

Rock Orchestra on a Restricted Budget: Outline

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Intro: Rock Orchestra = Educational Results!

Beth Hankins and her Lakewood Project "Rock Orchestra" in the Cleveland, Ohio area has opened the door and created the model for all of us to follow. She and Mark Wood should be commended for that! But, not every teacher is fortunate enough to have a wealthy ex-student/patron to donate up to \$3000 per specialized electric instrument plus the needed sound equipment to make it all happen. It is just not realistic. Nor is it even necessary, to reap the same educational benefits, and get the same excitement and support in your school and community!

So, what's a poor string teacher to do?

There are many steps one can take with just a little know-how, DIY moxie, and very minimal cash/budget to get nearly the same dramatic effect on programs, individual students, audiences, and administrators.

1) Attitude

"tude or "tood" in copious amounts. Rock n Roll is all about it. Rebellious "devil may care" approach makes it exciting for kids who will adopt this attitude anyhow, with or without you, so why shouldn't it be you who can be their inspiration, guiding them through this sometimes painful adolescent experience? Give them a creative outlet for what they are going to experience one way or the other. Dare to be the hero who changed their life!

2) Music

Available arrangements and compositions

There is a growing number of commercially available rock n roll orchestra arrangements (Fanatical Fitzhugh Music www.fanaticalfitzhugh.com and others).

DIY arrange it yourself?

Pick their favorite rock or pop artist. You know their abilities and likes and dislikes better than anyone. Remember: most good electric guitarists are praised for their violin-like phrasing. The viol family is the king of instruments! Do not be intimidated! You know enough music theory. Rock music in general is not very sophisticated harmonically (just rhythmically and socially).

Helpful "selling" point: Try picking tunes that are familiar to your student's parents to "sell" your program. Guaranteed, you will have no shortage when asking for volunteers during your next fund raiser!

Is it legal to re-arrange other's music?

I am not an attorney, but in my experience, it is completely legal to re-arrange someone else's music once it is in "the public domain" without having to get permission (license) from the original creators/writers. **It is NOT legal to SELL that arrangement** (or a recording of it) without their permission. There are some gray areas.

If in doubt, look up the publisher/writers of the song in question on the **Harry Fox Agency** song database and contact them. Who knows, they might even take interest in what you are doing, waive any fees, and come to your school for an appearance! Can you imagine what kind of impact having your student's favorite rock star come to your school might have?! Life changing stuff I'd bet! You never know. Don't ask, don't; get they say.

In a quick online search, I did find a free "permission to arrange" form at:

http://www.musicmart.com/CopyrightResources/Permission_to_arrange.htm

I can not verify its legal correctness or even the need for it, but there it is.

My advice: No need to pay licensing fees that are not necessary when we have an extreme budget to protect now is there?

3) Look/visuals

Dress: Always important in the pop and rock field. Let kids dress rock appropriate for one concert or part of it (in costume change fashion just like theater... rock *IS* part theater!). Have a rock costume party/dress down day and take digital pics for latter promo use! See below.

**** PAINT YOUR INSTRUMENTS!****

That's right, the viol-gods won't strike you down with lightning or anything! It won't explode, implode, or ruin it; only make it a little quieter and more mellow which is not a problem at all

for some of those tinn-y sounding student instruments you may have in your inventory. It is especially not a problem if you **electrify** (see below).

Tips on painting (see page below).

Going digital:

Take plenty of digital pics. If you, your school doesn't have a digital camera, you can bet that one of your students will. Use them wherever you can to promote your program. Try projecting them, pre-concert, on a screen in the lobby or on stage. Email them to your local newspapers and post them on the school's website. This is good low-budget promotion and can create much excitement... even before your first concert!

4) Improvisation: The EZ way (see separate page)

Improv is key to rock n roll, and rock 'n' roll is all about the major and minor pentatonic scale, and especially its cousin, the blues scale. Certain keys on string instruments fall more easily into simple "no-brainer" finger patterns I call "EZ-Zones" (see Fiddle Jam). Stick with these keys at first for maximum success. Encouraging your students to not think too much during improv helps them to sound more creatively mature. Coach them to keep it rhythmic and have fun with these keys/zones/fingerings and everything will fall into place naturally.

