connection to the color that relates to the note.**

What do you think this one is? This is a stretch. It's not supposed to be purple, but it's a close color to ... to the red. Caleb.

**CALEB:**

A.

**LORRIE HEAGY:**

It's A. What fruit do we eat that's red?

**STUDENTS:**

Apple.

**LORRIE HEAGY:**

So we have B for blue, A for apple. What do you think this one is? Everyone.

**STUDENTS:**

G.

**LORRIE HEAGY:**

G for green. This one ... it's E, because oranges give you energy. So this will be E for energy. All right. And what vitamin do we get from the sun?

**STUDENT:**

D.

**LORRIE HEAGY:**

Yes, this is vitamin D. So everybody, let's say the letters.

**Those five notes happen to be the pentatonic scale, which allows a child to really pick any of those five and it sounds good. So that's why we limited it to those five notes, and those are the five notes that they can play on their recorder as well.**

So this is your next step. Miss Heagy is going to add B. And... I'm actually going to do two B's. So Terry, taking a look at my cup, what sticky note's in front of it, what color?

**TERRY:**

A B. Blue.

**LORRIE HEAGY:**

Blue, right. So I'm going to play that for one beat. All right... So here I go. You're going to conduct your notes.

[LORRIE playing the recorder.]

**LORRIE HEAGY:**

**The next step in this composition lesson would be to begin reinforcing the notes and what they look like on the staff. And then have them create and compose just two measures with four beats each. And show them that if you take those two measures and reverse them or inverse them or do a retrograde or transposing a little bit, that they're composing just like some of the greatest composers did. They would find a phrase or a melody and then they would experiment with it by, by reversing it or turning it upside down. And that they can do the same thing and test it out to see what it sounds like. And once they do that, then we can move into form ... an ABA pattern or ABBA. And this is all using just eight beats.**

**STUDENT:**

You played a long time.

**STUDENT:**

That was beautiful.

**LORRIE HEAGY:**

You know, Miss Heagy started her measure halfway between, I didn't realize Talon's cup was part of my measure. So I should have ended on Talon's B, right? With his whole note. Which would make a nice ending, wouldn't it? So let's end with your... we'll do your four beats and then we'll end with Talon's. Ready?

[LORRIE playing the recorder.]

**LORRIE HEAGY:**

Wow, nice job. So next time, we will build this with all of our recorders.