

**PERCUSSION INVENTORY:
ORGANIZATION, REPAIR & MAINTENANCE
NATIONAL CONFERENCE ON PERCUSSION PEDAGOGY
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My Purpose: To provide options for Percussion Repair and Inventory Organization.

I. Equipment

A. General Suggestions:

- Keep a list of “current equipment needs” available at all times! You **MUST** be prepared if an administrator or donor should ask, “what do you need right now for _____ dollars or less?”
 - Have two lists available: a complete prioritized list of equipment and another in decreasing dollar amounts.
- Try to reduce the moving of instruments from practice areas to large group rehearsal rooms, and from one rehearsal space to another because of the wear and tear on the equipment.
- Create an “*Instrument Check-Out Form*” that students will use to sign-out instruments when moved out of the area for rehearsals and performances off-site (Please see **APPENDIX #1**).
- When other ensembles remove equipment from the percussion area (for tours, etc.), request a list of equipment being used from the section leader(s) or director before their trip.
- Create and maintain a “*Percussion Inventory*” list of all equipment; and update it often; (Please see **APPENDIX #2**).
 - This *Inventory List* should include the following items:
Drums, cymbals, keyboards, accessories, stands (of any and all types), instrument cases, mallets (bass drum and tam tam) and additional supplies (i.e. stand carpets, foam stand tables, “Project-O-stands”, etc.). A separate list should include percussion music, books, and school-owned CDs, DVDs, videos, and sound/video equipment.
 - Also prepare a “*check-out form*” for students who may ask to “borrow” these items for a specified time. (Please see **APPENDIX #3**).
- Create a “*to do list*” of summer repair items that may include changing drum heads, replacing cymbal felts, bar cord, post insulators, bass drum straps, triangle cords, gong cord, repairing or replacing instrument covers (i.e. timpani hard covers), recovering mallets, etc.
 - Then make an on-going list that includes the date(s) of when these items were completed for future reference (Please see **APPENDIX #4-6** for *Repair History form*).

- Don't forget to add tightening the casters on cases, oiling latches, and replacing torn or worn-out foam, and marking/stenciling items that may have not been done, or have been recently purchased.
 - Stencils, rollers, stencil ink, etc. are available from the Opti-Case Company, Henderson, TX (in addition to great ATA flight cases w/factory-direct pricing).
- Remind students to cover instruments when not in use. Covers will protect the instrument AND also discourages misuse by non-percussionists in the area.
 - Encourage students to use the appropriate sticks and mallets and possibly prepare a guide with acceptable stick and mallet choices for each instrument.
 - Make sure that the appropriate temperature and humidity levels are correctly set in each rehearsal, practice and performance space; especially crucial for keyboard instruments.
 - Make sure that drumheads are tuned appropriately as heads that are too loose or too tight are more susceptible to damage and won't last as long or sound as good.
 - Create a "*Percussion Set-Up Chart*" for the ensembles and/or multi-percussion set-ups, and encourage students to memorize what instruments belong in what location (See **APPENDIX #7**).
 - Create percussion positions similar to the other larger ensembles that could include a Manager, Librarian, and section leaders for each instrumental ensemble. This may take approval from the Administration. Graduate Teaching Associates would be appropriate for institutions with graduate programs.
 - Schedule a regular weekly meeting with the above-mentioned people to discuss issues related to the area: upcoming events (concerts, tours, major moves, etc), repairs needed, personnel issues, and set responsibilities of each person for the week ahead.
 - Have your GTA or Section leaders communicate any issues or concerns to their section members.
 - Prepare height extension blocks for keyboard instruments without height adjustment. Make sure that you include either "furniture-type coasters" or cutouts in the blocks to secure the wheels of the instrument to prevent accidents.

B. Complete a prioritized list of needed Percussion Equipment; both "new" equipment and/or "replacement" equipment:

- This replacement list can be subdivided into tiers based on equipment to be purchased this year, 3-5 years, in 5 years, and in 10 years or more.

C. Justification:

- Normal annual budgets for the instrumental area do not allow for purchase of new percussion instruments with larger price tags (5-octave marimba or a set of four timpani).
- Justification for a large instrument purchase should include:
 - State the Position (why this purchase is significant to the institution), The Problem (why is this instrument needed), and give The Solution (how it can be obtained), including options for the purchase of that product (i.e. may include which budget, or combination of budgets might be possible for purchasing).

II. Repair and Maintenance Items

A. Who should or could be responsible for those repair jobs?

•Another area of concern for every program includes Repair and Maintenance issues. An annual budget for repairs and maintenance of inventory should be adequate for replacing drum heads, small instrument repairs, stand repairs, screws, nuts, bolts, bar cord, cracked bars on keyboards, bar tuning when needed, instrument covers, cracked cymbals, cymbal pads, felts, washers, and sleeves, and many more items. It should also be noted that most of these repairs could be completed by the Percussion Professor or a student assistant. The expertise of a trained professional may be needed for bar tuning, bow rehairing, and welding stands among others.

