

*Put Your “Best” Foot Forward: Comparing and Contrasting Various Marching Techniques*

**An Honors Thesis (HONR 499)**

**by**

*Sarah Wagner*

**Thesis Advisor**

*Dr. Caroline Hand*

**Ball State University  
Muncie, IN**

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## **Abstract**

The art of marching band requires attention to detail and dedication to uniformity. When performing, members of a marching ensemble strive to move and play as one. To this end, every ensemble must define a marching technique: how the members move. This paper breaks down and explains a variety of these physical techniques, specifically the difference between glide step and chair step. It will also compare various types of ensembles' marching techniques through video analysis to uncover whether one marching technique is superior to another. Finally, it will present a case study that I conducted with the Pride of Mid-America Marching Band at Ball State University over the 2019 season.

## **Acknowledgements**

I would like to thank Dr. Caroline Hand for advising me as I write my thesis. With her help both as an educator and advisor, I have grown as a musician and an educator throughout my undergraduate career.

I would also like to thank my friends and family who have supported me during my musical career.

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## Process Analysis Statement

My love for music has developed through many years of performing in choir, playing in band, and singing karaoke with my friends and family. I have a strong passion for music and I want to share that with others, which led me to pursue a career in music education. I hope to provide the same experience for students that fostered my same work ethic and maturity. I believe that music is a power for good, and can facilitate collaborative and meaningful learning.

My thesis is specifically focused around my marching band teaching and performing experience. I have participated in the marching arts for eight years. In high school marching band, I played clarinet, served as section leader, and was featured as a soloist. During my time at Ball State University, I continued my active involvement in the marching arts, while also serving as Head Drum Major of the Pride of Mid-America Marching Band during my final season. In this leadership role, I created a set of marching technique videos and a routine for the Pride of Mid-America Marching Band. During leadership interviews for the ensemble, student members are asked about their goals for the upcoming season. I expressed my interest in developing instructional videos to allow members to refine their marching technique. I also took the initiative to create a fundamentals routine to be used throughout the season. When forming my thesis proposal, I decided that I would use the instructional materials and the Pride of Mid-America as a case study for my honors thesis.

I decided to frame my case study within the context of an investigation of various marching techniques. I focused on the descriptions of marching styles. Though marching technique seemed simple to me, I often found myself endlessly writing about the intricacies of a single step. The descriptions of various marching styles ended up being a more detailed and

involved task than previously anticipated. I wanted to put these descriptions to good use by analyzing how they were used and if there was a superior technique.

After graduating from high school, I worked as a woodwind teaching assistant for multiple high school marching bands. I spent time with individual sections as well as large groups. I focused on both marching technique and musical execution. When serving as a section leader or instructor, I found myself constantly refining marching technique. I always pondered whether or not one technique was better than the other. The staff and I would often converse about how the high school ensemble would perform if their style was slightly altered. This question became another focus of the thesis.

As a musician and educator, I regularly watch performances of other ensembles. I observe ensembles at competitions, public performances, and online. Because I wanted to find the “best” marching technique, I had to research various types of ensembles. I chose Drum Corps International and Bands of America due to their popularity among the marching community. Due to my participation in collegiate marching band, I also focused on the marching bands in the Big Ten Conference. The research of the thesis began with finding videos of many performances. I created a database and copied down various links for each ensemble. The Bands of America and Drum Corps International videos were easier to find due to the end-of-season championships they host. On the other hand, the Big Ten marching bands had various themed shows throughout a single season, so I chose to analyze the most popular videos of each ensemble. Once the descriptions of each marching technique were finalized for the thesis, I was able to identify each of these ensembles’ technique choices. From there, comparing and averaging competition results and YouTube video views formed my data on what constituted the best technique.

I found it fairly easy to write about my case study because teaching the routine and creating the videos felt like teaching a lesson, which is part of my coursework as a music education major at Ball State. I felt most comfortable creating the content and executing the exercises. I was able to observe the results of my work over the course of the fall semester of 2019. When composing the thesis in the spring semester of 2020, I reflected on my work in the Pride of Mid-America Marching Band within the context of my descriptions and video analyses.

The completion of this thesis has allowed me to reflect back on my undergraduate career and look forward to my future career. The completion of this thesis with Dr. Caroline Hand as my advisor has been a culminating accomplishment of my undergraduate career. The four years that I have studied music education has contributed a great deal to this paper, and I plan to utilize what I have learned over the course of composing this thesis with my future students.

## Types of Ensembles

Before delving into details of each style, it is important to understand what types of marching bands exist, as this can influence the marching technique that each band chooses. The marching arts includes various types of ensembles, outlined below.

### *School Community Bands*

At the middle school, high school, or collegiate levels, school bands are meant to perform at school-sponsored events. Performances may include the playing of school fight songs at pep rallies or themed halftime shows at football games. The length of a performance season for school community bands usually lasts the length of the football season, and may be extended for other school events.<sup>1</sup>

At the collegiate level, the Big Ten includes fourteen universities. The typical marching style of Big Ten bands is high knee or chair step style, which will be analyzed below. This group of colleges perform at football games for large audiences, and their shows have themes meant to please crowds; many high schools follow this model. Besides performing at halftime, Big Ten marching bands also perform pregame performances and stand cheers. They serve as the musical school spirit during sporting events.<sup>2</sup>

### *Parade Bands*

During May through October, parade bands perform at either themed or competitive parades. Rather than remaining in one form with straight lines, parade bands will change shape

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<sup>1</sup> Wayne Markworth, *The Dynamic Marching Band*, Three Rivers, MI: Accent Publ., 2008, 8.

