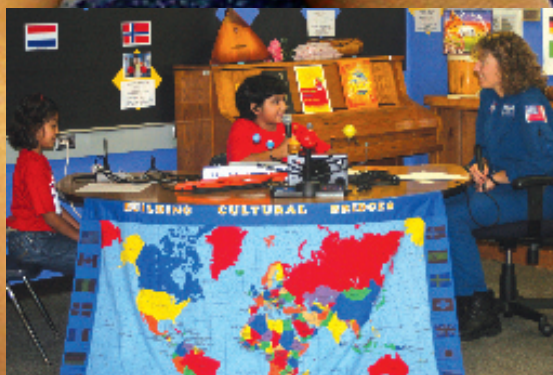


Southwestern MUSICIAN

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Music Education
Builds Cultural Bridges



Music Education Builds Cultural Bridges

by Karen Kneten

Music students gather around an inflatable globe and excitedly match international greetings to countries and continents. “*Sorida?*”—“Africa!” “*Hola?*”—“Spain!” “*Guten Tag?*”—“Germany!” “*Konnichiwa?*”—“Japan!” “*Privyet?*”—“Russia!” These are languages from just a few of the countries represented in a multi-dimensional, international program called “Building Cultural Bridges.” Jami Lupold and Pat Surface developed this program after the words of a TMEA keynote speaker became the catalyst for them to restructure their multicultural curriculum and revise how they delivered the daily lessons.

At the 2000 TMEA convention, these Pearl Hall Elementary music educators heard Dr. Jeffrey Kimpton assert that for music education to survive, music educators need to tap into community resources to establish a connection between education and the students’ place in the community. Lupold and Surface thought about how to put Kimpton’s words into action and quickly recognized the amazing resources that existed in their own backyard of Pasadena ISD. Now when Pearl Hall students leave their music classes, they call out with “*Ciao!*”, “*Sayonara!*”, or “*Do Svidanya!*”

Designing BCB

After planning with education directors from some of Houston’s foremost organizations, Lupold and Surface created the Building Cultural Bridges program (BCB). This extraordinary program links Pearl Hall Elementary with NASA, Johnson Space Center, the Houston Symphony, consuls general’s offices, the Society for the Performing Arts, the Houston Grand Opera, and the Norwegian Seaman’s Church, providing unique and creative opportunities for students and educators. The program allows students to discover that they are an integral part of society at the local, state, national, and international levels. The goal: create a greater cultural tolerance by offering students and educators a better understanding of the music and cultures of other nations. While this continues to happen throughout the school, so many more offerings have come to the Pearl Hall Elementary students and staff.

BCB provides students innovative learning opportunities to develop and use communication skills and technology to explore international music, culture, and literature. “It gives us a tangible focus for multicultural education, with science connections through music. Kids experience how music is a part of the lives not only of professional musicians, but also of scientists,

engineers, world leaders, and even astronauts—on earth and in space,” said Lupold. Surface added, “Even though it is a major project with great intricacies, BCB serves as a vessel for delivering music education and for supporting cross-curricular instruction, motivating students to embrace the cultures around them.” Once the program took root, it expanded in directions no one dreamed of, and it took their school to places no one ever expected.

Launching BCB

With Johnson Space Center (JSC) serving as home to the nation’s astronaut corps preparing both the U.S. and its international partners for living and working in space, as well as housing mission control centers for both the space shuttle and International Space Station (ISS), Lupold and Surface decided to focus the program on collecting folk songs and children’s literature from each of the sixteen ISS-partnering countries.

The teachers devised a detailed proposal for education directors at the Houston Symphony, the Houston Grand Opera, and NASA JSC Education Department to gain access to international participants who would represent their countries in the BCB program. These participants would be interviewed by Pearl Hall students and share their favorite childhood folksongs, children’s books, and cultural information from their home country.

Convincing all of the organizations to support this program wasn’t difficult. In

MUSIC MAY ACHIEVE THE HIGHEST OF ALL MISSIONS:

She may be a bond
between nations,
races, and states
who are strangers
to one another
in many ways;

She may unite
what is disunited
and bring peace
to what is hostile.

— *Dr. Max Bendiner*

August 2002, NASA Education Director Susan H. Anderson requested that Pearl Hall students participate in a live international webcast in NASA’s electronic classroom with astronauts at JSC and classes at Kennedy Space Center. That December, the first formal BCB interview featured Irish concert pianist Finghain Collins from the Houston Symphony. However, with the tragic loss of the *Columbia* space shuttle crew and with restrictions imposed following the September 11 attacks, the Pearl Hall teachers were concerned about whether international guests would be available to support the BCB program.