•To increase the allotment of funds available for Repair and Maintenance, discuss with your administrator how the instructor and students are doing as much of the repair work as possible themselves in order to help stretch your Department funds. Add up the money (\$\$\$) that you save the Department in labor costs (hours put in times the current “shop rate” - which is \$45 per hr. local in Minnesota--for repairs), and educate your administrators.

•Throughout the year, make a list of repair items to tackle over the summer months or during school breaks.

•A Student Manager or Graduate Assistant should have the responsibility for assisting in repairs. Allow time in your schedule to teach them proper repair and maintenance techniques. This is a skill they will need in their future positions.

•Have each person in the percussion ensemble or percussion class do a quick check of all instruments they are standing behind at the beginning of a rehearsal. Report necessary areas of concern to the Director or the Percussion/Equipment Manager.

- **Encourage students** to tighten screws, check pedals, secure bass drum stand straps, check bar cord, pick up cymbal felts and washers from the floor, and other things that only take a moment but keep instruments working properly.

•Allow a little time in your schedule each week for minor repair duties.

•Consider doing simple repairs like replacing tambourine heads during a *Percussion Master Class* situation where you can present this “art” to a group of students.

•Consider offering a “*Percussion Repair and Maintenance Class*” as an Independent Study or Special Projects to all Music Education majors (Please see **Eyler MUS380 Syllabus**).

•Practice rooms should be keyed and locked at ALL times. Only percussion students and select faculty (ensemble directors) should have access.

•How does one store and access equipment by students? To store small equipment for easy access by students, use Peg Boards with metal hooks and labeled for specific equipment. (Please see **APPENDIX #8**)

•Label cabinets, drawers, and shelves for quicker recognition and to guide equipment back to its proper home. (Please see **APPENDIX #9-14**)

•Give your percussion Section Leaders and Managers the responsibility of keeping the cabinets and equipment organized. If possible, lock cabinets and storage areas and consider limiting who has key access - managers, section leaders, and students doing recitals. Instrumental ensemble directors may also ask for access and you’ll have to make a decision.

B. A Repair Area should include many of the following supplies:

- Keep extra heads on hand (for snare drums, concert toms, bass drums, and timpani), but don't forget heads, mallets, and cymbal straps for the Marching and Pep Band equipment. Equipment for those ensembles might hopefully be covered under an Athletic Band budget.

- Small cabinets with pullout drawers for quick repair items; i.e. screws, nuts, bolts, replacement bar cord, post insulators, cymbal straps & pads, felts, washers, and cymbal sleeves, Hi Hat clutches, Teflon tape and moleskin for timpani maintenance, snare mechanisms (strainers, butts, dampening devices), and many more possible small items (Please see **APPENDIX #15**).

- A Tool Box (could be made from a tackle box) of emergency repair items to take on tour with the ensembles and then kept in a special place for manager to use throughout the year (should include a sampling of most of the above small items). Please see **APPENDIX #16**.

- Tools to include in the Repair Area:

Hex Wrenches (including metric), socket set, screw drivers, nut driver set, wire cutters, pliers of differing sizes including "needle-nose" pliers, crescent wrenches of different sizes, exacto-knife, rubber and metal hammers, masking tape, sandpaper or emery-cloth, bees wax, a hot glue gun, Elmer's wood glue, mole skin, rubber bands, etc, etc, etc.

- Different type of snares (wire, gut, cable, bronze, nylon, etc.) for each performance situation.

- Cleaning items to include in the Repair Area:

Pledge wipes for wood bars, chrome polish, cymbal cleaner (a company product or Brasso/Zud), old "cotton" clothes or soft rags, 3 in 1 oil, Vaseline, lubricant (WD-40 or Liquid wrench), paper towels, pipe cleaner or swabs, paint remover, etc.

C. Evaluating your Repair and Maintenance needs both for the immediate and long term.

- You may want to formulate a list of REPAIR & MAINTENANCE ITEMS done every year

- The following are examples of items that may appear on your list:

| <u>INSTRUMENT/PART</u> | <u>MANUFACTURER/SOURCE</u> | <u>COST</u> |
|--|----------------------------|-------------------------|
| ○ 1 set-Heads for <i>Timpani</i> | ABC Percussion Supply | \$ 400 |
| ○ SD & Tom tom HEADS | XYZ Percussion Supply | \$ 550 |
| ○ Post Insulator packs for marimbas | XYZ Percussion Supply | \$ 200 |
| ○ Bar cord for marimbas and vibes | ABC Percussion Supply | \$ 100 |
| ○ Vibraphone motor belts | ABC Percussion Supply | \$ 75 |
| | | TOTAL = \$ 0,000 |