5) Add a pick-up, open up a whole new world!

Though commercially made electric string instruments are nice to have, you don't have to purchase an expensive electric violin (\$300-\$3000 +!) to open up all the wonderful world of sonic possibilities that these instruments present!!

DIY (see separate pick-up page below)

With minimal know-how, tools, and effort, it is possible to electrify any stringed instrument by creating a pick-up yourself, using a part available at your local Radio Shack Store! I first learned this little secret from an article that ran in "Frets" magazine in the early 1980's entitled "Do-It-Yourself pick-up for \$1.79" The price has gone up a bit since then, but at around the \$3.00 mark today, it is still cheap and works!

Available instrument pick-ups (~\$100-150 average cost)

If you're not comfortable tinkering with electronics, the next step up is to purchase a commercially available add-on pick-up. 2 or 3 of these could get your ensemble rockin' for sure. A recent quick internet search came up with these manufacturers. There are others. LRBags, B-Band, Barbera, Barcus-Berry, Fishman, Ithaca Stringed Instruments, PUTW (Pick-up the world), Schatten, Shadow, Stringvision, Yamaha, Zeta

6) Electronic effects (see separate page below). Once electrified with a pick-up the whole musical alternative string (rock) world is open at your feet... literally! Now you can compete with electric guitars and drum sets and explore any electronic effect on the market!

7) Getting stuff cheap(er)

Non-profit school status can open many discount doors

Starting your own business +/- wholesale/re-sale/taxes

Asking your community businesses for support in exchange for advertisement

Ask any/everybody (remember Beth Hankins) how many degrees of separation will you find between you and a "gatekeeper"? Again, "don't ask, don't get!"

8) Closing

Resistance and a word to the wise. The Classical model is way-entrenched in administrator's ideals. Be firm, but polite, and remember the true goal in education: **the students**.

Ultimately it should be all about them and no one else! This is potentially life changing stuff for students to be exposed to! Don't let them down by cowing down to administrators or parents (or your own self doubts). If you have doubts, try one rock song the first year and note the results and responses. I'll bet that you may get some resistance, but the positives will far outweigh the nay-sayers, and when your program starts growing year after year, tickets sell out to your concerts, newspapers show up to review the wonderful things going on at your school, etc... you can also bet that, since you are so good for the school's image, budget money may not be as much of a problem in the future as well!

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Rock Orchestra on a Budget: Tips on painting a Viol family instrument

By: Geoffrey Fitzhugh Perry www.fanaticalfitzhugh.com email: gfitzhughp@fanaticalfitzhugh.com

Prepare for Painting

Remove all removable parts: Strings, bridge, tailpiece, end button, pegs (I mark each one with a pencil so they go back in the same holes when done, pencil marks can easily be removed later with a little saliva). Cover the fingerboard with masking tape (the tan kind you probably have in your desk drawer is fine, blue "painter's" kind is a step up as it lasts longer and removes a little cleaner I find, but either works).

Lightly Sand

Sand existing finish to give it some "tooth" but NOT all the way to bare wood! 220 grit sandpaper seems to do the trick. Be sure to get in all the nooks and crannies around the inner bouts and seams.

Hint: try using a coarse steel wool to reach these places efficiently. See health * below.

Optional: Create a viol paint hanger

I hang the instrument up eye level with a bent clothes hanger hooking one end through a peg hole and the other on a nail or hook for drying or if using spray paints. *See health and safety notes below.

Learned the hard way tip: make sure it is sufficiently secured or you may be gluing the instrument back together as well!

Prime the surface

The lighter the paint, the less it will effect the sound. Brush-on primer works fine, is usually non-toxic, cleans up with water, and can leave a brush-stroke wood grain-like look that I like. I sometimes I use a spray primer, as it tends to cover a little more efficiently. The white kind makes it seem like a nice blank canvas, but the gray or brown kind may cover better if you plan on using dark colors. See health * below.

