The Interdependent Musicianship Model: Centering Musicians in Collegiate Band Rehearsals

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Abstract

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Currently, wind band rehearsal structures are very conductor-centric; conductors serve as the primary musical problem solvers in these ensembles. Musicians in ensembles aren't given the opportunity to practice skills commonly held by conductors. Previous attempts at centering musicians in rehearsals typically fall short due to lack of depth in instruction and limitations in conductors' time and resources. Further, conductors do not explicitly teach prerequisite communication and social skills needed for musician-centric rehearsals. When combined with concepts from student-centered learning, Distributed Leadership theory provides a novel foundation to build a pedagogical model intended to distribute conductor responsibilities to musicians in collegiate ensembles. My proposed Interdependent Musicianship Model will provide a scaffolded method for conductors and ensemble musicians to contribute equally to musical creativity and problem solving by building skill sets within the domains of social

dynamics, aural awareness, and musical analysis. Developing interdependent musicianship in their ensembles will require conductors to gradually shift from using controlling functions of conducting and pedagogy to functions that release control, model metacognitive processes for musicians, and create various leadership trainings to give their ensembles opportunities to practice new social and interdependent musicianship skills. Progress through the Interdependent Musicianship Model is sustained through building of self-efficacy and is made simpler through use of self- and peer assessments.

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Dedication

First, to all the students that I have ever had or ever will have. The most important thing I can do with my professional life is to help you discover and realize the potential each of you hold, both as musicians and human beings. This document aims to serve both of those ends.

Second, to my mom and dad. My first and best teachers. You have always encouraged me, supported me, and showed me how to lead with love. You also made me stay in high school marching band when I wanted to quit, because band camp would interrupt my summer. That single decision to persist in music has had more impact on my life than perhaps any other. Thank you. I'm lucky to have you, and I love you both more than words can say.

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Chapter 1: Introduction

I have had the great fortune of learning how to teach and conduct from a long list of excellent educators and musicians. During my student teaching, I worked with one of the most thoughtful musicians and cultivators of classroom culture that I've ever met. His name is Mike, and when he taught, Mike held everyone to a high standard: his students, his staff, his parent group, and his administrators. His ensembles came to rehearsals ready to collaborate, ready to learn and grow, and ready to push one another toward excellence. They performed masterworks for the wind band at the highest level of artistry. I grew as a musician and educator more during that period than during any other part of my musical education, due in no small part to Mike's personality, openness, wisdom, and high expectations.

One of the most striking aspects of Mike's ensembles were his relationships he fostered with his students, and how those relationships led to musical excellence. When I was learning to teach and conduct with Mike, one of his flute students in his top ensemble challenged me. She stopped my rehearsal, corrected another student's technique, and ceded "control" back to me. She was, of course, correct in everything she said to her peer, but this moment has stuck with me as a conductor. At first, my ego was a bit hurt. Who was this student, after all, to stop *my* rehearsal so she could say her piece? And what must Mike and the other students think of me for not having control of *my* rehearsal? Mike, as it turns out, was watching and loved the interaction. He told me later that *this* was his goal as a music educator, to get his students to the point where they could speak, with a common vocabulary, about music to each other in a way that was meaningful and appropriate. I asked Mike how he cultivated that. He told me that relationships were key, as was trusting students with certain aspects of their learning. He pointed out that while the flautist's actions *could* be interpreted as stepping on my toes, he asked me why the

information was right coming from me but wrong coming from her. I had no answer, and this lesson has become a core aspect of my educational philosophy.

I attempted to replicate this sort of equalized relationship during my time teaching middle school band. However, whenever I asked my students to give me feedback on their playing, or make comments on what they were hearing, I found my efforts were unsuccessful. I felt as though I was missing something. Upon later reflection, I had failed to teach my students *how* to execute all the tasks I was setting for them to encourage interdependent musical thinking. I had not provided the requisite skill practice or the cognitive tools for them to be successful. The longer I taught, the more I learned how to gradually distribute and share leadership and rehearsal ownership to my student musicians.

Seeing how leadership could be changed and utilized during my time working with various marching bands convinced me that it was the key to developing a more centralized system for student musicians. Leadership training is about providing the skill sets necessary for communication, collaboration, handling disagreements with civility, and building trusting relationships. I researched leadership capacities in the wind band ecology, and its potential impact on musicianship, but consistently came up with results that suggested that there was no correlation. This went against everything I believed, observed, and experienced, so I sought an explanation as to why there was no cause or correlation.

I decided to shift my focus and instead sought a leadership theory that was already more in alignment with how the wind band functions as a social network. My search took me to Distributed Leadership (Spillane, 2006), where leadership functions as a quality of the interactions between individuals in an organization rather than the function of duties and positions that one person holds. It was this theory of Distributed Leadership that led to the

writing of this document and allowed me a foundation from which to build the theoretical and pedagogical system of Interdependent Musicianship.

I believe that students need to be central to the music making process. They need to be engaged in critical problem solving, communication, and musical decision making. This document is a major first step in a lifelong pursuit to those ends. It focuses on the unique social aspects of wind bands, built upon the foundations of distributed leadership and leadership development research, to elevate the role of student musicians in the rehearsal process. The model I propose in this document is my effort to make the experience I had in my student teaching available to all conductors and musicians, elevating and enriching their musical experiences.

Statement of the Problem

Currently, conductors are the primary musical problem-solvers in wind bands at the secondary and post-secondary levels. In rehearsals, conductors are responsible for selecting repertoire, score study, detecting errors, providing constructive feedback to students, and teaching technical and conceptual ideas and skills, amongst other duties and responsibilities (Graulty, 2010; Gumm, 2023; Kennedy, 2020; Lewis, 2012; Morrison & Demorest, 2012; Stanley, 2023). Students' roles in wind bands vary; usually, students are relegated to being responsible for preparing and performing their individual parts, with occasional independent small ensemble playing, compositional projects, and in the case of student leaders, managerial tasks (taking attendance and organizing music libraries) and peer teaching (Dobson & Gaunt, 2015; Dodson, 1989; Goff, 2016; Melton, 2012). Collegiate programs in instrumental music education focus heavily on teaching skills of conducting, rehearsal methodology, error detection, score study, classroom management, and individual instrumental performance techniques; in

short, collegiate programs tend to teach skills typically practiced by conductors. If students had an opportunity to utilize deeper level analysis and critical problem solving techniques in rehearsals, they may be less reliant on conductors to facilitate those skills (Bazan, 2011).

Student-centered pedagogies have been well developed outside of music in other educational domains. Scholarship and practical methodologies in student-centered learning exist in general education settings (Cornelius-White & Harbaugh, 2010; Doyle, 2011), post-secondary teaching (Hoidn, 2017), and even in information and library sciences (Klipfel & Cook, 2017). However, a distinct pedagogy proven through practice has yet to be well-established in the domain of instrumental music. Several areas of music scholarship currently seek to center student musicians in the rehearsal process, including methods of extending musical understanding (Burke, 2023; Dodson, 1989; Goff, 2016), democratic practice (Dodson, 1989; Scherer, 2020, 2023; Stanley, 2023), and musical independence (Duke, 2012; Roesler, 2017; Shieh & Allsup, 2016; Weidner, 2015, 2018, 2020). Despite these efforts, band directors tend to reject these student-centered approaches to instrumental ensemble rehearsals for a variety of reasons (Bazan, 2011; Dodson, 1989; Hedgecoth, 2018; Louth, 2022; McNamara, 2019; Scherer, 2023). Further, there is no established pedagogical system in music that teaches foundational skills in communication and awareness that would serve to support these student-centered methods.

Allsup & Benedict (2008) argue that instrumental music in the United States is built around oppressive systems for student musicians, entrenched in a self-fulfilling prophecy of tradition through the way new conductors learn from older ones. Morally, to truly allow students to develop autonomy and ownership over their musical learning, the system for teaching and leading wind bands must change. Allsup further states that as bands rely on external scrutiny for

their justification (by other conductors, administrators, parents, and the community), the literature and "concert-as-curriculum" culture that band subsists within is not focused on the student musicians. Rather, focuses upon conductors perpetuating what they believe a wind band *should* be (Allsup, 2012). He goes on to ask a very poignant question:

> If the interests of band students are not apparent, and if the band director focuses learning around the predeterminations of quality literature, musicianship, competition, technique, and half-time shows and concerts, a sociological leap logically ensues. Why should students be involved in school music when everything youths ostensibly desire is available outside of school and enjoyed on their own terms? (Allsup, 2012, p.181)

The search for a musician-centered rehearsal pedagogy then becomes one not only of moral imperative, but also one of ensuring the longevity of music education via large ensemble participation.

Despite the prevalence of conductor-centric ensemble rehearsals (Louth, 2022), music educators and conductors have shown interest in utilizing musician-centered techniques in their rehearsals (Bazan, 2011). However, the results and outcomes of these rehearsals are mixed. Some techniques, especially those that involve posing questions for musician input and decision making, are still conductor-centric in that the conductor has to lead the student to the critical questions, and the focus always returns to the conductor after an interaction (Temple, 2010). This is further supported in Bazan (2011), who found that when conductors utilize and seek musician-centric techniques, they often inadvertently use largely conductor-centric techniques. Other band directors and conductors cite external forces as a challenge in implementing musician-centered techniques, such as "administrative pressures, changes in class scheduling, a recent budget crisis in the school, and state-mandated testing" (Bazan, 2011, p. 41). Louth (2022) echoes these sentiments and adds that lack of teaching personnel makes musician-centered teaching difficult, especially in more rural schools and schools with fewer resources and financial support.

Many attempts to center musicians in the rehearsal process tend to focus on the growth of the individual. The wind band ecosystem is, inherently, a social environment (Carver, 2019; Ma & Hall, 2018; Matthews, 2017; Melton, 2012; Weidner, 2015; Weren et al., 2017). Professional ensembles highlight the importance of this social interaction as a part of the rehearsal process. However, even professional musicians attempting to audition for professional ensembles tend to lack the social awareness necessary to interact with their peers in a way that ensemble performance dictates (Dobson & Gaunt, 2015). Weidner (2020) defines preconditions of musician-centered rehearsal spaces to include musical fundamentals, social relationships, and "professional" skills (sometimes called 21st century skills). However, many of the metacognitive and social skills needed to achieve these preconditions are not a part any explicit musical curriculum. This also seems to be a challenge of some conductors; they don't know how to implement the skills in their students necessary to achieve a state in their ensemble that would allow for musician-centered practice (Hedgecoth, 2018). Leadership training offers a way to develop skills in musicians that would foster necessary communication and collaboration skills (Eich, 2008; Fisher, 2021; Girgenti, 2018). However, there are few, if any, resources that blend leadership development and musical practice into the fabric of the wind band rehearsal to foster a socio-musical skillset.

Purpose of the Document

The purpose of this document is to outline a codified and scaffolded pedagogic model that would allow wind conductors to transition to and sustain a musician-centered rehearsal environment. This system, which I call the Interdependent Musicianship Model, is based on current best-practices in student-centered curriculum design and is modeled after how professional musical ensembles interact socially. It seeks to intentionally build skills in musical

analysis, aural awareness, and social dynamics by distributing typically conductor-held rehearsal elements to musicians. The Interdependent Musicianship Model (IMM) shares musical responsibility equally between the conductor and the musicians to model how many professional ensembles function.

The IMM is new and unique in that it incorporates leadership theory and practice into ensemble rehearsal pedagogy. Previous studies regarding leadership in musical ensembles show little to no correlation between presence of leadership traits in individuals and musical achievement (Boerner & Von Streit, 2005; Montalvo, 2019; Price & Weiss, 2013; Sutherland & Cartwright, 2022). Only when ensemble relationships are factored in does leadership presence show any correlation with ensemble musical achievement (Boerner & Von Streit, 2007; Lewis, 2012; Weren et al., 2017; Ye, 2023; Zhu & Akhtar, 2014). The theory of Distributed Leadership defines leadership as an outcome of positive relationships between two or more individuals, rather than as a trait or an action of an individual as it is defined in most "heroic" theories of leadership (Spillane, 2006). Distributed Leadership Theory is used in the IMM because it describes how to utilize the mutual interaction and simultaneous leadership present in large musical ensembles.

In addition to outlining the Interdependent Musicianship Model, this document also offers a practical application of the model to collegiate wind band settings. I offer several tools for conductor use to help facilitate implementing the IMM in their ensembles, including:

- Formative self-assessments for musicians
- A framework for designing leadership development curricula for college wind bands
- Recommendations of how to gradually shift conducting gesture, pedagogy, and organization of the rehearsal environment

- A skill-based syllabus to track musician learning and inform future teaching.

The goal is to provide a flexible, yet structured, method for collegiate concert bands and marching bands to incorporate the IMM seamlessly into an ensemble rehearsal ecosystem. This would allow the conductor-musician relationships to grow and change organically over time without massively disrupting the way that ensembles currently function, thus allowing them to shift to a musician-centric rehearsal environment at a pace that is appropriate for the membership of any given ensemble. Also, future conductors often model their own teaching behavior on how they were taught themselves (Allsup & Benedict, 2008). Thus, in focusing on the collegiate rehearsal environment, the IMM could become an integrated part of how conductors of all levels learn to lead ensembles, allowing for a global change in pedagogy to occur.

The Interdependent Musicianship Model focuses on fostering interactions between rehearsal stakeholders through the implementation of Distributed Leadership theory. By focusing on teaching core elements within the domains of musical analysis, aural awareness, and social dynamics, the IMM extends previous attempts to center musicians in the wind band rehearsal. The term “interdependence” was chosen specifically to highlight the nature of both ensemble rehearsals and non-music-focused research in student-centered learning; rehearsal stakeholders rely on one another to prepare and perform their own parts separately yet together, and those interlocking parts influence one another in a very interconnected way (Spillane, 2006). Musicians can perform their own parts independently, but performing music with others or for others is, at its core, a very interdependent activity. In the body of research and practice that seeks a more student-centered rehearsal atmosphere, the IMM looks to fill gaps in the research by focusing on the social interactions and musical intersections of musicians, conductors, and the musical material itself (Lewis, 2012).

Method and Research Questions

This document utilizes non-empirical methods to propose a musician-centered methodology for approaching wind band rehearsals at the collegiate level. According to Dan (2017):

> Non-empirical methods can be divided into two categories. On the one hand are methods meant to review the progress in a certain field of research (e.g., systematic literature review, meta-analysis). On the other hand there are non-empirical methods that draw on personal observations, reflection on current events, and/or the authority or experience of the author (e.g., critical studies, editor's introduction). (p.1)

I combine an extensive literature review with theoretical applications of the literature in a practice-centered model of rehearsal methodology. While empirical methods could be useful in validating the proposed IMM, the extensive nature of the reviewed literature naturally provides rationale and support for a theoretical model of rehearsal pedagogy. Further, I support the IMM with my own personal experiences and the lived experiences of other conductors, validating the model's foundation in current practice (Empirical, n.d.). This allows the IMM to function as an extension of current practice, rather than a completely new pedagogy, potentially easing the transition to its use.

This document is guided by lines of inquiry and gaps in the reviewed literature. Each chapter poses several "guiding questions", which serve to focus the scope of each chapters' contents. These guiding questions are posed at the beginning of each chapter and are answered throughout the course of each chapter. The specific guiding questions are detailed in the next section alongside the description of the layout of the document. However, several overarching research questions inform the scope of this document. These research questions are meant to

address benefits and practical applications of the IMM and are answered in full in the concluding chapter of this document. Those questions are:

1. How does the IMM address shortcomings of previous attempts to center musicians in wind band rehearsal?

2. What benefits might the IMM provide to collegiate musicians?

3. How might the IMM benefit conductors hoping to center musicians in their rehearsals?

Layout of the Document

This document is laid out over nine total chapters. Chapters two through five encompass literature reviews across several related areas of study. Chapter six details the design and function of the IMM in full, including how musicians might utilize the model. Chapter seven describes how conductors adapt to the IMM, and provides tools for them to more easily implement the model with their ensembles. Chapter eight describes how the IMM might look in the collegiate band setting using prior experiences. The final chapter addresses the above research questions, affirms contributions the IMM makes to music education and conducting, describes possible limitations to the model and this document, and finally recommends avenues for future research. The table below outlines each chapter's purpose and guiding questions.

Table 1. *Layout of the Document.*

Chapter	***Title*** **/ Purpose**	**Guiding Questions**
2	*Student-Centered Learning* / Literature review examining fundamental concepts in centering students in educational spaces	1. *What are the foundations of student-centered learning??* 2. *What are common instructional techniques used in student-centered learning?* 3. *How could a teacher transform their learning environment to be more learner-centered?*

Table 1 *(continued)*

3	*The Current State of Student-Centered Learning in Instrumental Music Ensembles* / Literature review examining current techniques used to center musicians in instrumental ensembles	1. *How have researchers and conductors implemented musician-centered techniques into wind band rehearsals?* 2. *What are the benefits and drawbacks of each musician-centered technique?* 3. *Why are musician-centered techniques not more widely used in wind band rehearsals?*
4	*Professional Ensemble Practice and Social Interaction in Collegiate Wind Bands* / Literature review examining the importance of social interaction in both professional and collegiate instrumental ensembles	1. *Which qualities and processes do musicians utilize in professional or semi-professional ensembles to collaboratively make music?* 2. *What roles do social/ collaborative skills play in non-professional ensembles in affecting ensemble musicians' goals and performance outcomes?*
5	*Distributed Leadership as a Foundation for Musician-Centered Rehearsals* / Literature review of various theoretical leadership concepts, and an examination of Distributed Leadership theory and its applications to the IMM	1. *What influence does leadership have in musical ensembles?* 2. *How can Distributed Leadership be defined and implemented as a framework to center musicians in the collegiate wind band rehearsal space?*
6	*The Interdependent Musicianship Model* / Theoretical model description, including an overview of the IMM's design and structure, how musicians could use the model, and potential outcomes of its use	1. *How is interdependent musicianship defined and distinct from previous musician-centric rehearsal strategies?* 2. *How does the IMM's organization and structure allow elements of conductor responsibilities to be distributed to musicians?*

Table 1 *(continued)*

7	*Conductor Applications of the Interdependent Musicianship Model /* Theoretical application of the IMM for conductors, including how conductors might adopt the IMM and implement it in their ensembles	1. *How does a conductor's role change as they progress their ensemble through the IMM?* 2. *How might a conductor measure a collegiate ensemble's progress through the IMM?*
8	*The Interdependent Musicianship Model in the Collegiate Band Setting /* Examination of how the IMM might look in practice in a college band setting, including an example from a marching band rehearsal, a musical leadership development program, and a proposed syllabus of skills and concepts	1. *What might the IMM look like when implemented into a collegiate band setting?* 2. *How could a conductor organize a leadership development program for their collegiate ensemble that fits with a distributed leadership philosophy?* 3. *What would a curriculum look like with elements of the IMM mixed in with traditionally-taught concepts in a collegiate ensemble?*
9	*Conclusions /* Summary of findings and interdependent connections between elements of reviewed literature, including addressing overarching research questions and recommending future research	1. *How does the IMM address shortcomings of previous attempts to center musicians in wind band rehearsal?* 2. *What benefits might the IMM provide to collegiate musicians?* 3. *How might the IMM benefit conductors hoping to center musicians in their rehearsals?*

Chapter 2: Student-Centered Learning

Student-centered learning is an educational philosophy that purports to focus education on student needs and interests. Student-centered learning (or SCL) is an outgrowth of progressivist educational philosophies, humanism, and constructivism (Blumberg, 2009; Cornelius-White & Harbaugh, 2010; Kaput, 2018), and is a rejection of the concept of hierarchical management as applied to education. The push to re-center education on students, rather than on the curriculum, is relatively recent, coming into vogue within the last 60 years or so. Educational analyst in policy and educational evaluation Krista Kaput championed a call for student-centered learning to be more widespread: "It's time to design a system that takes into account students' interests, learning styles, cultural identities, life experiences, and personal challenges. It's time to design a system that not only sets all students up for success but that is also equitable and meets their unique needs" (Kaput, 2018, p. 7). This echoes a definition given by McCombs and Whisler (1997, p.9) as cited in Henson (2003):

> The perspective that couples a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) with a focus on learning (the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners.) This dual focus, then, informs and drives educational decision-making (p.5).

Both definitions above detail two aspects of SCL: focus on the student as a unique person having unique perspectives given their life experience and identities, and a focus on the curriculum content in making it relatable to the student to motivate and hold the student's interest and inquiry. This chapter will continue to examine SCL through the relationship of the whole-person and their connection to the curriculum, and will address the following guiding questions:

1. *What are the foundations of student-centered learning, considering perspectives from historical educational philosophers and foundational educational research?*
2. *What are common instructional techniques used in student-centered learning?*
3. *How could a teacher transform their learning environment to be more learner-centered?*

Foundations of Student-Centered Learning

Historical Foundations of Student-Centered Learning

Student-centered learning is not a new concept. Several European philosophers were discussing foundational concepts to student-centered learning in child psychology and education as early as the seventeenth century. English philosopher John Locke (1632-1704) described the mind at birth as a blank slate, or *tabula rasa.* He believed that the mind would be filled through a person's experiences, their feelings about those experiences, and their reflections on those experiences (Henson, 2003). Similarly, French philosopher Jean Jacques Rousseau believed that children should be allowed to experience the consequences of their actions rather than receive physical punishment from adults reprimanding undesirable behavior. His ideas, dictated through his book *Emile*, outlined a method of education that allowed children to experience an "education that was natural, child-centered, and experienced-based" (Henson, 2003, p.7). Swiss educator and philosopher Johann Pestalozzi was inspired by *Emile,* and his educational system sought to educate children physically, mentally, emotionally, by mirroring a nurturing home where students learn through experience (like Locke's ideas).

Despite a strong philosophical foundation in Europe, student-centered learning in the United States did not strongly develop until the twentieth century. This was due largely to the teacher-centric models of religious education that dominated the early American educational landscape (Henson, 2003; Mark & Gary, 2007). Francis Parker, a Civil War Colonel, studied

education in Europe, where he became familiar with the student-centered philosophies of Locke, Rousseau, and Pestalozzi. Upon returning to the United States in 1875, Parker became superintendent of schools in Quincy, Massachusetts, where he implemented inquiry and discovery-based teaching techniques (Henson, 2003). Parker's success brought great national attention to the "Quincy System", where effort was focused more on the development of the child than imparting knowledge of the content. In 1901, Parker became dean of the first School of Education at the University of Chicago, where he met John Dewey, who was the head of the Department of Philosophy, Psychology, and Pedagogy within the School of Education. Dewey continued Parker's work, and would go on to greatly advance the notion of student-centered learning. Dewey believed in problem-based learning in which students would be presented with authentic problems that would challenge the students' understanding of the world, and the resolution of the problem would lead to a reconstructed understanding of their reality and the world around them (Cornelius-White & Harbaugh, 2010). Dewey also believed that education involved a social element, in which engagement with their peers would prepare students to positively engage with society throughout their life (Henson, 2003).

Philosophical Foundations of Student-Centered Learning

Much of the student-centered learning praxis comes from two central ideas: humanism and constructivism. Humanistic education draws on the beliefs of the aforementioned philosophers by seeking to develop the whole person through education. Humanistic education sees the teacher as someone who facilitates learning through developing interpersonal relationships in their classrooms (Cornelius-White & Harbaugh, 2010). As both Kaput (2018) and Henson (2003) mention, there is a strong focus on the experience and perspectives of the

individual learner in SCL. Thus, SCL utilizes humanism by focusing learning on individual experiences in the following ways:

- Developing the teacher-student relationship to create self-actualized learners (or, a person who can rely on all of their intellectual, emotional, and empathetic resources as a human being to recognize their full potential)
- Using interpersonal relationships to develop democratic understanding and foster cooperation between learners
- Differentiating instruction and being flexible in facilitating learning
- Fostering the concept of being a life-long learner (Cornelius-White & Harbaugh, 2010)

Humanism, then, offers an ethical and practical foundation for SCL. It seeks to ensure that every student's experiences are validated, and that content is made relevant to each learner. Constructivism has the same goals but is considered through the lens of *how* the content is delivered and presented to the student.

Constructivism is the idea that meaning and knowledge are constructed based on experience, reflection, and reorganizing one's understanding of the world around them (Cornelius-White & Harbaugh, 2010; Fosnot & Perry, 2005). Before constructivism, *behaviorism* taught that learners gain knowledge as they progress through biological stages of development and respond to physical stimuli, and *maturationism* is a theory that learners are able to understand distinct levels of conceptual knowledge based on different developmental stages, unlocking different levels of biological programming (Fosnot & Perry, 2005). Constructivist thought differs from these other theories of learning in that our conceptual information and cognitive development is constantly being challenged and updated based on our experiences and

ability to reconcile those experiences with previously-held beliefs. The basis of constructivism stems from the research of Jean Piaget and Lev Vygotsky.

Jean Piaget believed that people understand the world based on two processes- assimilation and accommodation. Assimilation describes the idea of using previous experience to understand new information from the world (Cornelius-White & Harbaugh, 2010). For example, a child with a dog at home may see a horse for the first time and think it's a dog, given it also has fur, four legs, and a tail. This concept of the dog is called a schema, or a current understanding of a concept based on all available information. According to Piaget, we learn when we experience cognitive dissonance. As we seek balance and organization of our experiences, we learn to accommodate new information and reorganize our schema. The child from the earlier example may learn that horses have longer necks, and are taller and faster than dogs, allowing them to accommodate new information, update their schema of both dogs and horses, and now assimilate other information about dogs and horses as they continue to experience them and grow to understand more.

Lev Vygotsky's research detailed that learning is socially constructed. We learn by interacting with others and observing behaviors, and we value learning things that are culturally relevant. Social interaction, thus, leads to change and development (Doolittle, 1995; Vygotsky, 1978). Vygotsky championed the teaching of metacognitive strategies, or techniques that could help a student self-regulate their own learning, allowing them access to the tools to be constantly learning (Cornelius-White & Harbaugh, 2010). He promoted the structuring and organizing of information in formal teaching by discussing the "Zone of Proximal Development" (Vygotsky, 1978). The zone of proximal development, or ZPD, is a dynamic space in which students are capable of learning new concepts with help from a more experienced or knowledgeable person,

usually a teacher, but other researchers argue that peer learning can also be used (Doolittle, 1995). There are thus three distinct parts to the ZPD: the level in which students can perform unassisted, the level in which students can perform with assistance, and the level in which students would struggle, even with assistance. The goal of using the ZPD in constructivist education is to structure learning so that most students are operating within the level in which they can perform with assistance, *based on* information that they can now handle without assistance. In a music setting, this would be the equivalent of having already taught quarter note pulsation (and having that pulsation be mastered by most students) to teach them how to count a half note using a series of two quarter-note pulsations tied together.

Piaget's notion of accommodation and assimilation, and Vygotsky's ZPD build a significant basis form which constructivist education operates. Students are encouraged to use projects and areas of learning that they identify as engaging to create knowledge and concepts that teachers are seeking to facilitate. Student-centered learning is strongly based within this concept of constructivism, allowing students autonomy to create their own learning. Henson (2003) outlines six dispositions that student-centered learning ought to follow as an outgrowth of both humanist and constructivist thought:

1. Education should be experience-based.
2. Each individual learner's own unique qualities and dispositions should be considered when planning a curriculum.
3. The learner's perspective should shape the curriculum.
4. Learners' curiosity should be fed and nurtured.
5. Learning is best when it involves emotions.
6. The learning environment should be free from fear (p.14-15).

Similarly, Kaput (2018) outlines seven principles of student-centered learning, though based more in humanist concepts than Henson's:

1. Positive Relationships: students have a positive relationship with the adults who teach, guide, and challenge them
2. Whole-Person Needs: a student's biological, physiological, and safety needs are met
3. Positive Identity: students are welcomed into the learning space for who they are, and they develop a positive sense of belonging with their learning space and peers
4. Student Ownership and Agency: teachers serve as facilitators and guides to students freely pursuing their interests
5. Real-World Relevant: student learn to solve problems that they will experience in their lives outside of school
6. Competency Progression: students progress at their own rate as they demonstrate concept mastery with support of their teacher or peers
7. Anytime, Anywhere: students are provided the skills to learn anywhere outside of school, and are motivated to do so

Both Henson's (2003) and Kaput's (2018) dispositions and principles demonstrate that student-centered learning must consider both the curriculum and the experiences of the student. They align with John Dewey's early progressivist educational philosophy and adhere to the important advances made by both Piaget and Vygotsky in the realm of education. The next section will discuss how teacher roles change in student centered environments, as well as popular teaching techniques to implement it into the learning environment.

Student-Centered Instructional Techniques

While much of the instruction in a SCL environment must be flexible due to catering to the individual students' needs, there have been developed best-practices in terms of utilizing student-centered techniques in a classroom environment. The techniques included in this section are not comprehensive, nor do they capture the entire scope of SCL teaching practices. The techniques included in this section have been selected due to their proven effectiveness in the general education classroom and their potential applicability to an instrumental music rehearsal environment and thus, their inclusion in the Interdependent Musicianship Model. Specifically, this section will detail how teachers' roles change in a SCL environment, the technique of scaffolding in introducing new concepts, and how skill-based education works in a student-centered learning environment.

Redefining Teacher Roles

In learning environments where students are seen as receptacles for knowledge (in more behaviorist teaching environments, specifically), the curriculum guides much of the teacher's behavior. Teachers in these environments act as masters of their subject; lecture reigns supreme, and students are assessed on their ability demonstrate mastery as defined by the content and the instructor (Fosnot & Perry, 2005). Cornelius-White and Harbaugh (2010) found that teachers could greatly influence learners in SCL environments by shifting the focus of their instruction to include cognitive and metacognitive techniques, including emotional and motivational efforts in their teaching, and developing social and personal growth. Empathy and trust-building behavior on the part of teachers was also shown to be influential to positive student outcomes in SCL environments (Cornelius-White & Harbaugh, 2010; Doyle, 2011; Klipfel & Cook, 2017; Mayer, 1999). Authenticity and genuine interest in students' interest allows teachers to connect with

their students, providing a strong foundation for SCL (Klipfel & Cook, 2017). The notion of authenticity is particularly important in the music setting. Authentic learning allows students to address content-focused problems in a real-life setting, similar to how apprentices study with master craftsmen (Doyle, 2011). At the college level, this is largely how music-majors study with their applied instrumental faculty (Daniel & Parkes, 2019). Thus, authentic learning, behavior, and leadership could be an effective and seamless way for music teachers and conductors to reexamine their transparency and behavior in rehearsals with the intent of transitioning toward a more student-centered environment.

In her textbook for implementing student-centered teaching at the college level, Dr. Phyllis Blumberg (2009) outlines six components for how the role of the instructor can support SCL. Those components are:

1. Creation of an environment for learning.
2. Alignment of course components across difficulty level.
3. Teaching or learning methods are appropriate for student learning goals.
4. Activities involve student, instructor, and content interactions.
5. Articulation of SMART objectives and goals (SMART stands for Specific, Measurable, Attainable, Realistic, Time-oriented)
6. Motivation of students to learn.

These six components help an instructor ascertain the student-centricity of their course and course objectives. Blumberg (2009) provides helpful rubrics in her text for instructors to utilize in evaluating how student-centered one's classroom actually is. These rubrics, if adapted to an instrumental setting, would be useful to utilize in a transition to SCL environments.

Overwhelmingly, the most commonly-cited role for a teacher in a SCL environment is that of a facilitator (Blumberg, 2009; Cornelius-White & Harbaugh, 2010; Doyle, 2011; Klipfel & Cook, 2017; Morrison & Demorest, 2012; Weidner, 2020). As a facilitator, an instructor takes a lesser role in direct instruction, and guides activities designed to lead students to construction of their own understanding of the relevant content. Facilitation involves drawing out responses from students to cause them to think in a certain vein or mode without influencing their response in a right-or-wrong fashion. Facilitation is a learned skill and requires slightly altered planning from typical lesson planning, focusing on the student perspective (Doyle, 2011). Facilitation requires that a teacher be well versed in their content so that no matter the route that students take in engaging with the material, the teacher facilitator can still direct them to important and relevant information. Students may resist this role at first, as they are used to the teacher making all of the pedagogical decisions (Wright, 2011). Doyle (2011) outlines a four-step process for teachers transitioning into a facilitator role:

1. Write out course objectives, including a timeline of when students should demonstrate mastery, as well as resources that the teacher may have to provide to guide students in their learning activities.
2. Form an action plan of how students will work with one another, how much class time should be devoted to what activities, and what students might do within their activities (anticipating different outcomes).
3. Anticipating what additional practice students may need if they are unable to meet objectives in a timely manner, including what resources to introduce them to, and when in the timeline it would be appropriate to introduce them.

4. Giving meaningful, authentic feedback. This feedback should be framed so students see the benefit of it, should focus on process and instruction more than outcomes, should be specific and timely to the task, should be in language that students understand, and should not be in excess to overwhelm the student.

Outside of academic planning, facilitators also need to reflect the values and character that they hope to impart to their students in their own teaching (Eich, 2008). Facilitator-teachers should express warmth, develop trust through optimism and high expectations, create empathetic relationships with students, and exhibit realness and authenticity (Cornelius-White & Harbaugh, 2010). These traits are very close to the positive psychological capacities of hope, resilience, optimism, and efficacy often found in strong leaders (Luthans & Youssef-Morgan, 2017). Indeed, there are many connections between the role of a facilitator in education and in the field of leadership development. This facilitator role as it relates to leadership development and music instruction will be further discussed in chapter seven.

Scaffolding

Scaffolding is an important teaching technique within student-centered learning, and is a foundational aspect of the IMM. Scaffolding refers to structuring instruction so that assistance is given within a student's ZPD, or the area that they can learn something with expert assistance. Sometimes, a teacher might perform aspects of learning or learning processes that a student cannot perform, or is not yet ready to perform (Mayer, 1999). Teachers must be aware of when these student supports are needed, and when they need to be gradually removed. Essentially, scaffolding allows learning to always function within a students' ZPD, challenging them enough so they don't get bored, but keeping them well supported so they don't become frustrated with their learning (Kaput, 2018).

Scaffolding can take many different forms. Kaput (2018) suggests that scaffolding can involve outlining currently-known information with a student to predict what new information might look like, or leading questions to move student dialogue in a logical and somewhat-planned manner. Mayer (1999) identifies three forms of scaffolding: reciprocal teaching, cooperative learning, and participatory modeling. Reciprocal teaching involves the teacher guiding student dialogue and discovery by modeling certain cognitive processes, then handing off that process to the students, fading to a facilitator role and helping students learn to ask higher quality questions. Cooperative learning involves small groups of students who differ in academic ability assigned to work on a single task with the intention that students are motivated to help one another learn the material, possibly through motivational incentives like shared grades. Cooperative learning is structured in terms of group rewards, where a group is given incentives together, and individual accountability, where each person is held responsible for contributing to the group. With this level of accountability, group members feel a greater sense of task satisfaction through a higher level of interdependence (Doolittle, 1995). Finally, participatory modeling involves a teacher demonstrating cognitive processes of an expert, and students modeling their cognitive processes for one another in a similar way for feedback, reflection, and improvement.

One of the more popularly utilized scaffolding techniques is cognitive apprenticeship (Collins et al., 1987; Mayer, 1999). Cognitive apprenticeship, more widely used in mathematics and reading education, is a guided-experience-based pedagogy through which teachers demonstrate how they use cognitive and metacognitive processes to problem-solve, and is focused on decontextualizing knowledge so that it may be transferred to other settings (Collins et al., 1987, pp. 4-5). Three teaching strategies are popularly used in cognitive apprenticeship:

- Modeling- Showing students how an expert carries out a task so the students have a cognitive image of what successful and contextual problem-solving looks like.
- Coaching- Observing students while they perform a task, and offering feedback, reminders, redirections, and scaffolded concepts to help their performance closely match the expert's modeled performance.
- Fading- Understanding the necessary scaffolded supports that must be in place for a student to successfully navigate a previously unfamiliar situation, and gradually removing those supports once students are developmentally ready for them to be gone, demonstrated in the coaching phase.

Collins et al. situate cognitive apprenticeship within constructivist learning and include expertise as a necessary component of learning. Cognitive apprenticeship also serves to motivate students and encourages cooperative problem solving as a necessary part of educating students in metacognitive processes of their own learning. Weidner (2018, 2020) uses cognitive apprenticeship to encourage SCL in music ensembles, and I utilize it as a method to scaffold skill elements within the IMM.

Skill Learning

In constructivist thought, students learn through action. Skill-based learning is largely the same. To develop skill-based knowledge and techniques, students must be given clear instruction, be given opportunity and safe space to practice those skills and provided with direct and immediate feedback. Skill learning comes in three distinct stages (Anderson, 1993). First, the cognitive stage is when a student works from instructions and verbalizes each step to solidify it within memory. This repetition of knowledge verbally is called declarative knowledge (Anderson, 1993). In the associative stage, students can carry out physical steps without

verbalizing them. They have internalized the declarative knowledge and have begun transferring it into procedural knowledge. Eventually, these steps become so internalized that the collective steps may be grouped together into a higher order process. This is called the autonomous stage (Mayer, 1999). In a musical context, young musicians may have to verbalize note names and physically count lines and spaces to determine the letter name of a note. They then begin to internalize a specific note name and physical place on the staff with the fingering of their instrument. Eventually, students learn to read the staff, and can focus on other music-literacy details, like note length, articulation, dynamics, and so on.

The two most important aspects of skill-learning (and any learning, really) are retention and transfer. Retention describes a student's ability to retain salient information, as described above in progressing to the autonomous stage (Klipfel & Cook, 2017). Transfer occurs when students apply their knowledge to unfamiliar settings (Cornelius-White & Harbaugh, 2010). When engaging in skill learning, part of that process is discovering when certain skills will become salient. Many skills, especially within the music domain, can often be taught through a spiral curriculum. American psychologist Jerome Bruner described the spiral curriculum as such:

> …successful efforts to teach highly structured bodies of knowledge, like mathematics, physical sciences, and even the field of history often took the form of a metamorphic spiral in which at some simple level a set of ideas or operations were introduced in a rather intuitive way and, once mastered in that spirit, were then revisited and reconstrued in a more formal or operational way, then being connected with other knowledge, the mastery at this stage then being carried one step higher to a new level of formal or operational rigor and to a broader level of abstraction and comprehensiveness. The end state of this process was eventual mastery of the connexity and structure of a large body of knowledge… (cited in Harden, 1999, p.141)

Bruner, despite his long run-on sentence, describes a curriculum in which students revisit common topics on a deeper level each time. In a spiral curriculum, topics are revisited

with increasing levels of difficulty, new learning is related to previously learned content (as is common with Vygotsky's ZPD), and students gradually increase competence with each "pass" on the spiral. Spiral curricula are especially relevant to music, especially when studied over a long period of time. The spiral curriculum allows students to advance their skill sets by expanding upon grounded themes or topics.

Toward Student-Centered Learning

Effects of Student-Centered Learning

Student-centered learning is a beneficial system that offers numerous benefits for students' learning and development outcomes. An early experiment with progressive education in the United States, known as the "Eight Year Study" found the following benefits of a student-centered approach to education:

- Higher grades
- Development of intellectual curiosity and creativity
- Increased drive, motivation, and leadership aptitude
- Heightened awareness of global events
- Greater sense of objectivity (Henson, 2003, p.10)

Demonstrated above, even early attempts at SCL showed growth in academic achievement, development of the "whole person", and professional, 'soft' skills. More recent research supports these findings, and extends them. SCL can also enhance memory recall, reduce student stress, and help develop emotional self-regulation (Doyle, 2011).

Students involved in their own learning tend to develop a deeper connection to the curriculum and their peers. Higher levels of engagement in SCL often results in more relevant, authentic learning for students. They experience a greater amount of depth in content and retain

more knowledge (Kaput, 2018). Due to the very nature of SCL encouraging collaborative learning, students in a SCL environment develop more trusting and connected relationships with their peers (Klipfel & Cook, 2017). SCL also results in greater levels of intrinsic motivation in students (Wright, 2011).

SCL has positive societal impacts that benefit racial and socioeconomic equity. In 2014, a cross-case analysis of four urban California schools investigated student growth in student-centered environments (Darling-Hammond et al., 2014, in Kaput, 2018). These four schools served primarily low-income students from underrepresented racial backgrounds for whom English was a secondary language. The analysis found that the schools practicing SCL overperformed compared to other schools in the area who served similar populations in the areas of graduation rates, GPA, college prep course completion, and college admissions. Latino, English-language learners, and low-income students tested 10-24 percent higher on standardized tests than the state averages. Graduation rates for black students were 30 percent higher than state averages. College persistence rates were well above national averages for students who were first-generation college students. Students claimed that relationship-building, high academic standards, deeper learning, and academic relevance to their lives – all hallmarks of SCL – were the primary contributors to their collegiate success (Kaput, 2018). Not only does SCL provide numerous academic and social benefits, but it would also seem to serve a moral end in promoting social justice and equity. Student-centered learning could be an avenue to combat the oppression in instrumental music education that Allsup & Benedict (2008) mention, and will be discussed further, in the context of wind band rehearsals, in chapter three.

Collegiate-Level Student-Centered Learning

While still somewhat rare, SCL at the collegiate level is becoming more commonplace. Students expect to be taught by master teachers and content experts who will prepare them in their given field of study. However, in terms of engaging with content themselves, college students can be timid and anxious rather than confident and willing to take risks (G. B. Wright, 2011). When engaging these students, it is best to gradually increase power given to students and start with providing autonomy through simple choice. Students might choose how to demonstrate their learning, which assignments to engage in, or even determine how they are to be assessed (Blumberg, 2009; Hoidn, 2017; Wright, 2011). When ceding power to students, it is important that instructors place themselves in an advisor role while encouraging students to have a voice in their own education.

It is important that students not only learn the content itself, but learn how to engage with the content and apply it in context. In many fields, content is continuously evolving (Blumberg, 2009). By being presented with metacognitive techniques to understand how they learn, students can become lifelong learners and learn to assimilate new information as it arises in their field. Further, it becomes helpful if students understand why content and context are relevant. This is helpful when students are asked to engage in cross-curricular courses outside of, but relevant to, their major area of study (Blumberg, 2009).

Historical trends show that, as a college education became more accessible to the masses (especially through the twentieth century), students became less capable in handling their own autonomy or taking responsibility over their own learning (Blumberg, 2009). However, in a SCL environment, the responsibility of learning *does* pass to the student. The responsibility is on faculty to design courses in such a way that students are able to do this (Wright, 2011).

Instructors can utilize problem-based learning, which utilizes small groups and peer-accountability as part of a graded structure to ensure that students persist and contribute to their learning (Sarrazin, 2019; G. B. Wright, 2011). Students should also learn how to self-assess their own learning styles and techniques, take stock of their educational strengths and weaknesses, and develop information literacy skills inherent to their content area. In short, they should enhance their self-reflection and self-awareness skills (Blumberg, 2009).

Finally, in a collegiate SCL environment, the process and purpose of evaluation must change. Often, evaluation serves as a primary motivator for student success; students are primarily motivated by getting higher grades in traditional, teacher-centered environments (Wright, 2011). In a SCL environment, studies have found that more frequent, formative assessments (rather than fewer summative assessments) that are linked to authentic practice in their field of study result in greater retention of information and greater satisfaction with ones' own learning (Blumberg, 2009; Wright, 2011). It is also useful to provide students with multiple opportunities to demonstrate their mastery of the material. With multiple assessment opportunities, students are allowed to progress at their own natural rate of learning, can learn from their mistakes, and deepen their own learning of content, especially when self or peer assessment is involved (Blumberg, 2009).

Restructuring Collegiate Learning Environments Toward SCL

The change to learner-centered environments must happen gradually, and the final section of this chapter details how several educators and scholars have implemented that transition. First, Blumberg (2009) provides a comprehensive text regarding implementing five areas of student-centricity in collegiate education. Second, I detail Hoidn's (2017) model of developing a student-centered collegiate curriculum. Finally, I discuss Brian Weidner's (2019)

method of "disruption" at the collegiate level to integrate student-centric approaches in the field of music education.

