Dear Teachers,

Thank you for joining us for the Applause Series presentation of ScrapArtsMusic! ScrapArtsMusic re-invents do-it-yourself musical performance from the ground up with a creative, kid-friendly and eco-positive mandate. Featuring exceptional performers with instruments beautifully sculpted from salvaged and recycled materials, we think it is safe to say that going green has never looked — or sounded — so good! Through their performance, we hope your students will be inspired by the group’s green ingenuity, innovation, and commitment to excellence.

We thank you for sharing this very special experience with your students and hope this study guide helps to connect the performance to your in-classroom curriculum in ways that you find valuable. In the following pages, you will find contextual information about the performance and related subjects, as well as a variety of discussion questions and assessment activities. Some pages are appropriate to reproduce for your students; others are designed more specifically with you, their teacher, in mind. As such, we hope that you are able to “pick and choose” material and ideas from the study guide to meet your class’s unique needs.

See you at the theater,

Des Moines Performing Arts Education Team

Support for Des Moines Performing Arts education programs and the Applause Series is provided by:

This study guide was compiled by Karoline Myers and Trevor Wiley; edited by Michelle McDonald. Based on ScrapArtsMusic Educators Guide by Justine Murdy and Gregory Kozak.
DID YOU KNOW?

More than 300,000 people visit Des Moines Performing Arts venues each year.

Des Moines Performing Arts opened in 1979.

Des Moines Performing Arts has three theater spaces:
- Civic Center, 2744 seats
- Stoner Theater, 200 seats
- Temple Theater, 299 seats
  (located in the Temple for the Performing Arts)

No seat is more than 155 feet from center stage in the Civic Center.

Cowles Commons, situated just west of the Civic Center, is a community gathering space that is also part of Des Moines Performing Arts. The space features the Crusoe Umbrella sculpture by artist Claes Oldenburg.

As a nonprofit organization, Des Moines Performing Arts depends on donor funding to support facilities, programming, and education programs.

The Applause Series started in 1996. You are joining us for our 19th season of school performances.

ABOUT DES MOINES PERFORMING ARTS

Des Moines Performing Arts is a private, nonprofit organization and is an important part of central Iowa’s cultural community. It is recognized nationally for excellence as a performing arts center and is committed to engaging the Midwest in world-class entertainment, education, and cultural activities.

Des Moines Performing Arts presents professional touring productions, including theater direct from Broadway, world-renowned dance companies, family programming, comedy, and concerts.

Education and Community Engagement programs are core to Des Moines Performing Arts' mission as a nonprofit performing arts center.

Public education programs allow audience members and local artists to make meaningful and personal connections to the art they experience on our stages. Guest lectures and Q&As with company members allow audiences to explore the inner workings of the performance. In addition, master classes, workshops, and summer camps taught by visiting performers give local actors, dancers, and musicians the chance to increase their skills by working directly with those who know what it takes to succeed on the professional stage.

Through its K-12 School Programs, Des Moines Performing Arts strives to ensure that central Iowa students have affordable access to high quality arts experiences as part of their education. More than 50,000 students and educators attend curriculum-connected school matinee performances through the Applause Series annually. In addition, Des Moines Performing Arts sends teaching artists into the schools to provide hands-on workshops and residencies in special opportunities that engage students directly in the creative process. And, through its partnership with the John F. Kennedy Center, Des Moines Performing Arts provides teachers with in-depth professional development training on how to use the arts in their classrooms to better impact student learning. The Iowa High School Musical Theater Awards is Des Moines Performing Arts' newest initiative to support the arts in Iowa schools, providing important learning tools and public recognition to celebrate the achievements of students involved in their high school theater programs.
YOUR ROLE AS AN AUDIENCE MEMBER

Attending a live performance is a unique and exciting opportunity. Unlike the passive experience of watching a movie, audience members play an important role in every live performance. As they act, sing, dance, or play instruments, the performers on stage are very aware of the audience’s mood and level of engagement. Each performance calls for a different response from audience members. Musicians and dancers may desire the audience to focus silently on the stage and applaud only during natural breaks in the performance. Audience members can often take cues from performers on how to respond to the performance appropriately. For example, performers will often pause or bow for applause at a specific time.

As you experience the performance, consider the following questions:

* What kind of live performance is this (a play, a dance, a concert, etc.)?
* What is the mood of the performance? Is the subject matter serious or lighthearted?
* What is the mood of the performers? Are they happy and smiling or somber and reserved?
* Are the performers encouraging the audience to clap to the music or move to the beat?
* Are there natural breaks in the performance where applause seems appropriate?