While facing this challenge, Lupold came across the saying, “What would you attempt if you knew you would not fail?” She shared it with Surface and this perspective quickly became the driving force behind their

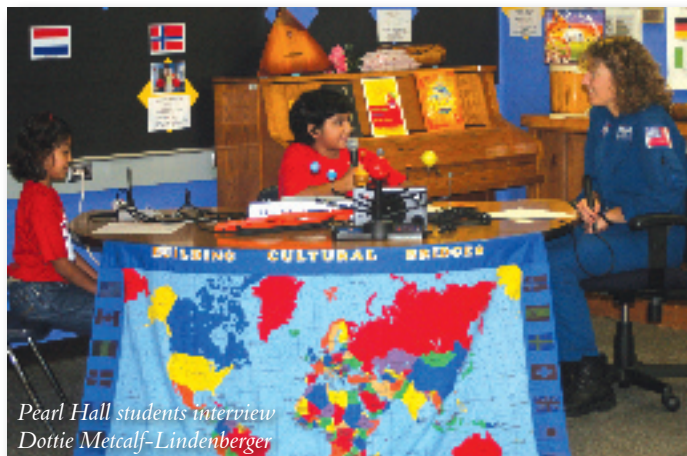
continued BCB progress. In 2003, persistence paid off as they welcomed their next BCB participant, Carlos Miguel Prieto, from Mexico, who was serving as the Houston Symphony Associate Conductor. After a few astronauts, engineers, and musicians participated, word began to spread. And as in all great organizations, success bred more success. To date, thirty participants representing seventeen countries have met with Pearl Hall students through this program.

Making International Connections

During their music classes, fourth- and fifth-grade students conduct formal interviews with the international participants, and after learning their guests’ favorite folksongs, students from various grade levels record them on campus using their digital recording studios. Since the program began, the students have interviewed approximately three individuals each semester. With only four of the sixteen

ISS-partnering countries remaining, the Pearl Hall students may have all of the interviews completed by the end of the school year. “Our kids are confident to ask questions of our international guests,” said Seth Fewell, who joined the Pearl Hall music education team after BCB had begun. “On top of all that music educators already do, preparing for a BCB event is very involved, but often it doesn’t seem like work at all,” he added.

One of the strengths in this program’s design is the consistent interview technique. Students have asked identical interview questions of each participant since its inception. This not only helps the students build confidence as they conduct the interviews, but also results in a consistent set of information gathered from each country. “They were so organized. It really struck me—that they were going to do their journalistic best and their musical best. They were connecting on all levels, and that’s what education is supposed to do. It was fun and startling to see them do it so well,” reflected Jack Bacon following his interview with the Pearl Hall students. As an ISS Systems Integration Engineer,



Pearl Hall students interview
Dottie Metcalf-Lindenberger

Bacon works with all the different systems on the ISS to make sure the entire space station is operating as expected.

When they complete their interviews with representatives from all sixteen countries, they plan to make the interview information and the student-recorded folksongs available on their school website. A growing collection of books from BCB guests is also available in the school library for students and teachers. While moving closer to this tangible goal, the music teachers saw an intangible goal realized in the process—student understanding and appreciation of other cultures and a vital connection to a world beyond Pasadena. Surface explained, “The children feel so connected to the world now. They’re not on their isolated little island. We work hard to branch out and see the big picture, but the joy of the music and literature that everyone has brought—that’s wealth. That’s the richness of the world that has been brought to them.”

Houston Symphony Education Director Roger Daily has worked with Pearl Hall from the beginning of the program to arrange participation by international musicians. “For kids to be a part of a program like this, where it makes the world not so big and not so different, is incredible,” he commented. “All of these guests have had a folk song and a favorite story from their childhood to share—it’s a universal thing. To have music as something that transcends all is very special.”



HSO Associate Conductor Carlos Miguel Prieto instructs Pearl Hall students on conducting techniques.

Canadian astronaut Colonel Chris Hadfield has visited the students several times for special events through the BCB program. “It’s delightful to go into your average, mundane building and see such a spark of interest that has been created by the teachers and that is being absorbed by the students,” he said. “What makes a big difference in this program is that it is included in the curriculum. The kids are prepared. They’re interested, and so it’s not just the entertainment of the day.”

