Intermediate
Timpani

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Sponsor: Texas Bandmasters Association
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Getting Started:

1. Introduce and reinforce timpani to 7th and 8th graders at the beginning of the year. Use All-Region audition music, band audition music, or other good introductory timpani etude to naturally introduce the various concepts and playing techniques required in timpani playing.
2. Discuss the history and importance of Timpani in the development of the modern percussion section.
3. Discuss why you start on snare drum and keyboard (bell kit) in the beginning year and why learning about timpani is the next logical step.
4. Discuss how to read bass clef (flash cards, various web-based tutors) and correlate that to the timpani's role in the overall ensemble (low voice, plays with tuba often, etc).

Setting Up the Timpani, and Setting Up a Successful Classroom Environment:

1. One of the challenges in teaching timpani is that it is a very individual instrument, and none of us have multiple sets of timpani (or at least enough multiple sets) for every student to be able to play at the same time.
2. Demonstrate to students how to set-up the drums (never overlapping or touching, easily accessible by the hands, mallets and feet).
3. Create a direct line from the player, through the 29” and 26” drums, through the music stand, to the conductor. Anything other than this set-up is unacceptable. And even if this causes the overall timpani set-up to look strangely angled, you cannot afford to not have eye contact with your music and your conductor.
4. For the classroom, consider taking four drums and splitting them into two pair (32” & 29”, 26” & 23”). You may have to invert the pitches, or ignore tuning altogether in the early stages, but this set-up will at least get two players a chance to play at the same time. The remaining players form an arc around this set-up with an individual music stand, their music and their mallets.
5. Additionally, when having two students practice on the drums themselves, have other students air-stick. This helps reinforce the music itself, but also the grip, the fundamentals of the stroke and the spatial awareness necessary to play on more than one surface.
6. Start with basic two drum exercises that help students get used to playing on more than one drum and that also address the need for a “truer” alternating sticking (instead of alternating sticking that is right-hand lead dominated, i.e. beginning snare drum technique).
7. Both the Kennan Wylie and Mark Wessel’s beginning percussion books have great beginning exercises, that can also serve as a sort of classroom text for beginning timpani method. Students may still have these books from their beginning year.

8. In a mixed grade classroom (i.e. 7th graders who have just completed their beginner year and 8th graders who have played for two years, or even when reviewing timpani at the high school level), take advantage of using your 8th graders for demonstrating or individually tutoring students who are new to the instrument. Think of a cooking show, where the 7th graders are the “raw ingredients,” and the 8th graders are the “fully prepared meal.”

Fundamentals of Grip:

1. There are two grips that are commonly used on timpani: the German grip (hands flat, thumbs horizontal) and the French grip (thumbs up, palms facing each other). Since the German grip is essentially what the student learned as a beginner, use that as a point of departure to discuss learning a new grip.
2. Start by talking about the similarities: the hand essentially holds the stick the same way (thumb/fulcrum, all fingers in contact with the stick).
3. Then contrast the differences: thumbs rotate up, fingers play a more intricate role in the production of the stroke, and the stroke itself is created by using a rotary motion of the wrist and forearm (versus the German stroke that is more like “waving goodbye”).
4. Discuss that the timpani mallet is generally shorter than the standard snare drum stick, and that this will affect where the hand is placed on the mallet (basically, all the way at the back of the mallet).

Fundamentals of the Stroke:

