

So, You Want to Write Drill

A Drill Design Solutions Help Guide by Joe Huls

If you are reading this you might be a band director, or a marching band staff member or maybe you're a color guard director or drumline staff member. Maybe you want a more personalized product for your team, or the ability to easily modify and change your product quickly. Maybe you're a person who has been interested in writing your own drill or staging for a long time and you want to save your team some extra cash on the design budget. There are many benefits to writing your own drill, but there are also some pitfalls to watch out for. Let's get started.

DISCLAIMER: THIS GUIDE IS NOT GOING TO TEACH YOU HOW TO USE PYWARE. IT IS SIMPLY A GUIDE FOR HOW TO PLAN OUT YOUR DRILL SO YOU CAN BE SUCCESSFUL WHEN WRITING. IT WILL GIVE YOU A LITTLE INSIGHT INTO WHAT A DRILL DESIGNER DOES. YOU SHOULD ONLY CONSIDER WRITING DRILL IF YOU HAVE EXPERIENCE IN THE ACTIVITY AND HAVE TAKEN THE TIME TO LEARN THE SOFTWARE. HERE ARE SOME RELEVANT LINKS THAT CAN HELP YOU IF YOU HAVE NOT DONE THAT ALREADY:

How to get the Pyware DEMO for Free: [CLICK HERE](#)

(This would be for practice, you will need a full / paid copy to write your own drill)

My Pyware Beginner Tutorial on Marchingartseducation.com: [CLICK HERE](#)

Here are some techniques that will help you be successful in your first drill outing:

1. Planning for your show.

- a. Collaborate with all staffers involved with your program on the type of show you might want to design, have a meeting and have everyone bring their ideas to the table.
 - i. Pick a show that is appropriate for your ensemble. How much do you rehearse? What size ensemble will you be? How long is your season? What type of budget do you have? These all should weigh into the show ideas.
 - ii. Choose what level you all will be designing for (A-Class Skills, Open Class Skills, World Class Skills) These might be different for different sections. That's ok.
 - iii. Create a broad storyboard and plan out the program with the whole staff,
 - iv. Get your music picked and arranged if needed..

MY EXPERIENCE: *In design meetings experienced drill designers will try and listen to all of the ideas in any given production and see how those ideas flow, and if the music picked will allow for all of the ideas to be realized on the field.*

2. Set your parameters.

- a. Your competitive level can help determine some parameters in the type of show you design.
 - i. It is always important to reference the judges sheets that will be used to judge your ensemble and note the skills and wording used to maximize your chance at being competitive. This is very important before writing your drill.
- b. Winds size and makeup will affect the kind of drill and field setup you might consider having.
 - i. 25 - 50 winds may want to shorten the field a bit (prop use around the edges and hashes would be a good idea).
 - ii. 50 - 100 winds should be fine to fill up the front two quadrants of the field, and maybe back to the back hash.
 - iii. 100+ winds should be fine to spread out a bit more.
 - iv. Of course the instrumentation and kind of instruments will need to be taken into account. *ie: A band with 30 woodwind players will want to have them very close to the front in order to be heard during tutti WW only sections etc.*
- c. Then come up with some rules for the drill. These rules can help you to design drills that will allow your performers to be comfortable playing while moving. *ie: "winds should be at no less than a 2.5 step interval, block forms should be on the grid, no smaller than a 3step front to back in covered forms. No more than 8to5 for melody instruments and 12to5 backwards."*
- d. Color Guard size and makeup will affect the kind of drill you write. Determine how many silks in the show, what movements will have weapons or dancers etc. Determine the level as well for the kind of skill you would like to see from the CG. (A-Class Skills, Open Class Skills, World Class Skills). You should think through the CG and think of how many students will spin or dance multiple roles in the show. This way you can make sure your best dancer doesn't end up away from the action when the time comes. Then come up with your rules for the drill. *ie: "6 Steps for flags, no less than 4 steps for weapon, at least one fully integrated moment in each movement"*
- e. Drumline section makeup and what your drum line is capable of doing is important to think through. DRUMS ARE HEAVY! Some students make it look easy and some will really struggle. Ask your staff folks to move the battery around quite a bit during the pre-camps, auditions, and summer rehearsals. Knowing how much to move your battery is important. Also ask your staff members to give you parameters for your drumline intervals etc. *ie: "Snares -*

2 step minimum, Tenors and Bass 3 step minimum, never in one long straight line"

- f. This video should help you in creating an inventory of the important information needed to write drill: (fast forward to 2:39) [CLICK HERE](#)
- g. **This inventory can be sent to the staff for extra notes / edits.**

MY EXPERIENCE: *These parameters will help to design drill that works for the students. Sometimes they will hamper your creativity, but they are a good way of making sure the product is appropriate for the performers level.*

3. How To Pick What To Write. "GENERAL" Effect Rules (if there are any) "AM I SEEING WITH MY EYES WHAT I AM HEARING WITH MY EARS?"