<sup>2</sup> Markworth, *The Dynamic Marching Band*, 8.

as they march down the street. The ensembles may march for entertainment or competitive purposes.<sup>3</sup>

### *Show Bands*

For show bands, the goal of a performance is maximum audience entertainment. An ensemble will typically march and/or dance with exaggerated motion to dramatize their performance.<sup>4</sup>

### *Military Marching Bands*

Compared to the types of marching ensembles mentioned above, military marching bands move with a larger step-size. The ensemble moves in ranks and files, rather than making elaborate shapes or curvilinear pictures. The band solely marches in straight lines.<sup>5</sup>

### *Drum Corps Style Bands*

The last type of marching band is the most widespread among high school programs and is modeled off the professional marching arts organization Drum Corps International (DCI). The mission of the organization is to facilitate learning and engagement through education, competition, and performance.<sup>6</sup> Rather than learn a new show for each performance, Drum Corps style bands focus on one concept or theme for the entire season. DCI groups begin audition camps during the fall and spring months, then begin practicing and performing every day from June to August. The ensembles consist of wind players, percussionists, and color guard members aged 21 and below. The ensembles tour nationwide and compete for ten weeks in several

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<sup>3</sup> Markworth, *The Dynamic Marching Band*, 8.

<sup>4</sup> Markworth, 9.

<sup>5</sup> Markworth, 9.

<sup>6</sup> "About Drum Corps International," Drum Corps International, accessed January 26, 2020, <https://www.dci.org/static/about-drum-corps-international>.

competitions, ultimately leading up to the World Championships at Lucas Oil Stadium in Indianapolis.<sup>7</sup>

High school ensembles may model their marching technique off of DCI groups. These groups typically focus on a competitive circuit of performances every fall. Competitive high school marching bands will use music, marching, dancing, and special effects to earn more points at competitions. Music for All (MFA) is a national arts organization, with the goal of promoting music and its importance in school, as well as influencing community appreciation of the arts.<sup>8</sup> Bands of America is the marching band branch of MFA.<sup>9</sup> Each year, the organization hosts the Grand National Championships, where high school marching ensembles compete over the course of three days. The organization promotes healthy competition and encourages music as a learning tool in the high school community.

### **Marching Technique**

This section will break down and explain a variety of marching techniques, specifically the difference between glide step and chair step. Glide step is a type of marching that requires the marcher to keep the foot close to the ground. Individuals can lead with the heel or the knee. Variations on the glide step include bent-knee and straight leg. Though the angle of the leg varies among ensembles, the roll step is the staple of the glide step technique. The other overarching type of marching is chair step. A marcher using the chair step technique leads with the knee and lifts the foot off of the ground.

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<sup>7</sup> “About Drum Corps International,” <https://www.dci.org/static/about-drum-corps-international>.

<sup>8</sup> “Bands of America,” accessed January 26, 2020, <https://www.musicforall.org/who-we-are/bands-of-america>.

<sup>9</sup> “Who We Are,” accessed January 26, 2020, <https://www.musicforall.org/who-we-are/who-we-are>.

### *Upper Body and Position of Attention*

In addition to a unified lower body technique, an individual must be able to maintain proper full body technique. Proper posture relies on alignment. The position of attention serves as the starting position for this alignment. When not in motion, a member will halt to the defined position of attention.

Aligning the body can be broken down into five points: ankles, knees, hips, shoulders, and ears.<sup>10</sup>



Figure 1



Figure 2

A position of attention or halted position requires the feet to pause. The feet will either be in an open or closed position. Closed position (see figure 2) requires the feet to be completely parallel. Open position (see figure 1) requires that the heels remain touching, but the foot rotates open to a specified angle. The angle varies among groups, but is typically in the range of 45-90 degrees.<sup>11</sup>

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<sup>10</sup> Ball State Pride of Mid-America Marching Band, *Fundamentals Handbook*.

<sup>11</sup> Purdue University, *"All American" Marching Band Handbook*, 2017, 19.



Figure 3

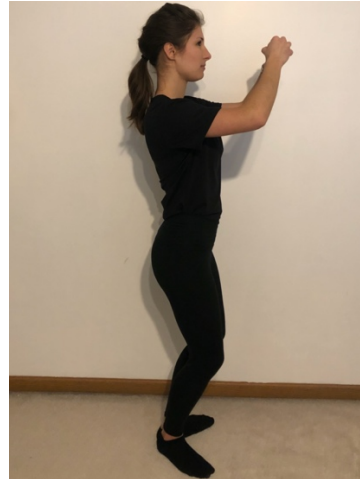


Figure 4

The knees should never be locked. The legs will be straight and muscles engaged (figure 3 and figure 4). The descriptions of the types of marching styles will dissect the movement of the knee.