Hadfield not only shares stories about his missions to work on Russia’s Mir Space Station and on the International Space Station, but also stories of his passion for music, which started at an early age when he learned to play guitar on his own and played trombone in band at school. Hadfield continues to play music today as the leader of Max Q, the

all-astronaut rock band formed in 1986 to raise the astronauts’ spirits following the loss of the *Challenger* crew.

Bridging the Curriculum

BCB has not only expanded Pearl Hall students’ knowledge of music through the collection of international folk songs; it has also enhanced their educational experience by providing them with a unique understanding of how math, science, technology, and music are integrated in successful people’s lives. Whether engineers, musicians, or astronauts, all of the BCB contributors have shared how important music education is in their lives and careers. In addition to learning about the connection between music and other disciplines, students also develop their own technical skills through this program by using digital audio and video recording equipment to record the interviews and, in a studio setting, to record the folk songs. When written music is not available for a participant’s folk song, the students search the internet and if they don’t find it, they are guided in how to dictate the music that is heard.

Selected in 2004 to be a Mission Specialist through NASA’s educator/astronaut program, Dottie Metcalf-Lindenberger recently visited Pearl Hall to speak for their “Science Lift-Off” day and to attend a music book club reception. A high school science teacher from Colorado, Metcalf-Lindenberger is also a

Building Cultural B

2002

- Aug. 27: Lance Bass, USA (*NSYNC Pop/Rock Artist)*
- Dec. 2: Finghin Collins, Ireland (Houston Symphony Orchestra [HSO] concert pianist)*

2003

- Jan. 22: Carlos Miguel Prieto, Mexico (HSO, Associate Conductor)*
- Feb. 10: Dr. Samuel Adler, Germany (HSO, Composer/Professor)*
- April 7: Evelyn Glennie, Scotland, (HSO, World’s First Solo Percussionist)*
- May 5: Dennie Sayers, England (Houston Grand Opera, International Choreographer)*

2003, cont’d

- May 15: John Connolly, USA (NASA-JSC Mars Exploration Rover program)*

- May 23: Dr. Jack Bacon, USA, (NASA-JSC, ISS Integration Specialist/Engineer)*
- Sept. 19: Dan Burbank, USA (NASA-JSC, Astronaut)*
- Sept. 19: Chris Hadfield, Canada (NASA/CSA, Astronaut)*

2004

- Feb. 6: Dr. Franklin Chang-Díaz, USA/Costa Rica (NASA-JSC, Astronaut/Rocket Scientist)*
- March 21: Damian Montano, USA (HSO, Composer/Bassoon soloist)*
- Sept. 28: Dr. Koichi Wakata, Japan (NASA/JAXA, Astronaut)*

2005

- Jan. 25: Ana Thompson-Holliday, Denmark (Vice-Consul General)*
- Feb. 25: Claude Nicollier, Switzerland (NASA/ESA, Lead Astronaut of the European Space Agency)*



strong supporter of education through the arts. “As a science teacher, oftentimes, my subject is now being touted as something that is taking the place of music, but these Pearl Hall teachers have shown that you can bring music and science together by bringing in the engineers and astronauts, and connecting it all,” she explained. “I wish we would realize as a society that a well-rounded person will learn about all of these things . . . that we will take science and we will take math, but that we will also recognize that studying music with all of the subjects together make us better human beings.”

BCB participant Carlos Miguel Prieto exemplifies the success enabled by this well-rounded education. Prieto is an accomplished violinist and professional orchestra director; however, his degrees from Princeton and Harvard are in mathematics and engineering. With this education, he could have easily ended up working at NASA alongside several of the other BCB participants, but Prieto instead followed his passion for music.

While studying at Harvard, Prieto also played violin and was concertmaster in their orchestra. He commented, “I know music helped me in my studies. I can’t tell you if it helped me solve a differential equation, but I can tell you that it gave me this focus. There’s something that music forces you to do that is very important for education and science, which is to make you able to concentrate for long periods of time. Also beneficial is the capacity to analyze. You have to be able to analyze where things fit in a very detailed way. Sometimes this is very solitary work, but

Learning music is important for many reasons. Playing musical instruments requires a discipline of mind, coordination, ear, and beauty.