1. Just as in snare drumming, a rebounding stroke is the preferred stroke. However, when using French Grip, the rebounding stroke is attained through a difference in motion.
2. To help the student begin to understand the rotary motion necessary for the French Grip stroke, have them try both of the following exercises:
   1. Have students mimic the turning of a doorknob. If a standard door knob is available, this is an especially useful demonstration.
   2. Have students place the palm of their hands and fingers together (symmetrically, no interlacing of fingers) in front of them as if praying. Then have the students rotate their hands away from them and towards them again.
3. Then with the student having become familiar with the rotary motion, have them take their mallets and practice the motion with the mallets in their hands. The “praying” motion is most useful when adding the mallets.
4. From this point, have the students begin striking the timpani. It is important to stress the rebounding aspect of the stroke, by having the students start with their mallets ten to twelve inches off of the head, then making sure that their mallet returns to this position after the stroke.
5. There are a couple of “tricks” that you can use in explaining the overall motion of
the stroke:
1. You can liken the stroke to casting a fishing pole, even discussing how there should be a good rebounding motion when casting your pole.
2. If the students have ever played hand bells or have been around a hand bell choir, you can discuss how the motion is often the same, with the players’ thumbs on top of the strap of the bell.
3. Also, you can have the student imagine that their timpani mallets are dripping wet, and they are trying to flick water off the end of the mallet.
6. When playing this stroke, the fulcrum placement can be considered to be at the wrist or forearm instead of the thumb and index finger, since the pivot of the mallet takes place with the rotation of the forearm.
7. Of course, nothing you can say can be quite as effective as demonstrating the stroke yourself. Even if you feel that you are not confident in your skills, a little bit of practice and guidance from a professional percussionist can greatly help you develop the stroke. Other aspects of timpani playing are fairly universal or easily explained, but the stroke is a technique unto itself that should be perfected by the teacher if the student is to be successful in re-creating it.

Fundamentals of the Beating Area:

1. Because the timpani are so large, playing in the correct spot can be a challenge. The timpani are unlike the snare drum and keyboard in that you do not want to play in the center of the surface. However, they are similar to the snare drum and keyboard in that there is a specific location you should play and your ear will tell you when you are in the right place.
2. Teaching the student to find the beating area by using their ear is perhaps the best way to not only teach the student where the beating area is, but also to approach the beating area (and the instrument itself) through always wanting to reproduce the desired and characteristic sound of the instrument.
3. To find the beating area by listening, have the students close their eyes. Tell them that you are going to play through two exercises: the first, you will start playing in the center of the head and then you will gradually move your stroke to the edge of the drum. The second, you will start at the edge and move to the center. During both exercises, they are to raise their hands when they think the sound is correct, full and what they think of as the “normal” sound of the timpani.
4. Once you have completed those exercises, repeat one of them again (perhaps, if the students were more accurate on one than the other, you could choose that one). This time, when you are in the correct place on the drum (and hopefully all of the hands are raised), you tell the students to open their eyes and to observe exactly where you are playing.
5. Then talk about the visual cue that will help them find the correct beating area. The best way I have found to most quickly find the correct beating area, is by placing the edge (thumb side) of your hand on the bearing edge (towards the center of the head). Where your hand stops is the correct playing area. You can also suggest that this is about four or five inches in from the bearing edge, or four or five mallet heads.
6. Also, be sure to explain that depending on the size of the drum, the playing area
might be slightly different, however your ear is always the determining factor as to whether you are playing the incorrect spot or not.

Fundamentals of Dampening:

1. Because the timpani will sustain long after you have struck them, it is important that students learn to properly dampen the sound. Discussing this with your students should also include a conversation about note length and making sure that they understand that note length is their responsibility. Dampening only at the end of a piece or at the end of a section is not adequate.

2. The simplest way to explain dampening to the student is by having them tuck the mallet between their thumb and index finger, thus freeing up the back three fingers of the hand to extend and touch the head. A rotation of the wrist is often necessary.

3. They should dampen the head precisely where they struck the head. Dampening anywhere else doesn’t full cut the sound out.

4. In the early stages of practicing this, students will dampen with the back three fingers while also clumsily striking the head with the mallet. This is entirely normal and they need to know that as they refine their dampening skills, they won’t accidentally strike the head as often, and they eventually will cease to have this problem.

5. Some instruction has been given in the past to “swipe” the drum when dampening. This is a valid technique, but there are some drawbacks. With modern heads tending to have texturing, the swipe can end up being audible which is never the desired result. Also, swiping the head takes a little longer to do, thus making this impractical in situations where rapid dampening is necessary.

6. Discussing dampening can also give you the opportunity to explain how other percussion instruments have to be dampened appropriately for note length (triangle, cymbals, gongs, concert bass drum, chimes, vibraphone, bells). And this is also a good time to point out how timpanists have to listen to the wind players to make sure that they are playing the same note length and style.

Dampening in Music:
There are three “levels” of dampening I like to demonstrate for my students:

1. **Dampening at the end.** Dampening only when there are long rests or at the end of a section or at the end of the piece. This is the best place to start for the beginning timpanist.