Figure 5



Figure 6



Figure 7

Proper posture will exhibit the natural curve of the spine. The upper body should not lean forward. To complete the curve of the spine, the neck should properly support the head. Chin height varies among ensembles, but the three most popular angles are level (0 degrees, figure 5), 10 degrees (figure 6), or press box level (40 degrees, figure 7).

### *Glide Step*

Glide step, also called “roll step,” is defined as the heel of the foot hitting the ground and rolling onto the toe. Below is an explanation of a single glide step, crossing of the feet, and closing of the foot.

When moving from the position of attention, detailed in the section above, the left foot leads. Ensembles using the glide step technique will either define the initial motion as leading with the knee or with the heel. For the purpose of this description, we will define glide step as leading with the heel.

Ensembles will either use bent-knee or straight leg glide step. The style is determined by the back leg while in motion.<sup>12</sup> If using straight leg style, the knee will never bend. As the individual marches, the legs will remain straight at all times. When using bent-knee style, marchers will allow the knee to bend as the legs cross. Each ensemble varies on the angle of the knee.

Momentum allows the body to move forward. The initial push of the step off with the left foot comes from a push off the right foot. The right foot will serve as the anchor, holding most of the body weight as the left foot moves forward. Both feet will remain parallel to each other, nicknamed “ski tracks.”<sup>13</sup> The foot should not swing outwards. If the toe points out at varying angles rather than straight forward, the marcher will not move in a straight line.

The contact of the heel on the ground occurs with the downbeat of the music. If marching to a metronome, each click signifies the heel hitting the ground. The marcher moves at a

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<sup>12</sup> Gary Smith. *The System: Marching Band Methods* (Chicago, IL: GIA Publications), 2019., 61.

<sup>13</sup> Ball State Pride of Mid-America Marching Band, *Fundamentals Handbook*.

consistent pace to promote uniformity. One stride utilizing glide step can be broken down into a prep, step, roll, and cross.<sup>14</sup>

### *Prep*

If stepping with the left foot, all weight should transfer to the right foot. Then, as the left foot moves forward, the weight is gradually transferred to both feet. The forward motion begins with the weight harnessed in the right heel.<sup>15</sup> The “push” must occur before the first beat/step to allow the left foot to move forward. This “push” acts as the prep for the initial first step.

### *Step*

Due to the weight transfer to the right foot, the left foot is slightly lifted off of the ground. As the heel moves forward to take a step, the weight that was held in the right leg will also move forward. As the left foot steps forward, the toes should be elevated to allow the foot to land on the heel. Due to the forward weight transfer, the right heel will lift slightly off the ground. It should lift about two inches to allow even balance between the feet. At no point should the initiating leg swing outside of the centerline of body.<sup>16</sup> It should move straight forward and land in the upside-down Y position (figure 8).

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<sup>14</sup> Smith, *System*, 61.

<sup>15</sup> Smith, 62.

<sup>16</sup> Smith, 62.



Figure 8



Figure 9

In figure 8, the Y shape is made with the even transfer of weight. The center of the body is in between both feet. The distribution of weight can either be defined as 50/50, where each foot receives half of the body weight, or 60/40, where there is a forward motion with more weight on the forward foot in order to prep for the next step. When initially teaching glide step technique, the 50/50 balance should be used. The even distribution serves as a checkpoint when taking a step.<sup>17</sup> The 60/40 forward weight transfer is used when marching at a faster tempo. For the sake of simpler explanation, the 50/50 balance will be used.

### *Roll*

The rolling of the foot takes up half of a beat. I will assign a part of the foot (heel arch ball toe) to each part of the beat (1 e & a) (see figure 10). The roll occurs during the length of an eighth note, which is half of a step. After taking the first step, you should be in the upside-down Y position (figure 8). As you roll, the foot does not slam from heel to toe, but rather rolls through gradually. The weight will transfer from the right foot to the left foot.<sup>18</sup> When you are

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<sup>17</sup> Ball State Pride of Mid-America Marching Band, *Fundamentals Handbook*.

<sup>18</sup> Smith, *System*, 62.

transferring, the forward foot rolls downward as the back foot lifts towards the toe. Both feet are moving smoothly.

**1**    **e**    **&**  
 —    —  
**Heel**    **Ball**    **Cross**  
           **Arch**    **Toe**

Figure 10

Count 1 is the upside-down Y position (figure 11). Count “e” is about halfway down your foot, or “ball” (figure 13). On “toe,” the forward foot should have the entire foot flat on the ground, and the back foot should be on the toe (figure 14). The roll through process occurs within a half count and is gradual. No snappy movements should occur while stepping.