— Sergei Galperin



HSO Violinist Sergei Galperin plays a balalaika Russian folk instrument for the Pearl Hall students.

the end result is a lot of contact with the community. In this way, it is similar to the life of a scientist who does a lot of solitary research in order to be able to share it with the world. The parallels between music and science never end.”

As the ISS Systems Integration Engineer, Jack Bacon has experienced more than just parallels between music and science. He has found that like him, other NASA engineers with musical training have used this knowledge in their technical analysis work required to keep the ISS operational. “We once had a problem on the ISS that was basically a beat frequency problem. Those who had musical training recognized it immediately. Those who were working the pure physics were still coming to grips with how we were seeing this problem after we already knew the answer,” Bacon said. “You could hear it, and see it. Anyone who has been slightly out of tune would tell you—that’s what’s going on. The other engineers around the

table would have solved the problem with pure science, but the musicians in the room intuitively knew the answer.”

For Bacon and astronaut Chris Hadfield, music also provides an essential connection between them and their international counterparts during their collaboration on the ISS. While both spent extensive time working in Russia, Hadfield also had the extraordinary experience of living on both Mir and the ISS with international crews.

As an astronaut on the second shuttle to go to Mir, Hadfield explained that he didn’t just want to take up a plaque to commemorate the event. He had previously trained in Russia with Thomas Reiter, a German astronaut with the European Space Agency who would be on Mir when they arrived. While they trained in Russia, Hadfield and Reiter also enjoyed playing guitar together. When Hadfield learned that the only guitar on Mir was an old acoustic, he decided to take up a

Bridges Participants



March 3: Thomas Hultén, Norway (*The Norwegian Seaman’s Church, Freelance Trombonist*)

March 29: Sergei Galperin, Russia (*HSO, 1st Violinist*)

April 18: Uri Pianka, Israel (*HSO, Concert Master*)

April 26: Ingun Studsrød, Norway (*Professor*)

May 24: Jean-Ives Thibaudet, France (*HSO, International Concert Pianist*)

2006

Aug. 29: Dottie Metcalf-Lindenburger, USA (*NASA-JSC, Educator/Astronaut*)

Oct. 24: Ed Miller, Scotland (*Folklorist/NPR Radio Host*)

Oct. 27: Seven STOMP cast members, USA, (*The Society for the Performing Arts*)

Nov. 2: Paolo Nespoli, Italy (*NASA/ESA, International Astronaut*)

2007

Jan. 25: Dave Hadfield, Canada, (*pilot/folk musician*)

Feb. 13: Frank De Winne, Belgium (*NASA/ESA International Astronaut*)

Feb. 23: Gabriella Lena Frank, Peru (*HSO, Composer*)

Mar. 8 Dr. Mike Pedley, England (*NASA, lead scientist for the Aries Project*)

Mar. 28: Kees Vandersteent, The Netherlands (*Bay Area Photography Club, photographer, cryogenics*)

May 5: Dr. Christian Otto, Canada (*Physician from the South Pole, co-op with NASA*)

Sept. 10: João Luis & Douglas Lora, Brazil (*HSO, The Brasil Guitar Duo*)

Sept. 19: Michael Lopez-Alegria, Spain (*NASA Astronaut, Commander, Expedition 14 International Space Station*)

Dec. 16: Hans Graf, Austria (*Houston Symphony Music Director*)

custom-made guitar for Reiter and other musicians to enjoy while living in space.

Hadfield presented the guitar to the Mir crew, and while orbiting about 220 miles above the earth, he and Reiter were able to connect again through their shared love of music. Their music provided an even wider international connection when then Russian Prime Minister Viktor Chernomyrdin asked them to play a duet for him at the end of their two-way video link public relations event. Hadfield reflected, "You can build cultural bridges not just by speaking a common tongue, but through other ways as well . . . and music is a terrific way to do that."

Through the insights of their international guests and the cross-curricular projects that Lupold and Surface have implemented, BCB has strengthened the connections between music education and core subject instruction at Pearl Hall. "Our version of music education is education through music," Lupold explained. "We're here to build a music education program that focuses on music as art as well as a vehicle for teaching other subject areas," added Surface.

Bobbie Smiley, one of many Pearl Hall teachers who appreciates their perspective, said, "I teach math at school, but every once in a while I break out into song and the kids look at me like I'm crazy! I use music in teaching multiplication facts and other things. Music is something that ties everything together—math, social studies—everything. So, I'm very pleased we have the BCB at our school."