Add Your Creative Vision

Like the "Karate Kid" movie... "close eyes - imagine what want it to look like - begin!" See my site's "Art Fitzhugh" page some ideas at: www.fanaticalfitzhugh.com. Make your designs a class or school project (or competition?! "Arts Integration" is the big grant writer's buzz-phrase these days. Get everybody involved and excited! You want playing an instrument in your program to be cool, interesting and exciting to the other school kids eyes, and ears, as well as your string kids and fellow educators!

Paint

I use inexpensive (and non-toxic) acrylic craft paints available at craft stores (also at Walmart, ~ 78 cents a bottle). I use a variety of brushes, none expensive. Sometimes I use a fistful of toilet paper and a few drops of water to create lighter shading around "sunburst-type" edges. I mix my colors in an inverted yogurt container top and keep the accompanying yogurt container 1/2 filled with water for cleaning brushes between colors. Clean/dry brushes on a rag or paper towels. I usually pick out my basic color scheme beforehand and improvise as I go (just like I play; this is my therapy!).

Learned the hard way tip: practice your vision/design's technique on the back of the instrument first before moving to the front/top side, as it will be seen less!

Detail work

Thought they are optional, I usually do my detail work with paint pens (also available at your local craft store for ~ \$1). Black and white are staples for me. I keep silver and gold paint pens handy as well. I use the wide tip ones the most. Try painting on fake purfling, graffiti, or flames! You can even decorate the pegs and tailpiece to match too!

Another detail tip (I discovered this from a student): nail polish comes in all kinds of crazy colors, textures, and looks! I used hologram-like sparkle flakes around the purfling edge of my first "zydeco" violin with success. Look no further than your local drug store for this (or your own dresser/bathroom?).

For the really daring

When done, think about "distressing" your art piece with 60 grit sand paper. Very carefully scratch up the artwork you just did (I like the "with the grain" look) to give it an antiqued finish that looks like it's always been there! I did this on my "Nouveau Navajo" violin for the Buffalo Philharmonic (see pics on my site).

Finishing Touches

When done... *really* done (like: can't imagine adding even one more brush stroke), hang it back up on your spray hook and give it a clear coat to protect your artwork available in gloss or satin finishes. See * below.

Miserly hint: go with gloss, as you can always give it a DIY satin finish with very fine steel wool later if you desire. Stick with quick drying acrylics, polyurethane tends to yellow the piece.

PS: don't forget to paint the bow to match as well! I take the adjustment screw right out (screw it back into the frog for safe keeping) and carefully coil the hair and frog in a plastic sandwich bag, securing it with a twist tie during painting.

Re-assembling

You may have to clean out peg holes of any remaining paint residue. This can be done easily with a peg reamer (stewmac.com), or just carefully clean it out the best you can (rolled up piece of sandpaper works)

*** Health and Safety ***

I use a full respirator mask these days, even when just sanding (around \$35 at Home Depot). The cheap paper kind should protect you enough for occasional sanding/painting. For health reasons, **spray paints and kids are not a good mix.** Kids also don't seem to have the motor skills/spraying technique necessary to get a good and even coat with no runs. So I recommend you stick with the brushes at first.

Good luck! Happy painting!!

Fiddle Jam "EZ-Zone" short-cut fingering list

See: *Fiddle Jam*, a way-cool easy way to learn how to improvise (Hal Leonard \$17.95 incl. CD)

"EZ-Zone" is a symmetrical "box" fingering on two adjacent strings that occurs in certain keys on stringed instruments as featured in the Fiddle Jam Book/CD. These Zones give the student as little as possible to think about while improvising (encouraging them to sound more mature, and have more fun, in less time).

Tips:

Stick with the blues scale at first. It fits well over major or minor keys. Simply instruct your students to start on the tonic, end on the tonic (and probably use the tonic the most) and they can't go wrong! **Encourage them to have FUN** (read that: keep it *rhythmic*). Reinforce that they can't do anything wrong since it is their creation, and don't let anyone criticize them (you included), but simply re-state the above instructions if they stray too far.