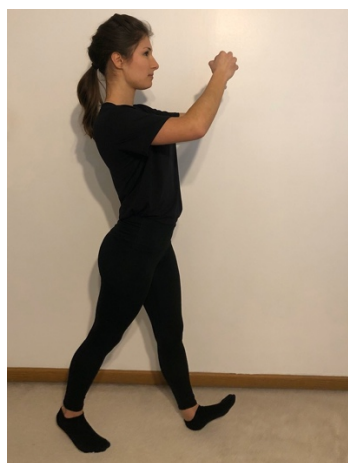


Figure 11

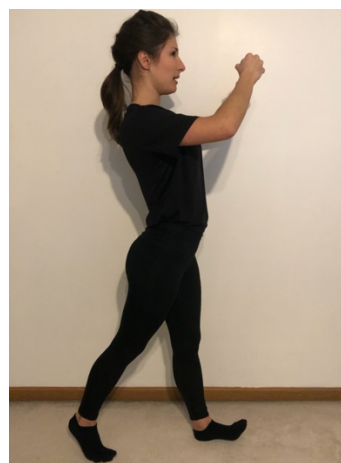


Figure 12

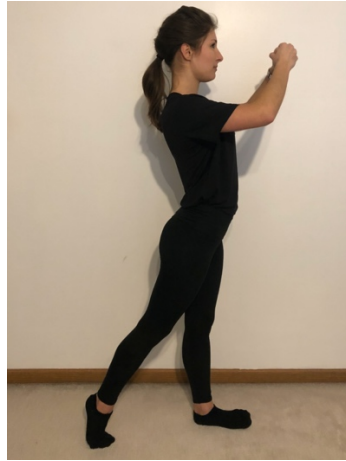


Figure 13

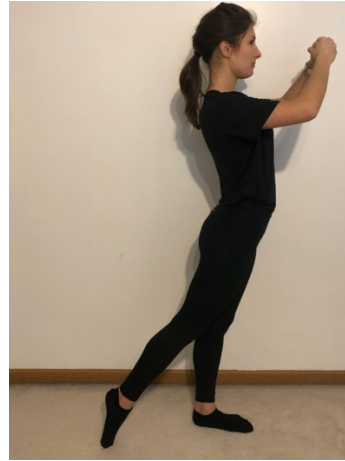


Figure 14

### *Cross*

When you roll down all the way to the toe of the forward foot and have pulled your back foot parallel with the left foot, you have hit the “cross” position. Approaching the “&” count, the back leg will move forward and become parallel to the front leg, similar to the position of attention.<sup>19</sup> The feet will remain parallel, as in the heels and toes will line up directly next to each other, although no weight is on the foot that is crossing through. We will call this position the “cross position.” All of the weight will be transferred onto the left foot because the right foot will be stepping forward. Though the weight is on the right side, there should be no leaning. There will only be a slight change in the hips due to the slight elevation in the left foot. The raised leg should be as straight as possible (see figure 15). This position, where the ankles cross on another, is considered the “&” count.

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<sup>19</sup> Smith, *System*, 63.



Figure 15

You will continue the remainder of steps with the same four-part process. Step forward, heel makes contact with the ground, roll step transferring the weight forward, then bringing the right foot forward.

### *Close*

The process of closing requires an opposite motion of the foot. Rather than leading with the heel, you will lead with the toe.<sup>20</sup> Rather than rolling from the heel to the toe, you will roll from the toe to the heel. Almost all closes will be with the right foot unless there is an uneven step number or other specified change.<sup>21</sup>

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<sup>20</sup> Ball State Pride of Mid-America Marching Band, *Fundamentals Handbook*.

<sup>21</sup> Smith, *System*, 63.



Figure 16

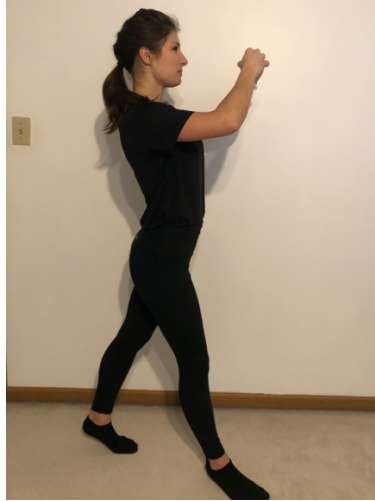


Figure 17



Figure 18

To close in an open position, the left foot will begin with all weight transferred onto it. As the marcher moves forward, the weight will still transfer outwards, except the marcher will be moving into a halt. The weight will not move forward, but rather stop. Leading with the toe, rather than stepping right in front of the marcher, the foot will rotate around your heel (see figure 18). The right heel will remain parallel with the left foot, but the toe will step outwards (see figure 18). You will turn your foot outward to the specified angle defined in the position of attention. Your toe will be placed down in a *tendu* as the weight is transferred forward. In a *tendu*, the arch of the foot will push forward. The toe will be placed slightly to the right, and the ankle will rotate to create a stretched foot.<sup>22</sup> You will still transfer roll towards your back toe as you roll down to your heel in your front foot (see figure 17). When the weight has been transferred and your right foot is completely on the ground, the weight will stop. It will no longer move forward. Now that you have weight on the right foot, you must transfer the remaining weight to the left foot.

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<sup>22</sup> “Ballet Dictionary,” Ballet Theatre Foundation, accessed April 1, 2020, <https://www.abt.org/explore/learn/ballet-dictionary/>.

While pulling the left foot in, it will not lift and place. The foot will remain close to the ground while also leading with the toe. It will turn out at the same angle as the right foot. The feet will come into a position where the heels touch, but the toes do not. The distribution of weight should not move forward and then back. Rather than rocking when closing, the marcher will stop all forward weight transfer. The weight should be halted in the marcher's heels. In this position, the points of alignment can be assessed to ensure the marcher is at a full halt.

If you were to close in a closed position, as if to start marking time or doing something in place, the only difference is that the feet will remain parallel. You will roll the front foot from toe to heel without turning the toe outwards.