2. **Dampening on rests.** Locating all of the rests in a piece and making sure that no sound is “bleeding” over into them. Greater attention has to be paid to be sure that the dampening doesn’t affect rhythm or note length. Also the students must begin to be aware of dampening as it relates to having more than one drum sustaining at the same time.

3. **Same-hand dampening.** Dampening one drum while striking another. This is an advanced technique, but is the best for drawing the most clarity out of the part. The coordination for this is tricky and must be developed.
Fundamentals of Sticking:

1. Using an alternating sticking is the best for timpani. Students should learn to mark stickings in their music to remind them of how to move around the drums, especially through tricky passages.
2. If alternating is not possible, the use of a double stroke is acceptable. Students should look for every option to alternate before choosing a double stroke.
3. A last resort is to use a cross-sticking. The cross-sticking should be avoided because of the likelihood that the mallet head will not strike the drum the same way and because the stroke itself is not produced in the normal fashion. Cross-sticking cannot always be avoided, especially if the composer has obviously written the music so that a cross-sticking has to be used. The saving grace of passages like this is that they tend to be fast and thus any difference in sound production is not as apparent to the listener.

Fundamentals of Rolling:

1. The purpose of a roll on any percussion instrument is to sustain the sound of that instrument in the same way that a wind or string instrument can more easily and naturally sustain on their instruments. This is a good point to mention so that it begins to acclimate the student to producing smooth rolls.
2. Rolls on timpani are almost (and for our purposes here) always performed by using quick alternating strokes. (No double stroke or buzz rolls should be played on timpani unless specifically required by the music.)
3. Rolls present a good opportunity to discuss using the fingers in the production of the stroke and the roll. When using fingers, the fulcrum of the stroke is at the thumb and index finger, while the back three fingers provide the impetus and motion for the stroke.
4. Generally, the smaller or softer the stroke or roll, the more the fingers will be involved. The larger the stroke or roll, the more the wrist/forearm is likely to be involved.
5. Spreading the hands apart on rolls (yet retaining the proper beating area or distance from the bearing edge) can help the rolls to have a less articulate sound. Placing the mallets approximately in line with tension rods is a good visual cue for spreading the hands apart.
6. Roll speed on timpani is tempered by many musical factors, but also by the size of the drums themselves. The larger the drum, the slower the roll should be, and the smaller the drum, the faster the roll should be. Great care should be taken as the instructor to make sure that the student's rolls are an appropriate speed and do not also sound like a specific rhythm.
7. When rolling between two drums, the students should be sure to lead with the hand that is also the direction of the release or continuation of the roll.
Fundamentals of Tuning/Ear Training:

1. The fact that timpani have to be tuned to a specific pitch is unique from all the other percussion instruments.
2. Because beginning percussionists have not had to tune their instruments, spending a good amount of time on tuning and ear training is necessary.
3. Having students tune with a pitch pipe is the best strategy for building confidence in tuning. When the student’s relative pitch is well-developed, they should switch to a tuning fork, which is inaudible to the audience and is more professional. The switch from a pitch pipe to a tuning fork, however, may not occur until late in high school or in college.
4. Tuning from a keyboard instrument is a good way to develop the student’s individual tuning abilities, but it is not practical in rehearsal and performance.
5. At this point, you should be discussing some basic relative pitch concepts. Starting with intervals of a fourth or a fifth are a good place to begin since they are easy to hear and almost common in the tunings of timpani.
6. Using “interval tricks” is the best way to help students gain confidence in their tuning abilities. (“George of the Jungle” and “Ein Klein Nacht Music,” for a Perfect Fourth down; “Here Comes the Bride” for a Perfect Fourth up; “Star Wars” for a Perfect Fifth up, etc.)
7. Tuning Strategies:
   1. Start with the pedal “heel down,” then flick the drum, push the pedal “toe down” until the pitch of the drum matches your pitch reference. Students will often move the pedal too slowly thus making it more difficult to tell when the pitches are the same.
   2. Hum the correct pitch into the drum, then adjust the pedal until the drum “hums back.”
   3. Students should always be aware of how loud their tuning is. Lightly tapping the drum with the mallet is useful, but sometimes can be audible to your audience.