THEATER ETIQUETTE

Here is a checklist of general guidelines to follow when you visit the Civic Center:

* Leave all food, drinks, and chewing gum at school or on the bus.
* Cameras, recording devices, and personal listening devices are not permitted in the theater.
* Turn off and put away all cell phones, pagers, and other electronic devices before the performance begins.
* Do not text during the performance.
* Respect the theater. Remember to keep your feet off of the seats and avoid bouncing up and down.
* When the house lights dim, the performance is about to begin. Please stop talking at this time.
* Talk before and after the performance only. Remember, the theater is designed to amplify sound. Other audience members and the performers on stage can hear your voice!
* Use the restroom before the performance or wait until the end. If you must leave the theater during the show, make sure the first set of doors closes before you open the second — this will keep unwanted light from spilling into the theater.
* Appropriate responses such as laughing and applauding are appreciated. Pay attention to the artists on stage — they will let you know what is appropriate.
* Open your eyes, ears, mind, and heart to the entire experience. Enjoy yourself!

A SPECIAL EXPERIENCE

Seeing a live performance is a very special experience. Although it is not required, many people enjoy dressing up when they attend the theater.
Thank you for choosing the Applause Series with Des Moines Performing Arts. Below are tips for organizing a safe and successful field trip to the Civic Center.

ORGANIZING YOUR FIELD TRIP
* Please include all students, teachers, and chaperones in your ticket request.
* After you submit your ticket request, you will receive a confirmation e-mail within five business days. Your invoice will be attached to the confirmation e-mail.
* Payment policies and options are located at the top of the invoice. Payment (or a purchase order) for your reservation is due four weeks prior to the date of the performance.
* The Civic Center reserves the right to cancel unpaid reservations after the payment due date.
* Tickets are not printed for Applause Series shows. Your invoice will serve as the reservation confirmation for your group order.
* Schedule buses to arrive in downtown Des Moines at least 30 minutes prior to the start of the performance. This will allow time to park, walk to the Civic Center, and be seated in the theater.
* Performances are approximately 60 minutes unless otherwise noted on the website and printed materials.
* All school groups with reservations to the show will receive an e-mail notification when the study guide is posted online. Please note that study guides are only printed and mailed upon request.

DIRECTIONS AND PARKING
* Directions: From I-235, take Exit 8A (Downtown Exits) and the ramp toward 3rd Street and 2nd Avenue. Turn onto 3rd Street and head south.
* Police officers are stationed at the corner of 3rd and Locust Streets and will direct buses to parking areas with hooded meters near the Civic Center. Groups traveling in personal vehicles are responsible for locating their own parking in ramps or metered (non-hooded) spots downtown.
* Buses will remain parked for the duration of the show. At the conclusion, bus drivers must be available to move their bus if necessary, even if their students are staying at the Civic Center to eat lunch or take a tour.
* Buses are not generally permitted to drop off or pick up students near the Civic Center. If a bus must return to school during the performance, prior arrangements must be made with Des Moines Performing Arts Education staff.

ARRIVAL TO THE CIVIC CENTER
* When arriving at the Civic Center, please have an adult lead your group for identification and check-in purposes. A Des Moines Performing Arts staff member may be stationed outside the building to direct you to a specific entrance.
* Des Moines Performing Arts staff will usher groups into the building as quickly as possible. Once inside, you will be directed to the check-in area.
* Applause seating is not ticketed. Ushers will escort groups to their seats; various seating factors including group size, grade levels, arrival time, and special needs seating requests may be used to assign a group’s specific location in the hall.
* We request that an adult lead the group into the theater and other adults position themselves throughout the group; we request this arrangement for supervision purposes, especially in the event that a group must be seated in multiple rows.
* Please allow ushers to seat your entire group before rearranging seat locations and taking groups to the restroom.
* As a reminder, children under the age of three are not permitted in the theater for Applause performances.

IN THE THEATER
* In case of a medical emergency, please notify the nearest usher. A medical assistant is on duty for all Civic Center performances.
* We ask that adults handle any disruptive behavior in their groups. If the behavior persists, an usher may request your group to exit the theater.
* Following the performance groups may exit the theater and proceed to the bus(es).
* If an item is lost at the Civic Center, please see an usher or contact us after the performance at 515.246.2355.