#### *Ankle-Knee Step*

Chair step is a variation of the ankle-knee step, so the ankle-knee technique will be detailed here before chair step. Rather than moving the heel into a forward motion, the ankle-knee step technique involves vertically lifting the foot completely off the ground. The foot will roll from toe down to heel. A single step with this technique can be broken down into Toe, Up, Toe, and Down.<sup>23</sup>

#### *Toe*

To begin, the left heel will lift until only the tip of the toe is making contact with the ground (figure 19). The left knee will remain facing forward and should not rotate in any direction. Because the left foot is lifted, all weight is on the right foot.

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<sup>23</sup> Smith, *System*, 65.



Figure 19



Figure 20

*Up*

While maintaining the pointed left toe, the left knee will bend and raise the foot up the leg. The left foot will elevate until the arch of the foot is aligned with the right knee (figure 20).

*Toe*

For the actual step, two variants exist.<sup>24</sup> The toe will lead in both instances. The first variant involves a “scooping” motion. Rather than moving the toe diagonally downward 22.5 inches in front of the starting position, the toe will curve down then forward. The second variant involves a “bicycling” motion. The foot will lift higher, curving upward then forward. To compare the two variants, imagine a circle directly in front of the right knee that must be outlined by the left toe.

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<sup>24</sup> Smith, *System*, 65.



Figure 21

*Down*

As the left foot steps forward, the weight will shift to the front foot until the right toe is the only part of the foot in contact with the ground (figure 21). The front foot will flatten from toe to heel as the weight shifts.

The ankle-knee step technique is smooth throughout. Though the body will feel constantly suspended, the weight transfer is constantly moving forward.

*Chair Step*

The chair step emphasizes more leg action and uses a pointed toe and bent-knee. Both the ankle-knee step and the chair step lead with the knee. Similar to the ankle-knee step, each stride of the chair step is defined by the contact of the toe. Rather than lifting the left foot to remain in line with the right leg, the knee moves forward and the toe outward.<sup>25</sup>

The chair step also uses Toe, Up, Toe, and Down. The only alteration between the processes is during the “up” portion. Rather than bending at the knee, the upper leg will come

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<sup>25</sup> Smith, *System*, 68.

out to become parallel with the ground. The toe is pointed forward. The angle of the lifted leg should resemble a “chair-like” position (figure 22).



Figure 22

When the front foot initially steps off of the ground, it will roll from heel to toe.<sup>26</sup> When making contact with the ground after taking a step, it will roll from toe to heel. The rolling motion controls the weight transfer and ensures a smooth motion.<sup>27</sup>

### **Marching Technique Video Analyses**

Though a plethora of marching band types exist, the main two marching techniques of glide step and chair step are the most utilized in various types of bands. Using competition results and video performances from Drum Corps International and Bands of America as well as video performances of the Big Ten College Bands, I will analyze the marching techniques of individual bands and how it affects their placement and popularity among judges and crowds. This may help me determine if there is a “best” or “correct” technique to teach. While watching

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<sup>26</sup> Purdue University, “*All American*” *Marching Band Handbook*, 2017, 20.

<sup>27</sup> Smith, *System*, 69.

the performance videos, I will specifically look at whether individuals step with their toe or heel, as well as the height of the knee to determine glide step versus chair step. If the ensemble utilizes glide step, I will also analyze the individuals' knees to determine bent-knee versus straight leg.

*Drum Corps International Analysis*

Drum Corps International Finals consists of 12 top performing ensembles. Using footage from the last 5 years of competition, I compiled the placement results and marching style of the 12 top performing ensembles of the 2019 season.

	Finals Placement 2019	2018	2017	2016	2015	Marching Style
Blue Devils	1	2	1	2	1	Glide Step - Bent
Blue Knights	7	9	8	7	6	Glide Step - Straight
Blue Stars	8	8	10	9	11	Glide Step - Straight
Boston Crusaders	6	5	6	12	10	Glide Step - Bent
Bluecoats	2	3	5	1	3	Glide Step - Straight
Carolina Crown	4	4	3	3	2	Glide Step - Straight
Mandarins	10	10	N/A	N/A	N/A	Glide Step - Straight
Phantom Regiment	12	11	9	8	7	Glide Step - Straight
Santa Clara Vanguard	3	1	2	4	5	Glide Step - Exaggerated
The Cadets	9	7	7	6	4	Glide Step - Straight
The Crossmen	11	12	11	10	12	Glide Step - Straight
The Cavaliers	5	6	4	5	9	Glide Step - Exaggerated

Figure 23. 2015-2019 DCI Results.<sup>28</sup>

<sup>28</sup> Taken from historical data on DCI website; see Bibliography for a complete list of sites referenced.

All 12 groups utilized glide step technique in their shows. The Blue Devils and Boston Crusaders were the only ensembles to use bent-knee. The Blue Knights, Blue Stars, Bluecoats, Carolina Crown, Mandarins, Phantom Regiment, The Cadets, and The Crossmen all utilize straight leg. Santa Clara Vanguard marches with glide step technique, but incorporate a bicycle motion, or exaggerated bent-knee, when moving forward. The Cavaliers marches similarly, but lifts the foot more than Santa Clara Vanguard.