Blumberg's text, *Developing Learner-Centered Teaching: A Practical Guide for Faculty* (2009), utilizes comprehensive rubrics for analyzing student-centered learning environments. These rubrics are consistently rated from teacher-centered, to transitioning, to student-centered and allow teachers to see where they're at in terms of implementing student-centered practices in their classroom. Blumberg's rubrics are supportive of other scholarship describing the formation of student-centered spaces. Cornelius-White and Harbaugh (2010) describe a four-stage process of change that classrooms might undergo when transitioning to a SCL environment. This four-stage process, based loosely from Tuckman's (1965) four stages of group formation, describes a traditional teacher-directed space, a "re-norming" phase in which instructors are re-socialized and buy-in to SCL, followed by a phase of student re-socialization, and finally, a synergistic space in which SCL can thrive. I utilize Blumberg's rubrics in my own conceptualization of creating an SCL environment in the collegiate instrumental ensemble through the Interdependent Musicianship Model, found in Appendix B.

Different types of college students may require different motivations in developing college SCL environments. Less-motivated students often struggle in adapting to student-centered environments. They may require some additional instruction in metacognitive techniques and in gaining autonomy over their grading. Nontraditional, adult students have varying levels of experience, expertise, and self-regulation abilities, and benefit from more authentic assessment (Cornelius-White & Harbaugh, 2010). Conversely, students in their first year of college often lack self-regulation abilities and being able to schedule their time to plan assignments. They may need more help developing those skills. Finally, and particularly relevant

to students involved with music ensembles, large enrollments of student would need to be divided into smaller groups for effective collaborative groupwork, and peer learning and teaching would play a significant role in student-centered learning in these environments. Graduate teaching-assistants would be helpful in facilitating SCL classrooms, though they may also experience difficulty transitioning to teaching these environments (Wright et al., 2011).

Sabine Hoidn (2017) developed a model of curricular design for student-centered learning environments built from a review of an extensive series of papers detailing the subject. Hoidn's model consists of three major agents in the SCL environment: 1) students as co-authors and partners in curriculum creation, 2) instructors who cultivate content, content learning strategies, and who cultivate a community of learners, and 3) the content material itself, which needs to be relevant and challenging to students to deepen learning. The environment ought to be cultivated to be supportive and productive, producing lifelong learners and intrinsic motivation. Finally, the course should have flexible structure, activities to encourage participation, open-ended assignments and formative assessments, and established routines and norms for interpersonal interaction (p.345). The secondary goals of this model (outside of grasping course content and metacognitive learning techniques) include:

- The ability to transfer concepts and information to new contexts
- The development of self-regulated learning strategies in students, and
- Students' identity development as engaged professionals within their academic community and vocation.

Hoidn found that effective instructors in SLC environments were skilled at scaffolding both content and metacognitive strategies that students would use. They also were able to cultivate welcoming environments that support student engagement and provide continual,

direct, and timely feedback. These instructors were found to have used four common teaching techniques effective in fostering student-centered classrooms:

- Developing problem-solving techniques in small groups through student-led inquiry.
- Teacher-led problem solving in large group instruction.
- Small and large group discussions and dialogue regarding content, metacognitive practice, and broad concepts that allow students to engage effectively with content and one-another.
- Lecturing, metatalk (talking about one's process out loud) and modeling process (p.358-359).

Weidner (2019), in an article regarding instituting student-centered practice in a music education program at the collegiate level, mentions that he gradually introduced the concept of a SCL environment through a technique he calls 'disruption'. He details how, in teacher education programs, young teachers will model their eventual practice on how they were taught in school, and (to a lesser degree) how they were taught in their college courses. This is in alignment with Allsup & Benedict's (2008) 'Problem of Tradition', in which teachers perpetuate problematic behaviors because it's how they were taught, and subsequently, how they were taught to teach. Weidner recommends changing this cycle by providing a disrupting event that ultimately changes a students' usual experience in education. They have a new experience, preferably scaffolded across multiple courses and levels, and a new pedagogy is demonstrated to show these students how to implement this new, disrupting course structure. Weidner discusses using this technique in a brass methods course. The first semester introduced new classroom structures and strategies, including students having choices over course content, content engagement, and assessment practices. The instructor provided course goals and gave students instructional

strategies for them to be successful. In the second semester of the course, students were much more engaged with the content and with one another once they felt comfortable engaging in a student-centered environment, especially after being given metacognitive strategies to handle the disruption.

Despite being given the tools for success, some students felt uncomfortable in the elevated role that SCL places them in (Weidner, 2019; Hoidn, 2017; Wright, 2011). These are not the only obstacles in college-level SCL course. Faculty and higher-education systems are exceptionally resistant to change, especially with a strong tradition of instructor-led lectures and shows of expertise (Hoidn, 2017). With many college courses, there is also very limited contact time between instructors and student; norms, expectations, and peer engagement take a significant amount of time that many college courses don't have. This is where Weidner's (2019) solution of a multi-semester implementation could offer a solution to instructors claiming time as a roadblock to SCL. To implement SCL across collegiate programs, Hoidn (2017) recommends promoting scholarship of teaching amongst faculty who may not otherwise possess much teacher training. She also suggests providing support for faculty program-wide, within a department, college, or school.

Summary

Student-centered learning is based in humanist and constructivist thought, based on the work of John Dewey, Jean Piaget, and Lev Vygotsky. It places education in the hands of students when teachers transition their role to that of facilitator, transitioning from the "sage on the stage to the guide on the side" (Wright, 2011, p.93). In SCL environments, instructors scaffold content to build upon earlier lessons, giving students necessary skills to meet future challenges with the assistance of the more expert teacher. Skill-based learning is centered around a spiral curriculum,

in which students deepen their understanding and competency as concepts are added to foundational skills. At the collegiate level, teachers must encourage students to take responsibility for their learning, despite their possible reluctance to do so. Instructors can transition to a student-centered environment over time through purposeful development of ideas, metacognitive abilities, and social skill development. Institutional support for SCL is paramount, as multiple factors make it challenging to implement with limited course contact time and reluctant-to-change faculty.

Chapter 3: The Current State of Musician-Centered Rehearsals

Given that most forms of music education in the United States occurs in large ensemble settings of band, orchestra, and choir, most student musicians are not asked, nor given the opportunity, to engage more deeply in the rehearsal process. Outside of the benefits of student-centered learning discussed in chapter two, the justification to implement this type of learning in the wind band rehearsal space is one not only of seeking more efficient practice, but one of moral imperative (Allsup, 2012). Many attempts have been made to institute musician-centered practices in the wind band setting, yet conductor-centric models remain the usual mode of operation in these ensembles. The question then becomes: Why are models of musician-centric learning not more widespread in the wind band rehearsal spaces in the United States? This question becomes even more poignant when one considers that student-centered learning is widely implemented in non-music courses with great success.

I introduce a new term in this chapter: musician-centered rehearsal. The term *musician-centered rehearsal* involves the concepts previously discussed regarding student-centered learning but are situated within the context of a wind band rehearsal. I chose to include this term for two reasons. First, while the IMM presented in this paper references collegiate musician-centered wind band rehearsals, it could feasibly be applied to any instrumental ensemble in any setting, amateur or professional. Thus, the term *musician* is more setting specific and all-encompassing than the term *student.* Second, while learning inevitably takes place in a wind band rehearsal, the goal of the IMM is to involve musicians more centrally in the rehearsal process, thus *rehearsal* is more specific to the IMM's goal than the term *learning.* Similarly, the terms *student* and *musician* are interchangeable in this paper, where *musician* focuses on the specific setting of the wind band rehearsal. The same is true for the terms *teacher* and *conductor*.

Three distinct methodologies suggesting how to implement student-centered learning in the instrumental ensemble arise from this scholarship reviewed in this chapter. These methods include:

- *Expansions of Musical Understanding*- methodologies that seek to broaden and expand student content knowledge and skills but are driven primarily by the conductor.
- *Democratic Practice*- teaching techniques that rely on student choice, usually through voting or dialogue, to make decisions in the ensemble rehearsal.
- *Musical Independence*- teaching techniques that attempt to encourage students to engage with the musical material, often with the goal of removing the need for a conductor.

The following guiding questions inform this chapter's contents:

1. *How have researchers and conductors implemented musician-centered techniques into wind band rehearsals?*
2. *What are the benefits and drawbacks of each musician-centered technique?*
3. *Why are musician-centered techniques not more widely used in wind band rehearsals?*

Expansions of Musical Understanding

In 1967, the Music Educators National Conference (MENC) held a symposium in Tanglewood, Massachusetts to discuss the future of music education in the United States, examining philosophy, goals, and teaching practices (Mark & Gary, 2007). The Tanglewood Symposium called for music education to be a core subject in American public schools, and afterward, generated a great deal of scholarship on best-practices in music education. This event was significant in music education as it generated a great deal of interest and self-reflection in examining how music is taught. Tanglewood sought to situate music education as a professional pursuit, justifying resources to be spent on training conductor-educators, entrenching music in

local communities, and establishing an aesthetic and humanism-centered curriculum (Choate, 1968). While the tenets of the Tanglewood Symposium did not explicitly call for teaching environments that were musician-centered, two of the tenets of the Tanglewood Declaration could be a foundation of musician-centered rehearsals:

- "Greater emphasis should be placed on helping the individual student fulfill his needs, goals, and potentials."
- "Programs of teacher education must be expanded and improved to provide music teachers who are specially equipped to teach high school courses in the history and literature of music, courses in the humanities and related arts, as well as teachers equipped to work with the very young, with adults, with the disadvantaged, and with the emotionally disturbed" (Choate, 1968, p.139).

Comprehensive Musicianship

Around the same time as the Tanglewood Symposium was the Contemporary Music Project for Creativity in Music Education (CMP). The goal of the CMP was to "modernize and broaden the quality and scope of music education on all levels" (MENC, 1965, p.3) While it focused particularly on bringing modern music into vogue for music education through the commissioning of new music, two major outcomes of the CMP were the development of the Comprehensive Musicianship curriculum (Abe, 1991) and a push to better reach underserved populations, especially racial minorities, in urban centers (Standifer, 2021).

Comprehensive Musicianship was a curriculum originally intended for implementation at the collegiate level that sought to include multiple areas of musical study for musical professionals. These included:

- Compositional processes and writing skills and improvisation.

- Music analysis and aural skills.
- [Music] History and literature and performance skills.
- Music theory and application of theoretical principles (MENC, 1965)

The goal was to make music students more well-rounded and well-versed in all musical disciplines (Mark & Gary, 2007). The Comprehensive Musicianship curriculum marked the first time in which the stated goal was to provide students with "the means to seek and deal effectively with material outside and beyond his or her formal education in music" (Standifer, 2021, p. 8), or more colloquially, lifelong learning in music. In addition to being taught skills and concepts alone, music students also needed to be involved in the metacognitive process of how they acquire knowledge. The Comprehensive Musicianship curriculum inherently valued building connections between music and non-musical disciplines (Abe, 1991; Dodson, 1989). Today, many undergraduate collegiate music programs often require coursework in multiple music disciplines (such as piano, aural skills, theory, music history, etc), which could very well be an outcome of Comprehensive Musicianship implementation. Some music educators use Comprehensive Musicianship to deepen musicians' understanding of the pieces they perform, rather than just preparing them to perform a work without creating any deeper understanding of it (Brown, 2008). In this way, Comprehensive Musicianship becomes an effective teaching tool for creating musician-centered rehearsals.

Instructional materials have been created to implement Comprehensive Musicianship in wind band rehearsals. Most of these materials focus largely on expanding musician awareness of musical concepts such as teaching about disparate musical elements (such as tone, rhythm, texture, timbre, form, and style), while others describe how to teach about historical and theoretical foundations of musical works (Abe, 1991). Music educator Julie Brown developed

five steps to teach Comprehensive Musicianship to student-musicians: literature selection, musical analysis, developing goals and outcomes, outlining strategies to achieve the outcomes, and assessment of the outcome achievement (Brown, 2008). Brown's model is based on the tenants of constructivism and scaffolding, both hallmarks of student-centered learning strategies.

Scaffolding and Codified Systems

Several other methodologies have developed since Comprehensive Musicianship that also attempt to expand musicians' understanding of musical concepts. These models contain elements that are essential to building the IMM. Two such models are Edward Lisk's *Alternative Rehearsal Techniques* (Lisk, 2006) and John Pasquale's *Directed Listening Model* (Pasquale, 2008; Pasquale et al., 2020). Both approaches to wind band rehearsals seek to involve students more in the rehearsal process by helping students understand musical concepts and processes in a way that they can transfer the knowledge and skill to a practical rehearsal context. In both methods, concepts are scaffolded to introduce new material in a logical progression, so learning can build from prior knowledge.

Edward Lisk, a former music supervisor and band director in Oswego, NY, developed his *Alternative Rehearsal Techniques* to get his musicians to transfer knowledge gained in warm up activities to the pieces they perform. Largely, this system is an expansion of warm up activities that seek to give students increased understanding of the music they play, so they can recognize it in their performance music. Lisk (2006) further discusses the importance of structuring student learning so that each new concept builds on the one previous. He states:

> Effective learning is based on patterns and connection. When new material is encountered, the brain searches for meaningful patterns and seeks ways to incorporate, connect, and apply this information. As students build their performance vocabulary, it is key that new material is presented as an outgrowth of what was previously learned, so that they can recognize patterns and find context to apply

> each new piece of information. This is what I refer to as *connected learning.* Lessons must be structured accordingly to guarantee student success. (Lisk, 2006, p.17-18)

Lisk's concept of connected learning would seem to pull from Piaget's concept of assimilation and accommodation (Cornelius-White & Harbaugh, 2010), as well as Vygotsky's concept of scaffolded instruction (Doolittle, 1995; Vygotsky, 1978). Lisk goes on to describe the importance of metacognition, or being able to think about how we think, and providing students with tools to gain more independence over their own learning. According to Lisk, the expanded musical understanding provided through his *Alternative Rehearsal Techniques* gives students the tools to engage with their own musical material and make informed decisions on their own. This is a foundational idea of musical independence and a principle of the IMM. Musicians must learn more foundational knowledge, concepts, and skills if they are to broaden and deepen their knowledge to more advanced areas of study. Those connections and constructed knowledge that musicians develop are the first stage to developing musical sense on their own.

John Pasquale, Clinical Professor of Conducting and Director of the University of Michigan Marching Band, took a similar pedagogical approach with his *Directed Listening Hierarchy* (Pasquale, 2008) and later, his more developed book and method, *The Directed Listening Model* (Pasquale et al., 2020). Pasquale's method for conductors details how to approach wind band rehearsals, including instruction on his four components of pulse, sound production, comprehensive balance, and musicality. He also includes advice for running rehearsals, including how to approach ensembles at varying skill levels, how to structure rehearsals, and example exercises for conductors to run with their musicians.

Where Lisk's method focuses on applying musical concepts to practice, Pasquale's method focuses on teaching the conductor how to deconstruct and understand an ensemble's

sound to better direct their listening for rehearsal purposes. Pasquale details how this listening is structured:

> For improvement of ensemble sound, all performers, including the conductor, must have an aural image of sound before it is produced. This prerequisite aural image, based on a knowledge of instrument/ensemble pedagogy, musicology/performance practice, and score study, is then informed by the conceptual information presented in *The Directed Listening Model* and matched using the Listening Awareness Levels. (13)

Pasquale builds on the idea of scaffolding introduced in Lisk (2006) and on the ideas of Comprehensive Musicianship in deepening musician awareness of the musical structures that they perform. Pasquale also introduces his concept of Listening Awareness Levels, which focuses where the ensemble member is listening. Those levels are:

- Level 1: *The individual*. Each performer focuses on their sound only, or in the case of the conductor, they focus on a single person's sound.
- Level 2: *The individual in relation to the section*. Performers listen to their sounds as they relate to the people on either side of them, focusing on more group-oriented elements of performance (such as pulse, balance, and musicality). Conductors focus on the sounds of small groups and sections.
- Level 3: *The section in relation to the ensemble*. Here, individuals consider their sounds as they relate to their sections' sounds and the performance of the rest of the ensemble. The conductor considers the entire ensemble sound.

The inclusion of these listening levels is groundbreaking for musician-centered rehearsal practice. The directed listening that these levels provide moves from a space of more simple focus to greater complexity, which is essential in teaching students how to develop musical awareness (Sorenson, 2021). Further, in order to expect musicians to engage in active, focused

listening, their experiences must be scaffolded, and foundational information must be in place before expecting them to exhibit that skill independent of conductor-prompting (Burke, 2023).

Pasquale states that, with the application of his *Directed Listening Model,* wind band rehearsals "may lead to a more collaborative rehearsal space, where performers evaluate their own musical product, along with that of the ensemble, and are given more responsibility for their outcomes. This allows the rehearsal process to be expanded for greater self-analysis, self-correction, and independent decisions by the performers" (Pasquale et al., 2020, p. 167). Pasquale's *Directed Listening Model* stops in the explicit teaching of those collaborative, evaluative, and corrective skills. He also makes note that those skills are to be *self-evaluative* and lead to *self-correction.* In a truly collaborative environment, musicians would be evaluative of each other and be free to correct the errors of their fellow musicians.

Critical Questioning Techniques

Critical and focused questioning is a common technique in expanding musical understanding that is often utilized in the pursuit of achieving musician-centered rehearsals. Many of the student-centered strategies implemented as a result of Comprehensive Musicianship involve conductors asking content-related, process-related, or reflection-related questions to their students (Abe, 1991; Brown, 2008). Pasquale et al. (2020) uses this technique extensively, asking directed questions at every phase of a rehearsal to direct the focus and listening of the musicians. Dodson (1989) uses a similar technique to draw student attention toward specific aspects of their playing, asking them to identify and analyze certain aspects of ensemble playing. In his article, Dodson provides example questions to ask students to enhance their cognitive skills in rehearsal, such as asking students to compare rhythm patterns, or analyze a section based on how a single musician plays it, or having two instrument groups play a similar passage, and asking the

musicians to analyze which version they prefer, and why (Dodson, 1989). Dodson's extensive use of critical and practical questioning is affirmed in Louth (2022). Louth's study sought to glean perceptions and concerns from educators regarding their use of student-centered teaching in their ensembles (Louth, 2022). Louth found, in a case study of 8 middle and high school wind band conductors, that asking directed questions (usually with a predetermined answer) was the primary mode of the conductors utilizing student-centered instructional techniques.

The effectiveness of asking questions in a rehearsal to facilitate a musician-centered rehearsal environment depends on the context in which the question was asked. Questions that tend to be more open-ended engage students and are considered to be important in developing student engagement with musical material as they have a much more constructivist goal (Bazan, 2011). This finding is corroborated in several other studies, especially where confusion is purposefully introduced (Avolio & Hannah, 2008; Duke, 2012), when multiple students have the opportunity to contribute to answering the question by sharing knowledge (Slette, 2014), and when students have been taught how to transfer information from prior knowledge (Burke, 2023; Morrison & Demorest, 2012). Both asking questions and refraining from immediately answering musicians' questions were behaviors also found to increase musician problem-solving behaviors (Roesler, 2017), and in those contexts, could lead to a musician-centric rehearsal. Use of critical questioning becomes a useful tool to initiate and maintain musician-centered rehearsals.

Democratic Practice

Another common methodology in implementing musician-centered rehearsals are what I term "Democratic Practices". Often, tenants of democratic government and political practice are sought in the music classroom and ensemble space, both as a mode of teaching and to create more informed citizens. Many of these democratic teaching practices are credited to Thomas

Jefferson, who was an ardent believer that the best way to sustain a democracy was through a free, government-funded education, which created an informed citizenry. Brazilian political and educational philosopher Paulo Freire echoes this sentiment: “Democracy is taught and learned through the practice of democracy” (Freire, 1997, p.48).

Democratic practices make sense in the pursuit of a musician-centered rehearsal space, and the wind band is an ideal space for democratic learning (Morrison & Demorest, 2012). Musicians are afforded a greater voice in the processes of rehearsal, from selecting repertoire, guiding rehearsal focus, or even running the rehearsal themselves (Hedgecoth, 2018; McNamara, 2019; Scherer, 2020). Democracy has been implemented in other educational settings through the concepts of collaboration, decision-making, dialogue, exchanging ideas, participation, and the expression of choice and voice (McNamara, 2019). This section will define democratic practice and provide examples of democratic practices in ensemble spaces, touching on the concepts of autonomy and shared control, and how democratic practice provides an opportunity to serve as a vehicle for social justice through music education. Finally, I will describe conductor and student responses to democratic practices and detail their potential limitations.

Defining Democratic Practice

Defining democracy and democratic practice in instrumental ensembles has been a challenge for researchers and conductors alike (Hedgecoth, 2018; McNamara, 2019). In one of the more extensive dissertations on the subject of democratic practice, Dr. Shawn McNamara (2019) conducted three studies on perceptions of democracy at various levels of music education. He found that many directors defined democratic practices in terms of its more governmental and political definition, including voting, having choice, equality, and having one’s voice heard.

McNamara (2019) found, after surveying a wide number of conductors across the country (n=1109), that they conceptualized democratic practice in three ways:

- Through *students*, in considering student voice and choice, and "creating a sense of ownership amongst students" (p.119);
- Through *teachers***,** including highlighting the importance of teacher/conductor agency, voice, and choice, characterizing the conductor as a leader, and giving the conductor the autonomy to teach as an artist;
- Through *musical materials and activities,* including providing student choice in repertoire, and in utilizing music from a variety of backgrounds.

Some conductors define democratic practice in terms of the musician outcomes in their ensembles, such as introducing "the ideas of collaboration, creativity, and critical thinking to students during their beginning instrumental musical experiences while maintaining and building musical skill" (McNamara, 2019, p. 56). In the collegiate music setting, educators defined democratic practice as the "interdependence of all members of all members of the classroom" (McNamara, 2019, p.160) driven by the concept of learner-centered pedagogy, revolving around concepts of dialogue, expertise, musician input, collaborative music-making, and musician choice. In studying collegiate musicians' experiences with democratic processes, Scherer (2023) found that a defining feature of democratic practice was allowing musicians to share perspectives and challenge one another without direct interference from the conductor. Graulty (2010), however, advocated for keeping the conductor as an equal part of the rehearsal process utilizing democratic processes. He believed that allowing for musicians to have an equal say in ensemble process as the conductor would increase musicians' "sense of ownership, pride,

and responsibility in the uniquely wonderful act of ensemble music making—creating music with and between others" (Graulty, 2010, p. 55).

In his article "Toward a Transcultural Theory of Democracy for Instrumental Music Education," Leonard Tan (2014) proposes a theoretical framework to explain how instrumental ensembles may be conceived of through democracy. Tan's proposal combines philosophical principles from both the Chinese philosophy of Confucius and pragmatic American educational theories, especially that of John Dewey. This proposed framework, one of the more extensive in examining democratic practice in the wind band, involves five components: people, participation, equality, cooperation, and conflict. The final two aspects of Tan's framework, cooperation and conflict, are the most crucial to a musician-centered rehearsal, but also amongst the most challenging to implement.

The notion of "cooperation" is described as cooperation between conductors and musicians, and interestingly, Tan here argues that obedience in musicians is a part of cooperation and is essential for a democratic community to exist. He argues that people need to learn to lead and to follow, and that obedience ensures that followers will successfully fulfill their roles. Tan's concept of "conflict" is unique in the scholarship and claims that musicians learning to deal with conflict amicably and peacefully is central to creating a democratic atmosphere. Many musicians struggle with peer communication during efforts to create a collaborative and musician-centered rehearsal environment (Hedgecoth, 2018; Melton, 2012; Scherer, 2023; Shaw et al., 2024). More efforts in collaboration and conflict-solving communication are needed in ensemble instruction to realize these tenets of Tan's framework.

Sharing control of the ensemble with musicians to develop musician-autonomy is a common theme through the literature surrounding ensemble democratic practices. Scherer (2023)

found that collegiate musicians in democratically run rehearsals valued the shared opinions of their peers, saw increased engagement with the rehearsal, and developed a sense of ownership and musical agency. Musicians felt more comfortable with greater autonomy in rehearsals the longer they practiced in a democratic environment, and the more developed their individual musical skill level was (Hedgecoth, 2018; Scherer, 2023). Dialogue and open communication was also found to be critical in sharing control of the ensemble through voicing opinions on other musicians' playing, dictating possible musical sections to focus on rehearsing, recommending repertoire, or participating in peer-run sectionals and rehearsals (Hedgecoth, 2018; McNamara, 2019; Scherer, 2023). Scherer (2023) also found that prolonged engagement with democratic practice gives students the space to develop agency and advanced musicianship skills, especially when musicians engaged in democratic principles in small ensembles or in individual practice. In a musician-centered rehearsal, democratic practices are an excellent way to enhance musician autonomy and encourage musicians to share their voice.

Alternative Ensembles

A common solution situated within democratic practice for centering musicians in educational practice is to explore alternative instrumental ensemble formats. There is some consensus amongst educators that implementation of democratic practice ultimately leads to a conductor-less ensemble. Professional conductor-less groups such as the Orpheus Chamber Orchestra are founded on principles of shared ownership, collective voice and control, and placing the power in the hands of the musicians doing the work (Hedgecoth, 2018; Khodyakov, 2007). Hedgecoth (2018) studied the guiding principles of the Orpheus Orchestra and found that their "guidelines are operationalized in the following rules: management does not impose its vision on the musicians, disputes are settled by vote of all members, orchestra membership is

decided by current orchestra members, rehearsal interaction is a critical element with civility and trust valued as operating norms" (Hedgecoth, 2018, p.3). In studies that investigated conductor-less models, musicians were found to appreciate the degree of feedback they received from their peers and that they felt less like "windup toys' or 'robots' during the music preparation process" (Scherer, 2023). Despite the apparent fit of conductor-less models in a democratic paradigm, other studies conclude that a more balanced, re-imagined structure that holds input of conductors and musicians equally is more ideal for democratic practice (Hedgecoth, 2018; Scherer, 2023; Tan, 2014). In this way, a shared form of leadership becomes central to democratic practice (Hedgecoth, 2018).

In a 2003 study of mutual learning and democratic practice, Randall Allsup describes grappling with emergent conductor-musician shared ensemble leadership:

> The learning scenario described in this [study] required a level of trust that went beyond the neutral practices of normative music education. Our experience depended on acts of reciprocity and caring. I needed to teach *with* my students, rather than *to* my students. Sometimes, my opinion was solicited; frequently, I had to determine when to offer it unasked. If my ideas were rejected on occasion, it became an opportunity to learn something new from my participants. (p.34)

Thus, ensembles using democratic practices allow for growth in both musicians and in conductors. It is unlikely, given the prominence of wind band culture in the United States, that instrumental music education will experience a radical paradigm shift to smaller or alternative ensembles quickly, if at all (Allsup & Benedict, 2008). However, the learning of process, dialogue (Allsup, 2003; Burke, 2023) and shared leadership (Hedgecoth, 2018) are useful learning outcomes that musicians could practice in smaller groups or sectionals *within* the context of a large ensemble.-

Social Justice

An overwhelming number of conductors and scholars agree that a musician-centered ensemble is a moral and ethical goal for music education (Allsup & Benedict, 2008; Bazan, 2011; Dodson, 1989; Duke, 2012; Graulty, 2010; Louth, 2022; McNamara, 2019; Morrison & Demorest, 2012; Scherer, 2023, 2023; Shieh & Allsup, 2016; Tan, 2014; Weidner, 2015). American wind bands are situated primarily within the American education system, both at the secondary and collegiate levels. Therefore, the primary goal of band conductors ought to be different from that of a professional orchestral conductor; that is, education of musicians ought to be prioritized over performance. As established in this paper, this is not the current mode of wind band rehearsals (Allsup, 2012). In his article, *The Moral Ends of Band,* music educator and scholar Randall Allsup contends that often, conductors subject each group of students to the same principles, repertoire, and teaching year after year, rather than adapting the wind band to fit the group of students who populate it at any given time. He argues that "band as a formative, self-generating community, is a space that is slightly unknown, always different, and subsequently shaped anew by each generation of contributors" (Allsup, 2012, p.185). He concludes that perpetuating the wind band on the basis of tradition alone is fruitless and not educationally-sound, concluding that the only way to justify the continuation of the American band is to approach it from a moral framework and perspective.

There are elaborate moral issues that several music scholars bring up in how ensemble rehearsals (especially wind band rehearsals) are run. Music education scholars have described the relationship of the conductor to the musician to be similar to that of an oppressor to the oppressed (Allsup & Benedict, 2008; Freire, 1997; Tan, 2014). Conductors legitimize minimizing student voice in rehearsal because that has been the established way of running

rehearsals throughout this history of the wind band (Allsup, 2012; Tan, 2014). By deviating from that norm, conductors risk ostracization by their community. Music educator Cathy Benedict (2008) warns that "we do well to remind ourselves that legitimacy is a construct defined and wielded by those who perceive themselves as legitimate" (Allsup & Benedict, 2008, p.162). Her call to action is that there must be a break from this self-fulfilling cycle, and she offers democratic practice as a potential solution.

As a more pointed moral issue, democratic practice allows for a more diverse number of student voices and perspectives to be heard (McNamara, 2019). American instrumental ensembles tend to be predominately white, while Black, Hispanic, and Asian students, along with lower income and English-language learners, are much less likely to participate. However, when they do enroll in instrumental music programs, they increase their academic achievement and are more likely than their white peers to remain in the ensembles (Hale, 2024). Further, musicians are also more likely to feel motivated in ensembles when they have a say in which repertoire is performed (Morrison & Demorest, 2012) and when they feel that the music represents some aspect of their identity (Hale, 2024). Table 2 below represents the racial disparity in undergraduate, masters, and doctoral music programs, based on a 2021 report by Higher Education Arts Data Services. Democratic practices in musician-centered rehearsals, especially those that enhance student voices, could be a valuable way to enhance underrepresented and underserved voices in wind bands.

Table 2. *Collegiate Music Students Described by Race.*

	Male/Female	Number	Percentage
Institutions Reporting		607	%
	M	4,747	4.8

Black / African American	F	3,225	3.3
American Indian / Alaska Native	M	325	0.3
	F	224	0.2
Asian	M	2,380	2.4
	F	2,985	3
Hispanic (of any race)	M	7,177	7.3
	F	5,115	5.2
Native Hawaiian / Pacific Islander	M	169	0.2
	F	149	0.2
White	M	30,114	30.7
	F	30,034	30.6
Other / Ethnicity Not Reported	M	5,511	5.6
	F	5,930	6.0
Total		98,085	100.0

Note. Adapted from "Music Data Summaries 2020-2021" by Higher Education Arts Data Services Project. (2021). p. 116. National Association of Schools of Music.

At the time of writing this document, representation and issues of diversity, equity, and inclusion are at the heart of many conversations in the wind band community. Research is uncovering reasons for racial and socioeconomic gaps in people who are looking to pursue music at the college level (Higher Education Arts Data Services, 2021; Hale, 2024). Those reasons reveal a lack of cultural connection with the wind band community, and a lack of access to resources that tend to be culturally understood as necessary to auditioning to a collegiate music program, such as having participated in honor bands, private instruction, and a culturally-built hesitancy to participate in auditions (Abramo & Bernard, 2020). Due to the lack of representation in collegiate and professional spaces, conductors, composers, and professional musicians from underrepresented groups don't have the same privilege to be considered on their own merits but tend to be judged from the lens of race, gender, and identity in addition to their accomplishments (ie. An "Asian composer", or a "female conductor", as opposed to simply, a "composer", or a

"conductor"). These optics send a message of "othering" to students who share identities with these individuals (Leung, 2021). If *all* musicians are to be centered in rehearsals, then *all* musicians must be represented in the rehearsal process and materials.

Efforts have been made to correct these social injustices. These corrections fall under the aspect of democratic practice as they center on lifting student voice, cultivating student choice, and providing more equitable access to music education for all. One major effort that has been made in the wind band community is the push to implement works by underrepresented composers into the mainstream of wind band repertoire to "normalize" the presence of music of various diverse groups of composers, enhancing visibility and representation (Bowman, 2020; Frost, 2024). Curricular approaches of wind bands have been created and implemented to serve specific communities and combat inequity through music education. One approach in particular both reflects democratic concepts in principle and in practice. *El Sistema* is a Venezuelan philosophy of music education, developed by Dr. José Antonio Abreu in 1975, that uses classical music to center young musicians from impoverished and low socioeconomic areas in a community, and bring about social transformation through ensemble participation, accessibility, and human connection (Bolden et al., 2021; Booth, 2017).

El Sistema is a philosophy of ensemble music education that lacks a formal curriculum. The applied curricula are contingent on the communities in which the ensembles exist, and vary based on the needs of the people it serves (Booth, 2017). The primary goal of *El Sistema* was to enact social change through ensemble participation, in Venezuela's most impoverished communities, to provide an enriching and transformative musical experience to all children (What Is El Sistema?, 2025). *El Sistema* programs exist all around the world today (Bolden et al., 2021; Majno, 2012; Osborne et al., 2016). The core tenets of *El Sistema* align with many of the

previously discussed ideals for democratic practice in wind bands. Those ideals, according to Sistema-practitioner Eric Booth (2017), are:

- A focus on social change and access for all musicians
- Excellence, and focus on achievement through intense practice
- The use of ensemble to emulate a small community and society
- The conductor role including citizen, artist, teacher, and scholar
- Connection of community and family, especially in valuing community meeting spaces

El Sistema, is both a socially-focused and musically-focused program. Younger musicians are tutored by both older musicians and professionals. More experienced players are given advanced instruction to prepare them for potential conservatory study, but also to provide them the tools to support other musicians around them (Booth, 2017). The *El Sistema* model has been shown to increase quality-of-life measures for participating musicians and help with their musical skill, social-emotional development, and academic achievement (Bolden et al., 2021; Majno, 2012). Even after being implemented for a short time, musicians showed improvement in problem solving skills, self-esteem, and self-regulating behaviors. Further, their non-participating peers saw similar increases after having been surrounded by participating musicians (Osborne et al., 2016). *El Sistema* stands out in that it not only centers musicians in its philosophy and process, but it is also built *for* the musicians it serves. *El Sistema* is a program that reflects the values it teaches and is an example of what McNamara (2019) calls "embryonic democracy", where democratic practice is a fundamental aspect of how the ensemble functions, as well as a foundational principle to its purpose.

Responses to Democratic Practices

Musicians who experienced democratic practice in their wind band rehearsals had mixed responses. In rehearsals with democratic practices present, musicians reported that they valued the perspectives that emerged from engaging musical dialogue, and that they felt a greater sense of agency and ownership over the musical processes of rehearsal. Musicians also reported that they felt more comfortable engaging in peer-to-peer dialogue with time and practice (Scherer, 2020, 2023). Indeed, many musicians are initially uncomfortable with having autonomy over the decisions made in an ensemble rehearsal, and may need to be taught *how* to contribute to a more democratically run rehearsal (Burke, 2023; Hedgecoth, 2018). Some recommendations of how to approach this are to provide musicians "with clear expectations and parameters of communication, equity, and guidance, so that such a new type of collaborative rehearsal environment can succeed" (Hedgecoth, 2018).

Hedgecoth, in 2018, investigated collegiate concert band musician responses to a self-guided rehearsal environment. He found that musicians felt that self-guided, democratic rehearsals significantly increased their awareness of musical elements in the piece, and that they improved musically from the experience. Despite this apparent success, only half of the surveyed musicians in Hedgecoth's study expressed interest in continuing this model of rehearsal, and even fewer felt that it would be a useful model for other collegiate wind bands to follow. Over 75% of the surveyed musicians stated that they did not feel that their opinions were respected when shared in rehearsals, and nearly 40% did not feel free to express their opinions in the first place. Reflecting this negativity towards self-guided rehearsals in democratic settings, many of these musicians also felt that they did not have the opportunity to grow socially from the experience and felt that their time was not used efficiently. When allowed to provide

commentary about the experience, 95% of Hedgecoth's respondents received comments were negative about the experience and were very focused on negative social experiences and specific individuals having too much ego or too dominant of personalities.

Alternatively, in Scherer's 2023 study, collegiate musicians in a non-music-major concert band were surveyed regarding their feelings about sharing their musical perspectives. Scherer found that they valued the social experience of sharing musical perspectives, and that they engaged in more critical thinking when the conductor was not the only source of information. Clarified roles and expectations, prolonged exposure to more democratic models, and structures to allow for more equitable discussion and dialogue could potentially remedy some of the negativity that Hedgecoth found from his musicians (Khodyakov, 2008). The musician's perspectives show that, in using democratic practice in wind band rehearsals, musicians may actually benefit from balanced conductor input along with their own (Graulty, 2010; Scherer, 2020; Tan, 2014).

More experienced conductors tend to have mixed feelings about the practicality of democratic practices in their ensembles. Some conductors did not feel that democracy was important or relevant to their work with ensembles. In McNamara's (2019) studies of conductor reception to democratic practices, some conductors were not able to define democracy, and one stated "I do not see a correlation between democracy and teaching practices in music education". In the same study, of all conductors surveyed (n=998), 44.1% of conductors cited lack of time as a barrier to implementing democratic practices, while 16.1% cited a lack of experience, and about 2% cited a lack of interest. Scherer (2023) found that conductors were unsuccessful in implementing democratic practices because students lacked the necessary communication and conflict-resolution skills necessary to implement said skills. He also recommended that "initial

steps toward a democratic experience might include scaffolded experiences involving regularly recording rehearsals and discussing strengths and areas for improvement as individuals, sections, and as an ensemble. The development of a rehearsal procedures list from which students can select might be useful for students who might hear issues but be hesitant about providing solutions" (Scherer, 2023, p. 380). McNamara (2019) extends this list of initial goals in a democratic rehearsal, adding that collaboration, creativity, and critical thinking should be introduced early in tandem with building musical skills, and states that an ideal democratic rehearsal is one in which there is a hybridization of conductor and musician-centered learning.

Despite the negative attitudes of more experienced conductors, newer conductor attitudes regarding democratic practices tended to be relatively high (McNamara, 2019). They especially enjoyed the prospect of being able to engage their students at a deeper level. Despite this enthusiasm, many conductors did not know how to implement democratic practice organically in their ensembles. This mirrors newer conductors' attitudes towards methods of expanding musical understanding; they were enthusiastic about implementation, but fell short of achieving an effective musician-centered rehearsal (Shaw et al., 2024). Conductors found most success when they did not fade themselves completely out of the rehearsal process, but rather found balance and equal cooperation with their musicians (Graulty, 2010). Interestingly, several studies noted conductor behaviors that "could not be determined democratically," including determining rehearsal pace, phrasing, inflection, and musical nuance (Graulty, 2010), and doing the majority of musical thinking (Morrison & Demorest, 2012). I would counter that each of these elements are almost exclusively under the control of the musicians, highlighting that there are many skills that the conductor could still be transferring to musicians. As identified in several studies, conductors must work with their musicians to develop necessary social skills for individuals to

feel secure in participating in collaborative democratic practices. Without this training, musicians can struggle with democratic practice, and it can even hinder their musical learning.

Musical Independence

A final common theme of the academic literature surrounding musician-centered rehearsals is the goal of "Independent Musicianship" (or *musical independence*, as the two terms are used interchangeably in the literature). Despite independent musicianship being oft-cited as a goal of ensemble music education (Brown, 2008), the term lacks a unified, agreed-upon definition. Independent musicianship has been previously defined as developing tools and motivation to guide independent musical engagement (Morrison & Demorest, 2012), placing importance on musicians' thoughts and feelings regarding musical activity (Gumm, 1993), developing musical problem solving skills in musicians (Louth, 2022; Roesler, 2017), or more simply, being able to engage in music activities on one's own, irrespective of a conductor's presence (Weidner, 2015, 2018, 2020). Morrison & Demorest (2012) define musical independence as "making musical decisions that matter" (p. 31) but suggest that musicians must learn independence not only through "discrete skills and knowledge" (p.33) but rather, as a means to an end which allows the musicians to apply the knowledge in a meaningful and personally relevant way. Duke (2012) supports this idea that music learning must be meaningful when he describes that the learning of new concepts only occurs when the concept is owned and worked for by the musician without conductor assistance.

Musical independence differs from the other discussed themes. Where "expanding musical understanding" dealt mostly with enhancing musicians' understanding of their musical material, and "democratic practice" focused on enhancing musicians' autonomy in an ensemble, "independent musicianship" has a significant emphasis on musicians learning metacognitive

processes and engaging with musical material on their own. Of the three categories discussed, independent musicianship has the closest ties to constructivism, as defined in chapter two (Cornelius-White & Harbaugh, 2010). Much of the discussion surrounding musical independence includes the ability to engage with new musical material on one's own, and to make meaningful musical decisions as a result (Duke, 2012; Shieh & Allsup, 2016). Even the National Arts Standards, developed in 2014, focus on the achievements of the individual, rather than the ensemble, through the four music education standards of creating, performing, responding, and connecting (National Coalition for Arts Standards, 2025). Synthesizing these definitions, for the purpose of this paper, musical independence will be defined as "the process of utilizing self-regulation, metacognitive, and problem-solving skills to be able to make autonomous, informed, and meaningful musical decisions." The remainder of this chapter will discuss research centering around independent musicianship, including how conductor and musician roles change to support independent musicianship, how conductors and researchers develop independence in musicians, and how the technique of cognitive apprenticeship (Collins et al., 1987) can be utilized in developing independent musicianship.

Importance of Roles

There is significant discussion in the literature surrounding independent musicianship that talks about changing roles for conductors and musicians. Largely, this is the primary philosophy that independent musicianship methodologies use for transitioning band rehearsals from a conductor-centric to a musician-centric space. In the conductor-centric model, conductors maintain a great deal of responsibilities, including providing masterful conducting gestures, selecting and analyzing repertoire for performance, scaffolding technical and conceptual instruction for musicians, possessing familiarity with all instrument idiosyncrasies, and

possessing performance skills themselves (Morrison & Demorest, 2012). In fact, the breadth of requisite conductor education makes the conductor a potent musical expert in the ensemble rehearsal, capable of great efficiency. This is a possible argument in favor of conductor-centric rehearsals. Conductors hold the role of *musical expert,* and, in most cases, this role remains in musician-centered rehearsals.

Morrison & Demorest (2012) examine shifting roles of the conductor to facilitate a more musician-centric environment. In their comparative study examining practices of two choir instructors, they found that, in order to facilitate musician-centered rehearsals, the conductor's role had to expand to include that of an "expert and professionally trained collaborator" (p.15). Morrison & Demorest argue that large-scale ensemble decisions, such as repertoire selection, are challenging to place upon individual members, and that those sorts of decisions are better relegated to musicians in chamber ensembles, and conductors in large groups. In their view, developing independent musicians is more about facilitating transfer of musical knowledge, and providing musicians a space to do so. Student leadership is an excellent way to manage this, though they do warn that student leaders should be limited in the scope of their independent decision-making unless specific music-teaching skills are taught and developed.

Shieh & Allsup (2016), in their philosophical discussion of developing musical independence, argue that the role of the ensemble music classroom needs to change in order to foster independent musical thinking. They discuss creating independence "within" the ensemble, but also, "with/through/beyond" the ensemble (Shieh & Allsup, 2016, p.32). In short, this means that conductors should teach skills and strategies that allow students to engage with musical material in the band setting as it is commonly practiced, but also space ought to be made to allow musicians to engage with musical materials in a setting more applicable to the real world. This

echoes the sentiment in democratic practices to alter the ensemble music room altogether, favoring chamber music, modern garage band ensembles, and student-led groups (Morrison & Demorest, 2012). They recommend moving the wind band from being the center of a school's band program to being one of many music offerings, sometimes happening simultaneously in the same space. They refer to this as the role of the "Collective", and again, overlapping with sentiments of democratic practice, state that all ensemble musicians should have a role in shaping the direction of their own music making.

Alan Gumm (2023), in a review of his 30-years of research on conducting gestures and teaching practices, found that conductors' roles can shift fluidly in their practice, though this research does not specifically focus on musician-centric rehearsals. Gumm (2023) identified six functions of conducting gestures and eight teaching practices which fall on a continuum of control or release. Control gestures and practices center around a conductor asserting themselves within a rehearsal, while release practices are meant to relinquish control of musicianship to students. The conducting gestures and teaching practices are laid out in the table below, showing their correspondence to either control or release function. These various gesture-functions and teaching practices imply that conductors can utilize them purposefully in their work with musicians to dictate the degree to which they are passing off or sharing rehearsal responsibilities with their musicians.