- REPAIR & MAINTENANCE ITEMS done every other year:

| | | |
|--|---------------------|-------------------------|
| ○ Bass Drum Suspension Straps | Hyer Perc. Products | \$ 85 |
| ○ Covers for marimbas & vibraphones | The Mallet Shop | \$ 150 ea |
| ○ Calfskin Bass Drum Heads | Stern Tanning Co | \$ 600 |
| | | TOTAL = \$ 0,000 |

•REPAIR & MAINTENANCE ITEMS done every 10+ years:

- **Powder coat Gong and BD stands** An Industrial Paint Co \$ 150
- **Tam Tam/BD Symphonic Stands** Anywhere Percussion Products \$ 250-500
- **Retune** “Keyboard” instruments Century/Marimba 1/Fall C/Musser/etc \$300 ea.
(done every 10 to 15 years)
- **Practice pads & stands** for PMethods ABC Percussion Supply \$ 50 ea.
- **Replace Casters** on “old” KPI XYZ Percussion Supply \$ 80 ea.

TOTAL = \$ 0,000

•Another list could include items that “may” need repairs throughout the year:

III. Suggestions for Tours / Traveling with Percussion Equipment:

A. Items To Cover Before A Tour:

•Purchase cases for any and all equipment that may leave the music facility (Opti-Case Co., Henderson, TX, is my #1 go to source)

- Label/stencil each case with the name of owner and the instrument (or parts) to go inside.
- Regarding other ensembles: ask for a list of equipment from the section leader or director before their tour. This helps with preparation for other groups left at the institution.
- Prepare a *truck-packing diagram* (chart) for instrument cases; start by measuring a space the size of the interior of the truck. (Please see **APPENDIX #17-18**).
- Prepare a list of *instrument assignments* for each person taking the trip. (Please see **APPENDIX #19**).
- Teach students how to assemble/disassemble and pack instruments in their appropriate cases. Don't assume they know how to do this.
- Organize duties for ensemble members (truck crew/ground crew/door crew/stage crew/etc.)
- If a performance is at a hotel or convention center call ahead about truck and/or bus **PARKING** (get a permit for Convention/Event Center parking).
- Take a handcart on the truck (for instrument cases without casters).
- Call ahead and get directions to each location; also ask what door to go to, is there a loading dock, are there stage set-up issues, and check on the number of music stands available at each location.
 - Check on the stage configuration and auditorium size.
 - Go and visit locations if possible. Take a “pre-tour” trip.

•Are there certain instruments available at each location for your use so that you don't have to unload and set up some of yours?

- If so, what are the sizes and ranges of the keyboards you need? Especially if your needs include a low "A" marimba, 3.5-Oct. vibraphone, or chimes that go up to a "G5"!

•Check on any sound reinforcement items needed for your group (announce mic, etc.).

•Find out if the concert is being recorded: if so, can you get a copy of the CD or DVD? Is there a charge for the recording? Will it be dispersed to anyone requesting a copy? (There may be legal implications involved) Are there any restrictions on YOU recording the concert with your own equipment?

B. Once The Tour Is In Progress:

•**Do Not** let the bus or truck driver leave under any circumstance until all items have been removed from the bus (clothes, mallets, sticks, music, programs, etc.).

•Make sure that everyone knows his/her assignments and have them check the list before leaving the concert site (make sure you have everything you brought). Check the stage floor, areas behind curtains, and the front rows of audience seating after the performance for vibe motor belts, post insulators, cymbal felts, washers or sleeves, sticks and mallets, music folders, etc.

•If traveling in cold weather with Rosewood bars, make sure the bar boxes/cases are not left out in the truck overnight.

- If you're using a bus to transport the bars, leave the bus running with heat on overnight to keep bars warm.
- You might need to request the bus company remove several seats for bar cases/storage on the trip. Try and stack them horizontally (parallel to the seats) so that they do not tip over during travel.

•Most important! Be sure to send "Thank You" notes to all parties involved in making your trip successful.

•Two articles that may be helpful in planning a successful tour with an ensemble:

- Eyler, David P. "*Planning A Successful Tour With Your Percussion Ensemble*," Percussive Notes, Vol. 34, No. 4 (August 1996), pp. 54-59.
- Eyler, David P. "*Traveling with an Ensemble*," The Instrumentalist, Vol. 50, No. 9 (April 1996), pp. 85-86.

C. Final Comment:

•Developing a top-notch percussion program involves "cultivating a culture or atmosphere" among your students AND colleagues. Each incoming student should know what is expected of her/him when they enter the program. Upper-class students should be responsible in helping to develop and maintain this culture. Repetition of your program values is the key to success. This is a great mentoring opportunity as well for your older students.