a. When the Music is Melodic and Pretty but Fast

- i. Consider where the melody is coming from and make sure they can be heard / seen and supported by a CG element.
- ii. Keep the interval larger to allow for any student error, watch backwards blind moves.
- iii. Consider having the CG use weapons to highlight rhythmic sections of the music and a flag layer to highlight melodic sections of the music.

b. When the Music is Melodic and Pretty but Slow

- i. Consider increasing forward step size to show off the marching technique (6to5 is ok) Backwards should still be small 12to5'ish.
- ii. Open up interval. (3step minimum)
- iii. Consider where the melody is coming from and make sure they can be heard / seen and supported by a CG element.

c. When the Music is Rhythmic and Accented

- i. Consider holding and adding body to support the accent
- ii. Use gates or cover downs to create excitement.
- iii. Consider having the CG use weapons to highlight rhythmic sections of the music and a flag layer to highlight melodic sections of the music.

d. When the Music is Disjointed and Angular

- i. Consider using angles and diagonals to help add to the angular nature of the music.
- ii. Smaller intervals can help this feel more disjointed (no less than 2 or 2.5) Just be careful that the performers aren't asked to move too large of a step size.
- iii. Consider having the CG use weapons to highlight rhythmic sections of the music and a flag layer to highlight melodic sections of the music.

e. When the Music is Slower and Dancelike (6/8 or ¾ feel)

- i. Consider using groupings. Pods and Pairs to dosey do, or move in unison across the field and then add choreo to the way they travel.

- ii. Consider adding hold moments in dense forms to add choreo to the lower body.
- iii. Consider having the CG fully incorporated with the rest of the winds with matching choreography in the lower body.

MY EXPERIENCE: *THERE ARE 1 MILLION OTHER RULES I COULD ADD, AND IT SEEMS LIKE OLD RULES GET BROKEN AND NEW RULES ARE BEING WRITTEN EVERY YEAR. BUT THIS WILL HOPEFULLY GET YOU THINKING "AM I SEEING WITH MY EYES WHAT I AM HEARING WITH MY EARS?"*

4. Planning for your drill - MACRO

- a. Once you have music picked and arranged it's time to get to work. One big thing your drill designer does is see the whole show all at once, here's how it works:
 - i. Create count sheets for each movement and then design MACRO first:
 1. *"Beginning to Letter A: Intro music, band builds to a 24 count hold for body. Introducing the main character of the show." 16,16,HOLD 24*
 2. *"Letter A - C: Percussion transition out of the hit, setup WW and rifle for feature SDIE 1" 8,12,12, 16 HOLD 32*
 3. *"Letter C - D: Rifle and WW breakup and join the brass and DL who are developing the melody with the flags on SIDE 2" 16,16,8*
 4. *"Letter D - END: Full ensemble playing exciting drill, building to a dense form, hold for body, play in the windows. Ripple across the form to Prop on side 2, rifles should already be at prop to get silk #2 for next movement" 12,12,16,8,8 HOLD 24*
 - ii. Continue this process for each movement. This will give you a good idea of how many pages you are looking at, then you can modify that if you want more or less drill.
 - iii. This is a great way to storyboard the whole program, it might also shed light on moments where you might need more or less music to create a visual idea.
 - iv. **This can be sent to the staff for extra notes / edits.**

MY EXPERIENCE: *This macro level planning is important for a couple of reasons, it will allow you to see around how many pages of drill the entire show will be. It will allow you to see if all of the planned effects will have enough counts to be created. And it is a good way for you to develop a "total show" view of the project.*

5. Planning your drill - MICRO

- a. Now that you have your parameters all set, your count sheets done and a general overview of the program written down. Its time to plan micro:

- i. Write out every count for each movement in a long line down a page of paper or in an excel spreadsheet.
 - ii. For every page write out the visual ideas for Winds, CG, DL
 1. "Winds in curvilinear drill, 3 step interval, DL is focus with rifles"
 2. "Winds now moving toward solid form, Setup soloist for next movement."
 - iii. Add information about upcoming soloists, CG transitions, actors or prop interactions.
 - iv. Add any information that might help you to sync the drill to the music *ie: TEMPO CHANGE FASTER*
 - v. Add rehearsal marking, and measure numbers.
 - vi. Even add your own little thumbnail picture of the forms you see when you are listening to the music.
 - vii. **This can be sent to the staff for extra notes / edits.**
- b. This should get you ready to open PYWARE

MY EXPERIENCE: *I usually have a sketched picture of every major hold or impact point before going to the software. The creative process can be challenging without all of the relevant information in front of you, and in the right order. "Failing to prepare, is preparing to fail" ... sorry, band director moment there.*

6. Open Pyware and Setup your file.

- a. Here is a quick setup guide for setting up your software defaults etc: [CLICK HERE](#)
- b. Create your OGG file of your music
- c. Here is my method for doing it:
 - i. GOOGLE "OGG Converter"
 - ii. Select a website you like this is the one I use: [CLICK HERE](#)
 - iii. Select your MP3 file
 - iv. Convert to OGG
 - v. This is the file you will select in Pyware to sync your music
- d. Then setup your file
 - i. Add your page tabs
 - ii. Add your measure numbers to the production sheet
 - iii. Add and sync your music (I use the spacebar method)