Miscellaneous Items:

1. The sizes of the drums are 32”, 29”, 26” and 23.” Even though this may vary some among brands and models, this is the standard vernacular when referring to the sizes of the drums.
2. Be very exacting when ordering and measuring timpani heads, as there is a lot of difference between models and brands. You may want to have a local timpanist or music store representative come and measure the timpani if you are unsure.
3. Teaching students about the specific range of each drum is helpful for when they have to start editing parts on their own. See attached Timpani Ranges and Characteristic Ranges page.
4. If possible, tune your pitches to the largest drums available, so as to get the benefit of the drum head being at a higher tension. (I.e. Tuning G, C, E on the 32”, 29” and 26” drums will have a clearer pitch and better rebound than putting the same pitches on the 29”, 26” and 23” drums.)
5. Consider posting a practice sign-up sheet for students to practice timpani as there
will inevitably be times when more than one percussionist is wanting to practice. This may only be necessary as an audition or test approaches.

6. The use of a stool can be beneficial to the timpanist, but early on it is probably not that necessary. A stool is most needed when the timpanist's height is 5' 8” or taller, or when a lot of pedal changes are necessary. A stool that is height adjustable with a padded seat is preferred. Many drumset thrones are tall enough to achieve the correct height. And there are also several companies making stools that are specific to timpani playing.

7. Gages are useful in music that require a lot of tuning changes or abrupt tuning changes. But because the gages themselves operate by measuring the distance the pedal moves and not the pitch of the drum itself, they can be inaccurate (especially if they are not regularly adjusted). The student who relies on gages only will not develop their ear as well as the student who must rely on their ear training skills. Thus, gages must not be a substitute for tuning by ear.

8. When the percussionist is starting their timpani playing, it is beneficial for them to purchase a pair of general timpani mallets. These mallets should allow the percussionist to perform nearly everything they will have to in music of this level. However, as the student progresses, they should add at least two more pair of mallets to their stick bag: one that is very articulate that might have a mallet head made out of billiard felt and one that is very soft or inarticulate that has a “cartwheel” shape to it.

9. While I firmly believe that the percussionist should own their own mallets and sticks, I also recognize that this may not always be financially feasible or musically necessary when it comes to owning multiple pairs of timpani mallets at the Junior High level. Therefore, you may decide to buy several pair of “school mallets” that the students are welcome to use, but only if you have specifically designated for them to do so. I also firmly believe in locking these mallets up in your band office!
Additional Resources for the Developing Timpanist and Teacher:

As mentioned before, both the Kennan Wylie and Mark Wessels Beginning Percussion Books do a wonderful job of introducing timpani and providing a number of lessons on the various topics covered in this clinic.


Additionally, there are several good etude books available that I highly recommend: *The Solo Timpanist* by Vic Firth and *Musical Studies for the Intermediate Timpanist* by Garwood Whaley.

Kennan Wylie has also produced a very useful DVD that demonstrates techniques for the most common percussion instruments including timpani, *The Beginner’s Guide to the World of Percussion*. This resource should be on hand in every Junior High band hall regardless of whether a percussionist is on staff or not.

And finally for a more complete resource for all percussion instruments and the pedagogy that goes into teaching them, *Teaching Percussion* by Gary Cook (Schirmer Books) is an invaluable addition to your library. With the third edition, the book has DVD's included with it that demonstrate many of the techniques that are discussed in the text.

I have many people to thank for their input and instruction in my development as a percussionist and as a teacher: Dr. Susan Martin Tariq, Brian Mason and Charles Emerson. Others that I have gleaned information from or have attended clinics by are too numerous to mention, but all were pivotal in one way or another in bringing you the information in this clinic. Additionally, various teaching strategies may have been my brain child, but were only developed through much trial and error and experience.

For any further information, clarification or discussion on this topic or others, I am most easily reached through email and my website: ericrathmusic@gmail.com and www.ericrathmusic.com.
Timpani Ranges and Characteristic Ranges

Each brand and model of timpani will have tuning ranges specific to it, but these are the most common among all of the brands. These are also the most common for tuning Ludwig timpani, which are still the number one selling set of timpani today.

Standard Ranges

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<tr>
<th>32” (30”)</th>
<th>29” (28”)</th>
<th>26” (25”)</th>
<th>23” (22.5”)</th>
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Characteristic Ranges

<table>
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<tr>
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Note: Some sets of timpani now include a 5th drum, a piccolo drum, which has the same range qualities as the standard 29” drum, only up an octave.