Table 3. *Descriptions of Gumm's Conducting Gesture Functions and Music Teaching Approaches, and their Correspondence to Control or Release.*

Control / Release Function	Conducting (C) or Teaching (T) Approach	Item Description
Control	(C) Mechanical Precision	Musical clarity; Precise cues/cutoffs/time keeping
Control	(C) Motivational	Prepare musical events through attention; Reminders of musical action

Control	(C) Physical Technique	Mirror and model musicians' physical movements
Release	(C) Expressive	Reflection emotional intent; express phrasing, dynamics, and shape

Table 3 *(continued)*

Release	(C) Psychosocial	Use gestures to mime commonplace actions; Use emblems familiar to musicians
Release	(C) Unrestrained Tone	Lack of beat pattern; Gestures that communicate ease and relaxation; Gestures that purposefully reduce conductor-led information
Control	(T) Assertive Teaching	Provide direct feedback; Monitor behavior and classroom management; Enforce rules
Control	(T) Time Efficiency	Rehearsal pacing; Rehearsal preparation; Acting in favor of efficiency or time-on-task
Control	(T) Nonverbal Motivation	Use of body-language to communicate intent or direction
Control	(T) Positive Learning Environment	Student praise; Attend to students' needs and questions completely
Release	(T) Group Dynamics	Encouraging student-led rehearsal procedures; Peer work; Small ensembles
Release	(T) Music Concept Learning	Presenting conceptual music information; Encourage problem solving; Use of directed questioning
Release	(T) Artistic Music Performance	Using language, metaphor, and physical movement to describe music and musical ideas
Release	(T) Student Independence	Use of student dialogue; Encourage creativity; Discuss emotions

Note. Adapted from "*Music Motivation Depends on What to Motivate: Research Review of Gumm's Music Teaching and Conducting Models*" by A.J. Gumm, (2023). *Frontiers in Psychology, 14,* p. 1293872. https://doi.org/10.3389/fpsyg.2023.1293872

Interestingly, one of Gumm's music teaching approaches is labeled, explicitly, "student independence". However, in relation to this paper's definition of student independence, Gumm's approach seems to categorize musical independence more in line with democratic practices than other models of musical independence discussed in this paper. Indeed, Gumm's "release" functions relate strongly to notions of student autonomy, choice, voice, and collaborative problem solving- all hallmarks of democratic practice.

Gumm (2023) brings up another interesting factor in terms of the conductor's changing role in the ensemble over time. He contends that teachers experience three stages of transformation in their instructional practice, each in succeeding roles of greater release of control to student musicians. The first stage, "Teacher Dependent," takes place over the first several years of a conductor's career. This stage is heavily focused on conductors mastering classroom management and motivational strategies for students, learning to keep them on task more efficiently. Years eight and nine are what he calls the "Interdependent" stage. At this point, conductors shift their roles to be more vulnerable, and to share leadership and critical decision-making with students. Notably, this is also one of the only instances in the reviewed literature where interdependence, not independence, was described as a goal. At this stage, Gumm notes that roles of musicians and conductors are shared equally. Finally, after a decade of experience, conductors enter the "student independent" phase, where the role of the conductor is nearly completely diminished, and students have an extreme amount of autonomy in the ensemble rehearsal. Gumm warns that, at this point, conductors' roles can become so distant and disconnected from students that they risk losing social connection to their students, and as a result, a loss of respect and musical productivity. It is implied that the "interdependence" stage, rather than the "independence" stage, is an ideal balance of roles between conductors and musicians in an ensemble rehearsal.

Bazan (2011) utilized a metric created by Gumm (1993) to measure the presence of "student-centered instruction" versus "teacher-centered instruction" in three middle-school band conductors. His findings from this study support the notion that a balance of musician-centric and conductor-centric behavior is ideal in a wind band rehearsal environment. Bazan found that, conductor-centric behaviors were much more common in middle-school wind band rehearsals,

even if the conductors espoused belief in musician-centered practices. He found that conductors who were in favor of using musician-centered practices would shift the roles of the musicians to be more independent and less directed *after* large contests and concerts, during times of less deadline stress and external pressures from administration and community members. These musician-centered behaviors would include utilizing learning stations, student-run sectionals, directed critical-thinking questioning. It was also found that younger conductors were more ideological in their pedagogical approaches; that is, they would try more diligently to include musician-centered practice, but often lacked the expertise to implement their ideas into a performance-based classroom and rehearsal space (Bazan, 2011). Bazan here references research that discusses "adaptive expertise" versus "frustrated novices" (Bransford et al., 2005). A frustrated novice is an expert in their subject matter who has ideas of innovation and creativity and are excited to apply those new concepts to their field but lack the lived experience to apply those ideas in an efficient manner. "Routine experts" are the opposite- they apply routine, tried-and-true practices to situations without changing their own behavior, and usually receive consistent results. Bransford et al. (2005) describe "adaptive experts" as those individuals who both possess a substantial grasp of routine roles and an understanding of how to adopt new practices into those roles without sacrificing quality of outcomes. The move from frustrated novice to adaptive expert could describe another way that roles change in ensembles as conductors gain more experience (Bazan, 2011; Bransford et al., 2005; Gumm, 2023).

Bazan concludes that, especially as ensemble size increases, a truly effective rehearsal environment is one that utilizes a balance of musician-centric and conductor-centric behaviors. Bazan corroborates Gumm's (2023) notion that interdependence, rather than independence, may be a more realistic goal for instrumental ensembles in balancing these behaviors. However,

young musicians may be a non-ideal population to measure or introduce concepts of musical independence, especially when led by young teachers. Young conductors have likely not yet developed the routines necessary to move to the role of "adaptive experts" (Bransford et al., 2005), or have had the time to develop out of the "Teacher-dependent" phase of teaching music (Gumm, 2023). Also, considering that middle-school musicians haven't had time to practice skills to become adept utilizing them in new novel situations, conductor-centric practice may be necessary. Perhaps collegiate programs, who likely have musicians well-versed in more developed musical skill sets, would be a more appropriate environment to develop musician-centricity in rehearsals. These researchers do make a point that, although teaching musician-centered rehearsal practices can be "out of touch" from teaching techniques actually used (referring to conductor-centric practice), some of the skills that foster musical independence are still useful for musicians to learn (Louth, 2022).

Developing Independence in Musicians

Given the above discussion regarding feasibility of adopting practices involving musical independence in rehearsal spaces, it is relevant to discuss actual practice that conductors have used to instill musical independence in their students. As a precursor for independence to take place, musicians must be taught emotional and task-based self-regulation and practice strategies (Bazan, 2011) and problem-solving strategies (Roesler, 2017). A sufficient grasp of musical concepts must also occur for musicians to transfer those skills to new settings in meaningful ways (Regelski, 1969; Shieh & Allsup, 2016). Other researchers have specific strategies for developing musical independence, such as utilizing planned ambiguity in their teaching to encourage musicians to problem solve (Duke, 2012; Roesler, 2017), or utilizing cognitive

apprenticeship (Collins et al., 1987) to make space for musician independence (Weidner, 2015, 2018, 2020).

Independent problem solving is an important aspect of musical independence, as it focuses on a musicians' ability to self-regulate and guide their own learning. In two groundbreaking studies, Dr. Rebecca Roesler investigated how musicians solve musical problems, and what specific conductor behaviors preceded these episodes of problem solving. Through video analysis, Roesler studied 5 adolescent musicians and 44 collegiate musicians in private, one-on-one study with an expert music professor. She found five components of musical problem solving in nearly every subject she studied, both in musicians and teachers: 1) Establish goals, 2) Evaluate performance, 3) Conceive and consider options, 4)Generalize and apply principles, and, 5) Decide and act (Roesler, 2016).

Roesler found that, if musicians or teachers were deficient in any one of the above components, their ability to solve problems would be exceptionally hindered. She recommends training on each of the five categories to develop proficiency in the requisite areas of problem solving necessary for musical learning to happen. This research reinforces the claim by Shieh & Allsup (2016) that independence develops as a function of expertise- Roesler is simply adding here that expertise should be expanded to include her five problem-solving components.

Roesler extended her research by studying teacher behaviors that preceded these five musician-led problem solving components (Roesler, 2017). She argues that for musical independence through problem-solving to occur, music teachers need to scaffold instruction in musical problem solving. This research is useful in identifying behaviors that conductors can utilize to inspire musician-led problem solving. The six teacher-behaviors that preceded musician-problem-solving in Roesler's (2017) study were: 1) Varying specificity of directives, 2)

Varying specificity of feedback, 3) Conceiving and demonstrating contrasting options, 4) Stating principles, 5) Asking questions that invite practice of problem-solving skills, and 6) Deliberately refraining from solving the problem for learners. Roesler also found that musician involvement in problem solving increased the less the conductor did for college-age musicians. Similarly, she also discovered that decreasing specificity of feedback and directives served to decrease musicians' reliance on their conductors and could be utilized as a means of driving musicians to initiate problem-solving on their own, thus increasing their musical independence.

Duke's (2012) article supports Roesler's (2017) findings. He believes that "the more teachers correct students' errors, the less likely it is that those corrections will become a lasting part of students' thinking and behavior" (Duke, 2012, p. 37). While this method may be slower (a common criticism of musician-centric techniques), musicians are more likely to learn and transfer musically knowledge more readily if they learn things on their own with minimal conductor help. Duke describes error detection as musicians reconciling the discrepancies between musical intention versus outcomes, reflecting Piaget's concept of learning through assimilation and accommodation (Cornelius-White & Harbaugh, 2010). Duke advocates for teaching in the "Muddle", or a strategic confusion that introduces ambiguity to a situation where the students have the resources and abilities to problem solve. The "muddle" serves as a 3 step process: 1) Have intention, 2) perceive the discrepancy, then 3) change behavior. Students must be highly motivated in many cases to seek resolution to their problems through multiple failures, but Duke describes that this is an effective and efficient manner to inspire musical independence in musicians.

Cognitive Apprenticeship and Independence

Brian Weidner has perhaps the most extensive body on research on specifically developing musical independence in musicians. Weidner utilizes cognitive apprenticeship (Collins et al., 1987) in nearly all of his work with musical independence. In his 2015 study observing conductors valuing musical independence in their wind bands, Weidner describes musical independence as arising from a confluence of three elements: 1) the band environment, 2) teacher-moderated instruction, and 3) student-led engagement. He describes the environment as existing as a musical space, where musical concepts are explored, a non-musical space where social bonds develop, and an extra-musical space, where there is potential to teach and develop prerequisite skills needed to make musical decisions. Weidner found that teacher-moderated instruction set expectations for student problem solving through direct and critical questioning, gave space for independent decision making, and contained teacher-moderated modeling and coaching, as described in cognitive apprenticeship. Finally, students engaged with their own independence through diagnosing musical errors, solving musical issues, and making musical decisions that directed the curriculum and instructional practice. Weidner found that the high school band he observed used chamber music as a foundational tool to teach cognitive apprenticeship processes, and that the musicians' skills were allowed to develop and thrive because of the vast musical knowledge base of the conductor. This study marked one of the first instances of a musician-centric model being utilized that considered the conductor equally in its construction.

Weidner continued to build on these observations through his later articles. His 2018 article outlined cognitive apprenticeship processes as they relate to the wind band rehearsal space, and his 2020 article developed a grounded theory of musical independence using

cognitive apprenticeship as a foundation. Through this research, conductor and musician roles changed in tandem to each other. As conductors moved from instructors (modeling), to mediators (coaching), and finally to observers (fading), the musicians' learning experiences were dependent in the modeling phase, collaborative in the coaching phase, and finally independent in the fading phase (Weidner, 2018). Three preconditions of musical independence also arose from this research; musicians need to be proficient in their musical fundamentals, need to establish strong social relationships, and need to have developed a strong set of "21st century skills", including collaboration, teamwork, professionalism, respecting others' opinions, and communication (Weidner, 2020). Weidner found that, while students were generally supportive of one-another's decision making and rehearsals exhibited high levels of autonomy, many of the errors were misidentified and recommended solutions were often ineffective. Weidner recommends continued conductor support through cycles of modeling, coaching, and fading to continue to give musicians practice and space to refine their peer-feedback. This is supportive of Bazan (2011) and Gumm's (2023) assertion that the ideal balance in a rehearsal space is one of equal conductor and musician input.

Summary

The concept of a musician-centered rehearsal is not a new one. Previous attempts have been made to eschew previous modalities of conductor-centric rehearsal techniques in favor of ones that center students in the music-making process. Early attempts involved expanding musicians' notions of comprehensive musicianship, introducing music theory, music history, ear training, and musicology into the rehearsal space. Attempts were made to unify vocabulary and codify musical performance skills to facilitate more fluid communication and understanding between conductors and musicians. Attempts were made to utilize democratic practices in

rehearsals to enhance musicians' autonomy and voice, in addition to serving social justice roles within the music education community. Musical independence has remained the most popular pursuit of musician-centric rehearsals and focused on shifting roles in the rehearsal space of conductors and musicians and places an increased emphasis on the development of effective problem-solving techniques. Despite these many and varied attempts, musician-centered rehearsals remain rare in practice. Conductors cite issues of lacking time and resources, inexperience in modified teaching techniques, fear of breaking from tradition or coming up short in performance quality, and not viewing musician-centered rehearsals as a realistic goal of ensemble rehearsing. Looking at models of professional ensembles who execute musician-centered rehearsals on a high level could yield helpful information about how to implement these techniques at the collegiate level.

Chapter 4: Professional Ensemble Practice and Social Interaction in Collegiate Wind Bands

Previous attempts to center musicians in the wind band rehearsal process have focused on expanding musicians' understanding of musical concepts, making space for musicians to share their voice, and developing problem solving skills to tackle musical problems independently. However, all of these previous attempts lacked a focus on building prerequisite social skills necessary for interdependent collaborative musical work to take place. Musicians who work in the highest level of ensemble performance (usually, professional orchestras or semi-professional wind bands) demonstrate that social skills are amongst the most important factor in being a successful and productive ensemble musician (Dobson & Gaunt, 2015; Kennedy, 2020; Khodyakov, 2007). Further, social interactions in collegiate wind bands serve as a primary factor in ensemble learning, performance, and motivation to continue participating (Heath, 2017; Kennedy, 2020).

The literature surrounding social interactions in wind band settings tend to focus on those interactions as a measurable outcome, rather than a curricular variable and pedagogical focus. If the collegiate wind band setting is to serve simultaneously as a training ground for professional musicians, a semi-professional performance ensemble, and a place for amateur musicians to continue practicing their craft, then there exists a need to allow those participating musicians to practice and refine requisite social skills. Those collegiate ensembles could also serve as models from which participating musicians can learn before they, themselves, become conductors. The remainder of this chapter will seek to understand the role of social dynamics and interactions in professional ensembles and collegiate ensembles through the lens of the following guiding questions:

1. *Which qualities and processes do musicians utilize in professional or semi-professional ensembles to collaboratively make music?*
2. *What roles do social/ collaborative skills play in non-professional ensembles in affecting ensemble musicians' goals and performance outcomes?*

Practices of Professional Musicians

Examining the processes and practices of professional musicians is important for informing the training of aspiring musical professionals (Kennedy, 2020). Because collegiate ensembles often function as a training program for these professionals, collegiate ensemble pedagogy should, at least partially, focus on the needs for these musicians to be successful in professional contexts. Studies have examined professional and semi-professional music ensembles (usually, professional orchestras) that utilize a conductor (Boerner & Von Streit, 2005, 2007; Dobson & Gaunt, 2015; Ye, 2023) and some that purposefully do not (Hackman, 2002, 2005; Khodyakov, 2007; Lewis, 2012). Several trends emerge from these examinations of professional practice that could effectively be fostered in collegiate-level ensembles. First, professional musicians display a need to grow their awareness and be able to adapt to changing musical input from their fellow ensemble musicians. Second, professional musicians need to be diplomatic and tactful in their social interactions with their fellow musicians and conductors, including adopting musical ideas and values of the ensemble. Finally, professional ensembles show surprisingly de-centralized leadership structures that focus more on collaboration than on top-down conductor-dictated hierarchies.

Building Awareness and Adaptability

Awareness and adaptability arise as two connected and foundational traits that are important, yet often found lacking, in musicians beginning their professional work (Dobson &

Gaunt, 2015; Kennedy, 2020). Melissa Dobson & Helena Gaunt, of the Guildhall School of Music and Drama in London, undertook a study in 2015 interviewing twenty professional London-based musicians on the skills and proficiencies they believed necessary for professional musicians to be successful. In that study, the top three necessary skills were possessing healthy interpersonal and social skills, teamwork and self-awareness, and a concept they dubbed "musical radar" (Dobson & Gaunt, 2015). The concept of 'radar' was multi-faceted in this study, involving a split-focus of being conscious of one's own playing choices while simultaneously being aware of the nonverbal communication and musical choices of the musicians around you, being able to adapt your playing to fit theirs. According to one of the participants of that study:

> ... no matter how good you are at playing yourself, you have to be playing in tune and in time and in the same way as your colleagues. So it's really, really important to be listening the whole time to everyone else and responding to what everyone else does. And that ... leads on to the next thing, which is adaptability, because when you're playing with a hundred other people you're not always going to be agreeing with absolutely everything, on the first play through certainly. And so you have to be able to adapt what you think is the way of playing something, in order to fit with everyone else. (Dobson & Gaunt, 2015, p.30).

This quote demonstrates the intrinsic link between awareness and adaptability. Awareness acts as a foundational skill to elevated musical performances in large ensembles, and adaptability is the active use of the information provided through that awareness to improve ensemble performance. In Aslaug Slette's (2014) multiple-case-study on developing awareness in chamber groups, three functions of aural awareness emerged. Slette found that awareness acted as:

- *Standby*, where musicians become aware of their own playing in relation to others, and identify possible musical problems (p.219)

- *A basis for negotiation*, where musicians become aware by vocalizing their musical thoughts and ideas to others, and assimilating new ideas from others into their own musical conceptions (p.221)
- *Preparation*, in which musicians include their anticipation of musical outcomes from others to prepare and practice their own parts for an upcoming rehearsal or performance (p.222)

Thus, aural awareness acts as a precursor to action and adaptation of one's playing. Slette's three functions of awareness also include ways in which musicians respond to musical inputs around them. The 'basis for negotiation' and 'preparation' functions highlight how intrinsically social aspects are included in professional musical performance. Navigating these social differences that occur require a great deal of tact and diplomacy within professional ensembles. These aspects of professional practice will be discussed next.

Demonstrating Tact and Diplomacy

With the degree of communication required in a professional ensemble, musicians must use tact and diplomacy in their communications. Dobson & Gaunt (2015) found that tact, or social sensitivity, served as a mediating factor characterizing the interdependence of musical and social awareness in an ensemble. In a task-focused situation, as in a professional ensemble, individuals can often be too direct with their verbal feedback, reducing trust between musicians. One of the participants in Dobson & Gaunt's study of professional ensembles succinctly encapsulates this idea of being aware of their colleagues' personal situations as it affects their professional performance: "…Because maybe your colleague didn't sleep well last night or is having trouble at home, and you almost have to become intuitive to those things, so that you don't put your foot in it, especially if you're on trial" (p.34). Here, the participant is referring to

being “on trial” as actively auditioning for a role in the professional group. However, the concept is applicable to permanent members of a professional or semi-professional ensemble. When trust is lost between members, the ability to work cohesively as a team is limited, and the performance may suffer (Boerner & Freiherr Von Streit, 2005; Khodyakov, 2007). Tact could be a very important part of preserving that trust.

Other than giving feedback, tact also encompasses behavior and professionalism. Another participant in Dobson & Gaunt’s (2015) study mentions behavior backstage while warming up before a rehearsal:

> … actually somebody coming down the line and just playing three bass drum notes beautifully is going to impress someone at the head of the section far more than someone who comes in before the rehearsal starts, [and] starts whizzing around the xylophone or flying around their Sibelius concerto, because they [the triallists] can all do that. What they can’t do is just sit in a section and fit in and be anonymous almost. (p.43)

From this participant’s perspective, tact would also include understanding that as an ensemble musician, you are part of a whole. The ensemble needs players who can blend, balance with others, match pitch and intonation, and play with good musical sense *and* social sense. To try and show off, or demonstrate virtuosity where none is asked for, could be a matter of ego, and needing to be validated for one’s skill rather than being confident and filling the role requested. At a professional level, as the participant mentions, most everyone can execute challenging music on a virtuosic level. The needed skill here is being a part of the group, and as an extension, demonstrating tact and professionalism in their behavior. Musicians learn these things through practice, both in microgenetic learning (experiencing moment-to-moment changes in behavior and creating meaning from those changes), and through lifelong reflection of positive and negative experiences (Kennedy, 2020). If professional musicians, then, are expected to possess

these skills of tact and social awareness in auditions, they must be introduced earlier in their musical careers as explicit musical skills.

In rehearsal and performance, consensus must be reached amongst musicians, on a multitude of fronts: how to shape a phrase, how to balance within instrument families, and who to listen to at any given moment. Some of these decisions are reached nonverbally, but some are reached through verbal communication and collaboration. Some ensembles, such as the Brittan Sinfonia (Lewis, 2012) and the Orpheus Chamber Orchestra (Kennedy, 2020; Khodyakov, 2007) purposefully don't utilize a conductor, thus facilitating the need for communication and collaboration. With the number of individuals in a large ensemble, it becomes nearly impossible for each person to have their ideas heard and realized in the ensemble setting. To solve the conductor-less question of "Who makes the musical decisions without a rehearsal descending into chaos?", the Orpheus Chamber Orchestra utilizes a rotation of a core group of decision-makers for each piece they play (Khodyakov, 2007). This small group dynamic means that everyone will have the opportunity to express their autonomy and voice regarding decisions about a piece, but when a musician is not in the "core" group, they must defer to others. However, Khodyakov (2007) mentions that musicians in Orpheus also have to wrestle with the notion of *when* to speak up, and if the idea is struck down, that there is a great deal of trust between musicians to ensure that they feel empowered to speak up in the future. According to one of the participants in the Orpheus ensemble from Khodyakov's study:

> "…you have to trust that when you speak up, people will listen to you fairly, support what you have to say, or be able to say why they don't. When someone criticizes what you do, we trust that it is out of the desire to make the music better, and that it is not personal." (p.8)

Thus, diplomacy guides inter-musician trust and motivation to persevere through potential slights to ego from one's ideas being turned down. Diplomacy is strongly related to adaptability in that musicians must be able to know when to voice their opinions, and when to go along with the group (Dobson & Gaunt, 2015). The issue of leadership and diplomacy in large ensembles, then, are strongly connected.

Leadership Functions in Professional Ensembles

In professional ensembles, both conductors and musicians exhibit leadership. There is a major benefit of a single, central leader in an ensemble; conductors provide clarity and efficiency to rehearsals that more democratic groups simply cannot (Hackman, 2005). Conductors in professional organizations act less as teachers and more as artistic guides, providing interpretations to the ensemble and holding them accountable to the performance of those interpretations. Sutherland and Cartwright (2022) found that conductors often exhibit two kinds of leadership: visual leadership and auditive leadership. Conductors who utilize visual leadership tend to be in the majority of professional (and collegiate) ensemble leaders. They believe that their ideas, due to their experience and expertise, should be enough for the ensemble, and adequately fulfill ensemble musical decisions. Conductors who utilize this leadership style often operate within ensembles that experience very structured, top-down hierarchies. Conductors who utilize auditive leadership tend to draw ideas from their musicians and elect to use a more democratic process in making musical decisions.

Lewis (2012) in investigating the performative aspects of orchestral leadership, developed two similar ideas: the "compleat" conductor, and the "incompleat" conductor (derived from Gunther Schuller's 1997 book, *The Compleat Conductor*). Lewis argues *for* the incomplete (spelling adjusted from Lewis' to facilitate ease of reading) conductor, stating that conductors are

only a part of the ensemble, and are "incomplete" until they utilize the talents, ideas, and musicianship of their musicians, their audience, and the composer's score. Lewis (2012) highlights some key differences between the complete and incomplete conductors in her dissertation. The full table can be found on page 41 of her document, but I replicate part of her comparison in Table 4 to highlight the differences between the complete, or visual, conductor leadership, and the incomplete, or auditive, conductor leadership.

Table 4. *Lewis' Comparison of the "Compleat" Conductor to the "Incompleat" Conductor.*

The "Compleat" Conductor	The "Incompleat" Conductor
Limited Repertoire Selection, largely masterworks	Open to any quality repertoire for a variety of instruments, including pop and folk styles
Values only the finest players	Welcomes players of all ability levels
Communication is directed and one-way: Score > Conductor > Musicians	Communication operates within the ensemble network and information flows freely
Goal is to serve the music	Goal is to work with all involved agents: the score, the repertoire, the audience, the composer, the musicians, and other collaborators
Typically low ensemble morale	High ensemble morale from shared sense of leadership
Product-focused	Process-focused
Conductor as arbitrator	Conductor as facilitator
Professional conductor	Musician-scholar who conducts
Gesture dictates	Gesture invites
Conductor-led performance	Performance from socially-distributed cognition

Note. Adapted from "*The Incomplete Conductor: theorizing the conductor's role in orchestral interpretation in the light of shared leadership practices*." by Lewis, L. A. (2012). [Doctoral Thesis, Royal Holloway, University of London]. p. 41

It should be stated here that, while the table does connotate a bias toward the "incomplete", Auditive Conductor, there is no moral slight to conductors who function as a "Complete", Visual Conductor. Many conductors learn in the style of the latter, and their ensembles do very well,

and their musicians can be quite content with that style of leadership. However, in the goal of shifting ensembles to a more egalitarian, musician centered approach, the Incomplete, auditive conductor offers a much more helpful model of conductor leadership.

Lewis' (2012) dissertation also contains a detailed multiple case-study on the interactions of conducting, musical interpretation, and leadership dynamics in the Brittan Sinfonia, a large chamber orchestra who rarely operate with a conductor. In this ensemble, the conductor arises out of necessity to facilitate challenging pieces, or to allow group cognition to focus on deeper musical concepts. Lewis found that while conductors facilitated a more efficient understanding of the score, feelings of musical satisfaction and deeper musical understanding developed in ensemble members when a conductor wasn't present. Lewis also found that an understanding of the score was an important aspect for all members of the ensemble to possess with no conductor present. Marked parts and interpretive conversation regarding the flow of the piece were commonplace to ensure that the correct musicians were leading at their respective times. This musical leadership was negotiated and universally agreed upon by the musicians, using the score to dictate what should be heard, and which parts (not people) were subservient to others, or which ones were to lead. Lewis cites flexibility and strong conflict resolution skills as being necessary to navigating a piece without a formal conductor. Finally, Lewis suggests that conductors are best utilized as experts to lay out the layers of the musical landscape, highlighting the musical score from a big picture perspective, and helping musicians to navigate leadership through their sound as the score dictates.

Leadership structures led by musicians can be examined in other professional ensembles with and without a conductor. In the conductor-less Orpheus Chamber Orchestra, the "core" group in the orchestra serves as a conductor substitution- the subordinate musicians still act as

they would in a situation with a conductor, but they are more empowered to speak up to discuss specific rehearsal needs as they arise (Khodyakov, 2007). In this more collaborative setting, the core defines the overall direction of the piece, develops musical interpretation, and leads rehearsals, but the rest of the members are free to offer input and musical offerings. This core group rotates membership, allowing all members to demonstrate their musical autonomy and allowing them to experience a more subordinate role, providing them with both leadership experience and followership perspective.

Despite this structure, Orpheus rehearsals, especially early in the group's formation, were chaotic and lengthy, which proved to be a waste of both time and money. To solve this problem, Orpheus came up with a system of clearly defined roles and leadership structures to enhance efficiency. Each core group elects a concertmaster, whose job is to communicate the musical vision of the core group and to find consensus with the whole of the membership (Khodyakov, 2007). Members are encouraged to vocally disagree and debate with the concertmaster and the core, but are expected to act professionally, with tact and diplomacy, to ensure that disagreements are brief and understand when to retract their opinions if they're not being accepted by their peers. Voting is used as a last-resort if consensus cannot be reached. The ensemble also elects three artistic directors, a managing director, and a general director, which form the administrative team. This team runs all of the administrative, business, and public relations elements of the Orpheus Orchestra. These temporary hierarchies allow the members of the ensemble to trust the structures, processes, and roles that they operate within, and set up priorities and responsibilities for the musicians while allowing them space to innovate and be creative.

Interactions between musicians, especially when studied in professional chamber music groups, also demonstrate peer leadership. Kleyn (2016) observed six musician-leader roles emerge in professional chamber groups:

1. The task leader who keeps the rehearsal on task,
2. The motivational leader who encourages and motivates their fellow musicians to achieve better,
3. The social leader who builds group morale and helps to mitigate social problems,
4. The external leader who is the link between the group members and the outside public,
5. The organizational leader who keeps track of non-rehearsal information, and
6. The "leader by example", or the person who demonstrates appropriate behavior.

These specific roles emerged naturally, but as with the Orpheus ensemble, could be explicitly given titles and roles to legitimize their function.

In ensembles with conductors, trust in expertise and social bonds are very significant factors in emergent leadership. While discussing the negotiations between musicians and the conductor, Dineen (2011) coined the term *shadow ensemble*. Dineen posits that an ensemble will size up the conductor within the first ten seconds of working with them, and a great deal of their trust in that person will be based on that initial interaction. Key musicians, who have an inherent trust from the rest of the group, truly determine the ensemble's direction. If there is no perceptible leadership coming from the conductor, the ensemble will default to the judgment of the shadow ensemble members, watching and listening for visual and aural cues that they may adapt to, or act in spite of, the conductor's actions. This idea suggests that when there are leadership gaps (as in Lewis, 2012), capable members of a group will rise to fill those gaps. If

gaps are intentionally made, perhaps the process of filling those gaps could be more collaborative and useful for developing leadership within the ensemble.

Often, popular leadership parallels are made to music ensembles, highlighting the conductor as the ideal leader of an ensemble, able to orient a large group of individuals toward a common goal. These comparisons tend to highlight conductor centric models of operation, espousing the qualities of the complete or visual conductor leadership as an ideal model to use widely. Richard Hackman pushes back against this, warning against simply looking at ensemble leadership through a simplistic lens and assuming that the conductor alone is responsible for the work that a large ensemble undertakes:

> Both scholars and practitioners compromise their own espoused objectives when they hold constant conditions that may be among the most substantial influences on their phenomena of interest. Yet we regularly do this: researchers do it to achieve experimental control, and practitioners do it to preserve established organizational structures, systems, and authority hierarchies. Until both scholars and practitioners accept the risks of breaking out of our traditional ways of construing and leading social systems, we will remain vulnerable to the leader attribution error — and we will continue to mistakenly assume that the best leaders are those who stand on whatever podium they can command and, through their personal efforts in real time, extract greatness from their teams. (Hackman, 2005, p.142)

By considering the leadership of musicians *in addition* to conductors, a more complete picture of ensemble leadership and professional ensemble social dynamics can be understood. Further, if we are to use professional groups as models from which to derive a goal-state of interaction between members of an ensemble, it becomes prudent to recognize differences between professional groups and collegiate groups that are the focus of this document. Professional ensembles are paid, exclusive, and serve the primary function of entertainment, education, and culture-building through performance. Collegiate ensembles are unpaid, are composed of a wide range of musicians with different abilities and motivations, and serve multiple purposes:

performance, education, professional training, community engagement and pride, and often, musician enjoyment and love of music. It is reasonable to conclude that a flexible form of leadership, in which members are allowed to contribute according to their willingness and ability (Fisher, 2021), would be a good fit for collegiate ensembles. This more flexible model of leadership could allow individuals who are more socially oriented and those who are more task oriented to exist in the same ensemble and still fulfill their motivations and individual goals (Boerner & von Streit, 2007).

Social Interactions in Collegiate Wind Bands

Social interaction is a very important element in wind band rehearsal spaces. Social interaction leads to identity development, which in turn develops community-like features: belonging, acceptance, trust, and mutual accountability (Dagaz, 2010). Social interaction also leads to greater levels of trust in ensembles (Kumar, 2020). In collegiate wind bands, one of the greatest measures of musical success is trust, especially when considered alongside conductor factors, such as consistency of instruction and greater levels of expressivity (Volpe et al., 2016). By understanding the importance of social interactions in ensembles, conductors can work to build connections and develop collaboration skills which will benefit group outcomes. This section will highlight how social interactions in ensembles form, contribute to motivation, and how to cultivate and teach collaborative skills to encourage social interaction.

Social Formation and Organization

Much of the musical interaction that occurs in ensembles inherently builds social connections. These interpersonal interactions occur over the course of an ensemble's "lifespan", increasing and strengthening over time (Weren, 2015; Weren et al., 2017). Lewis (2012) discusses four stages of ensemble development:

1. *Conductor-Assisted Performance*: At the beginning of a concert cycle, conductors assume most of the musical responsibility, such as communicating quality expectations, imposing time constraints, adjusting to the skill of the performers given the difficulty of the repertoire, and enhancing musician motivation. Conductor-musician interactions are common and unidirectional, as the conductor applies their score and pedagogical expertise to the rehearsal. Conductor goals influence musicians' goals.
2. *Player-Assisted Performance:* Once musician competency reaches a higher level, musicians enter a phase of self-talk, vocalized and internal, toward the score and each other to assist with performance. Conductors reduce their role, as in the 'fading' stage of cognitive apprenticeship (Collins et al., 1987), and focus on deepening musical expression. Musicians become more socialized and connected at this stage.
3. *Non-assisted Performance:* Musical performance is largely an automated process at this point, and assistance (from peers or the conductor) would come across as disruptive. Vocal cues and corrections have now moved toward smaller gestures and sometimes an unspoken understanding between musicians, where they are able to anticipate one-another's playing. If, or when, problems do arise, musicians move to stage four.
4. *Recursive Return to ZPD*: This stage is reached either when performers leave their automated state of operation to address problems from stage three, or, after a performance and the musicians reinstate learning processes with new musical material. Musicians do this by returning to the zone of proximal development (Vygotsky, 1978), in which they require others to aid in their learning. In the latter case, musicians maintain the built trust from stages 1-3, and hold on to the nonverbal cues used to musically communicate with one another.

The above stages are largely related to musical learning but underscore the importance of social interaction as ensembles grow in musical proficiency. Musical learning is accelerated when the musicians experience new material because of the strength of their nonverbal interactions and mutually held understanding.

These stages of musical progression are reminiscent of Tuckman's (1965) stages of group development. American psychological researcher Bruce Tuckman proposed that there were four stages of development than any group or organization goes through. They are:

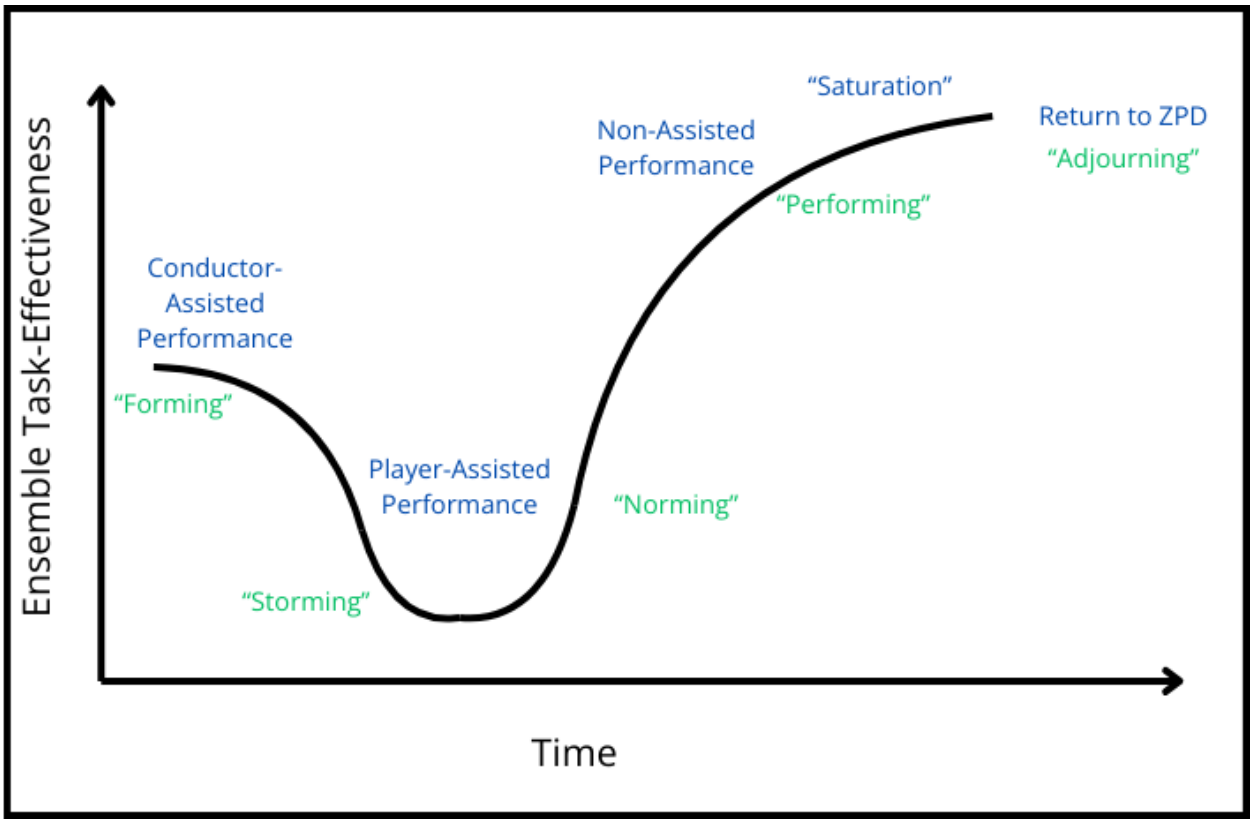
1. *Forming:* This stage is highlighted by members' strong reliance on the leader, and orienting themselves with group structure, the leader, and one another. Group members test boundaries to identify their place in the group.
2. *Storming:* Group members begin clashing with one-another on interpersonal issues, and struggle to agree with, redefine, or reject group social influences or task requirements. Group members voice their opinions and begin to assert themselves. Here, hierarchy typically defines itself and group roles gain more definition.
3. *Norming*: In the norming phase, group members work out their differences, feelings of group cohesion develop, and in-group roles are adopted. Team members begin to orient with each other toward the shared group goal, and in executing tasks, opinions are expressed more intimately, and with more diplomacy.
4. *Performing*: Here, interpersonal relationships become so strong that they assist in achieving goals. Team members become more intrinsically motivated, are able to make decisions autonomously, and when conflict arises, the designated leadership and organizational structures help resolve it quickly. This is the most optimal level of team performance.

Tuckman mentions that there may be a fifth stage ("Adjourning") in which group members take their group experience with them after the task is complete and move on to new roles. He mentions that this fifth stage is very situational and reliant on the context in which the group functions.

These group-formation theories have been replicated and affirmed in multiple settings (Hackman & Johnson, 2009). In each, social interactions and interpersonal relationships must solidify first before task-execution can become optimized. Looking at Tuckman's and Lewis's models, and speaking referentially to the music ensemble setting, musicians need to understand one another's verbal, nonverbal, and musical mannerisms, and be able to negotiate their own ideas with one another before the ensemble can become musically effective. Eventually, the mutual understanding of communication emblems and musical mannerisms reaches a point that Lewis (2012) calls "saturation", in which musicians and the conductor have reached an effective point of mutual social understanding. At this point, the ensemble potential for musical performance is maximized, if musicians and conductors have done the technique work and requisite practice on their own (Keller, 2016). In fact, for musician-centered learning to take place in musical ensembles, strong social relationships must first be present (Weidner, 2020). Figure 1 below shows a potential overlap of Lewis' stages of ensemble development (in blue) and Tuckman's stages of group development (in green), demonstrating a possibility of why musician-centered rehearsals take time and energy (a common complaint of conductors who try to implement these strategies). Tuckman's second stage, "storming", aligns with players attempting to reconcile more collaborative roles in "player-assisted performance", resulting in a reduction in ensemble task-effectiveness. When musicians normalize their new roles and develop

a greater sense of autonomy, ensemble performance becomes more effective than it was in its conductor-centric form.

Figure 1. *Ensemble effectiveness as an overlap of Tuckman's (1965) and Lewis' (2012) stages of development*



Social Interaction as Motivation

Aside from maximizing ensemble efficacy and efficiency, social interactions have been proven to be a primary motivating factor in wind band rehearsals. Matthews and Kitsantas (2016) found that, group orientation and individual motivation for joining a particular ensemble had a significant impact on the importance musicians placed on social interaction in their band. They measured group cohesion in a community college non-music-major ensemble and in a major university professionally oriented wind ensemble. The university music-major group found much more meaning in social interaction because they shared beliefs about the

performance level of their music and had inherent trust that their peers would take care of their own musical parts. The non-major group had less social motivation because their membership came from different people from different walks of life who all valued the importance of quality musicianship and practice differently. Thus, alignment in task goals correlated with stronger social motivations. Socially, the music major ensemble was motivated by competition, where the non-major ensemble found more common ground in the belief that each person played an important role in the ensemble and saw all members as equals. Collective efficacy and self-belief were also stronger in the music major ensemble.

In her study on inter-group beliefs and social cohesion in a small college marching band, Matthews (2017) found that social group attraction to ensemble goals and social group integration remain high motivators over the course of a marching band "season" (usually the fall semester or quarter). She found that social motivation remained consistent over the course of the season while task motivation fluctuated and reduced toward the middle and end of the season. Matthews (2017) study highlights the importance of the social community that exists within marching bands; the findings suggest that groups with high collective efficacy and cohesion have grit and perseverance enough to persist with through challenging task-oriented events. This study also underscores the importance of motivation and fostering social community aspects of music making to aid in the persistence of the musical performance. Matthews herself suggests that directors utilize student leadership in ensembles to invigorate its members to be more motivated in pro-social and pro-task behaviors.

The social importance of ensemble music-making found in Matthews (2017) is affirmed in Weren et al. (2017). This study utilized social network analysis to measure group social connections, friend-networks (who socializes with whom), and advice-networks (who trusts

whom for information). This study utilized self-determination theory (Deci & Ryan, 2000) to measure musicians' intrinsic motivation to participate in a collegiate marching band and found that band musicians were primarily motivated through social ties and were most interested in interacting with like-minded people. Highly motivated musicians tended to be more tightly integrated into the bands' friendship and advice networks and ascribed a great deal of importance to the value that their peers put on participation in band (Weren et al., 2017). This adds to Matthews' (2017) findings in that social dynamics in wind band could also be used to change an ensemble's social culture, beliefs, and values.

Developing Collaboration

Collaboration is the practical combination of social and task-based ensemble factors. Ensemble musicians must be versed in the music they're working on as well as capable of working with one. In a standard, conductor-centric ensemble, most of the rehearsal time is typically spent on building task-based proficiencies in music, including theoretical knowledge, skill-centered technique, and music literacy. Musicians get little, if any, practice in collaborating (Cortez et al., 2009). Given the importance of social interaction to wind bands, the social component in a wind band rehearsal space is a significant part of my proposed Interdependent Musicianship Model. The social components of that model are discussed in detail in chapter five. This section discusses how ensemble members can learn to collaborate to facilitate stronger task-centered social interactions.

Perhaps the most important aspect to understand about collaboration is that it can be taught and learned. In a multi-experimental study, Cortez et al. (2009) found that, over a series of four experiments, undergraduate participants were able to learn and retain collaborative strategies and skills from one experimental task, and often would apply and adapt them to future

tasks, modifying the strategies as needed. Collaboration (or "teamwork", in this study) was found to be a manifestation of five variables:

- Team orientation: when members of a team would show interest in assisting other teammates on a task.
- Monitoring: when members of the team accept help from teammates.
- Feedback: when members of a team show willingness to listen to and apply information from other teammates.
- Back-up: when members of a team ask for or offer help to others.
- Coordination: When multiple team members would align with others and defer to group decisions over their own.

Of these five variables, team orientation was the most influential in collaborative activity, showing that pro-social behavior is a strong predictor of task-centered social interaction (Cortez et al., 2009).

Different collaborative environments can exist in rehearsal spaces. Gruenart and Whitaker (2015) (cited in Bloomberg & Pitchford, 2017) describe six states of collaboration within classrooms:

- Pure-Collaborative: teamwork is encouraged freely, and feedback is direct, relevant, and authentic
- Comfortable-Collaborative: team members collaborate, but are overly polite to the point of inhibiting effective feedback
- Contrived-Collegial: one person determines how everyone will behave with the intention of creating harmony

- Balkanized: small groups are encouraged to compete against one another, valuing "winning" over learning and collaboration
- Fragmented: everyone is autonomous and working in harmony but with no collaboration
- Toxic: negative attitudes and opinions are common

In studying various businesses and organizations in several large cities, Chrislip and Larson (1994) (referenced in Hackman & Johnson, 2009) found several factors necessary for collaboration (The factors listed below are those of the referenced authors, and the applications to musicians are mine):

- Good timing and clear need: Musicians must be introduced to the idea of collaboration when they are ready to experience it, and the conductor must demonstrate how collaboration can positively impact rehearsals.
- Broad-based involvement: musicians come from different backgrounds and have experienced different things in their life, and can provide feedback and insight to complement that of their peers.
- Credible and open process: collaborating in an ensemble must involve transparency and honesty, and a willingness to admit mistakes (even from the conductor) if things don't go well.
- Participation of high-visibility leaders: Conductors must model collaboration in their teaching and leading. If they are hypocritical to the process of collaboration, then musicians will likely not buy-in.
- Formal support: The conductor must exude a belief in collaboration, and must create an environment in which it can succeed.