QUESTIONS?
Please contact the Education department at education@desmoinesperformingarts.org or 515.246.2355.
Thank you!
VOCABULARY

The following terms connect with the ScrapArtsMusic musical experience. Use these words in some of the following activities:

- Assign each student a word. Give students a list of the terms. Have each student act out their word while other students guess the meaning.
- Have students work with a partner to define as many of the terms as they can. Then put two pairs together, allowing students to add more definitions from the group knowledge base. Combine groups again if needed.

choreography: the art of creating and arranging dances or movement.

compose: to make up and write a piece of music.

cymbals: metal dishes that are clashed together as a pair or struck singly with a stick.

drone: a continuous and sustained hum or buzz tone.

drum: a percussion instrument characterized by a stretched skin or drum head that may be beaten, rubbed, or scraped. Used by all world cultures.

drum head: the membrane stretched over the opening of a drum.

drum stick: an implement used for striking a percussion instrument, also known as a beater.

ensemble: a group that performs together.

gong: a large metal plate hit with a mallet.

hocketing: a way of playing in two parts, in which rests are introduced in one, coinciding with the notes in the other. This technique is sometimes put into use on the Plankophone with several players playing the two parts.

kinetic: of, relating to, or produced by motion.

mallet: a beater with a round ball on the end used on various percussion instruments.

note: a tone of definite pitch.

percussion: musical instruments that you beat, scratch, rub, shake, twist, spin, rattle, roll, drop, throw, etc.!

pitch: any of various standards that establish a frequency for each musical tone, used in tuning an instrument.

polyrhythm: means "many rhythms." In common use, the term means two or more rhythms played simultaneously against each other. Polyrhythms can be thought of as two different meters (time signatures) played against (or with) each other.

resonator: the part of the instrument that amplifies the sound and makes it louder.

rhythm: the division of time in music.

rims: the point at which the outside edge of the drum meets the drum head.

roll: to beat a drum using continuous short blows.

timbre: the quality of a sound that distinguishes it from other sounds of the same pitch and volume.

volume: the loudness or softness of a sound.

Adapted from ScrapArtsMusic Educator Guide.
ABOUT THE PERFORMANCE

ScrapArtsMusic is innovative percussion theater. Five hyper-kinetic performers play amazing instruments skillfully crafted from salvaged and recycled junk. In the hands of ScrapArtsMusic’s artists and musicians, industrial scraps become the basis for a dynamic, choreographed, groove-based fusion of world music traditions and 21st century sounds.

Run Time: Approx. 60 minutes

WHAT YOU WILL EXPERIENCE
ScrapArtsMusic’s performance will feature original percussion ensemble music, a brief introduction to “scrap” instruments and their construction, as well as insight into how the music is composed and the choreography developed.

Just before the final composition is performed, ScrapArtsMusic may look for volunteers to help them with a popular student participation piece.

LOOK, LISTEN, THINK AND FEEL!
During the performance...

Look...
◊ Do the percussionists stand still or move with the music?
◊ How are the musicians dressed? Does their clothing matter?

Listen...
◊ Listen to the different sounds. Where are the different parts coming from? Can you pick out the sounds of the different instruments? Can you determine which kinds of instruments make loud or deep noises and which make soft or higher pitched noises?
◊ Can you detect rhythms, melodies, or harmonies?

Think...
◊ What are some different feelings you experienced during the music?
◊ What skills must the musicians possess to successfully contribute to the group?

“High kicking, virtuosic and adrenaline-packed. Kozak just may have single-handedly performed a million acts of green.”

-Gwenda Nemerofsky, Winnipeg Free Press

GOALS FOR STUDENTS:
◊ Exposure to original, rhythmically-rich percussion ensemble music
◊ Recognition of new ways to recycle scrap materials
◊ Willingness to accept new ideas of music and instrumentation
◊ Appreciation of musical structure in terms of elements of rhythm, pitch, and melody
◊ Understanding the inter-relationship of music with science, visual arts, dance, and theater
◊ Alternative ideas about what constitutes a musical instrument

Adapted from ScrapArtsMusic Educator Guide.
ABOUT THE ARTISTS

Learn about ScrapArtsMusic prior to seeing their performance.

THE COMPANY
Gregory Kozak and Justine Murdy, the artistic directors of ScrapArtsMusic, invented and created all the musical instruments used in the show! These are not found objects "played" like instruments, but completely new tune-able inventions made from a variety of "scraps" welded, bent, and transformed into entirely new sculptures. Gregory then wrote and choreographed the original music.

Gregory and architecture-trained Justine began their collaboration in 1998. Their multi-disciplinary approach brings together Justine’s architectural work and fascination with design with Gregory’s musical training. Over 3 years of research and development (1998-2001) they created 145+ large-scale, mobile, sculptural instruments.