Developing Tomorrow's Leaders

Before BCB, many Pearl Hall students had never experienced a world beyond the four-mile radius of South Houston. Now they realize that their world extends



Chris Hadfield plays the custom-made guitar he presented to the crew of the Russian Mir Space Station.

Pearl Hall Music in Space

While on board the ISS on December 3, 2006, astronauts Thomas Reiter (Germany) and ISS Commander Michael Lopez-Alegria (Spain/USA) received a call from ISS mission control Flight Director saying that the Pearl Hall choir had a surprise gift of music for Christmas . . . they had recorded "Still, Still, Still" in German and English and "Riu, Riu, Chiu" in Spanish. Upon the start of the Russian Christmas holiday, "Moscow Nights," recorded in Russian by third graders and accompanied by Chris Hadfield, was played for Russian cosmonaut Mikhail Tyurin. Selections from the choir's Christmas concert were later uploaded to the Space Station Media Center for the crew's enjoyment throughout the holidays.



Astronauts work to upgrade the ISS.

Photo by NASA/STS-116 crew

around the globe and beyond. They have learned that this connection begins at a personal level by recognizing commonalities they share with those they once viewed only as different. Each presenter has taught them that making connections with people from other cultures will be critical for their future success, and that music can play a significant part in providing those connections.

Jack Bacon described how music has helped him make these connections: "In my job, it's very important to have the broadest possible background and use every part of my brain. I'm a systems integrator, so unlike any other job and more than any other, I have to look at work from thousands of different sides. To the extent I can understand all of those people—to the extent that I can think geometrically and rhythmically—anything it takes to look for connections between the different disciplines and cultures is imperative. I go looking for those bridges. I look for connections on every level, and with music, there's already a connection there."

Lupold explained that when students connect with the presenters, they are inspired to set lofty goals and believe that they can reach them. She said, "Once the guests share their love of music and learning, and of having had successes with people from all over the world—that they like sports, have pets and families—the students seem to gain a sense that becoming highly successful is not out of their reach."

For BCB participant Sergei Galperin, who grew up in Communist Russia, music

connected him to a world that would have been impossible to reach without it. Music was one of very few pursuits that could enable a person to leave the country. Achieving success as a professional violinist meant that he could travel the world and discover a future that other Russian children could never imagine. Galperin observed that unlike in his home country and many others, American kids don't place limits on their future. "If you tell them that someday they're going to be president, they truly believe it's possible," he said. "If you say that in France or Germany, they will think you're insane! If your father is a plumber, you're going to be a plumber. To be anything else is just not possible. So, it's so nice to see that kind of spirit here," he said. Galperin is a first violinist with the Houston Symphony Orchestra and said he hopes that visiting with the students will help encourage them to pursue their dreams. "Maybe one or two or three will be inspired and end up in the Houston Symphony or end up being an astronaut. A lot of times, this is how these things work," he said.

Since BCB has been in their school, Assistant Principal Judy Diaz has observed a transformation of the Pearl Hall students, 85% of whom come from low socioeconomic families. "Now kids see possibilities. They wouldn't otherwise think beyond their own experience, but they do now." Roger Daily has visited many schools through his work with the Houston Symphony Orchestra and said, "I can see many of these young students in years to come standing up as leaders in front of major companies," he said.

Backing BCB

Lupold and Surface could not have achieved their goals without the support of Pearl Hall administrators. Once they created a plan for this program, Lupold and Surface immediately sought the approval of their school administrators (Principal Marilyn Pavone and Assistant Principals Judy Diaz and Jane Regner). “We always start with our principal, to gain her endorsement,” Surface said. “She has shown total confidence and has been a real champion.” Lupold added, “It’s taken an immense amount of belief and risk-taking on their part to allow us to step out like we have.”

Pearl Hall administrators are strong advocates for music education, and have a deep appreciation for the value BCB adds to the Pearl Hall students’ experience. “The excitement that [the students] have for other things in the world is a direct result of their participation in our music education programs,” said Assistant Principal Regner. Principal Pavone believes that BCB supports the vision that is the basis for everything educators do each day—a vision she expects will be the same ten years from now. “We want to enable the kids to be successful,” she said.

Looking in Your Backyard

Although your backyard may not house NASA or the Houston Symphony, it will have businesses and organizations with international affiliations that are part of the community in some way. Participating in programs like BCB offers businesses excellent opportunities to develop positive community relations, so they are likely to be willing participants. Jack Bacon commented, “It’s such a beautiful concept and it works on so many levels whether it be music or rocket science. It’s easy to copy, which makes it all the more amazing that I haven’t seen it before.”