- Ability to overcome mistrust and skepticism: Musicians are largely motivated by their own ensemble experience (Sutherland & Cartwright, 2022). Thus, positive experiences in collaboration, especially those curated by the conductor, will develop trust in one another and in the process over time.
- Strong leadership: Leadership can come from the conductor, or from other musicians as they take on larger rehearsal roles. While there are different types of leadership that can be exhibited (detailed in the next section), authentic leadership has been proven to be one of the most effective single-person-focused leadership theories to apply in an ensemble rehearsal context (Montalvo, 2019).
- Celebration of ongoing achievement: Small, extrinsic rewards (verbal or otherwise) can be effective in rewarding correct efforts that lead to musical achievements. Otherwise stated, effort should be acknowledged and rewarded to encourage musicians to continue those practices rather than achievement.

From these above lists, three factors emerge as primary catalysts to collaboration: sense of aligned purpose, interpersonal trust, and open communication. Purpose is typically defined by achieving a quality musical performance, though that can differ depending on the specific ensembles' goals (Matthews & Kitsantas, 2016). Trust is largely built through positive interactions and conceived rehearsal structures over time (Khodyakov, 2007; Kumar, 2020). Communication in ensembles is largely unidirectional, moving from conductor to musician. Inter-musician communication must be structured and taught by the conductor if it is to be an integral part of the rehearsal process.

In task-related cases, especially in providing peer-feedback and communicating musical ideas, musicians can express hesitancy and fear when it comes to communication. In many cases

when musicians are encouraged to share their musical ideas with the ensemble, especially with younger musicians, individuals can fear that they overshare information and will be perceived as arrogant by their peers (Shaw et al., 2024). There can also be a fear of being wrong, even in subjective matters such as musical decision making, that prevent musicians from sharing their thoughts and communicating with one another (Scherer, 2020). On the conductor's part, collaboration rests largely on one's ability to organize and create a space that is conducive to teamwork (Ye, 2023), which can be challenging in a musical space (Allsup & Benedict, 2008).

Several strategies can be used to facilitate collaboration between musicians. First, preparing collaboration involves ensuring musicians understand structure and roles. It is helpful to provide descriptions of what roles each person in a group can or will fulfill, what an appropriate timeline within that role looks like, and what sort of language could be useful in that role (Burke, 2023). For example, if a musician is delegated as the person to listen and provide feedback on a playthrough of a piece, they ought to know what to listen for, be aware of problems the ensemble has been having and be prepared to focus on the success or needed work of those sections, be cognizant of how much feedback is appropriate to give, and know that it's useful to provide suggestions to other musicians rather than simply point out problems of their playing. Other collaborative roles might include setting parameters (of a section to be rehearsed), identifying errors in playthrough of a section (Cavitt, 2003; Sorenson, 2021), and reflecting on a performance and providing opinions and factual feedback to peers (Williamson and Luebbers, 2022). When providing feedback, Hackman and Johnson (2009) offer the anagrambic CONNECT model:

1. C – Commit to the relationship. Communicate to your peers that you are invested in their success.

2. O – Optimize safety. Verbally set boundaries, and allow others to do so in order to ensure that no lines are crossed and everyone feels respected.
3. N – Narrow it to one issue. Identify one thing to be improved, or one element to focus on.
4. N – Neutralize defensiveness. Avoid language that might promote defensiveness and retreating behavior in those you work with. Check in with those you're working with.
5. E – Explain and echo. Identify what you observe, state relevant emotions and what you would like to happen. Have the other person echo this in their own words.
6. C – Change one behavior. Agree on one aspect of behavior or playing to adjust.
7. T – Track it. Monitor progress on the one changing item identified in steps 3 and 6, and provide direct, honest feedback without using defensive-promoting language from step 5.

Collaboration can be taught, step-by-step, by introducing and practicing small skills that lead to a larger net effect (Cortez et al., 2009). When teaching collaboration, I would recommend moving from a place of personal safety to being more vulnerable. One might begin by having musicians write their thoughts rather than express them verbally. They could then collect the written comments, type them out, and distribute the comments to the group anonymously to get people used to sharing their ideas with others. It may be prudent to type the same comment multiple times to enhance efficacy, showing musicians that their idea might be corroborated by others. During this process, conductors should praise positive collaborative behavior that involves personal vulnerability. Next, conductors might nominate musicians to serve as "an extra set of ears" at the front of the ensemble, asking them to provide one piece of feedback to the group, which includes 1) Something they heard, 2) a potential reason for highlighting that part of the music, and 3) a potential way to address the problem. The conductor can rotate musicians at the front of the room, either by nomination, volunteering, or going "down the line", allowing

musicians to decline participation (or choose to write their comments instead). Next, conductors can offer "comment time", in which after the conductor gives their ensemble feedback, musicians are free to address a prescribed audience (their neighbors, their section, or anyone). Finally, the conductor can normalize musicians offering feedback even when a conductor does not explicitly allow space for it. This may be the most challenging step to overcome, so it is important to praise that effort the first time it is noticed, and several times thereafter for reinforcement.

Summary

Professional ensembles provide a great example of optimized interpersonal musical interactions to heighten performance. Professional musicians tend to place greater import on adaptability, awareness, tact, and diplomacy over musical ability or virtuosity. Leadership in professional ensembles is much more varied and complex than surface-level observations might reveal. Conductors work to elevate musicians' knowledge, skill, and awareness, while musicians act in a more collaborative fashion with one another. In collegiate wind bands, social interaction emerges as an important factor in ensemble music making. Not only do ensembles experience a complex social learning and norming process, but interpersonal connections serve as a strong motivator to collegiate musicians.

Chapter 5: Distributed Leadership as a Foundation for Musician-Centered Rehearsals

Scholarship and practice in the field of leadership provides an established methodology for introducing, teaching, practicing, and refining social and collaborative skills (Avolio, Walumbwa, & Weber, 2009; Day, et al., 2014; Eich, 2008). Leadership structures also already exist within wind band spaces through conductor-leadership and student/musician-leadership. Often though, these existing student-musician leadership roles are relegated to perpetuating the top-down, conductor-centric hierarchy of wind bands. Further, wind bands tend to rely on leadership methods that are largely commercialized and relatively unsubstantiated in academic or practical research, or worse, proven to have little significant correlation with improving musical outcomes. However, models that describe leadership as co-action and an outcome of collaboration between ensemble members does have an impact on improving musical outcomes. Therefore, Distributed Leadership theory provides a substantial, validated, and multi-relational framework from which to build a pedagogic model of ensemble rehearsals based in Interdependent Musicianship.

Distributed Leadership is widely implemented in educational settings and focuses on highlighting multiple voices outside of named leaders to enhance efficacy, efficiency, and group outcomes. Distributed Leadership in the wind band rehearsal settings allows for the development of musical competency and individual musician autonomy (both outcomes of previous musician-centric rehearsal attempts) while providing a systematic approach to fostering interdependent social skills between ensemble members. The remainder of this chapter will seek to justify the use of Distributed Leadership as a theoretical foundation on which to build the Interdependent Musicianship Model, through addressing the following questions:

1. *What influence does leadership have in musical ensembles?*

2. *How can Distributed Leadership be defined and implemented as a framework to center musicians in the collegiate wind band rehearsal space?*

Redefining Musical Leadership

The examples of leadership in musical contexts are numerous. Ensembles are fertile grounds for exploring student-musician leadership, as well as the leadership interactions between conductors and musicians. Often, at the collegiate level, ensembles are structured around the active student inclusion of those leadership roles (Scheivert, 2018). However, as mentioned in Hackman (2005), leadership within musical ensembles is often more complex than the casual outsider might observe. Classical definitions of "heroic" leadership rarely show any correlation with musical growth or enhanced musical value. Yet, it is often these traits and values that are taught to young musicians as examples of good ensemble leadership, especially utilizing terms like "servant leadership" to prop up the qualities of exemplary student leaders (Lautzenheiser, 2006; Lang, 2007). It is possible that conductors value these leadership traits because they act as an extension of managerial duties a conductor typically fulfills and encourage musician compliance more than anything else (Warfield, 2013). This type of role-fulfilling student leader is ineffective in affecting musical growth or performance (Meals, 2016).

Musical leadership needs clarification, substantiation, and redefining in order to be useful for ensembles. This section will explore how leadership interacts with musical outcomes and will identify which academic leadership theories are most applicable to the collegiate wind band rehearsal. I will explore current leadership structures and states in college bands and will seek to redefine musical leadership to adopt academic theories of leadership that are positively correlated with musical development. Distributed leadership theory emerges as an ideal framework on which to situate collegiate band rehearsals. In defense of this, I examine structures

and qualities of leadership development programs that could be useful to develop distributed ensemble leadership.

Current State of Leadership in Collegiate Bands

In collegiate band settings, leadership tends to be highly hierarchical, with conductors maintaining most of the artistic and program-defining leadership roles, and student-musician leaders acting largely in subservience to conductor aims (Dagaz, 2010). Because of this hierarchy, musicians tend to operate in a more isolated manner and are concerned largely only about their social and musical experiences (Sutherland & Cartwright, 2022). This self-concerned behavior could contribute to a lack of meaningful social interaction in ensembles; student musicians need a rehearsal environment that encourages interdependence and a need for collaboration to solicit music-making outside of their direct sphere of influence. Musical leadership positions typically have a more pronounced role in collegiate marching bands more so than concert band ensembles (Davison, 2007; Dagaz, 2010; Scheivert, 2018). Studies regarding leadership in the concert band setting are limited. Most concert band-related studies in leadership focus largely on conductor roles (Gumm, 2023; Lewis, 2012; Matthews & Kitsantas, 2013), interactions of conductors and musicians (Boerner & von Streit, 2007; Davison, 2007), or effects of musical leaders on timing and synchrony (Noy et al., 2011; Volpe et al., 2016; Hargreaves, 2018).

In the marching band setting, student leadership is most-often highlighted in academic studies investigating student leadership roles and responsibilities (Davison, 2007; Dagaz, 2010; Fisher, 2021; Warfield, 2013). Warfield (2013) studied behaviors and perceptions of marching band student leaders and found that they were most often utilized to model behavior and actions. Out of the leadership behaviors examined, student leaders were least likely to empower others to

act and emerge as leaders, affirming Sutherland and Cartwright's (2022) findings above. Girgenti (2018) found that student leader roles in marching bands were often relegated to three categories: musical tasks such as running a sectional, non-musical tasks such as taking attendance or organizing the music library, or compliance-based tasks, such as being willing to help instructors or staff without being asked. Student leaders were also found to be responsible for motivation factors, such as encouraging their peers, maintaining ensemble spirit and mood, and building confidence amongst peers (Dagaz, 2010; Fisher, 2021). Named student leaders are also often designated to transmit group norms, but often, older, non-leader-members of the ensemble shared the responsibility for this cultural 'indoctrination' (Dagaz, 2010).

"Heroic" Leadership Theories

Academic theories of leadership largely focus on the traits, qualities, and actions of singular leaders (Northouse, 2009; Avolio, Walumbwa, and Weber, 2009; Hackman & Johnson, 2009). These types of theories are often classified as "heroic" theories of leadership and encourage a top-down hierarchical model in organizations ("heroic" because they usually position a single, elevated individual as rescuing or improving organizations singlehandedly). Several popular "heroic" theories are briefly described below (from Hackman & Johnson, 2009):

- Traits Theory: Quality leaders share specific traits, actions, and characteristics. While this is one of the oldest academic leadership theories, it has been largely debunked, but is often used in overly simplistic concepts of leadership in describing what "a good leader is"
- Contingency Model: Leadership is based upon what a person can give to someone, usually in terms of reward and punishments, and is focused on positional power and task structures.

- Charismatic Leadership: Leaders emerge as the most influential, persuasive, and likable people
- Transformational Leadership Theory: Leaders emerge as individuals who have the ability to develop intrinsic motivation in their followers, thus transforming and revitalizing organizations
- Servant Leadership: Leaders lead "from within" or through acting in service to others in their organizations. This is a very common leadership moniker, especially within the marching band world (Lautzenheiser, 2006; Lang, 2007).
- Authentic Leadership: Developed by Fred Luthans and Bruce Avolio (2003), authentic leadership theory has four components that can be developed as states of being in leaders: self-awareness, relational transparency (being open in one's actions), balanced processing (considering all sides of an argument before making a decision) and internalized moral perspective (having a set of guiding values).

With only a few exceptions, "heroic" theories show no correlation with musical growth in ensembles (Hackman, 2005). Transformational leadership, in particular, has been studied extensively in conductors and musicians and has been shown to have no effect on musical outcomes (Boerner & von Streit, 2005, 2007; Davison, 2007; Gooty et al., 2009; Kammerhoff et al., 2018; Sutherland & Cartwright, 2022). However, transformational leadership *does* influence individuals' notions of interpersonal connection, task satisfaction, and intrinsic motivation (Price & Weiss, 2013). Aspects of authentic leadership theory have improved concert band festival and sight-reading scores (Montalvo, 2019).

Leadership as a Relationship

Interestingly, in several studies, leadership emerges as a mediating variable in enhancing musical performance outcomes only when the *relationship* between conductor and musicians are considered. Boerner and von Streit (2007) found that, considered alone, transformational leadership qualities in the conductor had no impact on musical performance. However, when the ensemble's mood was positive, and motivation was high, transformational leadership did have a positive correlation with performance outcomes. Davison (2007) surveyed 42 Texas band directors and found that conductors whose leadership styles tended to be more facilitative (open to questions, collaborative, empowering others to act freely, and interactive) had stronger student leaders in their bands and reported higher scores at concert band festivals. Davison's study also surveyed high school band students and demonstrated a correlation between high student leadership scores and higher concert band festival scores *when* band director leadership scores were also high. Sutherland and Cartwright (2022) corroborate that a healthier ensemble ecosystem may be cultivated if more facilitative (rather than authoritarian) leadership styles are used and demonstrated by the conductor. Volpe, et al. (2016) found that, in collegiate large ensembles, the greatest predictor of success relied on how consistently and clearly the conductor communicated with musicians as well as the level of trust cultivated between those two parties.

Distributed Leadership

Distributed leadership theory (Brown & Hosking, 1986; Gronn, 2002; Spillane, 2006) differs from heroic theories in that it positions leadership as a relationship of mutual influence rather than an action done by one person to another. At the college level, successful marching band directors greatly rely on leadership responsibilities being evenly distributed amongst student leaders, and that ensembles are more effective when a more distributed model of

leadership is utilized (Warfield, 2013). This notion of distributed leadership is a relatively new area of scholarship (Avolio, Walumbwa, & Weber, 2009), and while it remains relatively unexplored in the music ensemble context- Ye (2023) being the only exception within choral setting- it could prove to be exceptionally useful in the wind band rehearsals.

Distributed leadership theory is part of a strand of leadership scholarship known as "Complexity Theories", in which the many, varied, and changing (thus, complex) relationships in organization are simultaneously considered as a way for leadership to emerge. These complexity theories were designed for modern organizations that deal in more knowledge and skill-based commodities and result in knowledge dissemination, learning, innovation, and adaptation to change (Avolio, Walumbwa, & Weber, 2009). Complexity leadership theories "can be enacted through *any interaction* in an organization... leadership is an *emergent* phenomenon within complex systems" (Hazy & Uhl-Bein, 2015, p. 2). To study and appreciate the leadership dynamics of a knowledge-based organization, the full complexity and interdependencies of an organization's interactions must be understood.

Defining Distributed Leadership

Distributed leadership exists under the umbrella of complexity leadership, and is a relatively new theory (Timperley, 2005). Like any modern evolving theory, distributed leadership is defined differently by each scholar studying it. It is also commonly referred to as "shared leadership" and "collective leadership" (Avolio, Walumbwa, & Weber, 2009), though some scholars treat these terms as synonyms. Distributed leadership theory is most often applied to settings in education (Spillane, 2006) as a framework for teacher-leadership and collaboration. Despite the different definitions, three premises arise in the literature that are uniform when discussing distributed leadership:

1. Leadership emerges from interpersonal interaction.
2. Boundaries of leadership are open rather than closed.
3. Expertise is often found across the many in organizations, not the few.

Some scholars studying distributed leadership claim that it is ineffective as a normative model to measure success or achievement, as other leadership models tend to do (Spillane, 2006; Bolden, 2011). Instead, distributed leadership tends to take on a more descriptive approach (Spillane, 2006) or a more critical one. That is, distributed leadership describes the relationships between agents in an organization rather than focusing on the actions of any one person. It is a theory that describes *how* individuals interact toward common goals, and how leadership is an emergent outcome of that interaction rather than a catalyst (Bolden, 2011). Distributed leadership does not, in and of itself, seek to change or improve outcomes. Rather, it serves as a tool to describe an organization's state of collaboration, interaction, and interdependencies, and allows agents within that organization to act on that knowledge.

Theoretical and Practical Components

Spillane (2006) described distributed leadership as having two major components: a leader-plus component, and a leadership practice component. The concept of leader-plus describes that, while systems can act in a traditional way with a single leader, there can be other official or unofficial leaders working within that system. How leadership is distributed depends on a number of factors: the type of work being done, the purpose of the organization, the size of the organization, and the developmental stage of the organization. Organizations typically start with more traditional leadership structures, with distributed leadership being dictated and prescribed (Bolden, 2011; Spillane, 2006). Over time, as individuals grow familiar with leadership interactions, the develop leadership proficiencies, and further distribute leadership

with others. Spillane (2006) argues that leadership distributes as a result of how individuals utilize the capital they influence. This can involve four types of capital:

- Human capital – a person's knowledge, skills, and expertise
- Cultural capital – a person's way of acting or being
- Social capital – a person's interpersonal connectedness, and their perpetuation of trust, collaboration, and sense of service to others
- Economic capital – a person's money or resources available to distribute to others

Alternatively, Hackman and Johnson (2009) suggest that influence is related to what type of power an individual wields. These power sources are related to sources of capital, but differ slightly:

- Coercive power – the ability to apply punishments or provide negative reinforcement
- Reward power – the ability to deliver something of value to other
- Legitimate power – the influence that comes with having an official title or position
- Expert power – the ability to share or utilize relevant experience or information
- Referent power – feelings of affection, esteem, or respect that causes individuals to defer to that person

Considering that each person in an organization likely has some sort of capital or power to call on, in a distributed leadership model, the line between leaders and followers blurs, with individuals rising to the occasion as the situation, circumstance, or need dictates (Gronn, 2002; Timperley, 2005). Leadership responsibilities in a distributed situation can be purposefully distributed and dictated through a division of labor, acted upon concurrently by organizational agents together through co-action, or can be enacted by separate agents concurrently in parallel performance (Spillane, 2006).

The Process of Distributing Leadership

One of the most useful aspects of distributed leadership theory is that it focuses largely on *how* to enact leadership across an organization (Spillane 2006, 2007; Gronn, 2002; Timperley, 2005). This practice aspect of distributed leadership is particularly useful in showing classic "heroic" leaders how they might transform their organization into a more distributed structure. Gronn (2002) describes how distributed leadership ought to be measured by collective, concertive action rather than individual acts of leadership, with a perspective for the aggregate organization and the tasks and goals to be collectively accomplished. These collective actions fall into three categories:

- Spontaneous collaboration – when leadership is distributed, it is stretched over a wide number of individuals. In this stretching of leadership, actions by individuals may be planned or unplanned, and are often the result of two or more individuals working together who's skills and expertise complement one another, allowing each to complete a task more effectively than if they were working alone. Sometimes, a single individual with both skill and efficacy can act, and act as a catalyst that empowers others toward action.
- Intuitive working relations – Over time, collective awareness and understanding emerge when "two or more organization members rely on each other and develop a close working relationship" (Gronn, 2002, p. 430). In musical settings, this is characterized by musicians learning one-another's mannerisms so well that one is nearly able to anticipate how another musician will act in each moment while playing a piece. As mentioned above, Lewis (2012) calls this "cognitive saturation."

- Institutionalized practices – when co-action works, often individuals will create structure around it to allow that sort of practice to be institutionalized and replicated. These formalized structures can be planned, or adapted to situations as the need arises to share best-practices with others in the organization.

These three actions represent a process called conjoint agency, meaning "agents that synchronize their actions by having regard to their own plans, those of their peers, and their sense of unit membership" (Gronn, 2002, p.431). Thus, distributed leadership helps align personal and collective aims. Two processes help this unification: synergy, and reciprocal influence. Synergy represents a way in which each agent in an organization is able to inspire creativity, open doors, and releases possibilities for expression in other agents. Reciprocal influence describes how, when one agent influences others, they are, in turn, influenced by those other agents. This is akin to when a teacher says to their students, "I learn more from you than you do from me," in the spirit of expressing that there is mutual learning in classrooms. Because of synergy and reciprocal influence, distributed action almost always involves interdependence and coordination. Agents in a distributed organization almost always rely on one another and work towards goals collectively, concurrently, or in parallel.

Ideally, distributed leadership allows for anyone in an organization to emerge as a leader and exhibit leadership. However, some circumstances and individual psychological capacities might predispose certain individuals to emerge sooner or more naturally. Brown and Hosking (1986) postulated that three types of individuals had a stronger proclivity for leadership emergence:

- Those who, through relationship building and keen organizational observation, can understand and anticipate organizational problems and growth opportunities.

- People who can connect their peers' talents and capacities to specific organizational demands.
- Individuals who are able to handle and withstand crises or key dilemmas.

Hackman and Johnson (2009) suggest that, to emerge as a leader, one should participate often in group activities, focus on quality and quantity of communication, demonstrate competence, and help unify others. The emergence of leadership harkens back to the concept of the "shadow ensemble" (Dineen, 2011) discussed earlier in this chapter. "Legitimate" leadership systems can interact with these un-designated "shadow" leaders in organizations, and often, leads to optimal interpersonal interaction (Halpin and Hanlon, 2008). These shadow systems often include influence gained through friendship groups or more casual, unofficial organizational communication. Much of the creativity and innovation resides within the shadow network. If legitimate leaders are able to tap into the connection and expertise of the shadow group, the organization stands to benefit from positive organizational change, innovation, and creativity.

While leadership can naturally emerge in distributed organizations, named leaders can actively distribute leadership in their organization through the process of empowerment, or sharing power with others. Named leaders who purposefully share power increase the task satisfaction and performance of the individuals they empower and foster greater levels of cooperation amongst organizational members (Hackman & Johnson, 2009). Distributed leadership allows for collective survival of an organization in that the group won't rely on any one individual. It also aides in personal growth and learning and prevents abuses of power. Hackman and Johnson (2009) outline three components of empowerment processes:

1. Modify the environment to reward individuals for exhibiting leadership

2. Build intrinsic motivation through developing personal meaning with tasks, providing autonomy and choice, developing efficacy and competence, and underscoring the impact of one's actions.
3. Provide resources to individuals for them to be successful- don't force people to unnecessarily struggle when you can provide the means to ease their task execution.

Through purposeful and natural means, leadership interactions can distribute within an organization, increasing task efficiency, interpersonal cohesion, and enhancing competency within a wide array of people. In the ensemble setting, distributed leadership emerges not only as an effective means to center musicians in the music-making process, but a natural means of explaining how some collegiate ensembles (especially marching bands) already function (Warfield, 2013). The final part of this chapter will justify distributed leadership theory as a foundational framework on which to situate the Interdependent Musicianship Model.

Distributed Leadership as a Foundation to the IMM

So far, this chapter has examined the interpersonal workings of professional ensembles while underscoring the importance of social interactions in collegiate wind bands. In conductor-centric models of wind band rehearsals, conductors "gatekeep" a great deal of procedural information and rehearsal strategies from musicians for the sake of rehearsal efficiency and quality. As previously stated, this results in musicians not being able to practice higher-level rehearsal procedures. It also ensures that communication in ensembles is unidirectional; information travels from the score, to the conductor, to the musicians, perhaps through a very hierarchical leadership structure (Lewis, 2012). Already, this causes immediate problems based on the information this chapter has revealed. Communication and social interactions are very limited, and only exist with the conductor's permission. This inhibits the development of not

only social bonds in ensembles, but limits musician's ability to practice effective communication and collaboration skills. Social skills are left to natural development and implicit instruction, and the ensembles' greatest source of motivation and persistence – relatedness and social connection (Weren et al., 2017; Meals, 2013; Deci & Ryan, 2000)- is severely limited.

Distributed Leadership and Social Dynamics

Distributed leadership dictates that information flows in all directions through open communication, acting as a first counter to the conductor-centric model (Spillane, 2006; Bazan, 2011). Thus, musicians in a distributed ecosystem must be able to communicate effectively and efficiently, and taking note of professional practice, know when to speak up and when to follow someone else's lead through tact and diplomacy (Dobson & Gaunt, 2015; Khodyakov, 2007). Musicians must learn the needs of the ensemble, and the roles that they and the conductor play that contribute to musical success. Once they learn to communicate effectively, musicians unlock the ability to work together to solve musical problems together, minimizing (though not entirely eliminating) the need for the conductor to fill this role. The conductor can scaffold instruction to elevate musicians to be able to recognize and hear more complexity in the music, allowing them to solve more advanced musical problems. Eventually, in a truly distributed system, musicians would observe and learn their own empowerment techniques (Hackman & Johnson, 2009), and learn to share leadership experiences with new members of the ensemble, perpetuating and generating distributed leadership (Komives et al., 2011). Thus, social dynamics and interaction emerges as a key domain to be developed by conductors to create distributed leadership within their ensembles.

Distributed Leadership and Musical Analysis

Leadership of any kind must exist within the context of promoting the organizations' task goals (Bolden, 2011), otherwise, leadership becomes simply influence. In a wind band, task goals center around meaningful and masterful musical performance (Matthews and Kitsantas, 2013). A number of competencies must be developed in musicians and the conductor to reach this goal. If musicians are expected to solve musical problems with one another, they also must be able to analyze the music they're playing. This involves skills in music literacy and analysis, being able to develop aural images of the music one reads, and detect mistakes when the actual performed sounds don't align with expectations (Cavitt, 2003; Slette, 2014). Further, musicians must be able to share score information through a theoretical and historical context to be able to adequately interpret that music, as with the efforts to expand musical understanding through Comprehensive Musicianship discussed in Chapter two. The social domain, thus, is only useful if musicians develop analytical skills to accurately identify and correct musical problems. Musical analysis skills then emerge as a second domain for conductors to develop in musicians within a distributed leadership environment.

Distributed Leadership and Aural Awareness

With both verbal and nonverbal cues playing an important role in musicians' performance and performance awareness (Slette, 2014), there is an obvious overlap in the social skill domain with the musical performance task domain. Musicians need to be able to coordinate musical performances by relying on their awareness of these cues (Dobson & Gaunt, 2015). This awareness is not limited to others, but also to the self. One must be aware of one's own sound before being able to compare it and match it to others'. This coordination requires both an enhanced sense of aural awareness and the ability to communicate one's musical ideas verbally

to one's neighbors, section, and ensemble. Once these skills have been developed, musicians reach a point of "saturated" awareness in which they can more intuitively adapt to one another's performance (Lewis, 2012). Therefore, aural awareness emerges as a third domain to be developed in a distributed ensemble setting.

Much like how an individuals' efficacy and confidence can serve as a catalyst for change and inspiration in those around them, purposefully developing social competencies in musicians can lead to a new, interdependent form of ensemble music-making. I have not discussed development of instrumental skill, technique, or learning to read music- these elements should already be covered in a musician's formal ensemble education. However, it should be noted that these skills are foundationally important to developing social interaction and analytical skills and enhancing awareness. As many musicians enter their college experience with prior learning in those foundational skills, the collegiate ensemble becomes an ideal place to develop advanced, interdependent musicianship abilities and cultivate distributed leadership.

Previous models of centering musicians in ensemble rehearsals (discussed in Chapter three) also focus largely on eliminating the conductor from the rehearsal process. Lewis (2012) states that the ensemble ecosystem is a series of socio-musical interactions between several agents: the musicians, the score, and the conductor. By virtue of Lewis' conceptualization of the "incomplete conductor", distributed leadership would seem to only enhance these interconnected interactions. Given this interconnectedness, my model seeks to preserve the conductor as having equal importance to the other ensemble agents in the rehearsal process while serving as a consistent source of expertise and elevating musical performance. The conductor's role becomes one of facilitation and inspiring musical challenge to encourage musicians to grow.

Summary

The importance of social interaction can be harnessed by implementing distributed leadership theory within the practice of collegiate wind bands. Distributed leadership differs from more "heroic" models of leadership in that it redefines leadership as an emergent property of interaction rather than a product of directed action. By examining how distributed leadership could explicitly develop social skills in collegiate musicians, three interdependent domains emerge as a means to center musicians in the rehearsal process: a social dynamics domain, a music analysis domain, and an aural awareness domain. These domains comprise the Interdependent Musicianship Model, which will be detailed next in chapter six. The conductor's changing role in facilitating the model and a distributed ensemble ecosystem will be discussed in chapters seven and eight.

Chapter 6: The Interdependent Musicianship Model

The purpose of this chapter is to outline and detail the Interdependent Musicianship Model, as intended for use in the collegiate wind band rehearsal space. The IMM extends previous efforts to center musicians in the rehearsal process by gradually scaffolding new skills to musicians that are popularly utilized solely by conductors, while including explicit teaching of social and collaboration skills for musicians. The IMM is multi-dimensional and multi-faceted, able to be applied in any wind band rehearsal space without a major disruption to the conductor's usual process or a standard, skill-based curriculum. This chapter will discuss the overview of the model, its intended outcomes, its component "zones", and the features of each level of progression through the model. This chapter is guided by the following questions:

1. *How is interdependent musicianship defined and distinct from previous musician-centric rehearsal strategies?*
2. *How does the IMM's organization and structure allow elements of conductor responsibilities to be distributed to musicians?*

Defining Interdependent Musicianship

Before discussing the model, it becomes prudent to explicitly define the terms *interdependent,* and *interdependent musicianship,* especially after reviewing the closely related term of *independence* in chapter three. As previously discussed, *independence*, in the context of ensemble rehearsals, involves each musician having the autonomy and skill sets to interact with musical concepts and to foster a lifelong appreciation of music in their own lives. *Interdependence* references the interconnected nature of certain group activities and describes a state in which individuals working together toward a common goal rely on one another, to a degree, to achieve the groups' intended outcomes.

Spillane (2006) discusses Distributed Leadership as a largely interdependent activity, in which leadership activities often rely on one another to achieve a desired outcome (again, Distributed Leadership relies on interaction between group members to take place). Spillane describes three types of interdependencies:

- *Reciprocal Interdependence* details when various group activities rely on each other for their outcomes. In a wind band setting, this could reference one section playing with adjusted dynamics so the net effect allows a melody to be heard.
- *Pooled Interdependence* references when activities share a common group of resources but are largely independent of one another. This could be related to a trumpet section rehearsing the same piece of music. There is a shared understanding of interpretation and all players are playing the same music, but individual practice might look different depending on the understanding and needs of the individual musicians.
- *Sequential Interdependence* speaks to one activity's success being contingent on the completion of another. For example, in building a cohesive musical performance, ensemble concepts of blend, balance, phrasing, and musicianship cannot be addressed until individual component parts are learned and practiced (Spillane, 2006, p.58).

Through these specific definitions of interdependence, we can begin to understand the complexities in which not only ensemble musicians are reliant on one-another for performance outcomes, but group learning and specific skill sets require certain requisite skills to be learned before more advanced concepts can be structured. This aligns very closely with Vygotsky's (1978) Zone of Proximal Development (discussed in chapter two), in which certain competencies must be taught in an order of increasing complexity to allow musicians to fully grasp new concepts based upon former knowledge and with the help of an expert conductor. Reciprocal

interdependence refers to the reliance of musicians and the conductor on one another for musical success, pooled interdependence refers to the shared nature of the musical score and its interaction with musicians and conductors, and sequential interdependence refers to the reliance of ensemble activities and skills to build upon and support one another in various ways. Independence and interdependence do interact with one another, as musicians must be able to understand music and their peers to successfully navigate the wind band rehearsal environment. Gumm (2023) references that interdependence is a prerequisite and precedes an ultimate goal of independence. The IMM proposes a contrary position; interdependence is a higher-order state of multiple independent agents (musicians and the conductor) learning the additional skills of communication, collaborating, and problem-solving, and engaging in co-action. Interdependent musicianship, therefore, will be defined as such:

> *The mutual understanding and craftsmanship of musical performance through structured, reciprocal influence between ensemble agents (musicians, conductor, and the musical score) in which gradual scaffolding of skills in musical analysis, social dynamics, and aural awareness allows for spontaneous emergence of musical leadership between all agents equally.*

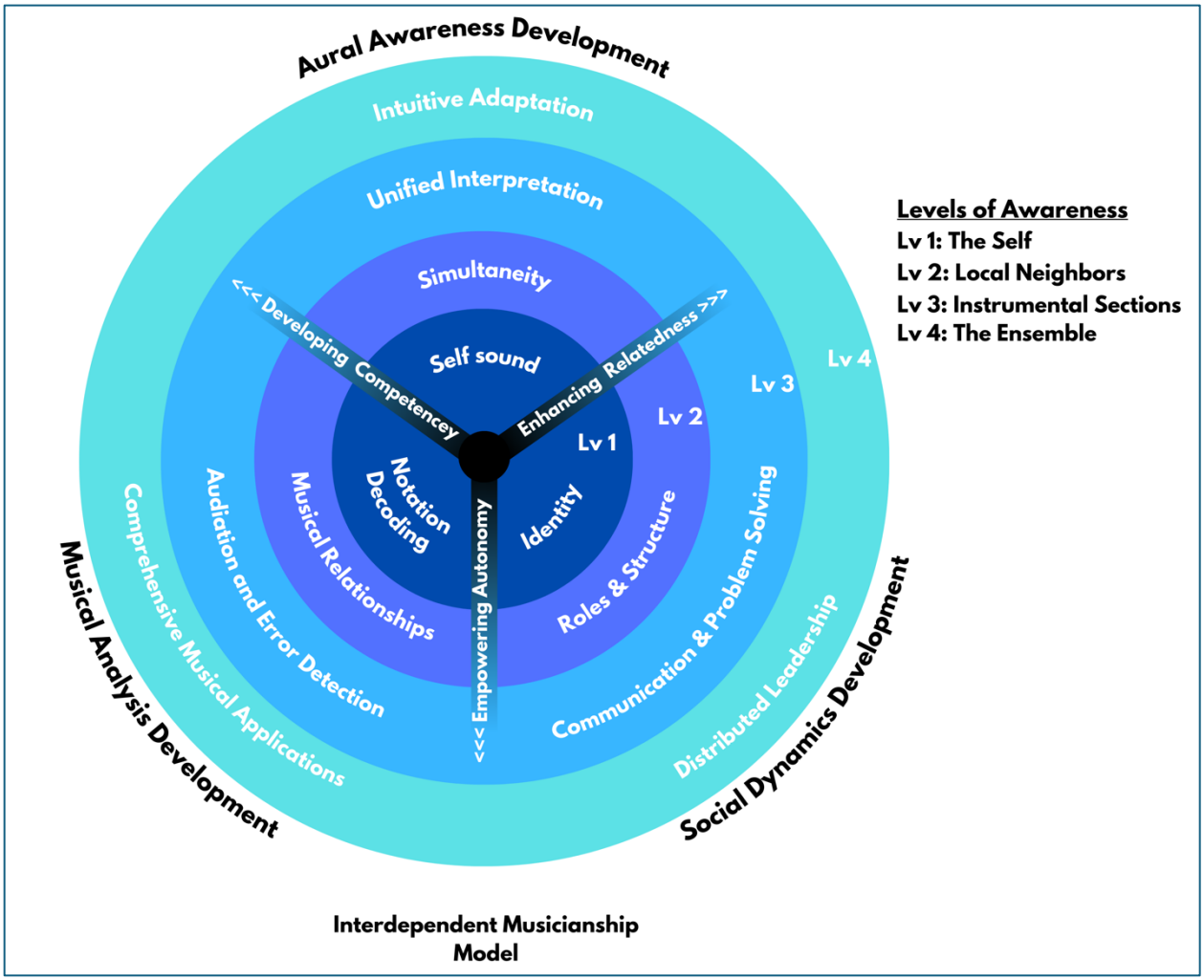
Interdependent Musicianship Model Structure and Overview

Overarching Structure and Concepts

The Interdependent Musicianship Model can be seen below in Figure 2. The model is comprised of three distinct domains of development: *Aural Awareness, Musical Analysis*, and *Social Dynamics*. These domains of development (or DD's) emanate outwards through four levels of awareness as musicians deepen their knowledge, skills, and understanding within each area. Each DD contains four elements that dictate the appropriate skills to be demonstrated by

musicians at their stage of musical growth given the level of awareness that they're operating from. These elements are named and detailed later in this chapter.

Figure 2. *The Interdependent Musicianship Model.*



The design of the IMM was inspired by Dobson & Gaunt's (2015) notion of the "musical radar" (discussed in Chapter four). For the professional musicians they interviewed, Dobson & Gaunt describe the musical radar as a metaphor of expanding awareness of musical and nonverbal communication of musicians in one's proximity as a necessary aspect of adapting one's own playing in a professional ensemble to other musicians. I found the "radar" imagery

evocative, and an apt visual representation of explaining the expansion of one's own musical awareness and skill sets to achieve interdependence.

At the intersections of each DD are secondary motivational outcomes that eventually lead to musical self-determination, or intrinsic motivation. Self-determination theory states that, in order to experience intrinsic motivation, individuals must experience competence in their domain, have control and autonomy over their decisions, and have a sense of relatedness to their peers and the organization they serve. The three components of self-determination (competence, relatedness, and autonomy) are strongly entrenched within ensemble rehearsal spaces, though only if conductors facilitate a sense of autonomy in their students through sharing rehearsal responsibilities (Meals, 2016). As discussed in Chapter three, previous attempts to center musicians in the wind band rehearsal largely have focused on developing competence through expansions of musical understanding, and autonomy through democratic practice and musical independence. The IMM situates relatedness as a core feature (alongside the other two self-determination theory components), as relatedness is a primary motivator in collegiate-level musicians (Weren et al., 2017). While situated as secondary outcomes, the motivational component of the IMM allows musicians to sustain engagement with more complex rehearsal processes than perhaps they're used to. These model outcomes are further discussed at the end of this chapter.

Scaffolded Levels of Awareness

In reading the IMM, one would start with the center-most concepts and move outwards as skills and awareness develop. As musicians develop, the outward motion is marked by four levels of awareness. Pasquale's (2008) Directed Listening Hierarchy helped to develop these levels of awareness. Pasquale et al. (2020) reference three levels of listening (discussed in

chapter three): 1) the individual, 2) the individual in relation to the section, and 3) the section in relation to the ensemble. The IMM's levels of awareness are split into four similar categories:

- Level 1: The Self
- Level 2: Local Neighbors
- Level 3: The Instrumental Section
- Level 4: The Ensemble

Notably, in Pasquale's second listening level (the individual in relation to the section), Pasquale introduces the concept of "individualized trios" in which musicians may focus on the sounds of the players to their immediate right and left as a natural expansion from only listening to their own sounds. Musicians build awareness of their rehearsal spaces gradually, starting with simple concepts and localized aural input and expanding to more complex musical relationships over time, affirming the validity of Pasquale's listening levels (Slette, 2014). The IMM expands upon upon Pasquale's listening levels splitting the "individualized trios" and his "Level 2 Listening" concepts into *local neighbors*, aligning more with Dobson & Gaunt's (2015) notion of expanding awareness to one's physical geography in the ensemble space, and subsequently, the *instrumental section*.

Lower levels of awareness represent more simplified, self-focused skills, while higher levels build on these skills and expand awareness to include elements that involve more musicians. While the model implies a linear progression, Susan Komives' research on leadership identity development would suggest that, while skills can develop in a linear progression if scaffolded correctly, traits, aspects of identity, and states of being do not (Komives et al., 2009). Therefore, there is flexibility in the model where an individual may progress to higher levels of awareness within one domain of development and achieve a different level of awareness in

another. As one progresses through the model's levels of awareness, the elements become more interconnected and reliant on one another to progress. In this way, the IMM not only has a goal of developing interdependence, but has interdependence built into its structure.

Domains of Development

The IMM consists of three distinct domains of development: *aural awareness, musical analysis*, and *social dynamics*. All domains contain four elements, each specific to the level of awareness within that domain. The elements are additive and scaffolded, in that each element ought to be mastered to effectively move on to the next one. Elements can also be returned to later to deepen understanding, typical of a spiral scaffolded curriculum (Bruner, 1964). Ensemble performance is a composite result of all inter-influencing "agents" in an ensemble, and in a rehearsal, the most major sources of shared influence are the conductor, the musicians, and the musical score (Lewis, 2012). The three domains of development reflect the results of the interactions of these three interdependent agents: how the musicians and conductor negotiate their understanding of the score, how musicians interact, both purposefully and automatically, with one another to interpret the score, and how musicians interact with one another and the conductor to problem solve and navigate ensemble social dynamics. Below, each domain is detailed and its component elements are defined in greater detail (and are summarized in Figures 3, 4, and 5). These domains are meant to build skills to demonstrate rehearsal capacities and support performance skills. It merits pointing out that, throughout the IMM, performance skills are assumed.

Figure 3. *The Aural Awareness Development Domain.*

Domain: Aural Awareness Development			
Level of Awareness	**Musical Element**	**Description**	**Rehearsal/Performance Concepts**
Level 1: The Self	**Self-Sound**	Awareness of one's own sound production and technique. Can employ reflective practice to purposefully adjust one's own playing.	Learning to develop the following skills and techniques, and developing rudimentary self-critique on them: Air support, instrumental technique, tone, intonation, tonal tendencies, articulation, pulse, rhythm, phrasing, individual rubato.
Level 2: Local Neighbors	**Simultaneity**	Awareness of one's playing in relation to musicians in the immediate neighboring vicinity. Can purposefully adjust one's own sound to match neighboring musicians.	Expanding awareness to those in proximity; Listening to other parts while playing your own; Matching timbre, melodic and harmonic intonation, blend, shared pulsation, and articulation; Developing a common understanding of musical concepts; Adjusting one's playing based on aural input.
Level 3: Instrumental Sections	**Unified Interpretation**	Synthesizing understanding of the score to justify and agree upon a musical interpretation of a musical line, either isolated or in the context of a larger musical work.	Adjusting tone and technique to achieve blend; Communicating to develop a shared understanding of phrasing; Creating within-sectional balance of static and changing dynamics.
Level 4: The Ensemble	**Intuitive Adaptation**	Adapting one's musical playing and decision making "on the fly" based on expectations and immediate nonverbal and musical cues from fellow musicians.	Synthesizing information to make small, incremental adjustments to tone, intonation, balance, blend, pulse, interpretation, etc. to match other musicians and help mold the emergent ensemble interpretation of a work.

Aural Awareness Domain

The domain of aural awareness development details how a musician might respond to the musical output of themselves and the musicians around them. When reflecting on live musical output, musicians develop awareness of their surroundings more effectively when they focus on more singular musical elements first (such as rhythm, tone, intonation, etc.) before moving to more complex and layered concepts (such as balance, or making phrasing decisions) (Slette, 2014). Therefore, this domain seeks to expand awareness from more simple, self-contained musical elements to more complex ones at higher levels. First, musicians should be aware of their *self sounds*, where they focus on their own instrumental output. This would include, but is not limited to, analyzing one's air support, tone quality, internal pulse, intonation, articulation, and personal interpretation. Next musicians would focus on *simultaneity***,** which Slette (2014) defines as "playing more accurately, according to what it says in the score, and that the goal is to play more 'together'" (p.92). However, since the leap from '*self-sounds'* to being aware of the *entire* ensemble is too large a jump for most musicians to handle at first, I relegate simultaneity to the individuals within direct vicinity of the musician, as with Pasquale's (2020) "individualized trios". Simultaneity might also include other ensemble performance concepts such as rhythmic entrainment (playing notes and rhythms at the same time), intonation, and tonal blend.