ScrapArtsMusic has performed in over 14 different countries around the world, for audience of all ages, languages, and backgrounds. They were even invited to perform during the Closing Ceremony of the 2010 Winter Olympics!

THE PERFORMERS
ScrapArtsMusic features five hyper-kinetic performers. Each is a highly trained, university educated professional with a strong athletic history as well. After all, percussion is the most physical of all of the instrument families.

The performers are:
◦ Gregory Kozak
◦ Spencer Cole
◦ Christa Mercey
◦ Greg Samek
◦ Malcolm Shoolbraid

What sort of skills do you think it takes to be in ScrapArtsMusic?

scrap:
an old, discarded, or rejected item or substance for use in reprocessing, as old metal that can be melted and reworked

“I’m from the future. I’m just a little early.” Check out this 4-minute, mini-documentary about ScrapArtsMusic’s creative process.

Why would the artists choose to call their group ScrapArtsMusic? What do each of these words mean on their own? Together?
"Using industrial scrap and everything from artillery shells, accordion parts and brass sheets to balloons, dishwasher hoses and bagpipe reeds, Kozak just may have single handedly performed a million acts of green. Who knew that scrap yards and dumps were treasure troves for the makings of new and marvelous musical instruments?"

- Winnipeg Free Press, Canada

Take a look at photos of several ScrapArtsMusic instruments? What do they appear to be made of? What do you think they sound like?
THE INSTRUMENTS: A MILLION ACTS OF GREEN

Scorpion Drums

Ziggurat Drum

Bell-Flower Chime

B-52 Drum

Artists on Humunga & Hourglass Drums
1) RHYTHM AND SOUND

Goal: To identify how everyday classroom materials and sounds can be used to create rhythms and musical pieces.

Explanation: Using classroom materials, students will improvise or compose simple rhythms with stylistically appropriate harmonizing parts.

Activity:
1. Have students look around the classroom and identify materials that could be used to make rhythmic sounds. Examples could be the sounds of a clicking pen, chalkboard brushes clapping together, notebook paper rustling, and the squeaking of sneakers on a floor.
2. Let one student establish a rhythm with one of the items, and have another layer a second rhythm on top. Improvise a jam session of classroom sounds around the rhythms.
3. Have students identify which sounds work well together. From your improvisation, create a running order for a piece of music. List the different sounds and the order in which they appear.
4. Perform the piece again and see if it has improved.
5. If students are confident with their piece, invite them to make vocal improvisations that fit with the rhythm. Create a name for the piece and suggest physical movements that go with it.

Follow-up Questions:
1. Where can you find rhythm? Do you have your own rhythm?
2. How do you experience rhythm in your everyday life? (Ex: rain falling, footsteps, brushing teeth)
3. How can different rhythms convey different themes, moods, or ideas?
4. How did the sound change depending on the size/structure of your classroom material? Are the sounds you created similar to any musical instruments you know?

2) GOOD VIBRATIONS

Goal: To identify the definition of sound and how size, length, and other factors can affect pitch.

Explanation: Students will explore how sound is affected by a number of factors.

Materials:
◊ Wooden ruler
◊ Desk or table

Activity:
1. Ask students, “What is sound?”

   Definition: Sound is caused by vibrations. Instruments make sounds by vibrating.
   When you hit a drum, the drum head vibrates.
   When you strum a guitar, the guitar strings vibrate. Singing is the result of vocal cord vibrations.

2. Hold a wooden ruler so that the edge hangs over a desk or table. Hold the ruler in place and push down on the end that is hanging over the table. Listen for the sound.
3. Now move the ruler so that more or less is hanging over the edge. How does the sound change?
4. Ask students to make generalizations about differences in the sounds of musical instruments.
Examples:
◊ The thinner the string, the higher the sound.
◊ The greater the movement, the louder the sound.
◊ The faster the movement, the higher the sound.

Follow-Up Questions:
1. Were there any differences between how fast the ruler vibrated and sound of the ruler? Explain.
2. The length of an object affects its pitch. How might this relate to different types of instruments?
3. What other factors do you think could affect the pitch of an object/instrument?

Activities adapted from ScrapArtsMusic Educator Guide.
3) SOMETHING FROM NOTHING

**Goal:** To experience innovation by transforming everyday objects.

**Explanation:** ScrapArtsMusic creates instruments from discarded or scrap material. In this activity, students will flex their creativity muscles by “transforming” everyday objects.

