

AGO National Convention  
*Kotzschmar 4 Kids: A Collaborative Curriculum for Schools*  
Wednesday, June 25 9:45 am  
Marriott Hotel  
A & B Salon, Fourth Floor  
Ray Cornils, Portland Municipal Organist, Presenter

### **Introduction**

The Friends of the Kotzschmar Organ, curators of America's oldest municipal organ (built in 1912), established a goal in its long-range planning of having a significant outreach to youth

Overseen by the Education Committee, FOKO has developed a wide variety of in-school experiences with the pipe organ

### **Our Offerings to Schools**

- Curriculum Units *Kotzschmar 4 Kids* – Exploring Music with the Pipe Organ
  - Intro to the Pipe Organ
  - 2 Composer based Curriculum
    - J. S. Bach
    - Olivier Messiaen
  - Science based curriculum
    - Sound Wave Energy
  - Kotz-O-Rama
    - An Integrated Arts and Science Day
      - Multi-stationed events
      - Music, Art, Science, Poetry, Creative Writing, Listening, Movement
- Meet the King of Instruments
  - 50 minute concert program with descriptions of how a pipe organ works and information about the music
  - Can be a follow up to the *Kotzschmar4Kids* in-school curriculum
  - Merrill Auditorium or Local church or school
  - Use power-point images
  - Features active involvement of students
    - Bring students that you have worked with in the classroom to help teach those in the audience how a pipe organ works or something about the music or composer
    - Invite a student to come up and play high or low notes
    - Invite organ or piano student to come and play a piece
    - Scavenger hunt – identify various components of the organ
  - Tours of inside of organ
    - Pipe chamber
    - Universal wind-chest
  - Tours of other parts of the building
    - Harriet Beecher Stowe's pew
    - Joshua Chamberlain pew
    - Back-stage tours
- Assembly Presentation
  - Located in-school, perhaps for multiple classes in an auditorium
  - Interactive

- Power-point based
- Uses video clips
- Uses portable organ, if available
- “Keepers of the Kotsch”
  - School-wide collaboration

Grade-level

Pre-K to 6<sup>th</sup>

Composers

Intro to pipe organ

Middle School

Intro to pipe organ

sound wave energy

music/band classes

High School

Resource for science and physics class

Intro to the pipe organ

**History of FOKO Education Efforts**

1990's

Lots of nice talk, no action

2000

Attended PipeWorks workshop at Seattle AGO National Convention

2000 -2002

FOKO Education Committee and Long Range Planning Committee develops a strategy to adapt AGO PipeWorks Curriculum for FOKO use

review of Maine State Learning Results and relate them to the curriculum

board adds a dedicated coordinator of Education, Kathleen Grammer

2002

Kotzschmar Junior commissioned by FOKO and built by David Wallace

2003

First *Meet the King of Instruments* concert at Merrill – now an annual event

2004

1<sup>st</sup> presentations at Middle School 3 or 4 weeks (has continued for 10 years)

Focus on music, social studies and math with lives and music of Bach and Franck

Worked with language arts, social studies, math and music teachers

Follow up concert at a local church

2005-07

Focus changes to Bach and Messiaen

Collaborated with partnered school teachers to develop materials

2008

Added student participation to Meet the King of Instruments

2009

Added three more middle schools, one became a long-time partnered school working with music teachers

Increased volunteer staffing and begin docent program

2010

- Added art and science components as a result of other teachers observing our work with music classes
- 2011
- Commissioned *Casey At Bat* in a composition contest  
Robin Dinda composer, Wayne Leupold publisher
- 2012
- Added 50-minute Assembly Program format for schools without a resident instrument
- Began Curriculum writing, including work by our partnered teachers
- 2014
- Began publication of our Curriculum
- Messiaen (available)
- Kotz-o-Rama (soon to be available)
  - Bach (available 2015)
  - Sound Wave Energy (available 2015)
  - Introduction to the Pipe Organ (available 2015)

## OUR PROGRAMS

- **Intro to the Pipe Organ**
  - How a pipe works
  - History of the organ
  - Where you find pipe organs
  - Winding system
    - Bellows and reservoir
  - Pipe types
    - Flue – principal, flute, string
    - Reed
  - Stops
  - Manual and Pedals
  - Pipe Lengths
    - Ratio of 2:1 for an octave
- **Bach**
  - Composer life
    - Large musical family
    - Employed by church and court
    - Imprisoned by Duke
  - German towns where he lived
  - Life 300 years ago
    - Other concurrent events
    - Transportation
    - Food
  - Germany
  - Musical instruments of the time
    - Harpsichord not piano
    - Organ
    - Mechanical or electric action???
  - Listening to various pieces
  - Musical forms

- Cantata Jesu, Joy of Man's Desiring
- Toccata Toccata in d minor
- Fugue Little Fugue in g minor
- Minuet – dances Minuets from Anna Magdalena Bach book
- **Messiaen**
  - Wildly imaginative, innovative, thoughtful composer
  - Life Events
    - Lived in France
    - Home-schooled – read poetry
    - Composer/Organist/Teacher
    - World War II
      - Quartet for the End of Time
  - Influences
    - Debussy
      - Discussion of Impressionism
    - Bird Song
      - YouTube clips
      - Selections from Pentecost Mass
      - Stained glass and color
      - Color
        - Each stop has its own timbre (color)
  - Scales – Major, minor, whole-tone, Modes of Limited Transposition
  - Form – Outbursts of Joy
  - Response to music
    - Sandpainting
- **Wave-Form Energy and the Pipe Organ (science)**
  - Amplitude
    - decibels
    - Slinkies
    - Links to volume
  - Frequency
    - Hertz
    - Links to pitch
      - Play “find that note” on K Jr.
    - Higher mass, lower frequency
    - Octave ratios 2:1 and pipe lengths
    - Explore what is vibrating
      - Flue pipes – column of air
      - Reed pipes – brass tongue
  - Conservation of energy – pumping bellows, filling reservoir, air rushing into pipes
- **Kotzsch-o-rama**
  - Use of K. Jr and continuo organ
    - Compare and contrast
  - Physics
    - Slinkies
  - Movement