These first two elements of aural awareness, *self sounds* and *simultaneity*, describe skills that musicians would typically be asked to have ownership over in a conductor-centric rehearsal. The next two elements begin to incorporate more autonomous choices on behalf of the musicians that involve more extensive collaboration and communication to develop. *Unified interpretation* begins asking musicians within a same-instrument section to perform their dynamics,

articulations, and phrasing elements the same, but with informed purpose in the context of the greater musical work being performed. Often, this notion of phrasing is dictated by the conductor and musicians are simply asked to apply those dictated concepts. However, in the IMM, musicians should seek out consensus within their own sections, and should communicate with other sections regarding relative dynamic balance and phrasing ideas. Once the musicians have a clear understanding of the agreed-upon phrase structure of a work, they ought to become aware of one another's non-verbal and musical idiosyncrasies and are able to actively adapt their own playing to one another using those instantaneous modes of communication. This state is labeled *intuitive adaptation***.** Dobson & Gaunt (2015) describe this highest level of near-instinctual awareness as one of the most desirable traits in a professional musician. Intuitive adaptation occurs when one's focus on awareness becomes automatic, like muscle-memory, and is a natural state achieved after a great deal of practice mastering new, challenging concepts, much like Csikszentmihalyi's (1990) concept of flow states. Slette (2014) argues that this level of intuitive practice should occur at the concert, and if a musician is too focused on specific elements of their playing, they cannot achieve a truly musical performance. They go on to state that "aural awareness and the sharing of knowledge that comes with aural awareness is crucial in the ensembles' collaborative efforts to improve their playing" (p.228).

Figure 4. *The Musical Analysis Development Domain.*

Domain: Musical Analysis Development			
Level of Awareness	**Musical Element**	**Description**	**Rehearsal/Performance Concepts**
Level 1: The Self	**Notation-Decoding**	Ability to accurately read, interpret, understand, and synthesize written musical notation at various levels of complexity. Understand fundamentals of music theory.	Reading notation of varying complexity; Understanding a single line of written music; Understanding new concepts and rhythms in written form; Sightreading, improvising and imitating a simple musical line; Composing a musical line.
Level 2: Local Neighbors	**Musical Relationships**	Ability to, aurally and visually (from written notation), understand harmonic, melodic, and contrapuntal musical relationships in both a monophonic and polyphonic context.	Reading a reduced score; Understanding the role of a single musical line in the context of multiple parts; Improvising over harmonic progressions; Composition involving advanced structures.
Level 3: Instrumental Sections	**Audiation and Error Detection**	Create "aural imagery" in one's mind based on the written score, and evaluate discrepancies between one's own aural imagery and external aural input, from oneself or others.	Utilizing a full score to compare other instrumental parts to one's own; Noticing when one's audiation does not align with actual, produced sound or written notation; Playing etudes that purposefully contain errors to practice finding them.
Level 4: The Ensemble	**Comprehensive Musical Applications**	Synthesizing and applying concepts from music theory, history, aural skills, and other interdisciplinary music fields into performing a written score.	Suggesting interpretation of a line based on a piece's compositional history; Using theory to inform intonation; Relying on historical performance practice to guide stylistic interpretation.

Musical Analysis Domain

Where the aural analysis domain dealt primarily with musicians' responses to actual instrumental musical output, the musical analysis domain contends with musicians' understanding and interpretation of the musical score. It relies heavily on music theory literacy and applications of other musical domains (similar to the goals of the Comprehensive Musicianship Project, detailed in Chapter three). The first element of the musical analysis domain is *notation decoding*, which is a musicians' ability to create musical meaning out of written notation. In developing the *notation decoding* element, musicians should be largely concerned with monophonic musical lines and understanding linear progressions of sound and rhythm. At a more advanced level, concepts of melodic leading and natural solfège tendencies, as well as note-grouping and linear phrasing (Thurmond, 1982; Lisk, 2006) would all be appropriate to teach within this element. Next, musicians begin to understand *musical relationships***,** which entails the understanding of multiple aspects of musical context and composition as they relate to a musicians' own part. This element is intentionally vague, because there are a multitude of connections to be made when considering various aspects of music. These relationships could include understanding how a melodic line interacts with other lines of counterpoint, how a composer uses lyrics and word painting in an instrumental context, a composer's historical influences on their writing, or the intonation of one's own line based upon harmonic implications. While exploring this element, I would recommend providing each musician with a reduced score, allowing them to track multiple parts and draw connections with their own.

Similar to aural awareness development, the elements described thus far within the Musical Analysis domain are concepts and skills typically asked of musicians in a conductor-

centric rehearsal. The next element that would begin to transfer ownership of the rehearsal to the musicians would be *audiation and error detection***.** *Audiation* is defined as "the process of assimilating and comprehending music momentarily heard performed or heard sometime in the past. We also audiate when we assimilate and comprehend in our minds music we may or may not have heard but are reading in notation or composing and improvising" (Gordon, 2012, p. 3). More simply, audiation is an informed mental concept of music formed through past musical experience and learning. Edwin Gordon undertook extensive research on audiation and musical learning sequences. He outlines six stages of audiation. The six stages of audiation are:

1. Momentary retention
2. Imitating and audiating tonal and rhythm patterns and recognizing and identifying a tonal center and macro-beats
3. Establishing objective or subjective tonality and meter
4. Retaining in audiation tonal patterns and rhythm patterns that have been organized
5. Recalling tonal patterns and rhythm patterns organized and audiated in other music
6. Anticipating and predicting tonal patterns and rhythm patterns (Gordon, 2012, p. 18)

Gordon would argue that audiation ought to be practiced all throughout a musician's career. For the purpose of the IMM in the collegiate band context, audiation could more closely be defined as relating to Gordon's conception of stage 4-6 audiation. Here, Gordon describes that stages 1-3 are about developing concepts of sound and musicality, and stages 4-6 involve building on those concepts and applying them to unfamiliar contexts. Decoding notation and building musical relationships are, in fact, a part of Gordon's stage 1-3 interval, so it makes sense that audiation, explicitly within the IMM, begins at stage 4.

Half of a musicians' time in a wind band rehearsal is often spent correcting errors, making it a significant skill that musicians ought to be adept at (Cavitt, 2003). Error detection is combined with audiation at level 3 of the IMM because it is the natural extension and use of one's aural imagination. Musicians can't detect and identify mistakes in playing unless they are able to audiate a passage (using primarily what Gordon terms "notational audiation") (Gordon, 2012). Musicians also have an easier time detecting rhythmic errors over pitch-related errors, so care should be taken to begin with a focus on rhythm, and gradually introduce melodic concepts into the curriculum. Further, beginning and intermediate ensembles often focus on rhythm, tempo, and articulation, where more advanced ensembles focus more on rhythm, articulation, and expression and phrasing (Cavitt, 2003), identifying rhythm and articulation as two musical concepts to be developed more strongly in musicians.

Singing should also be a focused element of instrumental music to develop one's ear. In her literature review on error detection in music education, Sorenson (2021) found that sight-singing and ear training instruction, listening to recordings, and utilizing simple-textured tonal music can aid in developing error detection skills. She also found that conducting can actually hinder one's error detection abilities, so teaching this skill to musicians would actually provide more opportunities to detect and fix errors in a collegiate wind band. Also of note, it may seem at first glance that these aural *skills* might better fit in the Aural Awareness Domain. Where Aural Awareness focuses more on reflection and reaction to aural output, aural skills, such as audiation and error detection, are more focused on interpreting and analyzing written notation, hence, their inclusion in this domain.

The final element of the musical analysis development dimension is *comprehensive musical applications.* This final element relates heavily to the goals of the Comprehensive

Musicianship Project, mentioned in chapter three. Within this element, a musician would synthesize their understanding of musical skills and concepts, music theory, music history, and perhaps other academic domains to inform their interpretation of a piece. Non-performance activities involved in this element would include informed evaluations of musical compositions based on composer-related factors, interpreting a piece of music given its historical context, or perhaps composing or rewriting a piece of music in a given style. Teaching opportunities in this element could cater to all national arts standards in music (National Coalition for Arts Standards, 2025), and would involve synthesizing information to develop informed musical decision making. This is also supported in Gordon's (2012) research in music learning theory, as composite synthesis of musical information is a more advanced levels of musical learning.

Figure 5. *The Social Dynamics Development Domain.*

Domain: Social Dynamics Development

Level of Awareness	Musical Element	Description	Rehearsal/Performance Concepts
Level 1: The Self	**Identity**	Self-professed belonging to a group or organization, and any salient behaviors that one adopts to reinforce that sense of belonging.	Identifying as "a musician" rather than a "student musician" or "amateur"; Understanding the norms and expectations of being in a particular band; Identifying with mantras and sayings core to a band's identity; Feeling like a "family".
Level 2: Local Neighbors	**Roles and Structure**	Specific responsibilities musicians can hold, and how the rehearsal space is organized and allow for musicians to operate.	Understanding the various roles that a conductor fulfills in a rehearsal; Understanding implicit roles within a section; Asking musicians to be responsible for listening, commenting, or critiquing; Adhering one's limits of behavior within an ensemble.

Figure 5 *(continued)*

Level 3: Instrumental Sections	**Communication and Problem-Solving**	Developing social communication and collaboration skills to effectively share one's musical ideas to others in the ensemble, both verbally and nonverbally. Working with other musicians to identify solutions to self-imposed, score-imposed, or conductor-imposed musical problems.	Engagement with peer-teaching; Student-led chamber music rehearsals; Negotiating one's musical ideas; Deferring to other musicians' musical ideas; Engaging with conductor or musician-initiated dialogue; Providing written comments; Engaging with a recording on a digital forum.
Level 4: The Ensemble	**Distributed Leadership**	The natural emergence of mutual influence between agents in an ensemble rehearsal that develop according to need, expertise, and willingness to lead.	Taking initiative to address a musical issue not addressed by the conductor; Having a sectional rehearsal to unify group interpretation; Helping a fellow musician out unprompted; Forming a committee or group to help the ensemble in some way.

Social Dynamics Domain

The Social Dynamics domain pulls heavily from information gleaned in Chapter four about how musicians in ensembles interact with one another. This domain, and the elements contained within, describe the newest and most novel introductions to the explicitly-taught ensemble curriculum. The purpose of its inclusion in the IMM is that, in order for musicians to interdependently rely on one another for feedback and accountability, communication, problem-solving, and leadership must be explicitly taught and valued in the rehearsal learning environment. Furthermore, not only can social skills be taught through leadership training, but social and leadership development can be accelerated through encouraging efficacy, developing self-awareness, situating the environment to be well suited for such training, and helping students to understand metacognitive abilities associated with social learning (Avolio & Hannah,

2008). In the previous two domains I discussed, the level one and two elements often correlated with typical traits of a conductor-centric rehearsal environment, while the third and fourth level elements marked a shift from typically conductor-held skills to being owned by the musicians. In this domain, largely all the elements are seldom explicitly taught in any band rehearsal setting. All contained elements represent new explicitly-taught materials for musicians to develop control over.

The first element in the social dynamics development domain is that of *identity.* In this context, identity is defined as the self-professed belonging to a group or organization, and any salient behaviors that one adopts to reinforce that sense of belonging. In Dobson & Gaunt's (2015) study, one's ability to fit in to a group while maintaining their personal identity was a key element in a professional orchestra's positive evaluation of new, potential musicians. Strongly developed identities as musicians belonging to an ensemble have been shown to correlate with commitment to that ensemble (Dagaz, 2010), an ability to persist through difficulties (Evans, 2023), and increased motivation and agency, especially when the identity of a performed composer matches that of the musician (Hale, 2024; McNamara, 2019).

As musicians develop their inter-ensemble identities, they become more familiar with their peers and the way the ensemble operates. This leads to the second element of the social dynamics domain: *roles and structure***.** Roles refer to the specific responsibilities musicians can hold, both socially and within the rehearsal process. Structure refers to the way the rehearsal process and space is organized, detailing how a musician can successfully operate within the given rehearsal space. As discussed extensively in this document, the goal of the IMM is to develop efficacy and ownership of certain conductor roles in ensemble musicians. The ensemble space and structure must accommodate this, or musicians will never develop the efficacy and

confidence needed to take greater ownership over these new roles. Kleyn (2016) found six specific and distinct roles that emerge in professional chamber music settings, referenced in chapter four. Kleyn also found that, in the chamber music setting, musicians would switch roles as need dictated, reinforcing the notions of distributed leadership allowing for individuals to shift leadership roles depending on their ability and willingness to do so. This is similar to the way that the Orpheus Chamber Orchestra would purposefully rotate roles to maintain trust and control in their ensemble (Khodyakov, 2007).

The conductor is largely responsible for facilitating the shifting roles in an ensemble under the IMM. If developing musician roles is similar to developing student-leadership roles, then we know that it is important for the climate and structure of a rehearsal to model the values it espouses to teach (Eich, 2008). If musicians are to see themselves fulfill various roles, it is important that they see the conductor do the same. Supporting this element, musicians filling the role of conductor would be relevant (Goff, 2016) as they watch the conductor model a different role or provide feedback to the musician-turned-conductor. Roles serve to develop hierarchy in ensembles and dictate what musicians should or should not do (Hargreaves, 2024). Musicians who view their role as superfluous or unnecessary are more likely to feel less relevant and less satisfied by the work they do (Kennedy, 2020). It stands to reason that expanding the scope of musicians' roles could help break that cycle of hierarchy, motivate feelings of value of ownership within ensembles, and pave the way to develop more distributed leadership structures.

The third element in the social dynamics domain is *communication and problem solving.* By now, musicians operating within the IMM have been prepared for new roles and have strong identity-related trust in the function of the ensemble and its conductor. Musicians must then learn the first steps of interdependency- how to problem-solve, communicate, and work together. As

discussed in Chapter three, early modeling of critical questioning techniques can teach musicians what appropriate communications regarding musical problems looks like. Roesler's (2016) five-component problem-solving model provides a solid foundation from which to do this. This model involves:

1. Establishing goals
2. Evaluate
3. Conceive and consider options
4. Apply principles
5. Decide and act

In previous studies where communication was measured and evaluated in collegiate ensembles, it was found that young musicians were hesitant to engage in peer communication and feedback, for fear that they would be seen as a 'know-it-all' or isolate themselves from their peers in dominating the conversations (Shaw et al., 2024). Indeed, in these studies, only a handful of musicians contributed verbally any musical input, largely due to these fears. Despite these reservations, the best way to develop comfort collaborating is by practicing the skill of collaboration (Cortez et al., 2009). This collaboration and communication can be taught in a multi-step process involving the conductor:

1. Fostering team orientation through goal setting.
2. Developing shared team leadership.
3. Build confidence in individuals monitoring musical problems.
4. Build confidence providing feedback.
5. Encourage musicians to vocalize support of one-another.

It would seem that conductors could rely on other forms of communication to develop efficacy with musician peer-communicating. Conductors could describe the kind of feedback they're looking for and call on musician volunteers to contribute. I have found that having musicians write their comments down, turn them in to the conductor, and having the conductor synthesize the ensemble's comments and return them to the musicians in written or digital formats has been useful. This technique shows musicians that their musical thinking is in line with that of their peers and builds group efficacy in their own self-belief as a commentator on musical outcomes. One could also use rubrics for peer evaluations of performance, or digital forums where musicians can communicate anonymously. Often, though, the best method to allow musicians to emerge as communicative leaders is to create "controlled confusions" or a "muddle" in which directions are clear, but feedback is ambiguous, and ask musicians to clarify things or add their own feedback (Duke, 2012; Tan, 2014).

The final element in the social dynamics domain is *distributed leadership.* At this level of awareness, musicians are actively applying the "leader-plus" concepts discussed in Chapter five and are leading at the same level as the conductor (Spillane, 2006). Rehearsal directives are clear and organically generated by a consensus of musicians and conductors and are woven into the fabric of daily rehearsal goals. Musical needs for improvement are evident to most of the ensemble, as most musicians have developed proficiency in ensemble awareness, score analysis, and error detection. These needs can be communicated without fear of judgement or negative response from peers, and leaders emerge to deal with those concerns by ability more than a named leadership position, though someone in a named leadership position may legitimize these emergent roles (Hackman & Johnson, 2009; Bolden, 2011; Acton et al., 2019). Ideally, these behaviors would become normalized within the ensemble, and would carry over between

whatever varying iterations of ensemble membership exist within an institution. Musicians could become more integral in ensemble planning roles, such as concert and outreach scheduling, and literature selection (though not without proper training and modeling from the conductor first). Musicians, rather than the conductor, would be the primary conduits of these shared responsibilities and standards of operation, thus fully realizing a truly-shared musicians and conductor rehearsal space.

There are certainly more competency elements within the scope of wind band rehearsals than the IMM includes, ranging from focused topics like literature selection, to broader topics such as specific instrumental techniques. However, as the IMM seeks to *develop musical leadership between all agents equally,* the scope of the included domains seeks to resituate popularly held conductor responsibilities in the hands of the ensemble musicians. The chosen domains, and their requisite elements contained within, seek to cover the most ground considering the relationships between the ensemble agents of musicians, conductor, and the musical score.

Interdependencies of IMM Elements by Level

Each level of awareness in the IMM consists of three distinct elements— one from each domain of development. At the first two levels, these elements are largely separate by domain, but do have certain characteristics that unify and define the level. As the musician progresses through the more advanced levels of the IMM, however, the elements exhibit natural interdependencies that connect their functions and allows further level qualities to emerge. These emergent qualities are necessary for musicians to fully grasp the elements on levels three and four and be ready to take on more typically conductor-centric responsibilities. Those emergent qualities and interdependencies are discussed below by level of awareness.

Levels One and Two: The Self and Local Neighbors

Within the first two levels of awareness, the included elements remain fairly isolated in their scope, existing and being largely defined within their own domains. For example, in level one, a musician's ability to create a characteristic self-sound (Lv. 1 Aural Awareness Domain) is largely a separate skill set from a musician's ability to decode and read musical notation (Lv. 1 Musical Analysis Domain). These two elements are indeed related but can develop separately. What the elements at the first level all have in common is that they form the foundation of a musician's technical skill set required of them to expand their musicianship.

In ensemble rehearsals, musicians are more likely to focus on their own experiences and musical output than that of their fellow musicians (Sutherland & Cartwright, 2022). The first level of awareness, the self, leans into this fact. A musicians' concept of their self-sound (from the aural awareness domain) will change as they grow and assimilate new concepts of tone quality advanced techniques, but the notion of being self-reflective of one's own playing remains constant throughout a musicians' career. Similarly, musicians in a wind band will always need to read and decode notation, but the complexity of the notation will change and increase throughout their career. A musicians' identity will also grow throughout their performance career and can have a strong impact on their motivation to continue to perform (Dagaz, 2010). Eventually, musicians reach a certain point where these elements become automatic and are not within the awareness or focus of the musician (Slette, 2014). At this point, musicians might move to the second level of awareness, or experience more challenging musical stimuli that would cause them to still focus on level one elements, simply on a deeper level.

Similarly, at the second level of awareness (local neighbors), musicians still develop elements separately, but build upon earlier elements within each domain. Musicians use their

concept of self-sound to evaluate their own playing in relation to their neighbors'. Looking at the intertwining of musical relationships relies on one's ability to decode notation and find similarities, differences, and patterns between multiple lines. As more roles are introduced in rehearsals, ensemble members may alter their self-ascribed musician-identities to assimilate these new roles. Where level one awareness allowed musicians the foundation to play music themselves, level two awareness provides musicians a foundation from which to begin interacting with their peers, both socially and musically. This is the reason for my differentiation between Pasquale's (2020) definition of *individualized trios* and my delineation of *local neighbors*.

As mentioned previously, levels one and two largely include material that is largely integrated into the conductor-centric band rehearsal space. By starting from this base, the IMM naturally includes elements familiar to conductors, facilitating an easier introduction of the model into their rehearsals. Further, conductors sometimes feel that they need to maintain stronger control of their ensembles. This is usually due to impending performance deadlines and limited rehearsal time (Bazan, 2011; Dodson, 1989; Hedgecoth, 2018). Should conductors need to return to this conductor-centric space, they are, in fact, still using the IMM- simply on a reduced level of awareness for musicians. Movement within the IMM, discussed later in this chapter, can happen fluidly, in stages, and can move back and forth through the levels of awareness. By accommodating conductor-centered practices into the core of the IMM, there is a sense of safety for conductors who, when breaking from popular practice, have a base to return to and continue to expand from. However, the lack of interdependencies between elements in levels one and two, and the resultant isolated nature of the three domains in that range, continue

to reinforce that conductor-centered rehearsals are more restrictive to musicians' learning and growth.

Level Three: Instrumental Sections

At the third level of awareness, the elements from each domain begin to interact and develop a greater sense of interdependency. It is also at this level that elements which were typically controlled by conductors are released to musicians. The major musical goals at level three involve making sure musicians have practice in creating aural images of written music, detecting errors between what they conceive of through audiation and what they actually hear, and developing consensus with their instrumental sections on group interpretation. Interpretation cannot occur unless musicians can detect errors and form their own informed concepts of what music should sound like. Further, they are unable to effectively come to a consensus if they lack the ability to communicate, solve musical problems, and resolve interpersonal conflict. The skills and elements developed in each domain at this level begin to start interconnecting and developing interdependency. This is reflected in Figure 2 by the domain boundary lines beginning to fade.

At level three, musicians are well aware of their need to work together, and this notion has ideally been facilitated by the conductor. The conductor has modeled what musical problem solving looks like in their interactions with the score and discussions of metacognitive techniques to describe how *they* might interpret a piece, providing tools for musicians to utilize. They might discuss note grouping (Thurmond, 1982), notions of basic phrasing (Lisk, 2006), or undertake more extensive score study as an ensemble and engage in purposeful error detection exercises. Appropriate and effective communication will have been modeled, and alternative opportunities to communicate musical ideas will be provided to musicians who may not feel

comfortable communicating verbally at first, such as through writing comments or using digital means. Musicians will pull on their prior knowledge from lower awareness levels to inform their budding collaboration and musical decision making and will begin shifting roles as they are comfortable holding them. It is likely that musicians within the ensemble will start to stratify in their readiness to move on to level four at this point. Some may need more time than others to develop effective communication skills and develop their own musical ideas. Conductors ought to be careful at this point to be more facilitative, and only provide information that would inform decision making, rather than making decisions for students. This process may take more rehearsal time, but should become more efficient with practice, support, and feedback.

Level Four: The Ensemble

At the fourth level of awareness, the ensemble begins acting as a single, cohesive unit. Divisions by section are relevant only insofar as the music dictates, and even then, sections can rely on their skills from level three to make section-level decisions. At this level, the ensemble functions as a system "precisely calculated to maximize individual contributions" (Lewis, 2012, p.106). Musicians and the conductor act similarly to professional level musicians, being responsible for their own roles as performers, and naturally adapt their own playing based on comprehensive musical knowledge and social awareness built from familiarity and trust over time. For example, a second trumpet player might become accustomed to understanding how their principal player moves before they begin playing, allowing the second trumpet player to intuitively adapt to their principle's playing, and providing for a seamless entrance and a unified sound. In this example, the musician ought to also understand music theory concepts enough to know their role in a particular chord structure at the trumpet entrance, allowing them to anticipate intonation tendencies of their fellow musicians and negotiate their own intonation with

that of their section and what the chord dictates to be played in tune. Musicians would carry out processes like this naturally and would solve problems amongst themselves as they arise, allowing for a more distributed form of leadership across musicians and the conductor.

Lewis (2012) would argue that this stage is reached through socially-distributed cognition of the ensemble. Lewis describes the conductor as 'incomplete", stating that there is need for the ensemble musicians and the knowledge contained within the score to fill gaps and assist in creating a musical performance. He describes the rehearsal process as beginning with non-automated processes and points of attention having most of the focus, as I describe in levels one and two of awareness. As these processes become more automated and unconscious- what Slette (2014) would refer to as 'performance mode'- the conductor can "slow time" in the rehearsal and bring up more musical minutiae, revealed through the musicians being able to focus on different musical details once more basic ones become automated. Musical interpretation becomes an emergent quality of the conductor's and musicians' gestures combined with their innate knowledge of the score (Lewis, 2012). The eventual communication of musical information leads to a point of "cognitive saturation," as described by Lewis (2012) here:

> The improved ability to conceptualize the musical landscape in multiple layers and at multiple levels and, perhaps even more importantly, develop the skill of moving between these layers and levels as necessary, are the fruits of both systematic practice and analytical approach (p.250)

Lewis is describing how a conductor might elevate certain aspects of performance only when musicians fully grasp and conceptualize more basic elements. This justifies how musicians in the IMM may move through the levels of awareness in unique ways, and often, revert to lower-level elements when confronted with more advanced materials. I extend Lewis' definitions here by adding that, in addition to comprehensive musical knowledge and understanding of a

piece, understanding of one's peers' tendencies (social and musical) are necessary for an ensemble to perform at the highest level. In the IMM at the fourth level of awareness, the boundaries of the three domains of development disappear, mirroring each domain's interdependencies with one another. This level also reflects the highest level of interdependency amongst rehearsal agents- the musicians, the conductor, and the score.

When new information is introduced to a level four-acting ensemble, they may revert to a lower level of awareness to develop new requisite skills, but as Lewis points out, musicians can operate at multiple levels of skill mastery simultaneously, and each skill and concept contains its own degree of mastery. Therefore, when musicians revert to lower levels in the IMM as a response to new information, they retain many of the procedural elements learned prior. This would allow them to return to level four more quickly and efficiently in a new cycle of concept mastery. I would postulate that the only level that would not regress too much would be social dynamics, as those skills are universally applicable to methods in approaching new musical concepts. This reflects Weren et al.'s (2017) findings that healthy social dynamics sustain ensemble motivation when task (musical) motivation is challenged. This underscores the importance of purposeful, explicit instruction in social communication and collaboration present in the IMM.

Intended Outcomes of the IMM

Now that the IMM and its domains, levels, and composite elements are defined, supported, and explained, this section will detail the musician's experience operating within the IMM. In the beginning stages of utilizing the IMM, typical band rehearsals would look fairly similar to conductor-centric rehearsals; standards would be set, classroom norms would be developed, and fundamental elements will be taught. As musicians develop, conductors will start

to model metacognitive processes in musical problem solving, communication, and healthy musical practice. They will model and demonstrate how to practice and experience new musical concepts on one's own, and how to ask for help. I recommend that in both the concert band and marching band contexts, named musician leadership undergo a more extensive leadership training "camp" prior to rehearsals starting for the semester, and during the semester, micro-leadership lessons be introduced. Musicians will be given small amounts of autonomy at first, then more as they show a willingness and ability to lead (Fisher, 2021).

As musicians practice their autonomy and begin interacting more and more with one another, the conductor should be moving into a more facilitative role, correcting both musical behaviors and social behaviors. Over time, as musicians grow and learn from one another, new group norms will emerge, and should be explicitly addressed as musicians become more comfortable with their new roles and autonomy. In expressing autonomy, musicians can often present incorrect information to one another (Ye, 2023). Conductors should be aware of their rehearsal space and be prepared to gently correct these mistakes as they arise, continuing to develop musician competencies. When musicians become more adept at peer communication and musical proficiency, they develop self-efficacy, or self-belief (Bandura, 1977). This efficacy is a strong motivating factor for musicians to continue their participation in band and to continue to grow musically. As development continues, named musician-leadership roles become less influential, and musicians rely on peers who they develop trusting relationships with, as well as peers that they see as musically competent (Balkundi & Harrison, 2006). Eventually, through the creation of planned "leadership gaps", an effective, emergent, and distributed pattern of leadership emerges amongst musicians. The following section will detail potential outcomes of participation in the IMM.

Again, with a theoretical model, it is impossible to know the outcomes of an ensemble ascribing to and utilizing the IMM without empirical evidence. The intended goal of the model is centering musicians equal to the conductor in a rehearsal space to create a truly collaborative environment. The reasonable conclusion is that musicians will develop stronger rehearsal skills and be more empowered to create music with others and understand the importance of interdependency in rehearsals. However, I believe that there will be other intended outcomes of utilizing the model within the rehearsal setting. First, using the model in rehearsal will develop musicians who are intrinsically motivated and self-determined to undertake pro-social and pro-organizational tasks; colloquially, this could be described as "giving back" to the ensemble. Second, in addition to efficacy, progression through a socially-forward model like the IMM could also develop other positive psychological traits that are beneficial for musicians.

At the intersection of each domain of development in the IMM lies an implied motivational factor that increases as musicians develop through the model. Each domain intersection highlights an overlap of interactions between ensemble agents. Musical analysis and aural awareness both reflect theoretical and practical understandings of the musical content, respectively, and develop competency. Aural awareness and social dynamics focus on the musical and social ways that musicians and conductors interact with one another, developing relatedness. Musical analysis and social dynamics tap into social-cognition and deepening each individuals' relationship with music, allowing for more autonomous musical behavior. These three secondary factors – competency, relatedness, and autonomy- are Deci and Ryan's (2000) three components of self-determination theory. Self-determination theory is an approach to explaining people's development of intrinsic motivation through fulfillment of basic psychological needs in social environments, like the wind band rehearsal (Deci & Ryan, 2000).

In music, the components of self-determination theory have been shown to increase confidence and efficacy and enhance task performance and persistence (Meals, 2016). As musicians develop in the IMM, especially as they gain more autonomy in levels three and four, they are likely to grow increasingly more motivated, potentially accelerating their movement through the IMM.

Individual musicians may experience a different progression through the IMM individually than the rest of the group. Individual movement through the levels of the IMM provides a source of self-reflection for each musician as to the elements that they have mastered, are developing, and have yet to take on. This information allows one to purposefully seek out help or support from one's peers if they are aware of the elements they need to develop to progress in the IMM (and the sources of self-efficacy can help their peers develop confidence in one-another). It should be made explicitly clear that all musicians will move through the IMM at different rates. Level four achievement is not necessarily a goal by a specific time, but rather, each level provides the musician with information as to how they might best use their strengths and competencies to serve the ensemble at the level they're at. Naturally gifted musicians and communicators will emerge in an ensemble. With named leadership, these natural, emergent leaders can help others develop their efficacy and move through the IMM.

At the ensemble level, movement through the IMM provides conductors with information as to what kind of information they should be providing, how they should be structing their rehearsal pedagogy and conducting, and the degree to which they should be releasing control to their musicians. While this form of instruction and podium leadership may not be appropriate for each individual musician, it allows the conductor to push the envelope of artistic expression at the macro-level. This is sometimes referred to as "teaching to the middle or the top" in educational settings. However, with proper scaffolded instruction, the further-progressed

musicians can ensure that their peers who may be operating on a lower IMM level of awareness not be left behind. The conductor's role, including how to guide an ensemble through the IMM and how their role changes at each level, is discussed at length in chapter seven.

Summary

The Interdependent Musicianship Model is a multi-stage pedagogical model of collegiate band rehearsals that seek to create an equal, collaborative rehearsal environment built upon the foundation of distributed leadership theory. The IMM is comprised of three interdependent domains of development that musicians grow within as they progress through four levels of awareness. Musicians become more aware of their written score, the ensemble sounds, and each other as they develop mastery of musical communication and problem-solving, facilitated by the conductor. Musicians move through the IMM by developing self-efficacy and use of the model could result in the development of intrinsic, self-determined motivation and positive psychological capacities, alongside greater competency in owning the elements of an interdependent rehearsal environment. The next chapter will examine the conductor's role in implementing, utilizing, and facilitating the IMM to their musicians, including a discussion on the shifting role of the conductor, assessments and tools to measure the IMM, and what a curricular plan might look like for a collegiate marching band and a collegiate concert band.

Chapter 7: Conductor Applications of the Interdependent Musicianship Model

The IMM provides a scaffolded, codified approach to creating a more musician-centric rehearsal environment for college bands. Through this model, musicians are gradually taught typically-conductor-held rehearsal skills in the domains of aural awareness, musical analysis, and social dynamics. The hand-off of these skills ought to result in a self-perpetuating system in which musicians hold one another accountable and assist in building these distributed rehearsal skills. However, the IMM does not explicitly explain the practical nature of its application, nor does it explicitly describe the role of the conductor in its implementation. Distributed leadership theory, which is fundamental to the IMM, states that theoretical postulating of a model has no merit unless that model contains a method of practical implementation (Spillane, 2006). Therefore, to answer this call to practice, this chapter is dedicated to describing the conductor's actionable items and change over time to implement the IMM in their ensemble. The following guiding questions will be addressed:

1. *How does a conductor's role change as they progress their ensemble through the IMM?*
2. *How might a conductor measure a collegiate ensemble's progress through the IMM?*

Adapting New Roles and Structures

The shifting of roles, especially on the part of the conductor, has been a major theme in this document. In chapter two, Blumburg (2009) recommends six roles an instructor can take on to facilitate a student-centered classroom:

1. Creation of an environment for learning.
2. Alignment of course components across difficulty level.
3. Teaching or learning methods are appropriate for student learning goals.
4. Activities involve student, instructor, and content interactions.

5. Articulation of SMART objectives and goals.
6. Motivating students to learn.

Blumberg also outlines four strategies for instructors transitioning into a facilitator role, including planning out when students should master course objectives, developing an action plan for how students will collaborate, anticipating potential student needs, and giving meaningful and authentic feedback. Cognitive apprenticeship (Collins et al., 1987) dictates the natural shift of teacher/conductor role as they scaffold lessons and move from modeling to coaching to fading. Gumm's (2023) conducting and pedagogical functions, cited in Chapter three, describe how a conductor can adjust their work from the podium to facilitate control over the musical process, or release it to their musicians.

This section focuses on three aspects of a conductor's changing roles in the IMM. First, the conductor-as-artist describes how conductors can deepen their musical gesture and instructional output *through* a planned, pedagogic release of responsibility to musicians. Second, the conductor-as-facilitator describes how a conductor can approach the role of musical and leadership facilitator, paying special attention to developing the social dynamics domain in the IMM. Third, the conductor can change the rehearsal environment to fit the changing needs of the IMM.

Conductor as an Artist

In all ensembles, utilizing the IMM or not, conductors are conduits of musical information. They channel their nonverbal musical intention through a series of gestures, and when that fails to yield the result they're seeking, they'll resort to verbal explanations of their intentions within small "rehearsal frames" (Duke, 2012). In Cavitt's (2003) study investigating how rehearsal time is spent in middle and high school wind bands, nearly 49% of the rehearsal is

spent identifying and correcting playing errors; this percentage is likely less at the collegiate level, but may be close in ensembles comprised of non-music majors. This time can be further broken down into the following conceptual target areas (listed from most frequently addressed to the least): technique, pitch accuracy, intonation and tone, rhythm, articulation, dynamics, and tempo (Cavitt, 2003). In this study, blend, balance, phrasing, and musicality were not addressed, despite being significant indicators of musical performance by other scholars (Pasquale, 2020).

Conductor-centric models leave this error correction to the conductor. In the IMM, conductors explicitly model and coach musicians to be able to detect errors and provide feedback to their peers regarding those errors. When conductors feel their ensemble is ready to take on such responsibility, they can purposefully create what, in the leadership development research, is known as "trigger points", "challenge events", (Avolio & Hannah, 2008) or "leadership gaps" (Lewis, 2012). These leadership gaps involve leaving open a specific need to be filled by individuals who possess the awareness to recognize that a vital need is not being met, and those with the self-belief to fill those gaps (Avolio & Hannah, 2008). For example, a conductor may teach their ensemble to listen to a consistent snare drum part in a particular passage of music to entrain and get their tempo. After making this connection with the students that tempo comes from the snare drum, they might stop conducting a beat pattern at that point. One might expect an ensemble to fall apart or slow down in this moment- the conductor can provide reminders by asking where to get tempo from, and try the passage again, with the same conducting strategy. Eventually, the students will focus on listening for tempo and communicating with one another rather than relying on the conductor for pulse and tempo. This tempo "gap" is filled by, ideally, the percussionist playing snare drum, leaving the conductor to change their conducting gesture and elevate another aspect of the music.

Despite expressive gesture being a major point in several popular conducting texts (Hart, 2019; Green, 1997; Haithcock et al., 2020), some conductors have a challenging time implementing it as a method of elevating musical performance. Silvey et al. (2020) postulate that discomfort in expressive conducting comes from a lack of expressive instruction (left hand or facial gesture), a focus on right hand technique being prominent in many conducting texts, or a pedagogical approach to expression that doesn't match the gesture. Some of this discomfort in expression may come from conductor training. Hart (2019) found that authentic rehearsal and conducting experiences were the most valuable aspects of their conducting classes. It was also found that many in-service conductors utilized surface-level score study, where a few more experienced conductors researched historical and cultural implications of a piece. It would stand to reason that a deeper level of score study could result in more expressive gesture, especially with conductors who have more practical experience and who have been conducting longer. Conducting symposia, peer tutoring, and self-reflection could also be an effective method to enhance expressive conducting gesture (Durrant, 2008).

Expressive gesture is strongly correlated with more artistic and musical performances (Gumm, 2023; Silvey et al., 2020). Developing comfort with these gestures may take practice to sustain in performance, rather than reverting to mechanical-precision gestures of simply beating time (Gumm, 2023). Elizabeth Green, a highly influential music teacher, conductor, and professor at the University of Michigan in the mid-twentieth century, provides guidance to several expressive techniques in her book, *The Modern Conductor* (1961; 1997). Green first discusses *melding and psychological gesture.* She defines the melded gesture as "the combining of two or more time-beating gestures into one long, sustained gesture that has a duration equal to that of the combined beats" (Green, 1997, p.138). This melded gesture communicated not only

time, but phrase and air flow. By eliminating an ictus point between beats, the conductor communicates musical style, length, and sustain, where a beat-centered pattern communicates more fundamental music components that run the risk of interrupting the phrase.

Next, Green's idea of *psychological conducting* is more of a technique and exercise meant for musicians to perform a conductor's improvised intentions on a single pitch. In psychological conducting, the conductor is meant to demonstrate not only time, but duration, dynamics, articulation and style. Green (1997) states: "Psychological conducting implies a transfer of ideas from the conductor's mind to the performer's mind through the medium of precise conductorial technique without the use of verbal directions. After all, isn't that what conducting is all about? The impulse of will must be strong" (p.146). Green mentions the importance of musical preparation, and the benefit that this technique allows students to get musical information without a lot of verbal discussion. Psychological technique is also the precursor to what Green calls *the virtuoso technique*- her method of truly immersive artistic and expressive conducting.

The *virtuoso technique* is described by Green here:

> Virtuoso technique is the free-wheeling, uncontrolled, let-it-ride technique that takes over when all of your attention is centered on the sound of the music and the performance itself. Every public performer has used it. It is not always reliable. A truly fine virtuoso technique rests upon a strong foundation of personal know-how and mental-physical labor. The conductor's hands-arms have come, honestly, to the point where they respond automatically and perfectly to the musical thoughts in the mind. The conductor is free to let his or her imagination soar. Too often, performances that fail do so because the performer has never acquired a controlled technique. How recurrently we see it on the podium! (Green, 1997, p.151)

Green's virtuoso technique would seem to mirror Lewis (2012) concept of "musical saturation", where a musician or conductor knows the musical score so well that they seem to perform

automatically, or perhaps Slette's (2014) similar notion of automatic performance awareness. One might arrive at this point from a perfect balance of musical mastery and ability and challenge to one's skill, as in Csikszentmihalyi's (1990) theory of flow. The virtuoso technique builds on interpretive technique from studying and practicing other aspects of conducting gesture and emerges naturally over time. As musicians progress through the IMM, conductors might find themselves developing more comfort with the virtuoso technique over time as they purposefully alter their gesture to develop leadership and pedagogical gaps for their musicians. Green provides seven suggestions for maintaining this technique and avoiding monotony in one's conducting:

1. Developing variety in the shapes of one's gestures and beats
2. Developing variety in the size of one's gestures
3. Developing variety in expressed style (legato, marcato, staccato, etc.)
4. Developing variety in speeds of gesture-motion
5. Developing variety of positions in space
6. Developing a variety of melded gestures
7. Developing variety in texture and emphasis

Conducting gesture and music teaching pedagogy are intrinsically linked (Forrester, 2018; Grey, 2022; Haldeman, 2001; Hart, 2019; Silvey et al., 2020). When conducting and instrumental pedagogy are often taught as separate courses (Forrester, 2018), there is inherently a disconnect between pedagogy, conducting, and application of the two (Hart, 2019). Conducting and rehearsal pedagogy must match and reinforce each other to be effect for an ensemble. In a setting where a conductor is releasing control to musicians, it becomes somewhat disingenuous to continue to simply beat time and give rudimentary cues, even with skillful teaching within

rehearsal frames. The leadership gaps, then, become not only a significant source of growth for musicians, but also a marker of reflection that a conductor is actively elevating the music-making in an increasingly musician-centered rehearsal space.

Considering change over time in IMM implementation, a conductor must become aware of the functions their gestures and instruction are serving. Referencing Gumm's (2023) six conducting functions and eight pedagogical functions from chapter three, one could map out the functions that gesture and instruction serve across each level of the IMM. In levels 1 and 2, which are largely conductor-centric, a conductor could realistically find themselves comfortably using Gumm's *control* functions. In conducting, those would involve mechanical-precision (beating time and cueing entrances), motivational (using gesture to regulate behavior and inspire attention and focus) and expressive (showing more musical line). "Expressive" is a *release* function, but in the early stages of IMM development, it could be used more deliberately to teach musicians how to interpret conducting gesture. As an ensemble progresses to levels 3 and 4 and becomes more musician centered, the conductor could use the control function of physical technique (inspiring mirrored behavior by mimicking physical instrument movement), continuing to develop expressive function, and introducing psychosocial (familiarly grasped and interpreted) gestures, and finally unrestrained tone (beating out of time in a way to encourage free and relaxed tone quality), which is reminiscent of Green's melding and virtuoso technique.

Gumm's pedagogical functions mirror the placement of the conducting gestures in the IMM. The control functions largely exist in levels of awareness 1 and 2 (*The Individual* and *Local neighbors*), while the release functions exist largely in levels 3 and 4 (*Instrumental section* and *The Ensemble*). Interestingly, some of the control functions (time efficiency, nonverbal motivation, and positive learning environment) are relevant at nearly all levels of the IMM but

take less effort at the later levels and become more naturally executed. Figure 6 below depicts a theoretical depiction of how gesture might change over time as an ensemble progresses through the IMM, and Figure 7 does the same, but for pedagogical functions. These figures are not based upon actual empirical data, but rather are a representative model of frequency of use through the IMM for each function, given that control functions are used earlier in development as a conductor, and release functions are used later.