Blues scale keys that work well for rock n roll string improvisation: A, B, D, E, G, but especially E! E blues scale EZ-zones can be found on all the viol family instruments. The Blues Scale = 1 b3 4 (b5) 5 b7 8

The Fiddle Jam "EZ-Zones"

0-1-3 EZ-Zone fingering

Violin:

A blues (0-1-3 on G & D strings)

E blues (0-1-3 on D & A strings)

B blues (0-1-3 on A & E strings),

Viola:

A blues (0-1-3 on G & D strings)

E blues (0-1-3 on D & A strings)

D Blues (0-1-3 on C & G strings)

Cello:

same as viola except replace 3rd finger with 4th finger (0-1-4 EZ-Zone)

Basses:

E blues (0-1-0-1-0-1 on A, D & G strings)

0-low2-3 EZ-Zones

Violin:

G blues (0-L2-3 on G & D strings)

D blues (0-L2-3 on D & A strings)

A blues upper octave (0-L2-3 on A & E strings)

Viola:

G blues (0-L2-3 on G & D strings)

D blues (0-L2-3 on D & A strings)

C Blues (0-L2-3 on C & G strings)

Cello:

same as viola except replace 3rd finger with 4th finger (0-1-4 EZ-Zone)

Basses:

E blues (0-1-0-1-0-1 on A, D & G strings)

Budget Rock Orchestra: Electrify for under \$10.00! By Geoffrey Fitzhugh Perry
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The Source

Yes, it is entirely possible, with minimal know-how, and tools, to electrify any stringed instrument by creating a pick-up yourself, using a part available at your local Radio Shack store! It turns out that the doorbell buzzers Radio Shack sells in their electronic parts department have a part inside them that works quite nicely as a pick-up. I first learned about this little trade secret in an article that ran in "Frets" magazine (no longer in print) in the early 1980's. These buzzers have a "piezo" element inside them that vibrates inside a small plastic case, making that annoying buzzing sound, when current is applied to them (like when you press the doorbell button next to your door). **Interestingly, piezo's also work in reverse and create a small electrical current when squeezed or vibrated in some way.** This is how we will apply them to make our pick-up.

The Part

These buzzers come in many sizes, all of which work, but I recommend **part # 273-073** (cost~\$3.00), as even though it is a little large (1"), it already has the two wires we will need, pre-soldered to it (soldering on these elements is a bit tricky). All you will have to then do with it is connect the other ends of the wires to a jack of some sort (see connections below) and find its optimum placement on your instrument. To "mine" this part for our purposes, you'll need to carefully crack open the buzzer's plastic case from its backside. Inside, you will find a brass disc coated in part with a gray-ish silver/white substance. This is the piezo crystal. Try not to damage it (it's OK if you bend the edges of the brass a little in removal though). It usually has a rubber ring of glue attached. I remove it with a razor blade, though you can experiment with leaving it on as well (it can act as a mellowing sound filter).

Placement

These various discs are quite sensitive and work very well when placed in any number of vibration-friendly spots on an instrument. In general, the more they vibrate, the stronger the signal. I've experimented with many spots, but on or somewhere close to the bridge is usually best. Try double-sided tape during your "sweet spot" search, and consider using epoxy or super glue gel to secure it in place once you've found a good sound. You do not want it to fall off or break during a concert! Finding the exact sweet spot may take a bit of trial and error, but the effort is very well worth it for the price.

I've tried: under a foot of the bridge (loudest), gluing to the bridge in various places, double-sided tape to top behind bridge, and experimented with cutting a slot in the sound post and gluing it there (not as loud but pretty "acoustic" sounding).