	Placement	Marching Style
Blue Devils	1	Glide Step - Bent
Bluecoats	2	Glide Step - Straight
Santa Clara Vanguard	3	Glide Step - Exaggerated
Carolina Crown	4	Glide Step - Straight
The Cavaliers	5	Glide Step - Exaggerated
The Cadets	6	Glide Step - Straight
Blue Knights	7	Glide Step - Straight
Boston Crusaders	8	Glide Step - Bent
Blue Stars	9	Glide Step - Straight
Phantom Regiment	10	Glide Step - Straight
The Crossmen	11	Glide Step - Straight
Mandarins	12	Glide Step - Straight

Figure 24. Average Finals Placement from 2015-2019

When comparing the average finals placement for the 2015-2019 seasons (figure 24) between the top scoring ensembles and attempting to establish a “best” marching technique, no clear correlation between marching style and placement occurred.

*Bands of America Analysis*

The fall competitive marching season occurs from September-November. High school ensembles that compete in Bands of America competitions may participate in Regional Competitions, Super Regional Competitions, or Grand National Championships.<sup>29</sup>

	2019	2018	2017	Marching Style
Avon	2	2	3	Glide Step - Bent
Ayala	12			Glide Step - Bent
Blue Springs		3	9	Glide Step - Bent
Broken Arrow		4	2	Glide Step - Bent
Carmel	4	1	1	Glide Step - Straight
Castle			8	Glide Step - Bent
Claudia Taylor Johnson	6			Glide Step - Straight
Dobyns-Bennett		10	6	Glide Step - Bent
Flower Mound			5	Glide Step - Straight
Hebron	3			Glide Step - Bent
Homestead	10	8		Glide Step - Bent
Jenks		9		Glide Step - Bent
Leander	5			Glide Step - Straight
Marcus			4	Glide Step - Straight
Marian Catholic			11	Glide Step - Bent
O'Fallon		12		Glide Step - Bent
Prosper		11		Glide Step - Straight
Round Rock	9		12	Glide Step - Straight
Tarpon Springs		5		Glide Step - Bent
Union	11		10	Glide Step - Bent
Vandegrift	1			Glide Step - Bent
Wando		6		Glide Step - Bent
William Mason	7	7		Glide Step - Bent
Woodlands	8		7	Glide Step - Bent

Figure 25. Bands of America Finals Placements 2017-2019<sup>30</sup>

Similar to DCI, the ensembles in the Bands of America National Championships all utilize glide step technique. Due to the variance in participation each year, I analyzed the top 12

<sup>29</sup> "Bands of America," Music for All.

<sup>30</sup> Taken from historical data on BOA website; see Bibliography for a complete list of sites referenced.

bands from the 2017-2019 competition seasons. According to figure 25, seventeen of the twenty-four (71%) ensembles utilized a bent-knee style. Though the style is less popular, those ensembles marching with straight leg style were not consistently placed above or below those who marched with bent-knee style.

When looking at comparisons between the top-scoring ensembles and marching techniques, the ensembles with bent leg glide steps tended to score higher than those who utilized straight leg. Though the DCI results did not show a pattern, the high school ensembles utilized bent-knee more and tended to place higher.

### *Big Ten Analysis*

The Big Ten Conference consists of: University of Illinois at Urbana-Champaign, Indiana University Bloomington, University of Iowa, University of Minnesota Twin Cities, University of Michigan, Michigan State University, University of Maryland-College Park, University of Nebraska-Lincoln, Northwestern University, The Ohio State University, Penn State University, Purdue University, Rutgers University, and University of Wisconsin-Madison.<sup>31</sup> These ensembles perform at football games and for various campus events.

After reviewing videos from each ensemble from 2010-2019, I found that there is a variation among the conference. Iowa, Purdue, Maryland, Nebraska, and Rutgers use glide step. Indiana, Minnesota, Illinois, and Michigan use ankle-knee technique. Michigan State, Northwestern, Ohio State, Penn State, and Wisconsin use chair step.

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<sup>31</sup> Justin Berkman, "Should I Go to One of the Big 10 Schools?" PrepScholar, September 8, 2019, <https://blog.prepscholar.com/big-10-schools>.

	Marching Style	# of Video Views	Average Attendance <sup>32</sup>
Michigan State U	Chair Step	1M	74K
U of Michigan	Ankle-Knee	910K	110K
The Ohio State U	Chair Step	485K	106K
Northwestern	Chair Step	194K	37K
Purdue U	Glide Step	58K	41K
Penn State U	Chair Step	56K	103K
U of Illinois	Ankle-Knee	51K	41K
U of Minnesota-TC	Ankle-Knee	30K	45K
U of Iowa	Glide Step	10K	67K
U of Maryland-CP	Glide Step	8.8K	41K
Indiana U	Ankle-Knee	4.7K	43K
Rutgers U	Glide Step <sup>33</sup>	4.3K	44K
U of Nebraska-L	Glide Step	N/A	90K
U of Wisconsin-M	Chair Step	N/A	78K

Figure 26. Ordered in Popularity by Video Views.<sup>34</sup>

When looking at figure 26, it is not marching style that affects popularity, but rather game attendance. The ensembles with more fans in the stadium receive more views of their performances, both in-person and electronically.