Figure 6. *Hypothetical Frequency of Use of Each of Gumm's Conducting Functions per IMM Level.*

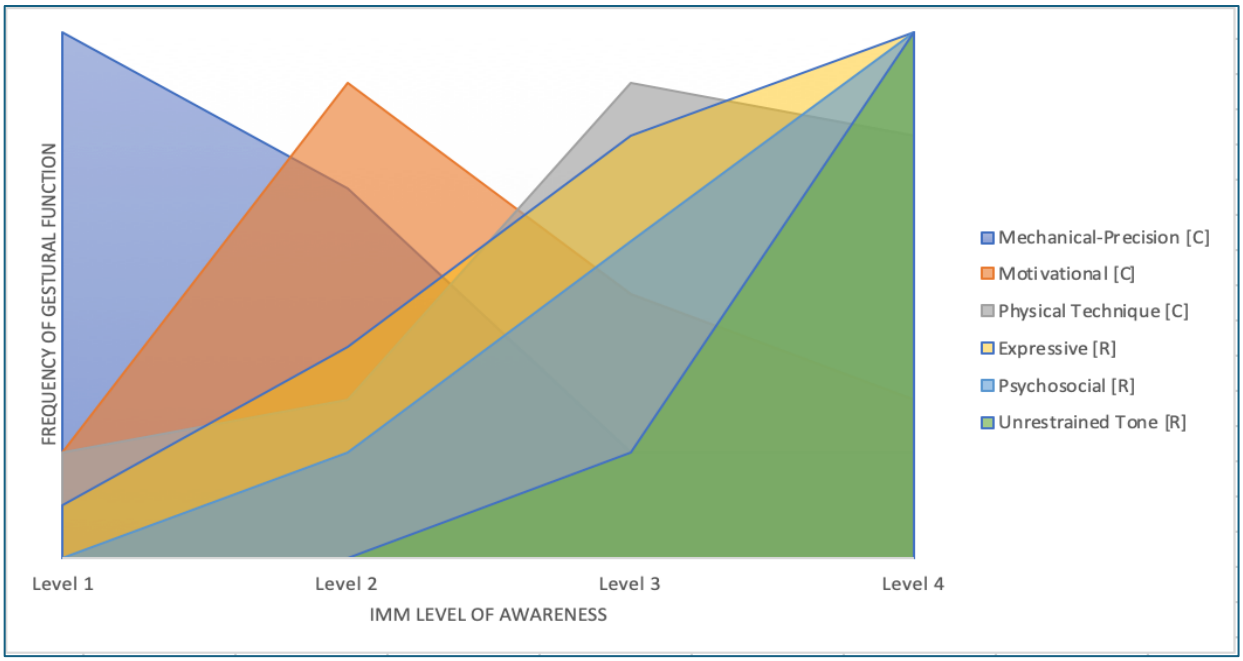
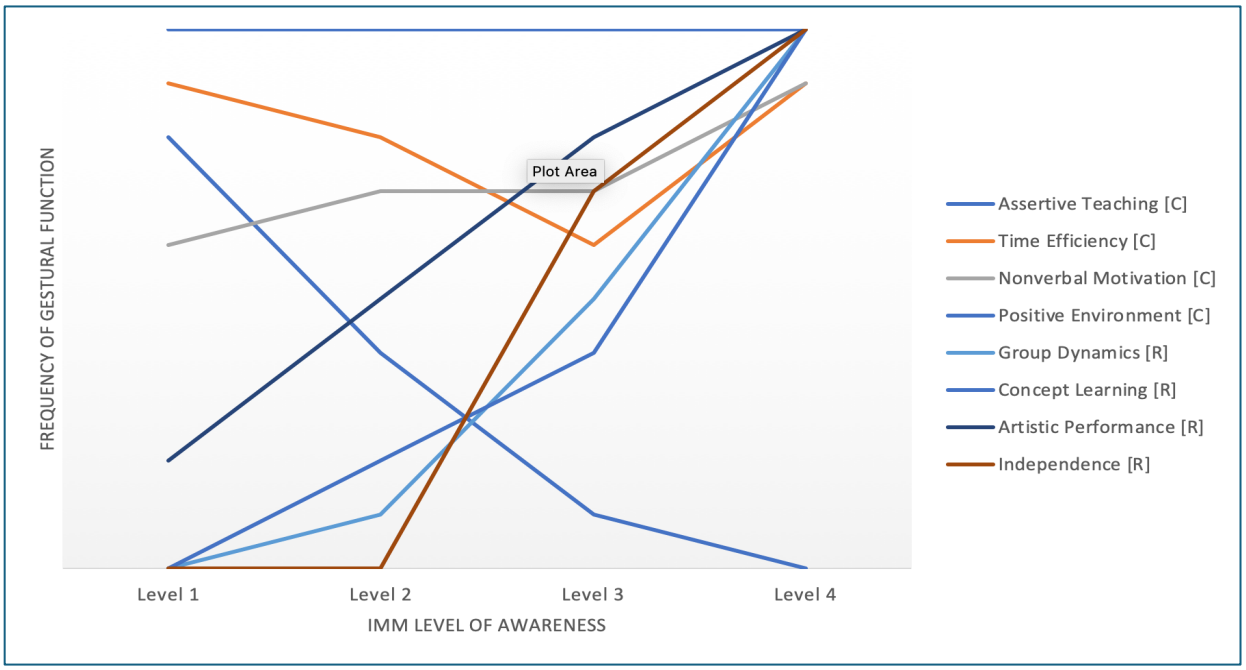


Figure 7. *Hypothetical Frequency of Use of Each of Gumm's Pedagogical Functions per IMM Level.*



In Figure 7, many of the teaching and pedagogical functions approach a maximum level by Awareness Level 4 (*The Ensemble*) because, unlike conducting functions, teaching functions stay in a conductor's "toolbox" to be utilized at any given appropriate time (also, lines were used in this figure rather than shaded areas as eight functions obscured each other when shaded, especially when they all converge by level 4). Further, the "Positive Environment" function is maximized throughout the progression of the figure because maintaining a positive rehearsal environment is always an important consideration. Similarly, the "Time Efficiency" function takes an interesting path. At levels 1 and 2 (*The Individual* and *Local neighbors*), a conductor's efficiency on the podium is paramount, as they are the ones doing the lion's share of the work. As responsibility is shifted to musicians, rehearsal progress becomes less efficient as musicians

learn and develop these new skills. However, by level 4, these new skills are learned, and the ensemble can operate with efficiency again.

Teaching levels might have to adjust after each concert when new content is introduced. This does not mean that the ensemble reverts awareness levels- similar to the statements above, teaching techniques remain relevant throughout multiple IMM stages. Bransford et al. (2005) would encourage conductors to become "adaptive experts" to adapt their conducting and teaching to any given situation. I would add to that by encouraging conductors to elevate their musical performance when possible by adjusting their gestures and pedagogy. Each of the above Figures provide a model of how a conductor *might* shift their gestural economies and teaching strategies, not only per each IMM level, but in a way that could *allow* them to progress to the next IMM level. This transition progression will be discussed later in this chapter.

Conductor as a Leadership Facilitator

The IMM posits the conductor as a facilitator in many regards, both as a facilitator of content knowledge and of social/leadership development (Blumberg, 2009; Cornelius-White & Harbaugh, 2010; Doyle, 2011). Many of the processes, qualities, and teaching skills that would be used in leadership facilitation can also be utilized in music content knowledge facilitation. Because the social dynamics domain is the most novel and new to the collegiate band environment, this section will largely focus on social skill and leadership facilitation by the conductor. Facilitation in an ensemble involves organizing the rehearsal space so an inquiry-forward method of learning can take place, including providing resources and time for musician discovery, and providing tools for reflection. In short, a facilitator's role is to support everyone doing their best thinking and practice through active participation, mutual understanding, and shared responsibility (Doyle, 2011).

There are many different forms facilitation can take, but there are several qualities that help create a more effective facilitator. According to Cornelius-White and Harbaugh (2010), effective conductor-facilitators:

- Show warmth and care about their musicians.
- Demonstrate trust by sharing power with their musicians.
- Generally show optimism in their work and set high expectations for their ensemble.
- Exhibit empathy and get to know their ensemble on a more personal level.
- Are honest and direct.

These qualities are very akin to those described in authentic leadership theory (Luthens & Avolio, 2003). Authentic leadership is comprised of four elements:

- Balanced Processing: Objectively analyzing information and data before making a decision.
- Internalized moral perspective: Being guided by moral standards which drive action and behavior.
- Relational Transparency: Appropriately sharing one's true feelings, thoughts, and opinions with others, and being forward with one's convictions.
- Self-Awareness: One's understanding of one's own strengths, weaknesses, and methods through which one interacts with the world (Avolio, Walumbwa, & Weber, 2009)

As stated in chapter five, authentic leadership theory emerged as one of the leadership theories which demonstrated a positive correlation with positive musical outcomes (Montalvo, 2019). While authentic leadership could be viewed as a "heroic" leadership theory, many of the qualities that authentic leadership embodies involve direct interaction with others. Therefore, authentic leadership could be a useful model for conductors to follow in reshaping their actions

as a facilitator. Authentic conductors could connect with their ensembles more effectively if they were open about intentions, processes, and values, considered multiple perspectives when making decisions (including those from musicians), and utilize reflective practices to demonstrate self-awareness.

Conductors-as-facilitators may need to follow a slightly varied process in the presentation of their lessons and concepts. Doyle (2011) recommends a four-step process to enacting a facilitative learning environment: 1) Defining goals and possible daily outcomes, 2) Creating an action plan involving how time and resources may be spent, 3) Creating space for additional practice, and 4) Providing feedback. Facilitators make strong use of critical questioning techniques (discussed at large in chapter three) and may often guide musicians to answers by posing directed questions rather than providing information. Questions can serve several purposes, including checking for understanding and recall, guiding musicians to their own answers, encouraging synthesis of materials and concepts to create new meaning, and inspire self-reflection. Roesler (2017) recommends several behaviors that have been found to frequently precede student (musician) problem solving:

- Varying specificity of directives
- Varying specificity of feedback
- Conceiving and demonstrating contrasting options
- Stating principles
- Asking questions that invite practice of problem-solving skills
- Deliberately refraining from solving the problem for learners

Being intentionally vague while facilitating is an especially effective tactic to engage others (Duke, 2012; Roesler, 2016, 2017). This is very much related to the concept of creating

"leadership gaps", as mentioned above. As a conductor-facilitator leaves room for speculation on a topic, capable and ready musicians will seek to fill that gap (Dineen, 2011). It is up to the conductor, then, to affirm the process and conclusions the musicians reach, or gently redirect them if their conclusion was inadequate or wrong.

Offering leadership and social development in wind band rehearsal spaces can be challenging. Clapp-Smith et al. (2019) offer several frameworks for activities that teachers can use to foster leadership development in their students. These activities focus on development of identity and skill in the areas of leadership meaning and strength of leader identity. I provide a limited contextualization and explanation of these activities below and offer ways that they may be adapted to fit a collegiate wind band rehearsal.

- Meaning: "Drawing Leadership Exercise". In this activity, participants draw on paper their concept of leadership, and explain their drawings to other participants. This explanation and discussion could allow participants to engage with one another and express agreement or disagreement in their concepts of leadership.
    - Meaning (Musical Context): Participants could be asked to draw a diagram of what musical leadership means to them, or perhaps design a diagram that represents the leadership structure of their ensemble. They could then be asked to, using a new blank paper, imagine what a more equitable rehearsal leadership structure could look like (assuming, of course, that their first drawing describes a top-down, conductor-centric hierarchical model). These could prompt change-creating discussion from their peers.
- Strength: "Leader Meter". Participants fill in a thermometer picture to the extent that they feel they have realized their leader identity potential. They are then asked to write down

what leadership qualities enhance their identity in the shaded part and write what leadership qualities and skills they would like to strive for in the blank space. Comparing these results, including what aspects the participants claim, with the first activities may result in revealing discrepancies or affirmations in leadership styles, leading to deeper level processing and reflection.

- Strength (Musical Context): Participants could be asked to write down, on index cards, actions, roles, or qualities of leadership in musicians, and leadership in conductors. They could then collaborate with other participants and group the cards by musician leadership, conductor leadership, and investigate if there's any overlap. They could manipulate the cards further to reflect their ensemble's leadership state. This could allow musicians to see a physical manifestation of transferring responsibility from conductors to musicians and could encourage musicians to reflect on what qualities they might already inhabit.

In encouraging leadership and social development in a collegiate band program, conductors should be careful to integrate musical content into any crossover social or leadership development activities. Time is a limited and valuable commodity in rehearsal, and music ought to overlap any explicitly taught social activity to maximize efficiency. The exception to this is in the case of the "leadership retreat" or any other external, designated, non-rehearsal time meant to be spent specifically on social and leadership development. The possible exception to this is the marching band setting, where social interaction is more woven into the fabric of the rehearsal, and small "mini lessons" in social components might be welcome (Warfield, 2013).

Changing the Rehearsal Environment

Alterations of the actual rehearsal environment are an important factor for a conductor facilitating a musician-centered rehearsal space. These alterations can take many forms- physical alterations of the space that musicians occupy, various arrangements of chamber ensembles or small group work, changing protocols and values, and adjusting assessment procedures. There are many aspects of the wind band rehearsal space that reinforce conductor-centricity, including the physical layout of chairs/musicians facing a central podium, the podium itself acting as a physical barrier between the conduct and musicians (Knapp & Hall, 2010), conductors not typically being in proximity to many students (especially those in the back of the room) and even "gatekeeping" certain resources or information, such as copies of music, selection of music, and access to rehearsal spaces. Rehearsal environment norms often stop musicians from interacting, including rules against talking, interrupting, or providing feedback and musical input *to* the conductor.

One of the most obvious ways of altering the rehearsal environment is to change the size of the ensemble. Work in chamber music ensembles is exceptionally useful for developing leadership and music rehearsal capacities (Shieh & Allsup, 2016; Kleyn, 2016). Having a structured chamber music unit in which ensemble students are assigned a group without a conductor (but perhaps with a TA or conductor coach) could be a useful way to encourage both musical development and communication skills. Marching bands frequently use sectional rehearsals as a way of developing smaller rehearsal spaces for musicians (Dagaz, 2010; Matthews, 2017). However, these often function with the section leader taking charge, and simply acting as a conductor stand-in, which is beneficial for *that* student, but not the group. To rehearse show music in the marching band setting, I would recommend placing musicians in a

small ensemble that is as close to a microcosm of the large ensemble as possible. This would look like a one-to-a-part mini-ensemble, but would allow musicians to collaborate, forcing them to be responsible for their own parts, and being able to better learn the parts of their peers on other instruments.

In an article detailing how to create high-quality leadership development programs, Eich (2008) discusses how to create a healthy environment for collaboration. Each of these aspects are detailed below:

- *Diverse and Engaged Students.* Students from different backgrounds should be given space to share their unique perspectives, thoughts, and experiences. In an ensemble, perhaps musicians that come from different programs could have the opportunity to share rehearsal techniques that they enjoy, or perhaps lead a new warm up to address an agreed-upon ensemble performance issue.
- *Experienced and Committed Practitioners*. Guest leaders from the community or expert teachers are invited in to the rehearsal space to share their expertise. This could extend to high school teachers in the area to generate outreach, professional composers, conductors from another university engaging in a "conductor swap" program, or any number of musical experts that perhaps wouldn't normally engage the wind band ensemble.
- *Educators Model Leadership and Support.* Here, program leaders demonstrate the same values and skills they're asking their participants to learn and exhibit. Modeling and coaching behavior are strong here- conductors can share personal stories, real experiences, and interact with their ensemble in a way to model distributing their conductor leadership. For example, if a conductor asks an ensemble to have a say in repertoire selection, they might discuss how they program, why they select certain

pieces, and their process for selecting a program. It is important that conductors "live the model" if they are engaged in the IMM. If students make an ask for more autonomy, a "no" here would be disingenuous and could undermine any trust that has been gleaned by sharing power. Musicians will be more likely to buy-in to the IMM and the values it teaches if their conductor is as well.

- *Participants Unite Through Small Groups*. This is discussed at length above through use of chamber music and small ensemble rehearsals. Musicians find more community in smaller sub-groups within their ensembles, the ability to bond with one's section is high. In these small groups, "students learn how to have a positive relationship with individual group members and how to develop relationships with a group. Second, students learn to practice collaborative leadership by identifying their own skills, taking on team roles, and using skills of different people for a common group purpose" (Eich, 2008, p.181).
- *Participants Foster a Culture of Challenge and Support*. Musicians develop standards in an ensemble and work to challenge one another to maintain that high standard. This is the difference between joining an ensemble *to* have fun, versus realizing that putting on a musical and entertaining performance is both fun and rewarding. If musicians are given proper support to fail, they will often take risks and expand their comfort zone in holding one another accountable. This vulnerability fosters trust, personal growth, and peer reflective skills.
- *Participants Cultivate One-on-One Relationships*. The relationship is at the core of distributed leadership and is the primary modality through which leadership in this ensemble context is measured. Musicians build trusting relationships and social

networks through small interactions, learn how to give and receive feedback, and learn how to listen to others and seek to understand their peers.

Creation of an effective rehearsal environment can be challenging, especially when it looks and feels different from what musicians are used to. However, through a combination of modifying pedagogy and conducting gesture, adapting facilitative techniques, and making the rehearsal space conducive to musician collaboration, a musician-centric space can be achieved. The key element here is that this change happens slowly, and over time (Blumberg, 2009; Doyle, 2011; Komives et al., 2011; Hoidn, 2017). Should conductors expect musicians to self-regulate too early, musicians could perceive their conductors as harsh, unrealistic in expectations, and too critical. Conversely, if musicians are ready to move on to more self-regulating behavior and their conductor lags behind, musicians can perceive conductors to be apathetic, uncaring, and less competent. The following section recommends methods for conductors to use to observe their ensembles and move them through the IMM. It also discusses awareness level benchmarks and techniques for transitional periods for conductors to understand how to make the IMM work for their ensemble.

Utilizing the IMM as a Conductor

Implementing a new pedagogical model, such as the IMM, into a collegiate band rehearsal environment can be challenging. Individuals in large learning-based groups, like a collegiate wind band, learn in a multitude of ways, and generally develop from dependence on others to independence in discovery, and finally to interdependence with comfort and security working cooperatively with others (Vygotsky, 1978; Komives et al., 2011). For a conductor, knowing what behaviors and characteristics to look for in an increasingly interdependent

ensemble is important to both evaluate the current state of the ensemble and to understand how best to guide the group forward.

The IMM has four levels of awareness that ensembles can develop through- levels one and two consisting of largely conductor-centric behavior, and levels three and four implementing more equitable musician-centered behavior. It is important to understand that, with any developmental model, it is unlikely that students will progress in a linear fashion (Komives et al., 2009). The model, nevertheless, provides information on what elements are to be developed, the level of attention and awareness likely required to achieve competency in said elements, and certain prerequisite competencies that can strengthen each element. Another yet-unaddressed element of the IMM is the transitioning between levels of awareness. Vygotsky's (1978) zone of proximal development, detailed in chapter two, describes a lot of what these transitions look like: an element will seem out of reach for musicians even with help, then achievable with help, then achievable independently, and finally able to be taught to others. However, to assist the conductor, I have included possible methods of transitioning musicians between levels of awareness.

Like the model in the chapter previous, the rest of this paper (while centered in scholarly research and existing practical application) is largely speculative. These assessments presented here are untested as of the writing of this document and are my own ideas as to what indicators could help a conductor with facilitating the IMM. I present three methods of utilizing the IMM in this section for conductors. First, I offer observational benchmarks indicating musicians' grasp of each element in each domain of development. Second, I provide recommendations as to how to facilitate level transitions through the model by building musicians' self-efficacy. Third, I detail several suggestions for handling transitional periods in the IMM.

IMM Observational Benchmarks

The IMM is largely a flexible, abstract model to drive the development of a musician-centered rehearsal space. While each part of the IMM is defined in detail in chapter six, many of these definitions are broad. For the sake of practical application, it is my goal to introduce a greater degree of specificity to each awareness level, domain, and element in the IMM. This section, then, will provide observational benchmarks to highlight what each level might look, sound, and feel like. Benchmarks are a first step in observational analysis and assessment generation, especially in educational settings (Resnick et al., 1995). They provide context and educational goals, while maintaining a degree of flexibility in actual instruction and implementation. Resnick et al. (1995) provide three parameters that benchmarks must encapsulate: similar subject area (wind band), similar age groups (collegiate, or roughly, 18-22), and comparisons countries. For this last parameter, given that this document largely describes the wind band in the American setting, I will adapt this to mean large, public and state universities in the United States. Smaller colleges may have different resources, musical interests, and varying music program scopes, so speaking about large university band programs could keep things more consistent (Scheivert, 2018). However, it is my hope that this model could be adaptable to any collegiate wind band ensemble.

Benchmarks can be comparative or absolute **(**Scheerens, 2004). Often, these types of benchmarks are numerical and tied to large, international assessment scores. For the purpose of the IMM, I would adopt the following comparative, "loosely defined" benchmark definition: "The aim of benchmarks is not to set standards or targets, but rather to provide policy makers with reference points. Benchmarks are used to identify issues which need to be investigated further, and to suggest alternative routes to policy goals [or educational aims]" (Scheerens, 2004,

p. 129). Given that the IMM is a longitudinal, development-based model, I would also look to Komives et al. (2009; 2011)'s Leadership Identity Development model, or LID model. The LID model describes six stages of leadership development and utilizes benchmarks in several categories. These benchmarks are provided for each category, per developmental level, and are useful for viewing progression through the LID model in a multifaceted way. For the IMM, I adopt a similar tact. For each Level of Awareness, I provide observational benchmarks for the following categories within each Domain of Development:

- Musician Actions (MA). These detail actions that musicians might take in a rehearsal.
- Musician Communications (MC). These detail examples of ways musicians communicate, either verbally or nonverbally.
- Conductor Pedagogy (CP). These, along with the next category, harken to Gumm's (2023) teaching and conducting functions. This category describes the *ways* that a conductor might provide effective instruction.
- Conductor Gesture (CG). This category describes the types of conducting emblems and conducting functions present (Gumm, 2023).
- Leadership State (LEAD). This category is unique in that it describes each level independent of the three Domains. It describes both leadership structure and action.

A set of possible benchmarks are provided in Appendix A for each level of awareness. Those provided benchmarks are not comprehensive, but rather, are meant to provide a hypothetical snapshot into what things might be observable at each level.

Of particular note in the benchmarks, the conductor pedagogy is consistently anticipating the following level of awareness. For example, with an ensemble at level 2 (*Local neighbors*), within the musical analysis domain, the conductor is practicing singing and audiation-developing

skills that precede the "Audiation and Error-Detection" element in level 3 (*Instrumental sections*). This is evident of quality scaffolding on the conductor's part, constantly preparing the ensemble for what will come next in their development. One of the benchmarks in level 4 (*The Ensemble*) describes how musicians will start to assist others in musical skill development. Obviously, not all musicians are uniform, nor do they develop at a consistent and predictable rate. This model takes that fact into account- it is one of the significant reasons that the IMM is based upon distributed leadership. Musicians are empowered to help one-another progress in ways that a conductor can never achieve. One-on-one mentorship and teaching is a planned factor of the IMM at level 4 (*The Ensemble*). However, before this becomes commonplace, it is largely up to the conductor to ensure ensemble growth and development. Therefore, being intentional with transitioning an ensemble from one level of awareness to the next is a crucial part of the conductor' role.

Learning and Progression through the IMM

Being that the IMM is a proposed, theoretical model, there is no way to know for sure how musicians will progress through the IMM without empirical studies (these are proposed in chapter eight). However, studies in leadership development suggest that positive self-beliefs are essential for personal growth (Eich, 2008; Fisher, 2021). Studies in musical learning and social collaboration in musical ensembles also suggest that self-efficacy plays a role in learning new behavior patterns (Bandura, 1977), builds confidence needed for musical growth (Hendricks, 2016), and is correlated with higher levels of musicality, perseverance, and ability to manage stage fright in musicians (Ritchie & Williamon, 2007) and leadership development (Komives et al., 2009). Development of self-efficacy in musicians, therefore, is one possible method to move through the levels of the IMM.

Self-efficacy can be described as a person's beliefs in their own ability to carry out specific tasks in the pursuit of goals and outcomes (Bandura, 1977; Ritchie & Williamon, 2007). There are four primary sources of self-efficacy:

1. Mastery experiences
2. Vicarious Experiences
3. Verbal Persuasion
4. Physiological and Affective States (Bandura, 1977; Hendricks, 2016)

Mastery experiences are the strongest form of building self-efficacy (Bandura, 1977; Hendricks, 2016). When musicians experience success in their activities, they develop positive self-belief in their ability to take on new challenges. Alternatively, if musicians experience setbacks, particularly early on in their musical careers, it can create a great deal of performance anxiety that can be difficult to overcome (Bandura, 1977). Thus, early on in ensemble development, it is important to choose repertoire and cultivate musical experiences aimed at generating fulfilling musical success. Vicarious experiences are less potent than mastery experiences in generating self-efficacy, though somewhat easier to accomplish. Essentially, when a person experiences other musicians' success, especially when that person can draw similarities to the successful musician, they believe that they, themselves, can be successful at that endeavor. This is why it is important for conductors to limit themselves to modeling metacognitive processes when utilizing a technique like cognitive apprenticeship and allow musicians in an ensemble to model for one another. In fact, creating a norm for musicians to feel efficacious enough to express their interpretive opinions through performing on their instruments can create a positive relationship with modeling and communicating musically. Vicarious

experience is more effective when all musicians have developed a basic level of competency that they can all inter-relate to (Hendricks, 2016).

Verbal persuasion, a common technique utilized by conductors, allows for conductors to instill confidence in musicians. Verbal persuasion is much less potent and long-lasting than other forms of efficacy development (Bandura, 1977). However, verbal feedback can be made more effective when it is specific, directly following a performance episode, authentic, and not overused (Hendricks, 2016). This is why it is important to teach musicians how to provide honest, thoughtful, and direct feedback with one another; it allows them to experience verbal persuasion from another source other than the conductor, and it allows other musicians to experience growth in efficacy in learning *how* to give verbal feedback via vicarious experience. The final category of efficacy development, physiological states, deals with presence of stress and anxiety in performance. Stress hinders performance, especially musical and artistic performance requiring creativity (Hendricks, 2016). Performance anxiety is a common problem for college-age musicians. However, just as anxiety can reduce self-efficacy, building self-efficacy can reduce performance anxiety. Therefore, it is important for a conductor and musicians to rely on multiple sources of efficacy to help one another build self-confidence. Figure 8 shows how each efficacy-building activity might be translated into a rehearsal setting.

Figure 8. *Sources of Self-Efficacy in Wind Band Rehearsals.*

Source of Self-Efficacy	Relevant Band Rehearsal Activity
Mastery Experiences	• Setting Rehearsal goals as an individual, section, or ensemble & achieving them. • Musician input in selection of repertoire leading to successful performance. • Performing a successful concert, especially where one has more control over the outcome, as in chamber music.

Figure 8 *(continued)*

Vicarious Experiences	• Allowing musicians to model a particular passage for peers. • Limiting musical competitions involving rankings. • Watching another ensemble perform in the same division or level at a contest. • Attending a professional music concert. • Listening to composers, improvisers, and performers discuss their process or experiences. • Recording a particularly musical rehearsal and playing it back for reflection.
Verbal Persuasion	• Honest and direct peer feedback. • Ensuring that positive and negative feedback exist to provide information, not judgement. • Authentic, in-the-moment praise when a musician has a technical or musical breakthrough. • Having discourse and dialogue about informed musical choices. • Making both positive and negative feedback specific.
Physiological States	• Teaching self-regulation activities when experiencing extreme emotions. • Practicing mindfulness in rehearsal as a preparatory/warm up activity. • Creating an environment where mistakes are celebrated with proper support to learn from them. • Correcting overly harsh self-criticism.

A key component to moving musicians through the IMM could involve developing self-efficacy in the musicians and in the ensemble as a whole (Bandura, 1977). This is why, in the benchmarks above, conductors begin to teach skills necessary for the subsequent awareness level; musicians need time to feel secure in those skills before they enact them in the next level. For conductors, coaching musicians in utilizing learning strategies and training in constructive and positive thought patterns could be effective in developing efficacy in utilizing social and leadership skills (Dwyer, 2019).

Transitions Between Levels of Awareness

One of the most expressed conductor concerns with implementing musician-centered pedagogy is the issue of time (Allsup, 2012; Bazan, 2011; Scherer, 2020). Vygotsky (1978) claims that the transition from a student being in the ZPD to developing to the point where they can carry out a task independently takes a significant amount of time. Students have to learn new skills, practice them, and transfer those skills to new situations (Eich, 2008). Piaget would describe this as the process of assimilation, or, incorporating new ideas into preexisting schema (Cornelius-White & Harbaugh, 2010). Therefore, it is logical to conclude that what would take the most amount of time in implementing the IMM in a collegiate ensemble are the transitionary periods that occur between levels.

Conductors of wind bands at the secondary school level are used to these sorts of transitions. In a transitional period, musicians are taught new concepts, given time to practice those concepts with help from the conductor, which then decreases over time as musicians gain mastery of those concepts. This would be similar to young musicians learning fingerings or slide positions as they learn to read music. At first, the rhythmic and staff notation can be overwhelming, so conductors will usually introduce new notes slowly after old ones have been practiced. After a while, these young musicians will start to develop competency with these notes, but may resort to memory aids to assist, such as reciting pneumonic devices to read staff lines, or writing in fingerings and slide positions above notes. Eventually, the goal is that reading notation becomes automatic with the physical technique needed to play the notes. This transition takes time and focus from musicians as they develop their automatic processes, but once those skills become automated, they can self-actualize in the next phase of their learning (or in this case, the next level of awareness).

Musicians enter college likely already having developed through the IMM. The model was developed with typical conductor-centric rehearsals in mind. It could be argued that conductor-centric models are beneficial for younger secondary students and could start developing "Level 3" (*Instrumental sections*) elements and skills at the late secondary level. Thus, I speculate that most musicians enter college-level bands functioning around "Level 2" (*Local neighbors*). This is corroborated in the leadership development research, discussed toward the end of this chapter (Komives et al., 2011). Thus, collegiate conductors would likely only have to worry about the transition from level 2 to 3 (*Local neighbors* to *Instrumental sections*) and the transition from level 3 to level 4 (*Instrumental sections* to *the Ensemble*), which simplifies things for them considerably.

In developing level 3 (*Instrumental sections*) elements and skills (*Audiation and Error Detection, Communication and Problem-Solving,* and *Unified Interpretation*), I would recommend that conductors start the term with a leadership retreat for leaders. Retreats are an opportunity for groups of musicians to get away from the familiar settings that they learn in and practice social skills and leadership tactics in an accelerated and safe environment. Retreats have been shown to encourage self-discovery and self-reflection in participants, as well as leaving them feeling renewed, confident, motivated, and prepared to put skills into practice (Eich, 2008). Retreats can be short and cater to the needs of the group. Because college marching bands can be large, they often will only take their named leadership teams. Concert bands tend to be more intimate groups, and could benefit from taking the entire ensemble, though concert band leadership retreats at the college level may be a rare occurrence, leaving little precedent to build upon. Leadership retreats for collegiate concert bands and marching bands are discussed in detail in chapter eight.

The progression from level 3 to level 4 (*Instrumental sections* to *the Ensemble*) would have to happen over the course of the academic term. Regular formative assessments would help the conductor understand the developmental status of members of the ensemble, as would keen observations looking for signs of readiness to move on. The conductor should be demonstrating application of music theory and historical practice in interpretive decisions and could program similar works across the span of multiple concert cycles to provide musicians the opportunity to transfer learned concepts in other pieces. A chamber music unit or outside-of-class assignment could also be useful in helping musicians develop rehearsal efficacy and automate rehearsal practices. Creating purposeful ambiguity in rehearsal feedback and speaking in artistic metaphors could also be a useful way to have musicians collaborate to figure out how to make that interpretation come to fruition. However, a conductor must also give rehearsal time and space for musicians to communicate and collaborate. Transitions take time, and the more practice musicians are given to master those expected skill sets, the more automatic these processes become.

Summary

This chapter contains information on how a collegiate wind band conductor can gradually alter their role, gesture, and pedagogy to implement the IMM with their musicians. I provide information on theoretical observational benchmarks for a conductor to understand which level of the IMM their ensemble is operating at and discuss strategies to navigate transitions between levels, moving musicians through the IMM by developing their self-efficacy. The next chapter extends the theoretical items discussed thus far by briefly describing an example of the IMM in a collegiate marching band context, providing an outline for conductors to design their own leadership development program for their ensemble, outlining a skill and concept-learning-based

syllabus that would assist conductors in implementing the IMM, and provide several examples of assessments that could help a conductor using the IMM.

Chapter 8: The Interdependent Musicianship Model Applied in the Collegiate Band Setting

The previous chapters in this document detailed the theoretical, functional, and practical aspects of the IMM. What's yet missing is describing what the IMM looks like in implementation within the collegiate band setting. The important thing to remember while examining this chapter is that the information here is simply a single example of what the IMM *could* look like in practice. The flexibility of the IMM provides conductors and ensembles the freedom to utilize, or not utilize, certain aspects of the model as is appropriate for their circumstance. A second caveat is that these two pseudo-case-studies are both centered around marching band, as the marching band setting is more conducive to social skill and leadership education than the concert band setting. Finally, the cases discussed in this chapter were not modeled off of the IMM but *do* embody enough elements of the IMM to warrant discussion as to their relationship to the model.

The first example is from a Midwest-based college marching band and details the format in which they teach their visual marching technique. This example, called "The Visual Techniques Circuit", serves as an excellent model of the Social Dynamics domain of the IMM, and demonstrates distributed leadership in practice. The second example is a curriculum of a marching band leadership course taught at a Southwestern United States-based university. Along with this example, I discuss how a conductor might go about designing their own leadership development program for their own ensemble. Last, I detail a sequential model of IMM skills and concepts that could be taught and scaffolded throughout the duration of collegiate wind band utilizing the model. This "skyllabus" (a word-play off of "skill-syllabus") serves as a curricular scope-and-sequence model that maintains flexibility for conductors implementing the IMM

created based on mastery learning and gamification of learning. The research questions this chapter examines are as follows:

1. *What might the IMM look like when implemented into a collegiate band setting?*
2. *How could a conductor organize a leadership development program for their collegiate ensemble that fits with a distributed leadership philosophy?*
3. *What would a curriculum look like with elements of the IMM mixed in with traditionally taught concepts in a collegiate ensemble?*

The Visual Techniques Circuit: Social Dynamics and Distributed Leadership in Practice

Teaching visual and marching fundamentals in marching bands has always been something of a challenge. Most conductors teach their ensembles the way they themselves were taught in marching bands (Allsup & Benedict, 2008; Dagaz, 2010). Those with little to no actual marching band experience tend to struggle teaching marching technique, as it has little practical correlation with any other aspects of music education outside of the marching band domain (Ma and Hall, 2018). In 2017, a presentation was given at the College Band Directors National Association Athletic Band Symposium detailing a new method of teaching movement fundamentals, titled "The Visual Technique Circuit: An alternative method for teaching marching fundamentals" (Wiltshire & Wooters, 2017). This technique demonstrated a revolutionary method of teaching marching band movement fundamentals that sought to also enhance peer accountability, build trust between musicians and within the organization, develop institutional integrity and teamwork, and raise performance standards (Batcheller, 2022a). The creators of this technique thought that too much time was wasted teaching superfluous skills to a large number of individuals, where some younger learners needed more individualized practice

with the marching skills, and older veteran members of the band needed deeper learning of previously-mastered skills.

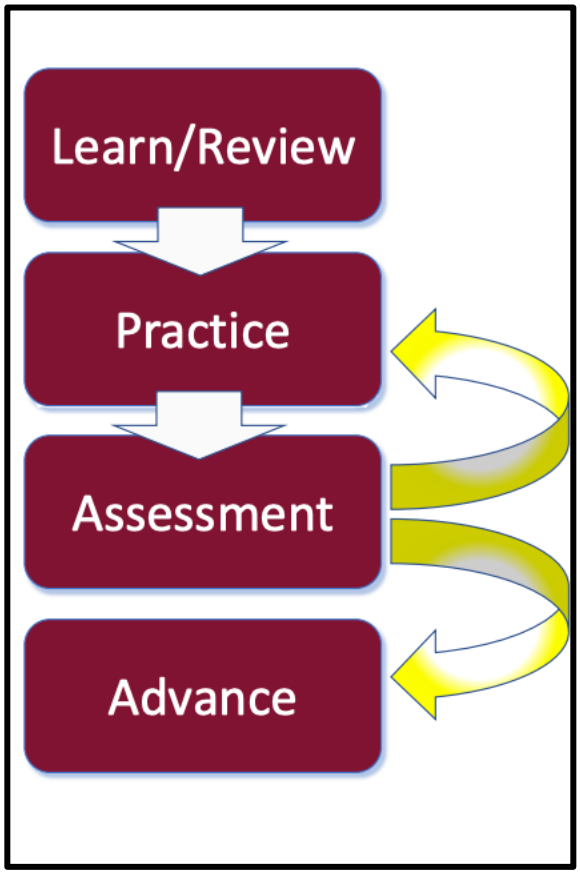
Description of the Visual Technique Circuit

There are six major tenets of the Visual Technique Circuit:

1. All instruction is done in small groups
2. All instruction and assessment is provided by students
3. Instruction is sequential
4. Students move at their own pace, working toward mastery
5. Motivation is intrinsic (desire to get better and contribute to the group)
6. Motivation is extrinsic (Get your dot; get time back) (Batcheller & Wiltshire, 2023, slide 2)

The Visual Technique Circuit (or VTC) breaks up elements of marching technique into subcomponents, which are then taught at various "stations". Each station is located at a designated space on the marching band field (or wherever the marching band holds instructional time). Within each station exists an instructional goal of what technique is to be achieved, advice for teachers and evaluators in how to teach and assess the technique, a detailed assessment to be physically performed by musicians demonstrating mastery over that station's skill, and a detailed rubric to remove ambiguity from assessment. The achievement levels at each station are "Developing" for musicians that have not achieved the skill to high standards, "Proficient" for musicians that achieve the skill to adequate performance standards, and "Mastery" for musicians that achieve the skill at the highest possible standard. The cycle of action a musician will go through in the circuit is detailed in Figure 9 below.

Figure 9. *Progression of Learning in the Visual Techniques Circuit.*



Note. Adapted from "*Movement Fundamentals Circuit: 2022 Chippewa Marching Band*" (2022) by J.C. Batcheller, p.6. Central Michigan University.

As each student learns the technique from their peers, they practice the skill, and move through the station's assessment, which is peer-assessed. If they pass the assessment, they continue in the VTC. If they do not, the continue practice and assessing until they do pass. Musicians hold one another accountable by the clear standards set by the rubrics, and there is very little room for ambiguity in the peer assessing process (Batcheller, 2022b). An example of a station 1 rubric and assessment outline, focusing on in-place visual fundamentals, is provided below in Figure 10.

All teaching in the Visual Technique Circuit is done by the musicians. There are three defined leadership roles that any musician can hold in the VTC method: student-instructors, evaluators, and monitors (Batcheller, 2022a). *Student-instructors* must achieve a "Proficient" rating at two sequential stations to teach at the lower of the two. For example, a musician who has achieved "Proficient" at stations 1, 2 and 3 may serve as a *student-instructor* at stations 1 and 2. *Evaluators* must be familiar with the rubrics and are designated to carry out a station's assessment and provide a grade. *Evaluators* qualify by achieving "Mastery" in the station they are assessing plus one other, or, achieve "Proficiency" at their assessment station plus *two* more. *Monitors* make sure the VTC is running smoothly. They enter assessment scores, maintain hard copies of records, help people move from station to station, and communicate needs to the ensemble. Named section leadership learn the VTC techniques and rubrics first to develop a cadre of initial *student-instructors* and *evaluators*. Once other members of the ensemble start their VTC process, *student-instructors* and *evaluators* emerge as an outcome of their own merit, meaning that teaching and assessing comes not just from named leadership, but from anyone demonstrating efficacy, competence, and mastery (Batcheller, 2022a).

Figure 10. *Example VTC Rubric.*

Rubric One: Stationary Positions and Alignment				
Category	**Novice**	***Developing***	***Proficient***	***Mastery***
Attention Position and Body Alignment	-Feet: Heels not touching, toes not close to 90 degrees -Knees: Bent or overtly locked -Hips: Misaligned forward or backward -Shoulders: Slumped or pulled far back -Head: Craned far forward or pulled back, chin tucked -Instrument: Held incorrectly at an improper angle with lots of extra movement -Consistent twitching, fidgeting, and extra body movement	-Feet: Heels together, toes apart (angle almost 90 degrees, and/or close to centered) -Knees: Straight with inconsistency (slight bend or locked) -Hips: Generally aligned, possibly slightly forward or back -Shoulders: Slight tension present -Head: Slightly forward or back, Chin slightly off 10 degrees above parallel -Instrument: Inconsistent hand placement, slight movement -Small extra body movements	-Feet: Heels together, toes apart at 90 degrees -Knees: Straight, not locked -Hips: In alignment -Shoulders: Down and Relaxed –Head: Balanced on A/O joint, Chin elevated to 10 degrees above parallel -Instrument: Held correctly and still -No erroneous body/horn movement	Everything in "Proficient" category is present with intensity in the eyes and exhibiting comfortable control of the body
Horn Position & Movement	Horn movement is slow and uncontrolled. Large movements and adjustments are required to correct the horn position after movement. Horn is not held correctly and is held consistently at an improper angle. Movement in the horn changes body alignment and posture.	Horn movement is anticipated or slightly late to finish. There is slight movement before or after the horn movement. Horn is held correctly with small inconsistencies in finger placement or angle. Movement in the horn slightly affects body posture.	Horns move in time between "up" and "down" positions. There is little to no movement in the horn before or after the move. Horns are held correctly at the correct angles. Horn movement does not affect the body or posture.	Horn movement is in time, crisp, and locks into place upon it's "up" or "down" arrival. Horns are held comfortably and correctly. Horn movement is smooth and isolated from body posture, having no affect on the body whatsoever.

Figure 10 *(continued)*

Adjusted Body Movement	Movements are out of time and marked by extra body movement. Motion to the left and right 45 is uncomfortable, and initiates from the upper body, greatly distorting horn carriage and posture. Horn pops are executed by movement in the neck, back, and/or hips and without A/O joint movement. The tendu is flat-footed or heel-led, is out of time and jerky, and is over/undershot, changing the foot angle. The plié causes a loss of balance and alignment. The carry position causes a loss of balance and alignment.	Movements are executed unevenly through space and time. Motion to the left and right 45 is executed from the upper body, slightly changing horn carriage and body posture. Horn pops are executed by moving the A/O joint, but also through moving the neck, back, or hips slightly out of alignment. The tendu lead is unclear, is slightly out of time, jerky, is slightly off correct width, and the foot angle slightly changes. The plié is unsteady, and alignment is inconsistent. Alignment is somewhat altered at the carry position.	All movements are executed smoothly in time. Motion to the right and left 45 is executed from the hip, not changing the upper body posture or horn carriage. Horn pops are executed with motion from the A/O joint, maintaining correct body alignment. The tendu begins with the knee, is toe-led, executed in time, ends up slightly wider than shoulder width apart, maintains the 90-degree angle between the feet. The plié is smooth, knees move over toes, alignment is maintained throughout.	Movements are in time, smooth, and with clearly defined starting and stopping points. Motion to the left and right 45 is seamless and smooth, executed from the hip, and with clearly defined starting and stopping points. Horn pops are crisp and initiated from the A/O joint. The tendu and plié are performed proficiently, and do not affect body posture or horn carriage. Alignment is maintained in the carry position.

THE TEST

1. Slow moves in 4 counts: Horns Up, Horns Down, Horns Up, Horns Left 45, Horns Right 45, Horns to 45 and up.
2. Quick moves: Horns up, Horns down, Horns up, Horn "pop"
3. Adjusted movement with horns up: Tendu left in 4, Recover in 4, Demi-plié 2 down, 2 counts up, Tendu right in 4, Recover in 4
4. Demonstrate the "Carry" position

Note. Adapted from *"Movement Fundamentals Program"* (2022) by J.C. Batcheller, p.20-21.

Outcomes of the Visual Technique Circuit

The VTC has many demonstrative positive outcomes for college marching bands that utilize it. Musicians are more invested in both the process of learning at the outcomes. Musicians collaborate to solve problems on their own and are given the ability to recognize their own efficacy through both mastery and vicarious experiences. Marching skill becomes more valued by a band's membership, and needless repetition is eliminated, while needful repetition is

increased (Batcheller & Wiltshire, 2023). Further, the movement fundamentals are so well defined that they are more easily able to be understood and articulated by all members of the ensemble (Batcheller, 2022b). Additionally, musicians achieve a higher state of visual performance with more efficiency, opening up valuable rehearsal time to be spent on other things. The VTC teaching and assessment process also provides opportunities for musicians to practice the skills of teaching, problem-solving, and accountability in a safe and controlled environment that is structured for those specific skills.

The VTC has undergone development through collaboration with multiple universities that are currently utilizing it. At another meeting of the CBDNA Athletic Band Symposium, Batcheller & Wiltshire (2023) presented an update of the VTC. They found that the circuit was flexible, and was able to be modified to subsume more and different visual skills. Skills were more efficiently taught when more stations were added, allowing musicians to be focused on one skill at a time. One university found that "embracing the muddle" (Duke, 2012) was a very effective technique in being ambiguous with conductor-centered feedback, and allowing musicians to develop emergent changes in the system based on problems they encountered. Perhaps most importantly, the VTC was found to distribute leadership demonstrated through teaching, assessing, and learning. What starts as a model with a few individuals teaching larger groups naturally evolves into a scenario of almost entirely one-on-one teaching, which is an ideal learning scenario (Batcheller & Wiltshire, 2023).

Connections of the VTC to the IMM

There are many uses of the VTC that align with various components of the IMM. First, the VTC takes place usually during a band's pre-season training week. Within that week, there are indications that an ensemble may demonstrate elements from all four levels of the Social

Dynamics Domain of Development. First, identity is developed as a member of the college marching band as each student works through the VTC at their own pace. Musicians develop trust as they work with one another to earn their ratings in the VTC assessments, perhaps, in a way, proving their worth (Batcheller, 2022a; Dagaz, 2010). Second, the specificity of the rubrics and the way that minor leadership roles are earned provide a well-defined structure so musicians know exactly what they need to achieve, and how their roles change as they progress. This encapsulates the second level of the social dynamics domain, "Roles and Structure". Third, given that the VTC is almost entirely musician-led, musicians become the entities to practice not only communication through teaching and assessment, but problem-solving with their peers to develop solutions to unanticipated problems.