MY EXPERIENCE: *I always put in a bunch of the formatting information first before writing. I find that I am tired at the end of writing a drill and it's no fun to have to go through and add all of the measure numbers and rehearsal letters. Do it at the beginning when your energy level is good, even if you have to go back some of it at the end.*

7. Create Your Groupings (this can be done in a sketchbook)

- a. Count up your Woodwinds and subsections

- i. How many different forms can you make with them?
- b. Count up your Brass and subsections
 - i. How many different forms can you make with them?
- c. Count up all of your Winds
 - i. How many different forms can you make with them?
- d. Count up your Battery
 - i. How many different forms can you make with them?
- e. Count up your Color Guard and Sub Sections
 - i. How many different forms can you make with them?
- f. Count up your Battery and Winds
 - i. How many different forms can you make with them?
 - ii. If you were to put them in one solid form what would that look like?
- g. Count up your total on field performers
 - i. How many different forms can you make with them?
 - ii. If you were to put them in one solid form what would that look like?
- h. Here are some extra files you can use to help create groupings: [CLICK HERE](#)

MY EXPERIENCE: *This is a great step to do for every drill you write. Knowing what they look like in a block, in sub-sections, in pairs or trios. All this knowledge will save you a lot of time before going to the software.*

8. WRITING METHODS

a. BACKWARDS METHOD

- i. Begin by finding your first impact point.
- ii. Picture in your head where everyone is on the field (good to sketch this out using pencil and paper, and kinda fun)
- iii. Begin by creating that set on your file at count 0. (don't worry you can always work backwards, or add counts in front or behind this set)
- iv. Roughly label the set so you know where each section is.
- v. If that is set 4 or 5, you can work backwards by clicking the arrow between the RED and YELLOW anchors and work back to the beginning. **This video can help you with writing backwards:** [CLICK HERE](#)
- vi. Be willing to change section order, or modify the initial idea you had to make sure everyone is given drill to be successful. *le: not running into each other, or taking too large or small steps. Have room to spin / drum / play etc. The drill fits the theme and ideas of the show and has the general effect to match the music being played.*
- vii. Once you have the first segment completed, get the performers properly labeled and changed in the visuals editor. Then move on from there.

MY EXPERIENCE: *In my experience this method works great for starting drills, and there is an element of this that you will use for every segment of the show you write. Oftentimes you will get to the end of the next impact point and then go back through your pages leading to that impact point and fine tune the transitions to make sure the step size, velocity and interval etc are all smooth from page to page.*

That is technically the BACKWARDS METHOD.

- b. "IMPORTANT SECTION" METHOD** (in my opinion, this should be the primary way of sculpting each segment of your show)
- i. Create your first set and roughly label the performers.
 - ii. Make your way to the first / next impact by moving the most important section first. If that is CG, move them first, if it is the Clarinets, move them first. Then the other sections to follow.
 - iii. Be willing to modify the initial idea you had to make sure everyone is given drill to be successful. *le: not running into each other, or taking too large or small steps. Have room to spin / drum / play etc. The drill fits the theme and ideas of the show and has the general effect to match the music being played.*
 - iv. Once you have the first segment completed, get the performers properly labeled and changed in the visuals editor. Then move on from there.

MY EXPERIENCE: *These two methods used together should be how you formulate your ideas for staging. Sometimes the ideas work really well, and what you have in your head will flow onto the page very easily. But sometimes you will need to take a break, rethink your idea, be willing to change direction, re-save the file and try something totally different (done this 1000 times) and see where it takes you.*

9. Finalizing and Exporting Your File

- a. Finish adding your information to your production sheet and format the drill pages for rehearsal.
 - i. Measure Numbers (Measure Category)
 - ii. Rehearsal Letters (Title Category)
 - iii. Information for rehearsal (Notes 1 Category)
 - iv. More info can be found in this video: [CLICK HERE](#)
- b. Create PDFs of Coordinate sheets and Drill Charts. Watch this video on how to format your coordinate sheets.
 - i. [CLICK HERE](#)
- c. Create Video Files of each movement.
 - i. [CLICK HERE](#)

MY EXPERIENCE: *The easier it is for you or your client to read and teach the more success the band will have. This is also the best way to keep your client. Formatting and delivery is*

very important, take a few more minutes and make sure all of the info is there before creating those PDFs, make the flags spin and the rifles toss in the animation. If the band is supposed to lunge, make them lunge in the animation, it's important.

10. FOR MORE TUTORIALS ON PYWARE CHECK OUT MY YOUTUBE CHANNEL:

[CLICK HERE](#)

Please don't hesitate to reach out if you need more help, I'm only an email away:

drilldesignsolutions@gmail.com