<sup>32</sup> “Attendance Rankings By Conference: 2019 CFN Five-Year Program Analysis,” College Football News, July 23, 2019, <https://collegefootballnews.com/2019/07/college-football-attendance-rankings-by-conference-2019-cfn-five-year-program-analysis>.

<sup>33</sup> “FAQ,” Rutgers Bands, accessed March 20, 2020, <https://www.rutgersbands.com/faq>.

<sup>34</sup> Taken from various YouTube videos; see Bibliography for a complete list of sites referenced.

### *Results*

Overall, not one style can be deemed “the best.” In the competitive culture of DCI, no correlation between placement and marching style was present. When analyzing BOA, glide step in the bent leg style is the most popular among the finalists, and also was present among the top scoring groups. Though the reasoning behind success could be that the style is superior, the sheer popularity of the style, teaching quality, and/or ability to clean the technique could contribute more. The success of a college band is not truly measurable by marching technique. Each ensemble decides on marching technique based off of preference or tradition, not on the competitive success of the ensemble.

### **Case Study**

As the head drum major of the Ball State Pride of Mid-America Marching Band, I had the liberty of creating instructional videos on the ensemble’s marching technique. The videos included Position of Attention,<sup>35</sup> Marking Time,<sup>36</sup> Forwards Marching,<sup>37</sup> Backwards Marching,<sup>38</sup> and Slides.<sup>39</sup> Each video utilized three members of the ensemble to demonstrate proper technique with their permission. Each instructional video can be found in full in the bibliography under the “YouTube Videos” section.

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<sup>35</sup> “Position of Attention,” produced by Sarah Wagner, July 20, 2019, YouTube video, 2:18, <https://youtu.be/oWE-9aJzAVs>.

<sup>36</sup> “Marking Time,” produced by Sarah Wagner, July 20, 2019, YouTube video, 2:48, <https://youtu.be/J5jqdeJDOI>.

<sup>37</sup> “Forwards Marching,” produced by Sarah Wagner, July 20, 2019, YouTube video, 2:25, <https://youtu.be/SAG51h6Ka8Q>.

<sup>38</sup> “Backwards Marching,” produced by Sarah Wagner, July 20, 2019, YouTube video, 2:18, <https://youtu.be/gYsnvf10fAY>.

<sup>39</sup> “Slides,” produced by Sarah Wagner, July 20, 2019, YouTube video, 5:45, <https://youtu.be/pI86BZhBf-4>.

The videos consist of text, pictures, and videos. Throughout each video, I recorded a voiceover to give more detail on the specified technique, as well as to transition between each step in the processes.

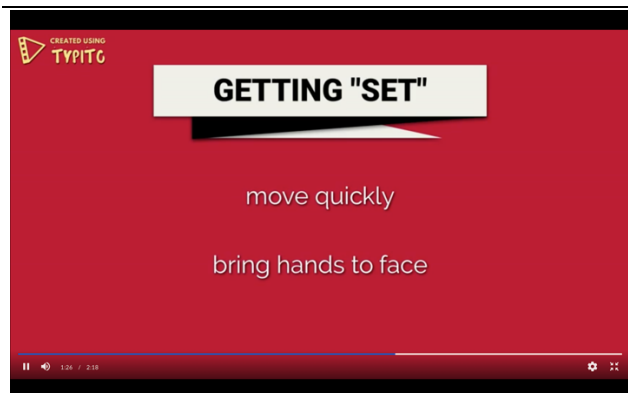


Figure 28



Figure 29



Figure 30

For example, in the “Position of Attention” video, I include headings and text to summarize the narrated information (figure 28). I include pictures of participants making common errors (figures 29 and 30). Though the videos are meant to show proper technique, examples of the opposite may help future students realize what they are doing incorrectly.

The other videos follow the same format as above. Each video includes a summary at the end, along with promotion of the ensemble on social media platforms. The videos served to

educate the ensemble and promote understanding of marching technique in order to unify our look, and the use of multimedia allowed for the information to be distributed clearly and easily.

### *Routine*

Though the instructional videos allowed members of the ensemble to understand the expected technique, they did not offer an exercise to improve the group's execution of style. With the five videos and our traditional Pregame performance in mind, I created a short routine to help members practice our technique.<sup>40</sup> The hope was for this practice to lead to better uniformity.

#### *2019 Pride of Mid-America Marching Techniques Routine*

Up 4, Open 4, Around 4, Mark 4

Forward 8, Mark 8 (x3)

Backward 8, Mark 8 (x3)

Upper Body Rotations (Turn 4, Hold 4...x4)

Box Drills (8 steps in each direction): FLBR, FRBL, BRFL, BLFR

Forward 4, Counter March 4, Forward 4, Close

The routine began with a posture exercise to open up the upper body and lift the head. Next, the routine isolates forwards march. The exercise alternates between moving forward eight steps at an 8 to 5 (22.5 inches) step size and marking time for eight counts. The movement of the exercise emphasizes consistent step size and proper marching technique. The stand still portion allows individuals to adjust to lines on the field and to others around them. After moving forward, the routine repeats the same process, except moving backwards.