As more individuals take on the minor leadership roles of the VTC, they practice interacting with others outside of their sections and cliques (Dagaz, 2010) and leadership (again, defined as mutual interactions of influence *between* two or more individuals) distributes and musicians are allowed to step up according to their strengths and preferences to serve the ensemble. All musicians are able to practice building efficacy in leadership, teaching, assessment, and problem-solving, which are indeed skills typically wielded by the conductor. The VTC thus demonstrates how systematic altering of roles, structure, and learning environments (described in Chapter seven) can create a musician-centric rehearsal environment that is centered on distributed leadership. I believe the structure and definition that the VTC provides could easily be adapted to musical pedagogy and contexts for both collegiate marching and concert bands. I discuss this idea further in the "Future Research" section of the next chapter.

Leadership Development Programs

Leadership development is a critical aspect of the IMM. Yet, it is likely that many conductors lack experience in developing a sufficient leadership development program for their musicians. Leadership development is largely domain-specific, (Eich, 2008) meaning that different organizations will have needs and outcome desires for their leadership development programs (or, LDPs) that are unique to their content area or specialty. Musical ensembles (and marching bands in particular), for example, not only require training in efficacy development and communication skills (Fisher, 2021), but benefit from procedural and skill-based learning on how to run music sectionals, teach marching techniques, and make peer corrections (Dagaz, 2010; Warfield, 2013). LDP's need to be structured enough to ensure that best-practices are being used in leadership education, but flexible enough to ensure that the program can be modified to fit the needs of those using it. This section outlines an example leadership development course for marching band created at a university located in the Southeastern United States, describes qualities of effective leadership development programs, and poses what an IMM-related collegiate band leadership development program template might look like for conductors to create their own programs that work for their ensembles.

A Collegiate Marching Band Leadership Development Course

Leadership development programs are common in collegiate marching bands, usually being run prior to the start of the marching band season (Scheivert, 2018). However, even within collegiate marching band programs, mid-season and on-going LDP's are rare (and nearly non-existent in the collegiate concert band domain). However, through a conversation at the 2022 CBDNA Athletic Band Symposium with Jay Rees, formally at the University of Miami, I learned about his marching band leadership course, MIP 270, Leadership and Instructional

Strategies for Marching Band (Rees, 2021b). Rees shared his course materials with me, which included a student leadership handbook for marching band (Rees, 2021a), his syllabus for the leadership course (Rees, 2021b), and music sectional and drill rehearsal tips for student leaders.

The course was a 15-week leadership course that covered a multitude of topics directed specifically at student-musician leadership in a college marching band. According to the syllabus, the course aligns very well with the goals of the IMM: to provide musicians with opportunities to problem-solve, collaborate, engage in peer-teaching and self-assessment, and learn to detect and correct errors musical in their peers. The course objective states that the purpose of the course is:

> To expose the student to various instructional methods for the modern marching band rehearsal environment. Various teaching styles will be examined, including verbal exposition as well as physical modeling and demonstration. An emphasis will be placed on not only the "how" of each marching and/or playing skill, but also the "why". Finally, the course will examine common problems in marching and playing and how to detect and correct these kinds of performance issues. (Rees, 2021b, p.1)

One of the forward-thinking elements Rees engages his students with here is the "why" of teaching and leadership. The "why" can be seen as a direct application of transparency and helping others to understand the logic and progression behind decision-making. This is one of the tenets of authentic leadership theory, which provides an excellent model of leadership for individuals in distributed environments (Luthans & Avolio, 2003; Montalvo, 2019). The student leadership handbook accompanying the course included information on ideal culture, leadership philosophy, specific roles and responsibilities, group expectations, and behavior standards (Rees, 2021a). These elements echo several key elements of the social dynamics portion of the IMM, including identity and culture development, and defining roles and structures.

The course itself seemed quite multifaceted. Some of the topics addressed during this course included:

- Giving commands and instruction
- Conducting
- Working in small groups
- Running an effective music sectional
- Running an effective visual marching teaching session
- Teaching music, and providing a system to teach new skills
- Problem solving
- Drum-Major-specific showmanship skills (Rees, 2021b)

The course ended with a full-course audition weekend, where everyone in the course goes through an audition process and, if they chose, could be selected to serve as the marching band's next leadership team.

In speaking with Rees at the 2022 Symposium, he shared several benefits of the course. First, all leadership skills and concepts were taught uniformly to a larger group of individuals outside the named leadership team. This allowed Rees to not only develop a team of leaders together but allowed non-named leaders to understand the philosophy from which the named leaders were working from. These leadership lessons turned into ensemble-wide cultural beliefs. Rees stated how he found that more and more individuals would sign up for the course, even those who had no intentions of serving in a leadership role. This allowed for expectations of the fall marching band to be set quicker, and for leadership to emerge between all individuals in the ensemble. He also found that people would take the class multiple times, suggesting that, like the IMM, there are multiple and deeper levels to leadership philosophies and collaborative action for

musicians to dig in to over time. The course, according to Rees, was a major factor in galvanizing musicians to buy-in to ensemble philosophy and work with one another collaboratively. The next section, which discusses qualities of effective LDP's, reinforces these more in-practice findings.

Qualities of Effective Leadership Development Programs

There is a significant body of research as to what constitutes a high-quality leadership development program (Baron & Parent, 2014; Clapp-Smith et al., 2019; Eich, 2008; Kets De Vries and Korotov, 2007). However, there is limited research on *how* individuals develop leadership capacities (Komives et al., 2009; Fisher, 2021). To investigate this concept further, Komives et al. (2009) conducted a series of interviews with 13 collegiate students from diverse backgrounds involving their thoughts on leadership. The researchers identified six stages of non-linear leadership development, which they call the LID (Leadership Identity Development) Model. These stages include:

1. Awareness: Recognizing the world around you, and observing that leaders exist. This stage usually embodies uninvolved followers.
2. Exploration/Engagement: Desire to be involved in specific activities through identification of personal strengths and weaknesses. These people are active followers building self-confidence and efficacy.
3. Leader-Identified: New roles are experimented and skills necessary for those roles are identified. This stage recognizes leadership as positional and as someone who gets things done. People at this stage may identify as leaders, especially if they have a position.
4. Leadership Differentiated: Leadership can be contributed from anywhere in an organization, and collaboration with non-leaders is common. Group skills, such as trust

and collaboration, are developed here. The identity of *leader* may be owned even if one does not hold a formal position. Interdependence is recognized as important.

5. Generativity: Active commitment to the group through love or passion, and responsibility is taken for others' growth and development. People at this stage see it as their role to develop leadership in others and elevate others.
6. Integration/Synthesis: Understands that leadership is a lifelong pursuit, and a commitment is made to developing value and action congruence and internal confidence. Typically, these people always own their leadership identity, and are able to see a bigger picture of organizational and leadership development.

Komives et al. (2009) mention that most individuals enter college around level 3. This is similar to how I postulate that most collegiate musicians enter their college experience at IMM level 2. Parallels here suggest that young collegiate musicians may recognize the value of leadership but may not possess the efficacy or competence to see themselves as leaders without a title. In the music context, reflection is highly valuable to musician-leaders (Fisher, 2021) as is the opportunity to develop a personal leadership philosophy that aligns with the ensemble (Eich, 2008). Over time, leadership efficacy and teaching skill improve with practice despite challenges, failures and setbacks. This is due largely to leaders having training in problem-solving techniques that allow them to adapt to setbacks and move forward (Baron & Parent, 2014).

Baron and Parent (2014) found that, through training in authentic leadership, individuals move through a 5-step, non-linear process that is largely broken down into two phases: an exploration phase and an integration phase. The exploration phase allowed participants to

experiment and take risks in changing their leadership techniques in a safe environment, and consisted of:

1. Developing self-awareness,
2. Identifying new possible leadership behaviors,
3. Trying out these new behaviors.

The integration phase occurred when the efficacy of the new leadership techniques overcame the fear of risk, and allowed participants to experience:

4. Affirmation in the use of these new techniques, and
5. Transfer of new techniques to applicable organizational settings.

Baron and Parent (2014) also identified three phenomena that allowed participants to overcome discomfort of risk and grow in their leadership capacities. These phenomena were:

- *The Clamp Effect*, which forced participants into new, uneasy situations and forced moments of intense reflection. This was referred to as "Trigger Events" or "Challenge Events" in other studies (Avolio & Hannah, 2008).
- *The Safety-Net Effect*, which mitigated the feeling of risk by creating a safe and supportive environment to try new techniques.
- *The Organizational Simulation Effect*, which amplified typical behaviors and allowed for participants to grow in comfort in transferring their new techniques to an actual practical environment.

These findings suggest that a LDP ought to incorporate a pre-practice stage, such as a retreat, where named leader-musicians are in a non-contextual environment going through concentrated, focused leadership training together, and an in-practice stage, where leaders are given the opportunity to put their new skills and concepts into practice. Indeed, leadership development

may be more effective with regular interventions rather than a one-time training (Clapp-Smith, et al., 2019).

The LDP environment is very important to consider when creating such a program. Creation of small groups within a larger leadership team (either by instrument sections, or randomly assigned) is important, because as musicians move through leadership development training, familiarity and safety in small groups contribute to leadership efficacy and confidence (Komives et al., 2009). Musicians would also be able to practice new skills more quickly with a safe environment without fear of judgement (Baron & Parent, 2014; Eich, 2008), which the small groups could also facilitate. The conductor-as-facilitator should also be ready to align staff and teaching assistants to the values being taught to leaders, and should be ready to exist congruent to those values (Eich, 2008). Opportunities for collaboration, making connections through self- and peer reflection, and engaging in dialogue are important ways that musicians make meaning of their leadership styles and skills. If utilizing in-practice check-ins throughout the course of an academic term, musicians should be running these meetings, both to engage actively with one another through practice of social skills, but also to test out their leadership philosophy in a more active, practical way (Eich, 2008). Effective LCP's are also flexible to allow for musician-input and change, and development is constantly considered to think about how the program could evolve and grow. Finally, musicians ought to be given the opportunity to develop reflective skills centering on the self (Fisher, 2021), observational and collaborative skills centered on working with a diverse group of peers (Eich, 2008; Kiersch & Peters, 2017), and role-based practice and assessment centered on the task. All of these elements should be driven through values and morals and focused on individual and group goals.

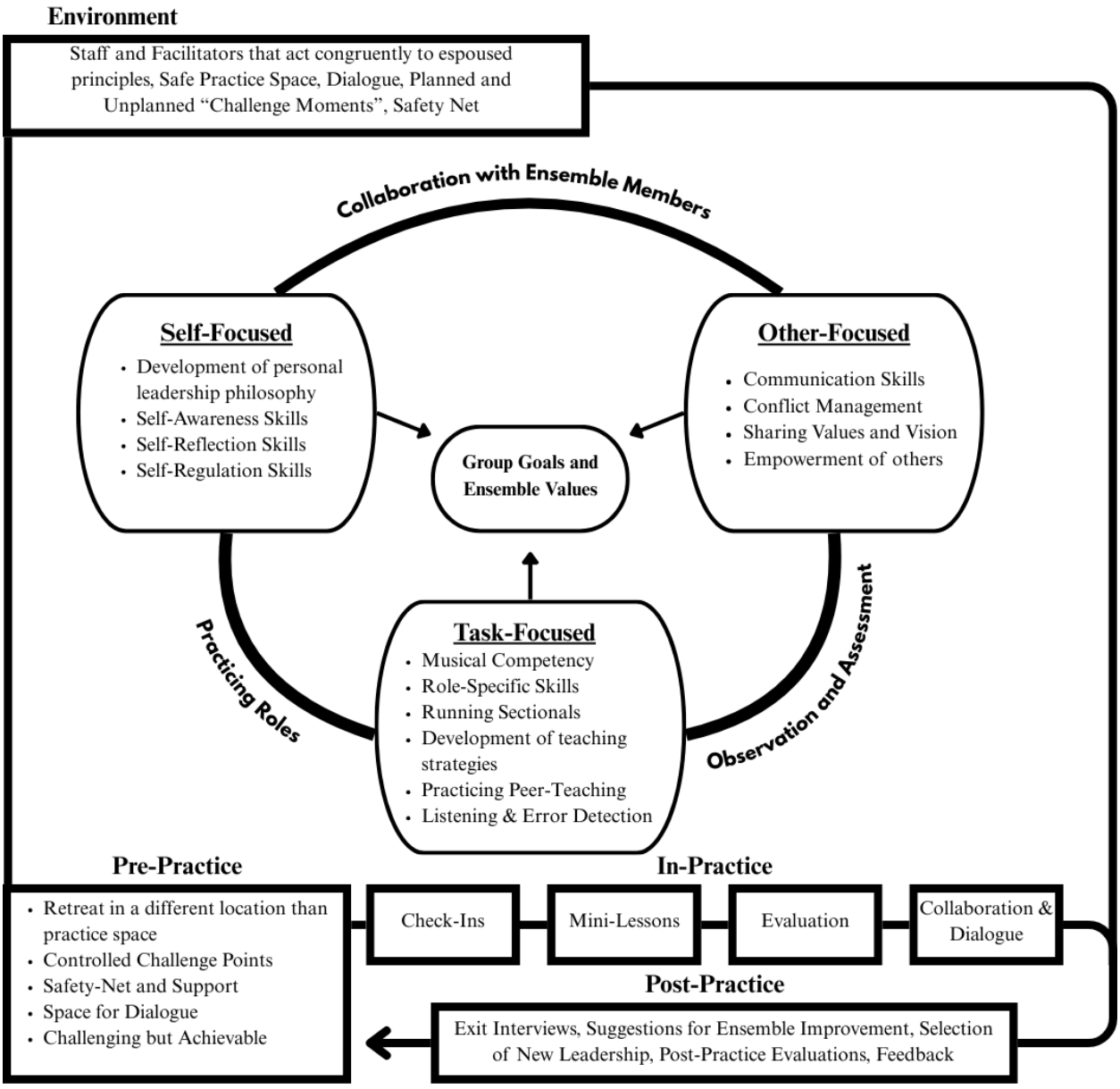
Often, lack of time is a problem for band directors and conductors implementing new and complex pedagogies and trainings, such as LCP's (Allsup, 2012). However, Avolio and Hannah (2008) studied various ways of accelerating leadership development, especially in college-aged individuals. They recommend:

- The organization must be ready to develop leaders with a well-conceived curriculum to fit the context and needs of the organization and the participating individuals.
- Potential leaders must be developmentally ready to receive leadership instruction. Fisher's (2021) "Ready, Willing, and Able" model echoes this sentiment, and states that potential leaders be selected by how they personally define leadership in terms of benefiting others and the band.
- "Trigger Events" must be carefully planned to allow reflection practice when leaders encounter setbacks, so when challenge is encountered in an authentic setting, the leaders are ready to handle it.
- Strength's-focused leadership should be practiced (focusing on one's inherent talents rather than trying to develop areas of weakness)
- Evaluation and reward mechanisms should be set up to
    - Reinforce learning and development over performance.
    - Reward demonstrated development within the parameters set by the facilitator.
    - Reinforce self-concept and organizationally helpful behavior.
- Establishing the fact that leadership skills are learnable, and that leaders are made and developed, not born. Genetics only account for 30% of leadership capacities.
- Leadership progress should be measured, either through a collaboration of participant and facilitator, or through measured self-reflection in the participant.

College Band Leader-Development Framework

Leadership development programs in college bands utilizing the IMM should be present in both concert and marching band settings. I outline a model of LDP construction that conductors can use to guide the creation of their own program to fit their leaders' and ensemble's needs. This College Band Leader-Development Framework is outlined in Figure 11 below. The framework seeks to develop both inward and outward focused concepts (Clapp-Smith et al., 2019), as well as task and role-specific skills. The outer framing elements of the framework account for a positive leadership learning environment and describes pre-practice (pre-academic term) formats and in-practice formats, and post-practice considerations, reflecting Tuckman's (1965) "adjourning" stage of group development. The inner cyclical element focus reflects leadership skills and concepts to be developed in relation to oneself, one's relationship with other musicians, and one's task-specific skills. All of these are informed by group goals and ensemble values. The aspects of the framework are broad enough to be adaptable for multiple needs and ensemble settings, but specific enough to provide conductors a useful template to build from.

Figure 11. *College Band Leadership Development Framework.*



I recommend several differences between marching band LCP's and concert band LCP's. Marching band LCP's need to focus on a visual element as well as a musical element. Being that marching bands tend to utilize their musician-leadership in more active teaching roles, teaching both music and visual techniques ought to be a priority. Social interaction is also more intrinsic in marching band rehearsals. Problem-solving and conflict resolution should be primary focuses

for musician-leaders. Marching bands also tend to be much larger than concert bands. Therefore, behavior expectations, peer-accountability, and discipline processes and procedures need to be understood and practiced by all musician-leaders, without exception. In the concert band setting, typically, the technical and artistic difficulty of the music is greater than in marching bands. Therefore, concert band musician-leaders should be ready to discuss advanced musical concepts and should be versed in relevant technical pedagogy on their individual instruments. Score study also merits instruction, at least on a rudimentary level to be able to notice patterns and access information held by the score more readily (Lewis, 2012), as defined by the second awareness level of the IMM. Communication must also be a focus for concert band leadership development, as individuals in concert bands are typically more hesitant to vocalize their thoughts in this setting, for fear of stepping out of line or being seen as unfavorable in the eyes of their peers (Dagaz, 2010; Warfield, 2013). Music theory and music history ought to gain relevance in concert band leadership training, especially to address the "Musical Analysis Domain" of the IMM, and to allow leaders to make informed interpretive decisions, as in the "Aural Awareness Domain" of the IMM.

Check-in and smaller leadership touchpoints may also vary between the two ensembles. In the marching band setting, named leadership may be able to set aside time before or after rehearsal at a regularly repeating day of the week to discuss progress, problems, and possible solutions. Conductors may also elicit feedback from marching band leaders at this time to guide rehearsal goals, or to prepare leaders for changes in rehearsal structures (such as pivoting to sectionals instead of a full-ensemble rehearsal due to individual musical needs of the band). In the concert band, musicians may also have regular touchpoints throughout the course of a term, but these might be more informal. Brass section leaders might collaborate to address issues in

tone or intonation of a brass-heavy section, or leaders from multiple sections may also cross-collaborate if their parts align. Due to limitations of meeting indoors, and scheduling conflicts with other musical groups in a collegiate school of music, concert band leadership may find it difficult to reserve a space large enough to hold multi-section sectionals regularly. Marching bands, due to their ability to rehearse outside, may not have this problem. However, due to the size of even individual instrument sections, sound-bleed may be an issue in coordination outdoor sectionals so as to not disrupt other academic events happening inside nearby buildings. Conductors should be prepared to communicate with their music and non-music colleagues to mitigate these issues as much as possible.

IMM Assessments: Mastery Learning and Formative Assessment

Implementing scope and sequence can be a daunting task for conductors implementing a new curricular model of wind band pedagogy. There are so many interconnecting elements of skills and concepts that scaffold into more advanced concepts within a music curriculum that it becomes a daunting task to map them all out to understand a desirable order to teach them in. For conductors of young musicians, method books do this very well- new concepts are gradually introduced and practiced until they demonstrate proficiency, at which time a new concept is introduced to reinstate challenge into the young musician's learning. These methods don't really exist in popular use for collegiate musicians, since most collegiate musicians are assumed to have a well-developed skill set where ensemble rehearsal time can largely be spent rehearsing musical literature. However, the IMM does introduce new skills typically held by conductors for musicians to master. Therefore, in conjunction with the IMM, it is appropriate to develop a syllabus of skills and concepts (referred to here as the "Skyllabus") arranged in a scope-and-sequence way to guide conductor instruction and musician learning.

Mastery Learning and Musical Skill Development

Developing proficiency in a set of musical skills and concepts is very reminiscent of mastery learning. Mastery learning is a competency-based model of skill-learning where students undergo some sort of instruction around a skill or concept, take a formative assessment on their mastery of that skill or concept, then either experience enrichment activities where they deepen their knowledge, or experience reteaching and corrective instruction if mastery is not reached. Once mastery is demonstrated, learning continues (Winget & Persky, 2022). This model of learning is very similar to the VTC discussed earlier in this chapter. Mastery learning also results in increased performance, including aspects of motivation, taking assessments, and providing peer feedback. However, in a rehearsal context, this cycle would seem to assume that students develop skills and concept-mastery at a similar rate. This is not the case. In musical skill learning, musicians typically undergo a three-step learning phase with new skills and concepts that heavily involves self-regulation. Those steps are:

- Performance Phase. Musicians perform new skills and utilize self-control functions such as focus and on-task practice strategies in their performance.
- Self-Reflective Phase. Musicians evaluate their performance and attribute causes (sometimes rightfully, but not always) to their success or failure, and react in a way that encourages adaptive or defensive behaviors.
- Forethought Phase. Musicians plan for their next attempt at the skill, and form outcome expectations based on their planning. Musicians also begin to develop goal orientation and a sense of self-efficacy. The cycle here repeats. (McPherson & Renwick, 2011)

Gamification

Given the length of time it takes musicians to develop new skills to a mastery level going through the cycle of self-regulation, it makes sense to empower musicians to peer teach, peer assess, and collaborate to develop their own learning as in the VTC. Therefore, a developed "Skyllabus" should also be accessible for musician understanding, use, and manipulation. Gamification of learning has emerged as an effective method of engaging students in their own learning. Gamification, or "the use of game design elements in non-game contexts" (Sailer and Homner, 2020, p.77), has been shown to have positive correlations with cognitive learning outcomes, motivational learning outcomes, and behavioral learning outcomes. Further, these effects of gamification become more potent when a fiction, or story, is assigned to justify the gamification, and when students were engaged in both competition and collaboration. This could partially explain why the competitive-collaborative nature of the VTC outcomes were so potent. Music ensembles already gamify some of their mastery learning techniques. "Band/Recorder Karate" has emerged as a popular tool for conductors to motivate musicians to achieve certain performance standards. Each subsequent standard is assigned a "belt color" which can be passed off via an assessment (similar again to the VTC), whereupon the musician will receive a physical or metaphoric "belt" of that color to show their mastery.

Some popular video games demonstrate models of mastery learning within the game system in the form of "skill trees". In the *Civilization* video game franchise, players spend game time and points to research skills and technologies as power-ups. Certain upgrades and powerups serve as prerequisites to more advanced ones (Firaxis Games, 2016), similar to how fundamental musical skills serve as foundational elements to more advanced, scaffolded skills and concepts. In the 2013 game *The Elder Scrolls: Skyrim*, players can earn "experience points" by completing

tasks in-game, and spend those points in "skill trees" focused on various skills to gain greater proficiency in various in-game abilities (Bethesda Softworks, 2013). In this instance, some of these skills serve as cross-skill prerequisites (you have to unlock "X" skill in Skill Tree A before you can unlock skill "Y" in Skill Tree B), showing that certain skills and concepts are interrelated, which is also the case of skills and concepts in the IMM. I would anticipate that many students could acclimate more quickly to a "skill tree" using a chart depicting scope and sequence. Therefore, for the IMM, the "Skyllabus" will be built to resemble a video game "skill tree" that uses gamification to make mastery learning accessible to musicians.

"Skyllabus" Creation and Function

The Skyllabus is detailed in full in Appendix C. Each domain of development acts as its own "skill tree" and outlines sequential skills and concepts that build on one another to scaffold into more advanced concepts. The Musical Analysis Domain skills are yellow, the Aural Awareness Domain skills are green, and the Social Dynamics Domain skills are blue, while the IMM elements are marked by purple diamonds. Skills from specific trees appear in others when relevant, showing the interdependencies of the skills, concepts and elements. The red dotted lines mark levels of awareness, which are also noted on the diagram. The connecting lines between skills, concepts, and elements read top-to-bottom, so that the top-most markers act as prerequisites to the markers that fall below them. Learners do not always build skill and conceptual understanding in a linear manner, as presented in this model. However, this does provide for a logical, scaffolded progression of skill development that conductors could use as a guide for their ensembles.

Musicians with access to the "Skyllabus" could self-assess and determine their own progress through their IMM learning. Alternatively, they could use the assessment provided in

Appendix B, determine their approximate level of awareness, and reference the "Skyllabus" to see the concepts and skills that they might want to work on. Again, this is meant to be a tool and reference for conductors and musicians navigating the IMM. The tools outlined in this chapter require tests in reliability and validity before they can be more widely utilized. However, I believe that the gamification of skill and concept development in music is a proven method that conductors already use and would be useful in facilitating learning and progress in the IMM.

IMM Formative Assessments

Formative assessment serves as an effective method to track musician learning and growth, providing both them and the conductor with useful information to guide practice. Bloomberg and Pitchford (2017) provide five highly effective formative assessment practices:

1. "A classroom culture in which students and teachers are partners in learning is crucial. A high degree of relational trust must be established for learning to flourish.
2. Learning goals and/or intentions and criteria for success are clearly identified and communicated to students.
3. Learning progressions clearly articulate the subgoals of the ultimate learning goal.
4. Students are provided with evidence-based feedback that is linked to the criteria for success.
5. Both self- and peer assessment are important for providing students the opportunity to think metacognitively about their learning" (p.42-43).

As discussed thus far, the IMM inherently takes care of the first four criteria. Trust is established between conductor and their musicians through gradual sharing of responsibility. By being taught about the IMM, musicians should understand the learning outcomes that they are expected to master, and helped by their conductor and peers to develop individual, section, and ensemble

goals. Musicians are constantly provided with evidence as to their progress of their goals- this section serves to provide means by which at progress can be more concretely tracked, thus developing space for self and peer assessment (which includes the conductor), fulfilling the fifth criteria.

Self-assessment is important to developing self-efficacy in student-musicians. Bloomberg and Pitchford (2017) further describe a four-stage process by which successful self-assessment can take place (adapting the steps to reflect musicians rather than generic students).

1. Clearly define, *with* musicians, the criteria used to assess progress.
2. Teach musicians how to assess those criteria, usually through modeling.
3. Provide musicians with direct feedback as to the quality of their self-assessment.
4. Partner with musicians to develop individual learning goals and action plans.

This process serves to build efficacy in musical skills and in self-assessment skills and increases achievement by allowing musicians to know exactly how achievement is defined and be able to see it when it happens. Step three allows musicians to be able to accurately self-assess, which is important because individuals who self-assess in a progressive development model such as the IMM tend to overestimate their achieved stage of development (Fisher, 2021). Finally, by advancing musician leadership initiatives, musicians can be taught to collaborate and partner with one another to develop learning goals and action plans, rather than relying on the conductor to do this with all of their musicians.

Often, a major criticism of formative assessment techniques in a progressive development model is that assessment scores can tend to over-categorize an individual (Komives et al., 2009). This is especially true with quantitative formative assessment and assessments that are designed to measure social and leadership capacities. Musicians do not develop uniformly or even in a

linear fashion, so over-categorization can give misleading and unhelpful information (Komives et al., 2011). Therefore, formative assessments in the IMM should provide snapshot information of a musician's self- and peer assessed mastery of each element, on each level, at multiple touchpoints within ensemble membership. Komives et al., (2009) recommend starting an individual's learning journey with a "Background Knowledge Probe" to understand one's current approach or grasp of a topic to set a foundation for growth. For an ensemble, where so many concepts and skill sets are active and interdependent, musicians ought to be given a basic assessment to gauge how comfortable they are with their understanding of a concept or mastery of a skill. This could be a simple Likert scale (Creswell, 2015). Then, peer assessment could utilize a more standardized, rubric-based approach to provide more substantial feedback and information. To assess where students are in a developmental model, Komives et al. (2009) recommends utilizing instructor observation then comparing observed behaviors to benchmarks and noticing themes of communication and behavior.

Measuring the social component of the IMM can be a bit more challenging. Outside of using benchmark behavior, one tool that arises from the research in being particularly useful in this pursuit is social network analysis, or SNA. SNA is a highly quantitative method, common in leadership assessment, in which individuals in a group self-assess on their connection to others in the group, usually in terms of friendship and information-gathering **(**Balkundi and Harrison, 2006; Desrosiers, 2017; de Jong et al., 2022; Mehra et al., 2006). SNA is useful in identifying effectiveness of named leaders, as well as identifying emerging or unofficial leaders (de Jong et al., 2022). Within the IMM, SNA could reveal how well leadership is truly distributing by observing how connection "density" changes over time surrounding official or unofficial leaders. It could also reveal quiet experts within an ensemble; as musicians progress through the IMM,

individuals may gravitate towards certain musician for help, revealing trust in that person to provide helpful and quality information. While the technical surveys and data-analysis of SNA are beyond the scope of this document, free social network visualization software exists as open-source material at https://socnetv.org/, making it a readily available resource should a conductor wish to utilize it.

The formative assessment I have built for the IMM specifically utilizes a rubric-based approach for each of the twelve model elements. This assessment is modeled after the rubrics utilized in a marching band method of teaching visual movement technique, described in detail in the following chapter. The assessment gathers ordinal data on each musicians self-assessment of how well they have mastered each domain of the IMM, based on a five-point scale of "Limited," "Fundamental," "Developing," "Proficient," and "Mastery." I also assess three subsidiary elements of the IMM, including "Musical Leadership" (as defined in chapter four), "Musical Efficacy" (measuring one's ability to progress through the IMM), and "Interdependence" (measuring one's understanding of the interconnected nature of ensemble music-making). Scores of 0-4 could be assigned to each of the categories and averaged to glean information on the composite status of the ensemble. Like the rest of the IMM, this assessment lacks validity and reliability testing, but provides a starting place for conductors wanting to utilize formative assessment to gauge IMM progress. The full assessment can be viewed in Appendix B of this document.

Summary

When implemented in the collegiate band setting, there is no standardization for what the IMM may look like. Like other developmental models, the IMM is not linear, but it does provide sequential growth opportunities. The collegiate marching band setting may be more applicable

and “open” to the elements of the IMM, as demonstrated by the Visual Techniques Circuit. The VTC essentially provides for musicians to develop distributed leadership and the entire scope of the Social Dynamics Domain of the IMM within the span of one week. Peer engagement and leadership training are essential for activating the ensemble at this scale. Collegiate band leadership development ought to include inward- and outward facing components, as well as adherence to group values and ensemble goals. The framework provided in this chapter gives some flexibility to conductors to tailor their development program to their ensembles’ needs while ensuring that musician-leaders get the training they need to lead their peers in progression through the IMM. To ensure that all aspects of the IMM are covered, I created a “Skyllabus” that outlines the interdependence and requisite flow of skills, concepts, and IMM elements. The items in the Skyllabus can be utilized by musicians for self-reflection and goal-setting, and by conductors for assessing ensemble progress and setting instructional and artistic goals.

Chapter 9: Discussion and Conclusions

The Interdependent Musicianship Model, detailed in this document, discusses a novel pedagogical method of centering musicians in collegiate wind band rehearsals through gradually shifting commonly conductor-held responsibilities to the musicians. The model rests on the framework of distributed leadership theory, which describes how organizational roles and responsibilities can be shared between official and unofficial leadership. The model also redefines musical leadership as an outcome of interaction, collaboration, and mutual influence, rather than a role or an input into a rehearsal ecosystem.

This document details extensive literature reviews in the areas of student-centered learning, musician-centered learning in rehearsals, practices of professional ensembles, social dynamics in collegiate wind bands, and distributed leadership, all of which serve to inform the IMM. I also provide recommendations for conductors to navigate implementing the IMM and provide examples of what the IMM might look like in a collegiate band setting. The rest of this chapter will serve to make final connections regarding the IMM, including revisiting the major research questions outlined in chapter one, describing potential contributions to the field of instrumental music education and wind conducting, detailing limitations of the document, and suggesting future research with the IMM.

Research Questions Revisited

Each chapter of this document discussed smaller-scope research questions to guide the inquiry of the chapter's content. However, there are several overarching research questions, posed in chapter one, that serve to connect overarching concepts together to justify and explain the IMM. Those questions are answered below:

How does the IMM address shortcomings of previous attempts to center musicians in wind band rehearsal?

Previous attempts to center musicians in wind band rehearsals are detailed in chapter two, and include expansions of musical understanding, democratic practice, and independent musicianship. While each of these categorical attempts have contributed valuable pedagogical techniques to best-practices in wind band rehearsals, musician-centered rehearsals are still the exception to the norm rather than the rule. In each attempt, various scholars cite shortcomings of the various musician-centering techniques.

Expansions of musical understanding seek to broaden musicians' concept learning and skills by introducing them to music theory, history, and other non-musical academic domains. The primary instructional delivery method of these expansions is critical questioning. Use of critical questioning is not, in and of itself, a sufficient technique to create and sustain musician-centered rehearsals. Dodson's (1989) use of questioning involves a rudimentary method of directing students' listening skills, similar to the "modeling" phase of Collins et al.'s (1987) cognitive apprenticeship, where the teacher displays metacognitive behaviors for students to learn from and adopt. Unlike cognitive apprenticeship, however, Dodson doesn't seem to move to the next step of coaching students *how* to ask their own questions, leaving his use of questioning largely conductor-centric. This is reflected in Bazan's (2011) study of analyzing middle-school conductor's use of student-centered instructional methods. In the study, questions involving trivia, rhetoric, or factual recall are identified as a teacher-centered instructional method, as there tends to be a right or wrong answer and the question doesn't involve critical thinking (Bazan, 2011). Questioning must lead to musician engagement and musician-led lines of inquiry in order to support a musician-centered rehearsal environment.

The IMM responds to the expansions of musical understanding by accommodating much of the added curriculum naturally into the "Musical Analysis" domain of development. Conductors gradually introduce new elements of musical understanding as they become practically relevant to the rehearsal. Musicians learn how to apply this information to make more informed musical decisions. Further, critical questioning still *can* be used in the IMM, but often as a way to introduce intentional ambiguity into the rehearsal environment to encourage musician problem-solving (Duke, 2012; Roesler, 2016). Critical questioning is not the end of attempts to engage musicians, but rather a method of modeling inquiry. Questions are important, but must serve the next steps of allowing musicians to try new skills on their own and building confidence and efficacy with them.

Democratic practices seek to change the rehearsal environment to accommodate musician choice and autonomy. Scherer (2023), McNamara (2019), and Hedgecoth (2018) contend that optimized use of democratic practice involves equal rehearsal contributions from both the conductor and the musicians. Further, these researchers mention that shared ensemble leadership is essential for democratic practices to become useful. In order for this balance to occur, musicians must be gradually introduced to the concept of democracy in rehearsals. Currently, there are no known widely used pedagogies that focus on the social-skill components of musician-centered rehearsals that reinforce democratic practices. Additionally, there is little guidance providing conductors with guidelines on how these skills could be introduced in a timely manner within rehearsal setting. A scaffolded, gradually-progressing curriculum that addresses metacognitive processes and social learning alongside musical development could assist conductors and musicians alike in creating effective musician-centered rehearsals.

The IMM pulls heavily from democratic practices, especially in enhancing musicians' autonomy. Democratic practice can sometimes get too caught up in soliciting musician input before preparing musicians to give that input. Morrison & Demorest (2012) discuss musician centricity as musicians being able to make "musical decisions that matter" (p.32). I would extend this by saying that musicians ought to be given the chance to make *informed* decisions. Anyone can guess at a posed question, or make an uninformed decision about musical phrasing, or programming, or musical interests. However, the IMM seeks to utilize a scaffolded, sequential program of ensuring that, when choice is presented to musicians, they've received the requisite information and training to allow them to make a well-informed decision. Also, the Skyllabus presented in chapter eight and in Appendix C provides guidance on not just what skills have been mastered, but what learning might be coming next. Thus, the IMM provides structure and balance to an otherwise possibly chaotic rehearsal involving multiple active participants.

Musical independence is the most modern and widely researched method of developing musician-centric rehearsals. However, it still possesses similar limitations and drawbacks to the other pedagogic modalities discussed above and in chapter three. Practices in musical independence are challenging to implement. Reflecting the concept of Bransford et al.'s (2005) "frustrated novice," younger conductors who are more amenable to independence-fostering practices tend to lack the skill and experience to implement them effectively (Bazan, 2011; Louth, 2022). Similarly, more experienced conductors tend to be set in their ways and are resistant to wide-sweeping change in their rehearsal techniques. Louth (2022) continues to point out that, as is often the case with academic and scholarly teaching theory, that there is a discrepancy between what music education scholars deem as "best practices" versus what practicing conductors know to be effective "real practices." Many conductors are turned off

when best-practice stops short of explaining how to implement recommended pedagogical models effectively and realistically. Bazan (2011) cites this as a potential reason why models of musical independence are not more widely utilized, despite claims from other researchers that these teaching techniques are realistic for the modern wind band (Morrison & Demorest, 2012; Weidner, 2020).

Independent musicianship is probably the closest to the IMM out of the three discussed models. However, independent musicianship seeks to largely change the paradigm of the wind band rehearsal (through alternative ensembles or removing the conductor from the process). The IMM incorporates current ensemble conductor-centric rehearsal processes within the model, allowing ensembles to operate as they're used to while slowing introducing new concepts. It is also likely that conductors will be at least familiar with some of the "new" concepts discussed in the IMM because they are, largely, skills that conductors already enact. The IMM gradually introduces new skills into the rehearsal as conductors become ready to teach them and musicians become ready to take on new responsibilities.

What benefits might the IMM provide to collegiate musicians?

The IMM centers strongly on the social strengths of instrumental ensembles, as discussed in chapter four. Social interaction serves to connect ensemble musicians through friendship, trust, and professional practice. These bonds act as major motivators when other forms of drive and motivation atrophy (Weren et al., 2017). By strengthening these social ties through purposefully teaching collaborative practice and how to handle controversy with civility, tact, and diplomacy, ensemble mood and productivity increases (Boerner & Von Streit, 2007). Musicians cultivate intrinsic motivation as they progress through the IMM by developing competency, relatedness, and autonomy through interactions of the model's three domains (Deci

& Ryan, 2000; Meals, 2016). In an ensemble full of self-determined individuals, the IMM provides structure with how these interdependently linked musicians ought to interact, allowing for ensembles to make productive use of their time.

Further, the IMM inherently fosters skills that are sought after in professional settings. When auditioning new musicians in a trial period, symphony orchestras found that many applicants lacked tact and diplomacy in their interactions with their soon-to-be peers. Further, many of these applicants seemed to be unable to adapt to the musicians around them, lacking a sense of awareness of musical and nonverbal cues happening in their proximity. The IMM's "Musical Awareness" Domain and "Social Dynamics" Domain both seek to rectify these lacking qualities. The Social Dynamics Domain teaches musicians how to collaborate and be productively collaborative, and the Musical Awareness Domain focuses collegiate musicians' attention specifically on the playing of those around them and helps them be reflective and flexible in response to those musical communications. Further, at its core, the IMM looks to empower musicians with skills that conductors are typically responsible for and provide space and time for those musicians to practice those skills. Many musicians in college bands are often music education majors and aspiring conductors. These musicians will have the opportunity, in an authentic environment, to practice the skills they'll one day need to utilize as a conductor. By altering the wind band environment to fit the IMM, conductors can "disrupt" usual practice and show future educators new possibilities (Weidner, 2019).

Finally, the IMM seeks to develop healthy practices in musicians. Building musical capacity through leadership has also been shown to develop secondary positive psychological outcomes outside of self-efficacy. First, when musicians view their peers and conductor as being strong leaders, higher-order positive psychological capacities develop, known collectively as

PsyCap (Gooty et al., 2009). PsyCap is comprised of efficacy, hope (belief in a positive future), resilience (ability to persist through challenge), and optimism (the ability to sustain efficacy) (Luthans & Youssef-Morgan, 2017). When inherent in musicians, PsyCap is a measurable predictor of peer leadership. Conversely, leaders with greater PsyCap capacities tend to develop those same capacities in those they influence (Gooty et al., 2009), suggesting a cyclical, reciprocal, and interdependent relationship of the individual PsyCap capacities and development in the IMM. Trust in one's leaders was found to mediate the relationship of PsyCap and group performance outcomes (Clapp-Smith et al., 2019), again underscoring the importance of building trusting, collaborative relationships in an ensemble rehearsal. With greater psychological capacities, musicians take with them abilities to overcome adversity, persist through challenge, and maintain a positive growth-centered mindset, all desirable qualities in one's career be it in music or not.

How might the IMM benefit conductors hoping to center musicians in their rehearsals?

Developing musician-centered spaces in ensembles is very much in vogue with younger conductors entering the field (Bazan, 2011). However, these enthusiastic individuals may be unsure of how to implement practices to achieve their goal. The IMM creates a structured, scaffolded, and developmental method that conductors can follow to center their musicians in music-making processes. Especially in chapters six and seven, I also provide guides for how conductors ought to adjust their conducting styles, their teaching styles, as well as tools for assessment and curriculum building. Leadership development is central to the IMM, as it is through leadership that conductor-centered skills are distributed to musicians. To this end, I also provide a flexible, yet structured, model on how conductors may create a leadership development program for their ensemble.

An effective musician-centered scenario is one in which conductors and musicians share the responsibilities, problem-solving, and decision making of the ensemble equally (Hedgecoth, 2018). When ensemble collaboration occurs in the IMM, structure and trust emerge to mitigate the chaos of the distributed leadership inherent to the model (Khodyakov, 2007; Kumar, 2020). This sort of relationship building not only enhances group efficacy ad group mood, but the conductor is allowed to elevate their musicianship and the performance outcomes also increase (Boerner & Von Streit, 2005). Conductors are allowed to elevate their craft, leaving simpler gestures, such as cues and time-beating, to the responsibility of the musicians (Green, 1997; Gumm, 2023).

As was the case with democratic practice shortcomings, conductors often don't feel they have time for implementation (Duke, 2012; Gumm, 2023), or the needed resources to fully implement these programs (Louth, 2022; Weidner, 2018). Further, utilizing new pedagogic models can be challenging because there is not precedent for their use (Shieh & Allsup, 2016), and early models can yield inefficient rehearsal outcomes (Weidner, 2018). Conductors that showcase the IMM in their ensembles begin to perpetuate new norms of rehearsal pedagogy, making the transition to adopting the IMM easier for other conductors (Allsup & Benedict, 2008). As discussed in chapter five, the first two levels of the IMM are essentially current popular conductor practice, allowing a sense of immediate familiarity with a new model. Conductors would only have to tweak their instruction rather than change it outright to successfully implement the model. Also, this means that no additional resources or space are needed to implement the IMM. For the issue of time, unfortunately, there are not many ways to expediate implementing a new pedagogic model in one's rehearsal. As chapter five states, transitions takes time. This is true for both the musicians learning new skills as well as the

conductor learning a new system. However, I think I have made a strong case that ensembles that successfully navigate the transitional periods in the IMM operate with much more efficacy and efficiency than those remaining at level two. Thus, the concern becomes not one of time, but prioritizing musician growth and education. While others may view it differently, to me, the ethics and mandate to value music education over rehearsal efficiency makes this an almost nonexistent dilemma.

Contributions to Music Education and Wind Conducting

The IMM serves to place value in music education through ensemble music-making. I believe that ensembles are fertile grounds to teach "life skills" such as collaboration, communication, tact, diplomacy, awareness, and countless others detailed in this document. Building the IMM so that it incorporates common practice that evolves to best practice allows conductors the comfort of experimenting with a new system, or retreating back to familiarity if things don't work. Conductors wouldn't be "giving up," they'd simply be returning to level 2. More importantly, with the inclusion of the Skyllabus, development doesn't have to rely on conductors. Able and willing musicians, using the tools set forth in this document, are more than capable of educating themselves on what skills to develop next, and how to develop these skills in their peers. Additionally, social development is a largely untapped, yet influential, component of collegiate bands. The IMM harnesses social collaboration and leadership development in a way that is intuitive to the ensemble ecosystem, rather than adopting leadership training from external sources and making it fit the ensemble.

For conducting, the art of ensemble pedagogy and conducting gesture are intrinsically linked (Forrester, 2018; Grey, 2022). Using Gumm's (2023) work in this domain was exceptionally beneficial for the IMM, as it provides clear direction on how gesture could develop

over the course of an academic term. As it stands, practicing conductors at the middle and high school level typically only experience conducting growth through conducting symposia or graduate programs in music. This kind of development is much less common for collegiate conductors (as they are the one's giving this instruction to other band directors and conductors). The IMM provides a foundational model for collegiate conductors to self-examine their gesture and rehearsal pedagogy development, and how to elevate both to deepen musical experiences for themselves and their musicians.