- Square dancing to Allemande
  - Visual Arts
    - Sand painting
    - Water colors in response to music
    - Listen to BACH (Badinaria, Allemande, Cantata, Harpsichord)
  - Writing
    - Color tonal poems
- **Assembly Programs**
  - Includes K Junior
  - Many video clips
  - Where's the Organ
  - Pipe families
  - Composer introduction
    - Bach
  - How a Pipe Organ Works
    - Pumping (reservoir and bellow)
  - Pipe Lengths
    - Use of ropes 2-64' long
- **Concert at local church with organ chamber exploration**
  - Review of pieces heard in classroom
  - Musical forms
  - Pipe families
  - Tour of pipe chamber
    - Types of pipes
    - Reservoir
    - 16' Open Diapason
  - Scavenger hunt
  - Word search
- ***Meet the King of Instruments* - Merrill concert and tours**
  - Demo concert and exploration
  - Often the culmination of other educational experiences listed above
  - Pipe families
  - Percussion
  - Bach Little Fugue
  - Pedal solos
  - Kotzschmar Leviathan March
  - Student participation
    - Explanation of how a pipe organ works
  - Pre-tour videos
  - Docent led tours
- Pre- activities
  - Pulling Out All the Stops, edited version
  - Red Book

- Bach Comes to Call
  - At the Console
  - Composer information
  - Websites
  - Video loops of Kotzschmar wind chest
- Post-activities
  - Writing
  - Presentation to other students (MTKOI)
  - Keepers of the Kotzsch (Breakwater program)
  - Film making
  - Demo/Tour of local organ
  - Demo/Tour of Kotzschmar organ

### **Approaching a School**

Personal connection with a teacher or administrator is key  
 Understand National Core Education Standards  
 Respect the teacher  
 Teachers are busy and have many demands  
 Find out what concepts they are teaching and figure out what approaches they take to teaching  
   What vocabulary do they use?  
   What tools do they use to establish order and respect their classroom?  
   Notice what is in the classroom, what is important in their classroom?  
 What subjects can you use a pipe organ to teach?  
   Math (age a composer, octave ratios, percentage, fractions)  
   Listening  
 Develop pre-visit materials to prepare classes and post-visit assessments and “extra-credit” projects

### **Sources of our Curriculum**

AGO Pipeworks  
 FOKO Curriculum Writers  
 FOKO Partnered School Teacher and Curriculum Writers  
 YouTube resources  
 Organ Builder Sites  
 Your imagination and your own personal experience

### **Resources needed**

Artist in Residence (aka Organist)  
 Curriculum  
 Pipe Organ  
 Computer, projector, speakers  
 Administrator
   Liaison with the schools: pre- and post- visits  
   Materials manager  
 Volunteer Coordinator
   For concert  
   Team to do preparation and presentation of materials

### Budget items

- Artist in Residence
- Printing
- Organ
- Organ cartage
- Rental of concert hall or church for concert

### Funding

- Arts Organizations
- Schools – for busing to concerts
- Local AGO chapter
- FOKO
- AGO special projects funds

### Approaching schools and teachers

- Start with teachers or administrators with whom you already have a personal relationship
  - Music teachers
  - Science teachers
- Do presentations to Music Educators Associations
- Do presentations to principals associations
- Do presentations to Gifted and Talented organizations
- Listen to their needs

### Working with Students

- Listen to the students
- Watch for glimpses of energy and imagination
- Get them involved
  - Have them play
  - Have them play high and low notes
  - Have them choose the stops
  - Have them turn a page
  - Have them react to what you just played
  - Have them move the slinkies
  - Have them tell you what they just learned
- Give the student “space” to be her/himself.
- Ask open-ended questions
  - What do you know about...
  - What do you think about...
- If a student doesn't know an answer, ask another student to help them
  - The other student can't answer the question for the first student, rather the other student can give a hint or suggestion of how to find the answer
- Give them encouragement after they shared, and then redirect, refine, revise their response, if needed
- Bring the richness of your experience and knowledge to the classroom
- Identify what you want the students to learn and approach it from many angles.
  - Draw in parallel experiences
    - Manual – mano, manual labor, manicure
    - Pedal – pedestrian, bicycle pedal, pedicure

Stops – “pulling out all the stops”

Octave – Somewhere Over the Rainbow, Take Me out the the Ballgame

Court – basketball court, food court, judicial court, courtyard

Use video clips from YouTube

Play for them

Play for them things that they know, and things that you would like them to know

Choose pieces (or portions of pieces) that are short – 2-3 min max.

Develop follow up materials to assess what the students have learned

Have the students explain to other students or classes what they have learned

I use this technique in my Meet the King of Instruments Concerts

### **Follow up**

Review the assessment materials that they worked on

Set up a review time with the teacher or coordinator of the project a week or so after

your presentations for their feedback. This can be the time when you encourage a

return visit next year, or can help you redefine the project and goals.

### **GOALS OF THIS WORKSHOP**

Freely share what we have done in Portland

Hear your reactions

Hear your experiences

Have a network of folks (organists, schools, teachers, organizations) around the country  
who can share resources and support each other.

### **CONTACTS**

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