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<sup>40</sup> "POMA Basics Routine," produced by Sarah Wagner, March 20, 2019, YouTube video, 2:40, [https://youtu.be/a2Eyx5b\\_YAk](https://youtu.be/a2Eyx5b_YAk).

To isolate the upper body, the next portion of the routine involved the rotation of the hips, shoulders, and head. The individual rotates for four counts, then holds for four counts. The upper body will move to the left, center, right, and back to center for a total of thirty-two counts. During these rotations, the feet will continuously mark time.

The next portion of the routine combines forwards and backwards marching with slides. A box drill involves moving in four directions to finish in the same spot the exercise began. The four possible directions are forward, backwards, left, or right. The left and right directions can either be marched forwards or backwards.

The routine utilizes four boxes:

- Forward, Forward Left, Backwards, Forward Right
- Forward, Forward Right, Backwards, Forward Left
- Backward, Backward Right, Forward, Backward Left
- Backward, Backward Left, Forward, Backward Right

By using all four variations, the marcher is able to work on all direction changes. As stated in the “Slides” video, the prep step for each direction change is dependent on the direction coming into the change, and the direction the marcher is intending to travel to.

To finish the routine, the marcher performs the Counter March. The four-count move is a staple of Ball State’s pregame performance. Over a series of four steps, the marcher rotates 180 degrees to march forwards in the opposite direction. During the performance, it will look as though marchers are about to collide, but are actually two steps apart.

The routine serves to combine all fundamentals into a short window of time, and to build upon one another in a sequential manner. The posture exercise serves as the basis for all marching. An individual should focus on posture at all times. The forwards and backwards

marching is used in slides and during the counter march. Before moving into slides, the upper body exercise served to identify angles of the body and upper- and lower-body dependence. Lastly, the counter march portion combines forward marching and direction changes that will be later incorporated in a performance setting.

After creating the routine, I taught it to the leadership crew (a select group of twenty-five Ball State students chosen to lead instrument sections), then taught the routine to the entire 200-member ensemble. I broke down the routine into segments. Like the routine was initially built, I used previous sections of the routine to aid in the learning of future sections. I taught both small groups and full ensemble. When separated, the small groups focused on details of segments of the routine. Because each small group had multiple leaders, individuals were able to address problems and were given time to improve. During full ensemble rehearsal, I used multiple repetitions to emphasize overall uniformity.

### *Reflection*

By creating the instructional videos and routine for the Pride of Mid-America Marching Band, I was able to focus on the details of glide step technique, specifically bent-knee style. I constructed the videos based off of the hypothesis that students require scaffolding of visual aids to properly learn technique. I attempted to structure my routine in the same manner. When teaching the routine, I focused on each exercise before attempting to perform the entire exercise.

I have always believed that bent-knee glide step is the simplest marching style to teach and learn. The movement is most similar to walking, which allows for easy comparing and contrasting. After collecting data on the marching techniques, I found that the bent-knee glide step style was not only the most popular, but also the top-scoring compared to other marching styles in Bands of America competition. The popularity of bent-knee style at the high school

level likely allowed for easy transfer when teaching the same technique to the Pride of Mid-America. I was also most comfortable with the style myself. My familiarity with the style allowed for a more accurate construction of teaching materials for the ensemble. My case study further supports my belief that the ease of teaching the technique aids in its popularity.

When looking at the marching styles of collegiate ensembles, I found that tradition is more important than technique in terms of audience popularity. In the Pride of Mid-America, the traditional Pregame show utilizes the Ball State University Fight Song and countermarch. Keeping this in mind, I incorporated the counter march into my routine to refine the specific move out of context. My use of the traditional move allowed for members to begin and refine the tradition before performing for audiences.

### **Future Research**

If I were to modify a part of my video analysis, I would collect more years of data from both DCI and BOA competitions. I would also interview high school directors and ask if the bent-knee glide step is utilized for the reason of popularity, ease of cleaning (resulting in higher scoring), or both.

I would like to construct the videos in my case study with more detail regarding each part of a step. I believe that I defined the parts of a step more intricately in this paper than in my videos. By using more specific terminology and definitions, I could have transferred the intricacies of the technique to my teaching, thereby unifying the marching technique of the band even further.

If I were to add to the research topic, I would focus on how marching affects parts of the body. I would compare and contrast how ergonomic each marching style is. To further

investigate the physical effects, I would work with a physical therapist or other medical professional. Also, I would work with an athletic trainer to find stretches or other exercise to prevent marching injuries. The marching season is demanding, and the body works to overcome unnatural motions and positions. If I were to use the knowledge and research of experts on the body, I could create a productive and safe environment for mine and others' future ensembles.

### **Conclusion**

Based on my research, popularity and higher competitive placements are not dependent on marching styles. Marching technique appears to be a creative and pedagogical choice. In the situation of competitive ensembles, one may favor glide step. When teaching a college marching ensemble, one may stick to years of tradition. My analysis did not produce a blanket answer for all types of ensembles. The "best" technique could not be determined from the specific ensembles I researched, nor the case study I conducted. If anything, the thesis resulted in more questions that I had not previously raised.

Rather than label the study as inconclusive, I will use it as a baseline. I learned from my research and experience. As a future music educator, this study has allowed me to develop resources for my own ensemble, as well as hone my ability to teach a large group.

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