Connections

To get the signal to an amplifier, you'll need to connect (solder) the pick-up's two wires (a "ground" and a "hot") to a ¼ inch jack and mount the jack somewhere convenient to the player, so as to not interfere with normal playing. Mounting can be as low-tech as duct taping the jack on, or as sophisticated as removing the instrument top, drilling a hole and installing it from inside. Most folks go the middle ground and mount an enclosed jack (also avail. at Radio Shack) to the tailpiece with cable ties (kitchen twist ties work too). The ¼ inch jack is recommended (rather than other sizes), as it is the industry standard to plug into guitar-based electronic effects and amplifiers.

Tone shaping electronics

Keep in mind that this is not a professional grade pick-up, but does work. You surely can't beat the price! Tonally, even after finding your sweet spot placement, you will most likely still need to "shape" the sound a bit using the tone knobs on whatever you may be plugging it into. Start with turning the treble down and go from there. Even professional model pick-up companies often recommend a "pre-amp" to further sweeten their sound. If you're reading this though, don't spend \$ you may not have til you're absolutely sure you need it and have exhausted all avenues to beg, borrow or steal what you need!

Available instrument pick-ups (~\$100-150 average cost)

If you're not comfortable tinkering with electronics, the next step up is to purchase a commercially available add-on pick-up. A recent quick internet search came up with these manufacturers: LRBags, B-Band, Barbera, Barcus-Berry, Fishman, Ithaca Stringed Instruments, PUTW (Pick-up the world), Schatten, Shadow, Stringvision, Yamaha, and Zeta.

Good luck and happy (miserly) tinkering!

Budget Rock Orchestra: Electric Viol Equipment terms/cost list

Geoffrey Fitzhugh Perry

Electric violin/viola/cello

Pick-ups:

Create your own using the element from a Radio Shack piezo buzzer (see separate sheet), or... Fishman (or equivalent), mounts in slot on bridge. Cost ~ \$100+
Note: on violin/viola, slot may need to be widened a bit on some bridges to make the slot the same thickness of an emery board, you can use the emery board to do it yourself. Too tight can damage the pick-up. Also, this pick-up can be mounted on either the treble side or bass side of the bridge for slightly different sounds. The angle of the pick-up changes the sound too (try 45 degrees). The Fishman is a nice option for classical players since it can easily be removed for normal acoustic playing as well (sound with it left in will be slightly muted).

There are many other manufacturers. Some may even have better sound, but none that I know, sound good AND can easily be removed when not needed.

Amplifier: \$30 and up. Guitar amps are plentiful. Small is fine. These days there are "acoustic" amplifiers available, which usually sound a bit clearer and pleasant, but also cost more and are not necessary for rock n roll. My best advise is to go to your local music store and try some before purchasing. Another option is to simply plug your instrument into an existing PA system (at school or church, etc...) though results will vary in the sound quality. I usually find it best to control the sound yourself for musical comfort during performance.

Electronic Effects

Electronic gizmos plugged in-line to effect the sound. Usually these are in the form of pedals placed on the floor and operated with your foot. These are usually created for guitarists, but work for bowed strings just fine.

Distortion: The main effect for rock playing! Overdrives the sound making it "dirty" or "gritty" like an electric guitar. Cost ~ \$35 and up. Note: many amplifiers have a distortion circuit built right in these days!

Volume pedal: very handy for bowed strings, since it can be foot controlled WHILE you play. Cost \$30 and up.

Wha-Wha pedal: sweeps the tone of your instrument by rocking the pedal back and forth to create its name. Note: some pedals are made with volume AND Wha in the same unit. Cost \$50 +

Chorus/Flange/Phaser: these 3 vary slightly from each other, but all create an interesting swirling sound to the notes you play. Cost \$30 and up.

Echo/delay: self explanatory. The amount and/or length of echo can be adjusted for interesting sounds. The longer the delay, the more the cost. \$40 and up.

Reverb: as in reverberation, like in a big church. Cousin to echo. Many amps have this built in as well as some newer instruments (like Yamaha's silent violins).

Looping echo/delay: in a category to itself, records you as you play, then endlessly loops that recording under you while you play over it. Very interesting and creative! Cost \$200 and up.

Feel free to contact me with questions!

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