**Materials:**
- Variety of common objects, such as a cup, a shoe, a pencil, a rubber band, etc.

**Activity:**
1. Place an assortment of common objects in front of students.
2. Have students “invent” all the unusual or different ways the item could be used. Brainstorm ways to make new things from old things.
   - Ex: a rubber band could hold papers together, hold a pony tail, or to propel objects through the air.
3. Inventions are often the result of creative ways to solve problems. Have students think of a problem that needs solving, and then invent a solution. They can describe their inventions through words and pictures, or create inventions of their own using recycled materials.

**Follow-up Questions:**
1. How did you reinvent a new product from an old object? Can you think of products that have been created used this tactic?
2. ScrapArtsMusic takes this reinventing tactic, and applies it to musical instruments. Using the materials you used, how could you create a musical instrument?

4) THE HUMAN FOOTPRINT

**Goal:** To raise student awareness of level of waste output and to brainstorm ways to boost recycling in the classroom.

**Explanation:** A way we leave our human footprint on the earth is through the garbage we produce and leave behind. According to the U.S. Environmental Protection Agency (EPA), Americans generate about 1600 lbs. of waste, per year. Americans recycled and composted 550 lbs. of their individual waste generation, or about 34%. Students will identify how much waste their class produces, and propose ways to cut down that waste and recycle more.

**Materials:**
- Scale

**Activity:**
1. At the end of your school day, have your class weigh the bags of garbage that are produced throughout the day. Weigh recycling garbage separately.
2. Add all of the weights you record to have a daily total garbage output for your classroom.
3. Multiply this number by 180 (or number of days in school) to find out how much trash your classroom will output in one school year. Now take that number times the number of classes in your building.

**Follow-Up Questions:**
1. Isn’t it crazy how much trash we create in just one day, and how that adds up over the course of a school year? What are ways our classroom/school could cut down our garbage output. What ways could we further reduce, reuse, and recycle?
   - If you feel that your ideas could make a real impact in your school, propose your garbage reduction/recycling plan to your administrators.
2. What percent of our daily garbage output was recycled material? Do you know what you can and can’t recycle? How can you recycle your unused or old school supplies?

Activities adapted from ScrapArtsMusic Educator Guide.
POST-SHOW DISCUSSION QUESTIONS

1. What makes ScrapArtsMusic different from other musical groups you have seen? (Answer could include: most of the instruments are on wheels, the instruments are original, the music is original to the instrument, the instruments are moved in new shapes and played in a variety of ways to create different “looks” and “sounds”, musicians use choreography.)

2. What surprised you about the instruments you saw on stage? About the choreography?

3. How are ScrapArtsMusic instruments different from traditional percussion instruments?

4. What kinds of materials does ScrapArtsMusic use to make their instruments? (Answer includes: steel, aluminum, brass, plastic hose, PVC hose, gymnastic mats, and wooden dowel ‘seconds’.)

5. Why do you think making instruments from scrap is — or is not— a good idea?

6. What skills must a ScrapArtsMusic performer possess to be able to perform well? (Answer could include stick drumming skill, working well with others, good memory, athleticism, aerobic conditioning, theatrical skill, etc.)

7. How did attending this concert reinforce ideas about music that you have learned previously? Do you have any new understanding or awareness of music after listening to or participating in this event?

8. What do you think ScrapArtsMusic wants their audiences to understand or experience? What led you to this conclusion?

9. Which instrument did you find most interesting or surprising? What was it about this instrument that struck you? Its sound? Design? Combination?

10. How did the choreography enhance the performance? What sorts of shapes or movements did you see the musicians perform?

11. If you were to invent an instrument, what would it sound or look like?

Discussion questions adapted from ScrapArtsMusic Educator Guide.
RESOURCES AND SOURCES

BOOKS


ADDITIONAL RESOURCES

Recordings
ScrapArtsMusic's work is available on iTunes and at CDBaby.com. Discography includes: Live from Vancouver; Phon; The Big Bang; Gravikords, Whirlies and Pyrophones; and Planet Drum.

Websites:
ScrapArtsMusic website: www.ScrapArtsMusic.com
Videos, photos, bio, tour info and more!

Bash The Trash Homepage: www.bashthetrash.com
Ideas and information about instruments made from trash.

The New York Philharmonic Kidzone Instrument Lab:
http://nyphil.org/education/young-peoples-concerts/kidzone-online-learning/instrument-lab

Experimental Musical Instruments Homepage: www.windworld.com
An extensive website with great links.

Oddmusic. www.oddmusic.com
A source for unique, unusual, ethnic, or experimental music and instruments.

SOURCES
ScrapArtsMusic, Official Website: www.ScrapArtsMusic.com