Principal Pavone explained how important programs like BCB are to school administrators. “As an educator, I always feel responsible for the whole child. So, I’m constantly looking for a good hook, such as the arts, where children can enjoy it and translate it into their academics. It’s a great place to start. To have this project that has brought world-class arts, science, and literature to our kids and teachers has been a very validating experience.” One Pearl Hall fifth grader who interviewed seven members from the cast of STOMP echoed this as she reflected on her experience: “It’s cool that astronauts and famous

musicians think we are important enough to spend time with us and be a part of the BCB program.”

Reaching the World

Because of BCB, Pearl Hall students have heard the Houston Symphony perform in Jones Hall, performed pre-concert music before the symphony concerts, performed concerts with astronauts from Max-Q at the International Space Station Educators Conference and the Texas Arts Alliance Center at Clear Lake, toured Johnson Space Center, sung for over 100 international delegates at the World Space Congress, interviewed leading international scientists and musicians, been the featured school on two live web casts at the NASA electronic classroom, and much more. Lupold explained, “We couldn’t take our students and school around the world, so we’ve brought the world to them.”

Since looking in their own backyard six years ago, Lupold and Surface have continued to build bridges throughout their community, country, planet, and beyond. Through music education, they have opened up the world for their students and enabled them to believe in a future without limits.

What Pearl Hall Third and Fourth Graders Say About Building Cultural Bridges

What have you liked most about interviewing international guests and learning their favorite folk songs?

- I feel good when people come to help us learn.
- We get to learn what their childhood was like in their own country and compare it to ours.
- I like learning songs that most people in America haven’t ever heard of.
- I like learning new songs in different languages.
- We enjoy learning their songs and it’s fun.
- When people come from other countries, they share with us different kinds of music from our own.

Why should other schools start a program like Building Cultural Bridges?

- I think it would be good for other students to have a chance to learn how we are learning.
- We feel kind of special that we are the only ones getting this right now.
- Other kids should have a chance to do some of these things too.
- Other kids could learn about all these careers like we have.
- Other kids can learn to have respect for people of different cultures.
- I want other kids to be able to learn about different cultures because there will be many people from other countries we will meet in the future.

For more information about this program, contact Jami Lupold (jlupold@pasadenaisd.org), Pat Surface (psurface@pasadenaisd.org) or Seth Fewell (sfewell@pasadenaisd.org).

Pearl Hall teachers and administrators extend their gratitude to Roger Daily and Carol Wilson with the Houston Symphony, the NASA Education Department and Astronaut Appearance Office, Chris Hadfield and the Canadian Space Agency, as well as the European Space Agency, the Society for the Performing Arts, consuls general’s offices in Houston, the Houston Grand Opera, and the Norwegian Seaman’s Church for their incredible support of this program.



Special thanks to Jami Lupold and Pat Surface for sharing their extraordinary success story, for organizing interviews with these BCB contributors, and most of all, for their genuine commitment to excellence in music education.



Texas Music Educators Association

promoting excellence in music education since 1920

Begun in 1920 as the Texas Band Teachers Association, the Texas Music Educators Association is an organization of over 10,000 school music educators dedicated to promoting excellence in music education and united by the following common goals:

- To foster public support for music in schools
- To offer quality musical experiences for students
- To provide professional growth opportunities
- To encourage interaction among music education professionals
- To cultivate universal appreciation and lifetime involvement in music
- To develop and maintain productive working relationships with other professional organizations

TMEA is comprised of five Divisions: Band, Orchestra, Vocal, Elementary and College, each of which is led by an elected Vice-President who serves on the TMEA Executive Board. Members in each division are active and retired educators and college students. Music industry leaders also support TMEA with their sustaining memberships.

The state is divided into 28 geographic Regions, enabling each Region to carry out TMEA objectives at the local level. Each Region has representation on the State Board of Directors. Each of the seven Areas are comprised of four Regions.

TMEA leaders represent the more than 10,000 members at the state level, voicing their concerns and providing information to the Texas Legislature, the State Board of Education, the University Interscholastic League and all professional educational organizations in the state. In addition, TMEA assists its members in promoting music education at the local level.

Robert Floyd has served as TMEA Executive Director since 1992. Before joining TMEA, he worked as a Texas music educator for 26 years.

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