Limitations of the IMM

The most obvious limitation of this document, and the IMM, is that it lacks empirical validation and reliability. Non-empirical research, such as this document, focuses strongly on literature reviews and theoretical speculation (Empirical, n.d.; Dan, 2017). However, for the IMM to have substantial grounding as a pedagogical model, it ought to be tested for validity and reliability (Creswell, 2015). This may include developing constructivist grounded theory in distributing leadership to student musicians similar to the one in Weidner (2020) and comparing it to the IMM. It may also Ie significantly studying smaller aspects of the IMM, and reframing the model to fit those results. These possible empirical studies are discussed in the next section.

Second, the IMM uses distributed leadership theory as a foundation for sharing conductor-held responsibilities with student musicians. Distributed leadership theory, even within academic leadership scholarship, lacks a distinct and developed definition, and is still being measured for its effectiveness. It provides a useful alternative to "heroic" leadership theories, but generally lacks deep substantiation as to its impact and effects on organizations compared to other theories of leadership (Avolio, Walumbwa, & Weber, 2009). This is why I provide authentic leadership theory as a secondary theoretical construct to consider. Authentic

leadership has more substantiation, has been studied more (Avolio, Walumbwa, & Weber, 2009), and has significant ties to positive work environments and organizational culture (Kiersch & Peters, 2017) and has even demonstrated ties to performance outcomes in music ensembles (Montalvo, 2019). Either way, I believe distributed leadership to be an effective model on which to rest the IMM, but any leadership theory that centers itself around sharing power and responsibility could also work.

Finally, despite the arguments made above, institutions and conductor likely remain resistant to change (Allsup & Benedict, 2008; Allsup, 2012; Shieh & Allsup, 2016). I fear that this model will linger in academia only and not find purchase in best practice, like so many similar theoretical models before it. For me, centering musicians in rehearsal is a priority, and is something I regularly practice- both for the hope of doing right educationally by my students, and to model what the IMM could look like for the future educators and conductors in my group. I believe the IMM will increase musician capability and ensemble efficiency, and allow conductors to elevate their practice. Future research is needed to both validate the IMM, and to continually change and mold it until it is in a place where it is easily implemented by any collegiate ensemble.

Suggestions for Future Research

As with any non-empirical study, the IMM begs for empirical validation. This area encapsulates my recommendations for future research. For future study, I recommend the following:

- Studies remain mixed on how musicians perceive attempts to create musician-centered rehearsals (Bazan, 2011; Sutherland & Cartwright, 2022). A study measuring both musician

and conductor motivation as the ensemble moves through the various levels of the IMM could provide insight on where motivational help is needed in the model.

- Fisher (2021) discusses how student leaders in a college marching band develop based on their readiness, willingness, and ability to lead. Similarly, Komives et al. (2009) discuss how student leaders do not develop in a linear fashion. Where the IMM was inspired by a scaffolded approach to learning (Vygotsky, 1978) and Dobson & Gaunt's (2015) "Musical Radar", perhaps social skills and capacities don't develop in a linear, scaffolded fashion as the IMM purports. Qualitative methods could be useful in refining the Social Dynamics Domain of the IMM by interviewing participants and understanding how they develop social skills through a more constructivist lens.
- There is a popular saying in leadership and management: "Only be responsible for those things that only you can do. Delegate everything else." This serves as a core component of the IMM- through distributed leadership practice, conductors distribute rehearsal skills to their musicians. However, perhaps musicians are not developmentally ready to take on these responsibilities. It would be illuminating to understand self-belief and efficacy of musicians as they attempt to practice popularly-conductor-held rehearsal skills.
- Mentioned in chapter seven, social network analysis measures friendship connections and information-solicitation in large groups to identify network connection density and even informal emergence of leadership. Utilizing social network analysis as ensembles go through the IMM and leadership distribution could help identify *how* leadership distributes in ensembles, especially when rigid hierarchies are more common in collegiate band environments.

- A reliable and valid assessment of progress through the IMM would help conductors monitor their instruction and would inform musicians of their strengths and weaknesses using the new skills introduced by the IMM. While I provide a sample rubric of the 12 elements of the IMM to start this process, a developmental metric is warranted.
- The IMM focuses on collegiate ensembles because of the assumed skill set of the musicians, and the complexity of the concepts to be conferred to the musicians. However, the IMM could feasibly be introduced into ensembles of all ages and competencies, as well as adapted for orchestra and choir. In expanding the IMM to cover different ages, it would be interesting to investigate how far school-age musicians can reasonably progress through the model, confirming or denying my assumption that musicians enter college operating at awareness level two. Similarly, it would be interesting to see how different types of wind bands (marching, concert, jazz, etc.) develop through the IMM.

The IMM is built from scholarly research, a love of studying leadership, and a passion for serving my students. As conductors, we owe it to our students to provide them with opportunities for meaningful, informed, and autonomous musical experiences. We owe it to them to prepare them for their lives ahead and to help them unlock their human potential. Many people find meaning in creating music with others, and the interdependence of ensemble music making cannot be understated. We rely on the actions of our fellow ensemble members just as much as they rely on us.

When ego is introduced into the ensemble ecosystem, it destroys the beauty of that human connection. Sense of belonging, togetherness, and shared purpose can be somewhat lost when the belief that the conductor *must* be the one to make meaningful decisions is pervasive. When we let go of doubt and self-importance as musicians, we value the truth of ensemble music

making: process *and* the product are worthwhile pursuits; the beauty of musical connection, and the sense of fulfillment that comes from chasing unachievable perfection, can be experienced by everyone. Everyone in an ensemble is required to be an active participant for ensemble music-making to work. The interdependence of the score, the conductor, and the musicians is intrinsic to the wind band experience, and together, the resultant art is greater than what any of those entities could create alone. Halford E. Luccock said, "No one can whistle a symphony. It takes an orchestra to play it." The ensemble experience can be enhanced if we recognize the importance of interdependence and when we, as conductors, can elevate *all* musicians to a place where they can truly take ownership of their music-making. Introducing interdependent musicianship to music students would enhance ensemble satisfaction, foster self-determination, and cultivate leadership skills in all musicians. It is my hope that the IMM helps to inspire conductors to reflect on their practice to ensure that we, as a community, are doing our best for our musicians and our art.

Appendix A – Interdependent Musicianship Observational Benchmarks

Level 1 – The Self

	Aural Awareness (Self Sound)	Music Analysis (Notation Decoding)	Social Dynamics (Identity)
M.A.	• Using a tuner for objective intonation • Listening to professional soloists on one's instrument • Disengaging with peers to hear one's own sound • Sound sticks out of ensemble (usually via intonation or tonal error) and is not corrected	• Making notes in one's own part • Clapping or self-talk to figure out one's part • Fingerings, slide positions, or counting numbers written in above parts	• Formation of cliques • Limited interaction with anyone outside of their direct friend group • Developing comfort with ensemble rules and expectations • Discovering "unwritten" ensemble rules • Discerning if they belong
M.C.	• Literal playing of written material- little interpretation beyond written notation • "Do I sound _____ to you?" • Frequent experimentation of tone, technique, and sound in "free-play" or warm-up periods	• Asking the conductor for help decoding complex rhythms • "I don't know how this is supposed to sound" • Playing written elements wrong despite others around them playing correctly (or vice-versa)	• Procedural questions • Questions regarding explicit or implicit expectations • Statements that are very self-centric, perhaps an obliviousness to others • Statements involving feeling overwhelmed by new things • Social talk unrelated to music
C.P.	• Direct instruction, dictating "how" something should go • Pointing out intonation errors • Guiding musicians to recognize musical leaders and relevance of interconnecting parts • Leading warm up activities to establish ensemble sound	• Sharing metacognitive techniques for how individuals can figure out unfamiliar parts • Selecting repertoire based on perceived ensemble ability • Light discussion of theoretical concepts applied to performance • Isolated score study	• Encouraging and welcoming demeanor • Dictating rehearsal expectations and role expectations • Regulating rehearsal pace, flow, and focus through verbal reminders or proxemics • Introducing sayings or "isms"
C.G.	• A number of melodic or tutti-entrance cues • Regulatory gestures ("too loud" or emphatic "more here")	• Strong presence of mechanical-precision function (beating time) • Showing passage of melodic figures through body language or gesture	• "Inviting" gestures, rather than being demonstrative • Mirroring gesture while explaining pedagogy (ie. "We will gradually crescendo at m.23" while

	• Repeating a passage without remarks, but using emphatic gesture to communicate musical intent	showing a very slow crescendo gesture
LEAD	• Leadership is largely hierarchical, and conductor led • Musical information flows from the conductor to the musicians • When musician-leadership steps up, it's usually in a "substitute-conductor" role (taking care of clerical tasks like copies, running a one-sided rehearsal, etc) • Leadership positions are absolute and are the only people who typically will demonstrate any form of leadership, including initiating social gatherings, or bringing issues to the conductor • Musician-to-conductor communication is usually funneled through official musician-leadership • Ensemble-wide values are still being learned	

Level 2 – Local Neighbors

	Aural Awareness (Simultaneity)	Music Analysis (Musical Relationships)	Social Dynamics (Roles and Structure)
M.A.	• Asking neighbors about their parts • Adjusting instruments to be more in-tune with their neighbors • Tone and playing are adjusted to blend and balance neighbors' sounds • Musicians sometimes arrive at rehearsal with their parts prepared	• Using a reduced score to identify musical relationships • Beginning to explore implicit rules of playing and phrasing depending on musical role (ie. Playing louder if one has the melody, etc) • Able to rhythmically entrain with other musicians whose part is more pulse-oriented	• Musicians begin following implicit and explicit ensemble expectations • Musicians will learn who to approach for certain resources, based on roles (go to Ensemble Librarian for music, go to conductor for score questions, etc)
M.C.	• Inner-musician chatter is more task focused • Phrases to neighbors such as "I think you sound ____" • Nonverbal communications that (intentionally or not) express opinions about other musicians' playing • Verbal or nonverbal communication indicating recognition of sticking out of musical texture with neighbors (or neighbors sticking out)	• Musicians identifying who has a similar part to them • Musicians should be able to verbalize changes in dynamics and balance depending on musical roles • Beginning to indicate musical ideas to neighbors on fundamental musical concepts, like matching tone or intonation • Easily identifying melodic, harmonic, and rhythmic musical roles when prompted • Musical vocabulary is individualized	• Named leaders will likely hold peers accountable for adhering to ensemble structure • Musicians assign each other regulatory roles in chamber groups • Musicians experiment with providing musical feedback-usually a small number of individuals in a group would step up and do this
C.P.	• Asking musicians to sing a passage • Guiding listening toward matching timbre (blend) and having appropriate dynamics based on musical importance (balance) • Teaching about the importance of listening to harmonic movement and non-melodic parts	• Asking musicians to listen to themselves or neighbors to ask what they're hearing, focusing on fundamental questions (ie. "Do we sound the same or different? Why?") • Questions are more directed toward recall of fundamentals, and are less vague	• Redirect students asking logistical questions to other leaders in charge of those things • Asking procedural questions back to students rather than providing a direct answer • Facilitating conflict resolution by encouraging musicians to communicate

		• Lessons and critical questioning leading the ensemble to uncover the structure of a piece of music	• Providing musicians with a "how to" practice guide, or a list of directed questions to motivate listening
C.G.	• Using motivational gestures to encourage certain sections to play louder or softer • Trusting melodic parts with independence and using gesture to focus on and shape contrapuntal or harmonic lines • Gestures become less emphatic and more musical	• Gesture may adopt more expressive roles to encourage phrasing, style, or articulation • May introduce more "macro-beat" conducting to encourage musicians to take ownership of pulse and tempo • Conductor might stop, give nonverbal gestures to reinforce how the music should be performed, and start again with no verbal communication	• In a chamber music setting, the conductor jumps into a more "advisor" or "facilitative" role, providing metacognitive strategies about how musicians should interact with one another • Encouraging nonverbal movement while playing, such as having everyone watch a front-row musician for breath to start a passage • Using gesture to direct listening toward an event • Using nonverbal gestures to affirm musical decisions
LEAD	• Still conductor-centric and hierarchical • Information might flow from conductor to musician-leaders to the rest of the ensemble • Musicians may have more input into rehearsal process or preparation (such as literature selection), but this is limited and controlled by the conductor • Musicians are developing their own standards and concept of ensemble direction, and "testing the waters" by speaking their ideas to the conductor or asking questions that begin with "Could we try____?" • Ensemble-wide values are known to many, but not necessarily all		

Level 3 – Instrumental Sections

	Aural Awareness (Unified Interpretation)	Music Analysis (Audiation & Error Detection)	Social Dynamics (Communication and Problem Solving)
M.A.	• Conferring in sections about how to play a shared part • Sections agreeing on and marking down similar un-notated phrase marks in their parts • When isolating parts in rehearsal, other sections not explicitly engaged pay attention and take note • Musicians begin to engage in similar physical movement while playing • Side-by-side musicians with different parts may nod or bob to cue the others • Musicians arrive at rehearsal with their parts prepared at conductor expectations	• Singing as sight-reading • Singing largely on pitch • Checking with conductor about possible errors in score or parts • "I'm playing what's written, but it doesn't sound right to me." • Note taking on perceived problems to solve or work on, as an individual or section • Musicians are able to detect mistakes given a full score to reference	• Use of individual goal setting and tracking • Seeing musicians confer about music after rehearsal • Impromptu and musician-instigated sectionals or group work to address problems from rehearsal • Section leaders might hold leader meetings to collaborate • More instances of musicians holding each other accountable for behavior and musicianship
M.C.	• Frustrations communicated to conductor if individuals think the ensemble playing is not up to standards. ie. "Can we tune again?" • Dialogue is largely about music, and conversation is elevated • Use of musical reasoning to justify arguments • Musicians conferencing about phrasing and interpretation outside of rehearsal	• Named leadership runs sectionals and asks musicians if they hear any problems • Inter-musician discussion about mistakes without going to the conductor • "I think it goes like this" • Using recordings as a reference with pieces that they're playing • Musical vocabulary is developing, and shared meaning is common	• Typically, older and more experienced musicians might talk quietly to their peers to address problems they hear if the conductor is not speaking to them or their section • Musicians indicating to conductor to stop or asking to go over a problematic section • Dialogue is regulated and is more efficient
C.P.	• Talking over the ensemble to catch small mistakes without stopping • Providing instruction on how to make phrasing decisions,	• "Don't tell me, tell them" Helping musicians to communicate their detected errors to the offending parties	• Explicitly teaching collaboration and communication techniques • Setting small groups to a musical task with time

	as in Lisk (2006) and Thurmond (1982) • Providing time and space for musicians to confer and agree on interpretation • Full score is used to direct musicians' attention • Providing metaphor as a guide to what something should sound like • Discussing interpretation decision-making based on theory, history, and outside experience	• Asking musicians to justify their decisions from theory, history, or outside experience • Asking musicians to identify mistakes they hear, written or verbally • Collaborating with musicians for repertoire selection or program direction • Ear-training, sight-singing, and error detection warm ups are utilized regularly	parameters, and letting them figure it out • Using intentionally vague language or instructions • Shifting value system from time spent in ensemble (seniority and experience) to ability and excellence
C.G.*	• Mechanical-precision gestures are much less demonstrative, and more collaborative • Melding gestures are more common to shape long-term phrases out of time • Conducting is not needed to keep musicians playing together, but it has a noticeable musical difference when it's absent • Body tension and instrumental gestural mimicry is thought out and controlled to communicate a relaxed tone and *how* something should sound • Musicians are familiar with gestures, and may subconsciously mimic them in musical descriptions		
LEAD	• Leadership structure is still slightly conductor centric, but is more fluid with and between musicians • Musicians and conductor try to assume good intent • Trust is outwardly placed in non-named leaders through recognition, task-delegation, and praise • Named musician leadership may start to empower non-named individuals into leadership roles • Musicians will hold one another accountable for musicianship and behavior, though sometimes misuse of communication tactics may render these ineffective • "No" to a request is rare, but when it is given as a response, it is respected and reinforced with data and information • Communication flows openly between musicians and conductor, though not everyone may feel comfortable doing so • Ensemble-wide values are commonly known and able to be articulated by all members		

*At level's 3 and 4, gesture becomes more detached from domains and elevates to connect the domains

Level 4 – The Ensemble

	Aural Awareness (Intuitive Adaptation)	Music Analysis (Comprehensive Musical Applications)	Social Dynamics (Distributed Leadership)
M.A.	• Nonverbal cues are given and correctly interpreted more often than peer verbal reminders are needed • Musical movement is adapted by most of the ensemble • Sheet music is heavily marked with reminder and phrasing marks • Musicians may occasionally serve as conductors (often mirroring lower-level conductor behavior) in the absence of the conductor • Musicians consistently arrive to rehearsal with parts prepared in excess of conductor expectations	• Significant transfer of knowledge regarding historical practice and composer background from piece to piece • Musicians intuitively research and listen to pieces when they are assigned to them without being directed to do so • Musicians understand how to appropriately select repertoire	• Musicians collaborate based on conductor's direction, but not necessarily *at* their direction • Ad hoc committees may form for various musical or non-musical reasons • Musicians may form their own small ensembles for enjoyment or practical purposes (events, gigs, etc) • Behavior is purposeful, intentional, and lacking in egotistic behavior • One-on-one teaching • Mentorship
M.C.	• Communication is largely nonverbal • Extensive errors are often addressed in an outside sectional or practice • Musicians can shift within a single rehearsal frame to adapt to their peers' playing	• Discussion of interpretation involves theoretical ideas, historical context, and outside experience • Dialogue is concise and efficient • Musical vocabulary is well-developed and used to communicate shared meaning	• Musicians expect to collaborate with one another and the conductor regarding • Musicians will teach one another to lift others up • Collaboration is common, and often individuals from different sections will communicate
C.P.**	• Conductor comments are more concise and communicate broad vision more often than details, trusting musicians to understand root causes of problems and address them • Communication is open and honest • Conductor may resort to inspiration and vivid metaphor to guide musical direction • Expectations for rehearsals, both short term and long term, are given early and often met with little reminder • Ensemble setups may be nontraditional or change to elicit different listening environments • There is little egotistical behavior on the part of the conductor		
C.G.**	• Gesture is collaborative and largely focused on musical interpretation, even when sight-reading a piece		

	• Time-keeping gesture is the least salient aspects of the conductor's gesture • Musicians anticipate gestures and respond similarly when they are used in new contexts • Conductor is not needed to maintain ensemble cohesion or to communicate anything written on the page • Conductor uses gesture to guide audience listening to the musicians
LEAD	• Leadership structures are more fluid and shift with need. Hierarchy is respected when needed, but mutual respect, trust, and communication are much more influential • Ensemble values are known to all and lived by many, even outside of the ensemble environment • Problem-solving and collaboration are efficient and timely • Musicians feel intrinsically motivated to persist in the ensemble and express organizationally-beneficial behaviors • Authentic leadership defines a majority of named leadership

**At level 4, gesture and pedagogy become more detached from domains and elevated to connect the domains

Appendix B – Interdependent Musicianship Formative Assessment Rubric

Interdependent Musicianship Self-Reflection Rubric

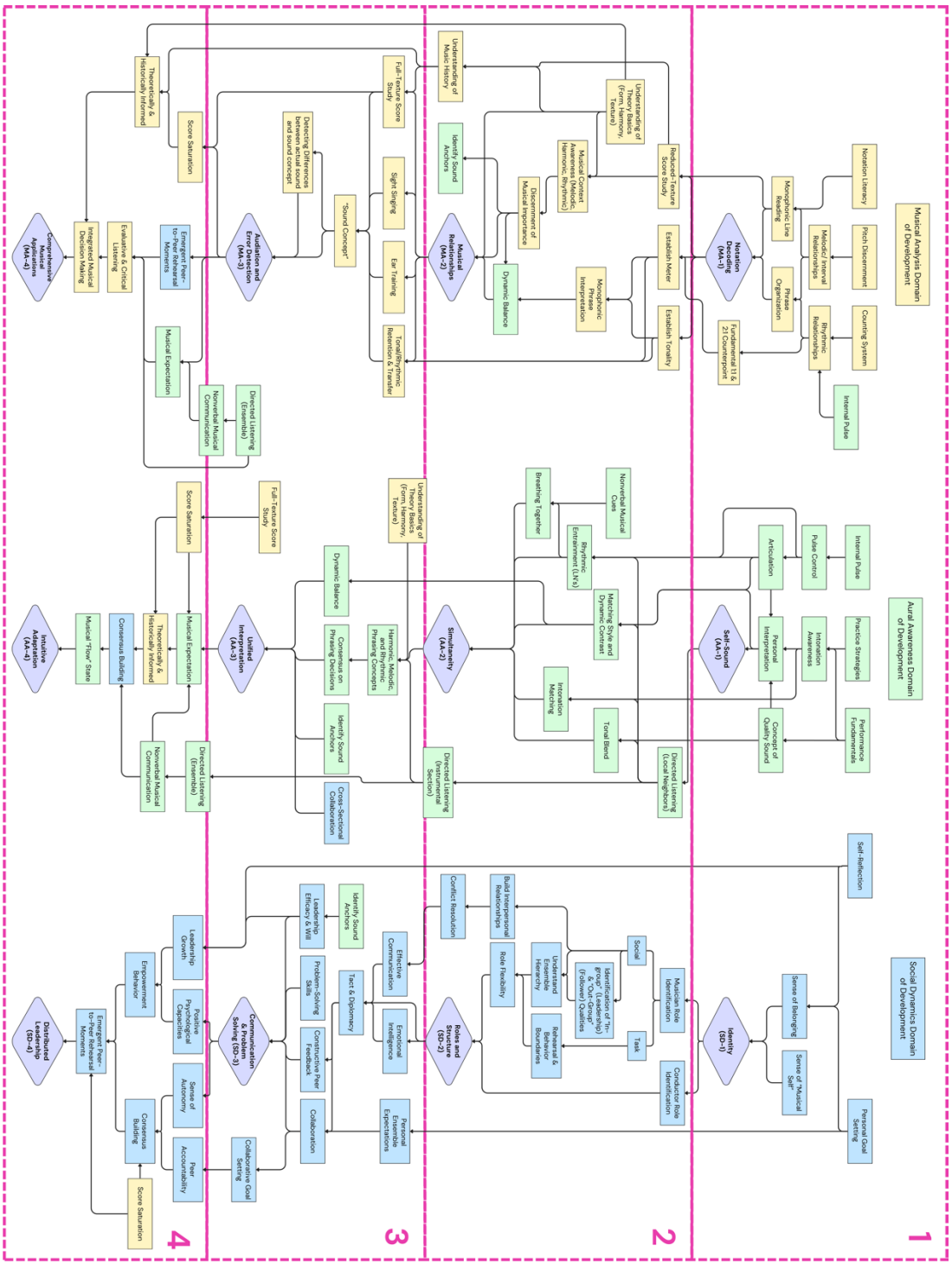
Select the development level in each row that is most appropriate for your current state of development in the categories listed to the left. This is a snapshot of your progress. Be honest, and know that this is a foundation for your future growth as a musician.

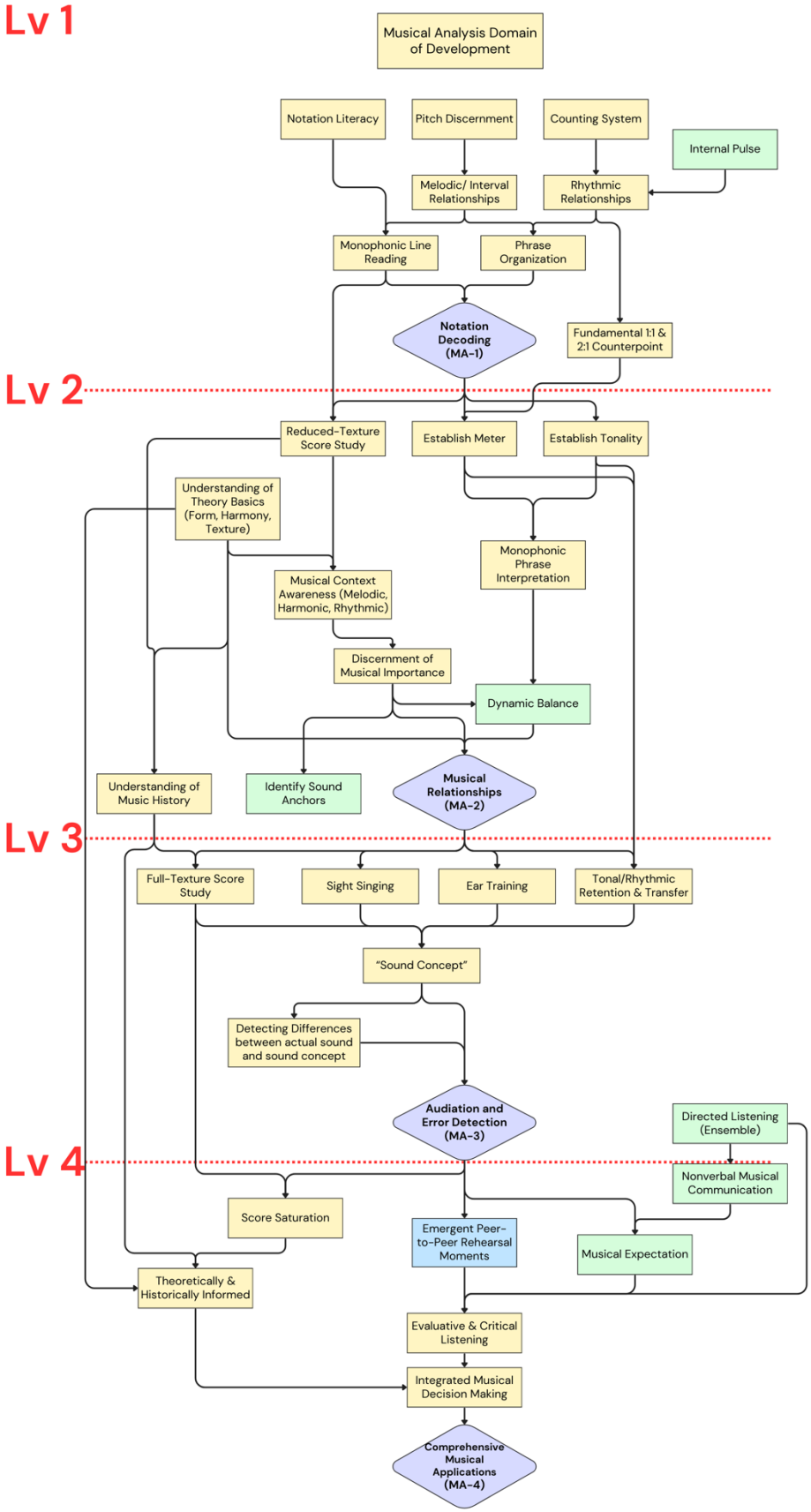
	0 - Limited	1 - Fundamental	2 - Developing	3 - Proficient	4 - Mastery
Aural Awareness	•Demonstrates little awareness of one's own sound production •Unable to apply fundamental techniques to adjust one's own sound •Heavily reliant on conductor feedback for self-improvement	•Able to analyze basic quality of one's own sound production •Able to self-prescribe techniques to improve aspects of one's playing •Primarily views one's own sound in isolation – limited ability to adjust to peers' sounds •Reliant on conductor feedback	•Able to analyze quality of one's own playing and quality of neighbor's playing •Able to adjust aspects of one's own sound to match quality and technique of neighbors •Nonverbal gesture and reactive communication may indicate basic assessment of neighbor's playing •Developing independence from conductor feedback needed for musical succes	•Able to analyze quality of section's collective sound and communicate with others about it •Able to adjust dynamics, articulation, and interpretation to match section's performance •Basic understanding of balance in relation to other sections' parts •Communicates frequently with neighbors and section about aspects of performance (some input from conductor still helpful)	•Responds to musical, nonverbal gestures from conductor and other musicians •Actively analyzing performance of musicians outside of one's section mid-performance •Responds actively to changes in performance to maintain clarity of ensemble sound
Social Dynamics	•Feels little social connection to one's peers or the collective ensemble culture •Little verbal communication (social or task-focused) with other musicians •Limited understanding of explicit or implicit ensemble expectations	•Feeling of connection evident to the ensemble or small cliques within the ensemble •Developing concept of claiming "musician" as part of one's identity •Demonstrates social behavior with friends in ensemble •Social behavior norms are prioritized over ensemble behavior norms •Implements problem-solving behavior when prompted by conductor	•Developing understanding of ensemble rehearsal roles demonstrated in small groups •Developing social connections within ensemble outside of normal friend group •Adheres to structured ensemble leadership hierarchy •Demonstrates self-regulation and self-reflection behaviors •Implements appropriate problem-solving behaviors for self	•Peer-communication in rehearsals is largely task-based •Able to clearly communicate musical ideas to conductor and peers •Developing positively influential behavior (leadership) between those in physical and social spheres with and without conductor prompting •Implements appropriate problem-solving behavior for self and with peers	•Comfortable with providing prompted and unprompted musical ideas and input •Proactively takes solution-oriented action in anticipation of musical problems •Able to code-switch between leader and follower roles when necessary •Demonstrates tact and diplomacy when interacting with peers •Encourages others to lead, communicate, and openly share ideas
Musical Analysis	•Limited understanding of interpreting musical notation into performed sound •Limited understanding of music theory or other disciplines •Able to identify isolated musical notation elements with some success	•Appropriate understanding of interpreting musical notation into performed sound •Able to make limited connections of music theory and other disciplines in one's playing •Limited ability to perform unfamiliar rhythmic or melodic notation without conductor assistance •Relies heavily on external aural feedback to understand "how a part goes"	•Able to sing one's part with accuracy as to contour and fundamental stylistic notation •Identifies one's musical role or aural importance based on written and aural feedback •Developing understanding of adjusting one's playing when presented with theoretical or score information •Adjusts intonation based on knowledge of chordal structures	•Able to sight-sing one's part with pitch accuracy and dynamic inflection •Able to audiate written notation •Identifies discrepancies between audiation and external aural stimuli in one's own and others' playing •Fundamental ability to apply and recommend corrective measures or techniques to fix perceived errors	•Utilizing music theory knowledge to inform one's interpretation of a part or a work •Applies historical performance practice to one's playing •Transfers knowledge from non-musical domains to enhance one's understanding or performance of a work •Able to develop interpretation from a score independent of conductor input

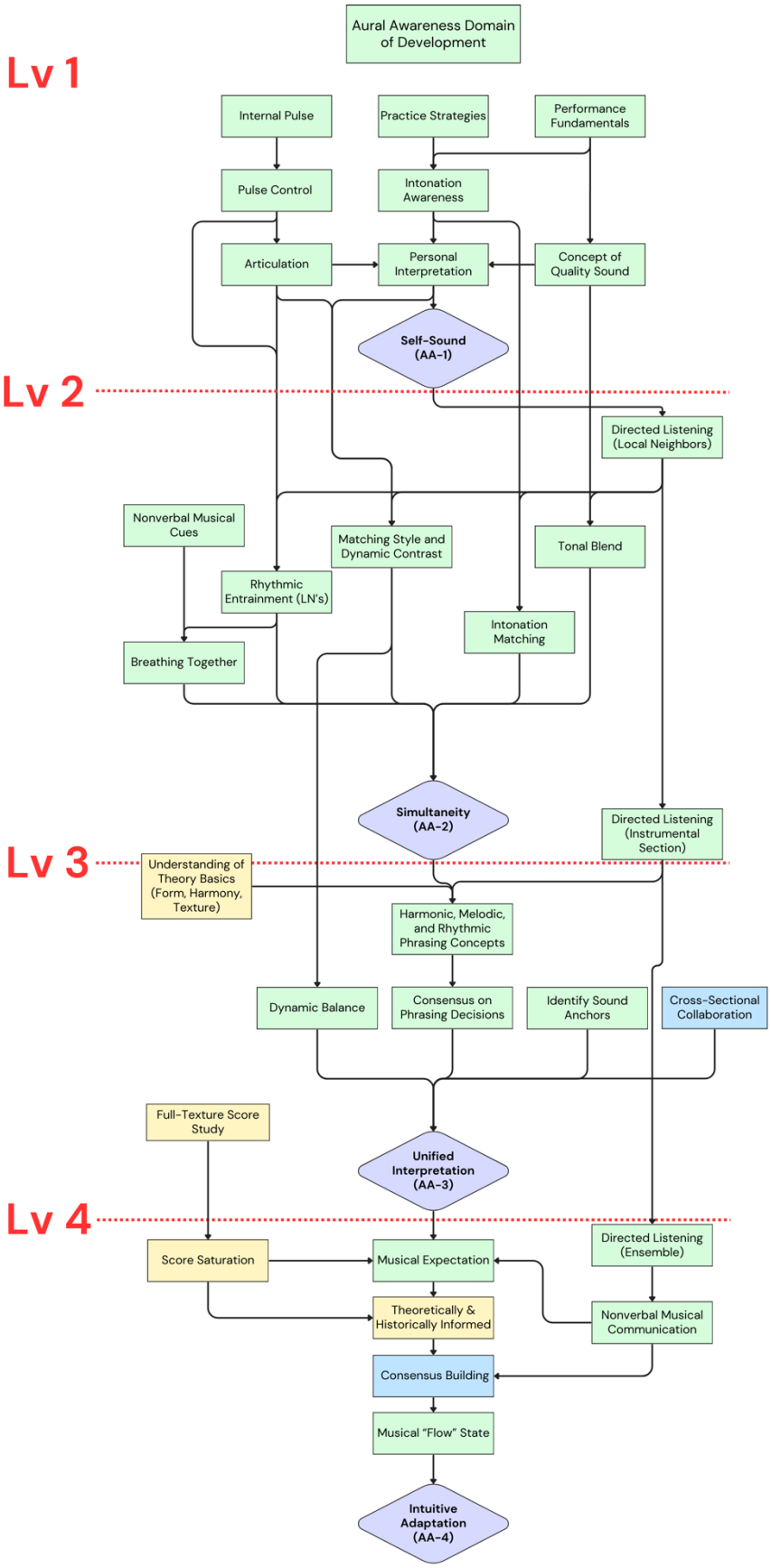
	0 - Limited	1 - Fundamental	2 - Developing	3 - Proficient	4 - Mastery
Musical Leadership	•Understanding of ensemble leadership structure is very hierarchical •Largely, only the conductor makes important musical decisions •Limited self-belief, desire, willingness, or ability to develop leadership •May play quietly to not draw attention to oneself, regardless of performance ability	•Understanding of ensemble leadership structure is hierarchical •Conductor and named leadership make important musical decisions •Developing ideas of desire and self-efficacy to contribute to the ensemble •Contributes to ensemble, though largely when asked or in a follower role	•Understands leadership to encompass named and unofficial leaders •Beginning to see leadership gaps within the ensemble and expressing a desire to fulfill them •Communication with peers may be evident, but utilizing tact and diplomacy is limited •More bold with leadership in comfort of social circles, but not with more unfamiliar peers •May take on smaller named leadership roles, or express desire to lead when prompted	•Understanding of ensemble leadership is nuanced and one expresses a desire to lead •May ask to help to fill needed perceived leadership gaps in ensemble •Communication with peers develops accuracy, directness, tact, and diplomacy •Demonstrates confidence in communicating with peers outside of one's social group •Seeks named leadership positions to exert influence	•Understands leadership as a distributed structure •Leads through earned respect and expertise, without necessarily asking for permission •Demonstrates confidence in one's musical convictions communicating with the conductor and one's peers •Understands when to express leadership and when to follow •Actively seeks to empower one's peers to lead
Musical Efficacy	•Very little confidence to express one's self musically •Self-reflective practice is limited. May frequently blame external factors on one's lack of progress •Expresses hesitancy to communicate with others, musically or socially •Fear of peer-judgement	•Limited confidence expressing one's self musically. May play proficiently but quietly. •Developing understanding of self-reflection. May express a "fixed" mindset of growth (based on talent, or unable to improve) •Confident in one's musical abilities below their personal ZPD	•Developing musical confidence. May play "out" with musical material one is confident in. •Expresses confidence upon receiving positive feedback, or through vicarious experiences with peers. •Self-reflection skills are applied, but grit and persistence may be limited, limiting progress and musical self-concept •Confident in musical material one receives outside assistance with •May set inappropriate goals, hindering progress	•Takes musical "risks" – confident in making musical mistakes •Expresses confidence upon receiving positive feedback, through vicarious experience, or after a demonstrated mastery experience •Growth-mindset is adopted and grit and persistence are demonstrated. •Expresses excitement in musical challenges •Goals are appropriately set, though follow-through may atrophy over time	•Takes musical risks and is comfortable encouraging others to do so as well •Becomes a source of efficacy-generation in others, especially through vicarious experience •Growth mindset is modeled and encourages others to think similarly •Practice demonstrates confidence in overcoming musical challenges •Appropriate goals are set and adhered to •Other positive psychological capacities are high (resilience, hope, optimism) and contribute to extra pro-ensemble behavior
Interdependence	•Remains isolated, socially and musically •Behavior is purely self-serving •Highly dependent on conductor aid or input •Low motivation to connect or collaborate with peers •Unaware of musical connections in score	•Connects with friend groups, but remains isolated musically •Behaviors are largely self-serving •Musically trusts authority figures, such as conductor or named leadership •Limited understanding of impact of musical behaviors on others, and resistant to change	•Demonstrates use of practice behaviors, but largely depends on conductor input for improvement •Behaviors are self-serving and serves social peer-groups •Musically trusts named leadership and conductors equally •Developing understanding of impact of musical behaviors on others, but needs external motivation to change detrimental behaviors •Expresses independent musical thought	•Understands importance of everyone having their parts prepared independently •Behavior serves the social group and the musical score •Places appropriate, earned musical trust in others, irrespective of leadership positions •Implements strategies promoting independent musical behavior •Expresses willingness to collaborate with others and change behaviors for the benefit of the group	•Understands interconnected nature of the ensemble's social connections •Understands the interconnected nature of musical parts •Expresses external influence on musical interpretation and decision making •Actively builds trust within the ensemble •Actively collaborates with others and engages in dialogue to develop group consensus •Behavior benefits the group over the self. Very flexible and open to change.

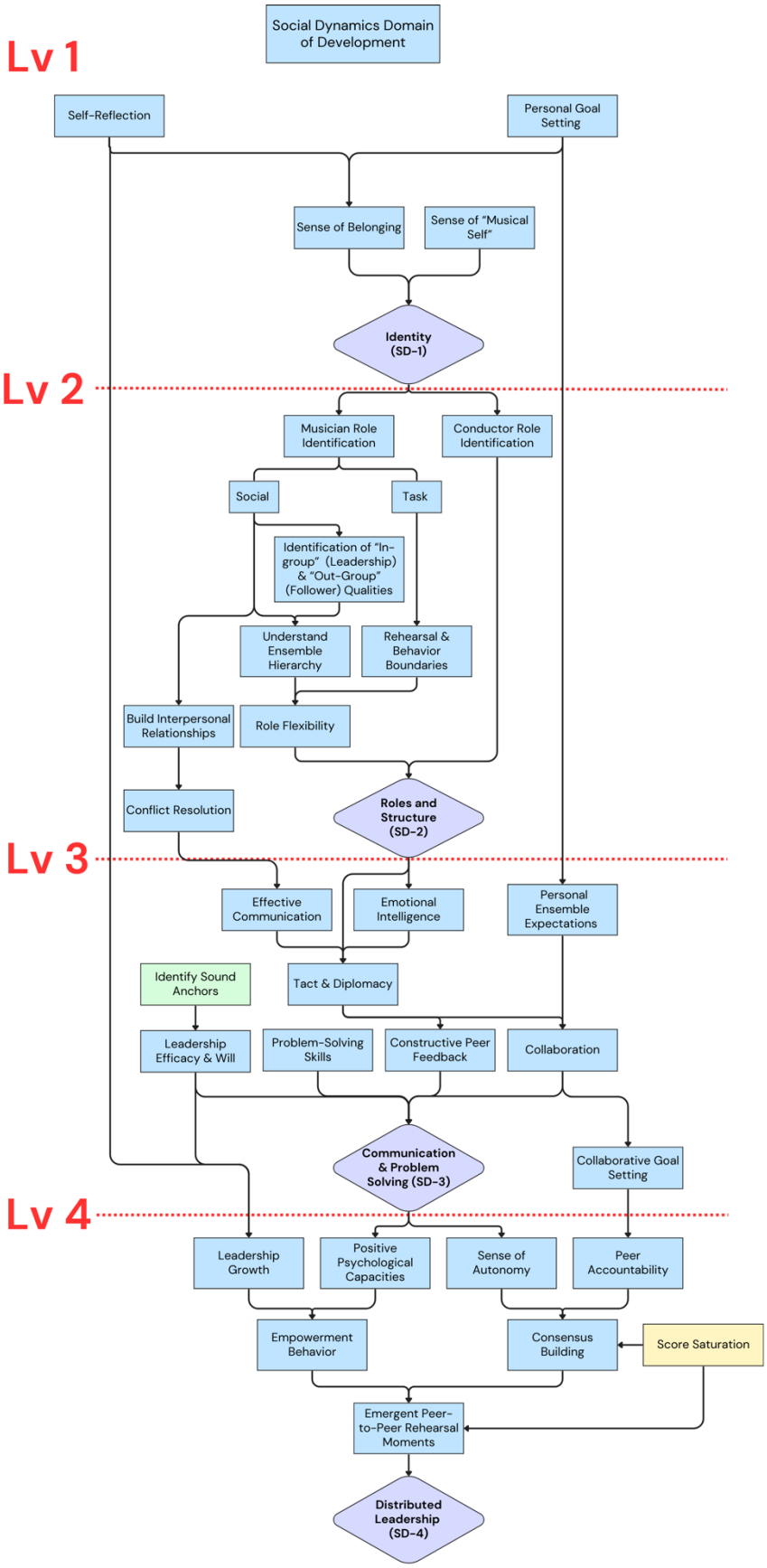
Appendix C- Interdependent Musicianship "Skyllabus"

The "Skyllabus" is presented over the next few pages. The composite set of skill set "trees" is listed first, followed by a "zoomed-in" perspective for each Domain of Development skill tree.




Lv 1
Musical Analysis Domain of Development
Notation Literacy
Pitch Discernment
Counting System
Internal Pulse
Melodic/ Interval Relationships
Rhythmic Relationships
Monophonic Line Reading
Phrase Organization
Notation Decoding (MA-1)
Fundamental 1:1 & 2:1 Counterpoint
Lv 2
Reduced-Texture Score Study
Establish Meter
Establish Tonality
Understanding of Theory Basics (Form, Harmony, Texture)
Monophonic Phrase Interpretation
Musical Context Awareness (Melodic, Harmonic, Rhythmic)
Discernment of Musical Importance
Dynamic Balance
Understanding of Music History
Identify Sound Anchors
Musical Relationships (MA-2)
Lv 3
Full-Texture Score Study
Sight Singing
Ear Training
Tonal/Rhythmic Retention & Transfer
"Sound Concept"
Detecting Differences between actual sound and sound concept
Audiation and Error Detection (MA-3)
Directed Listening (Ensemble)
Lv 4
Nonverbal Musical Communication
Score Saturation
Emergent Peer-to-Peer Rehearsal Moments
Musical Expectation
Theoretically & Historically Informed
Evaluative & Critical Listening
Integrated Musical Decision Making
Comprehensive Musical Applications (MA-4)


Aural Awareness Domain of Development
Lv 1
Internal Pulse
Practice Strategies
Performance Fundamentals
Pulse Control
Intonation Awareness
Articulation
Personal Interpretation
Concept of Quality Sound
Self-Sound (AA-1)
Lv 2
Directed Listening (Local Neighbors)
Nonverbal Musical Cues
Matching Style and Dynamic Contrast
Tonal Blend
Rhythmic Entrainment (LN's)
Intonation Matching
Breathing Together
Simultaneity (AA-2)
Directed Listening (Instrumental Section)
Lv 3
Understanding of Theory Basics (Form, Harmony, Texture)
Harmonic, Melodic, and Rhythmic Phrasing Concepts
Dynamic Balance
Consensus on Phrasing Decisions
Identify Sound Anchors
Cross-Sectional Collaboration
Full-Texture Score Study
Unified Interpretation (AA-3)
Lv 4
Directed Listening (Ensemble)
Score Saturation
Musical Expectation
Theoretically & Historically Informed
Nonverbal Musical Communication
Consensus Building
Musical "Flow" State
Intuitive Adaptation (AA-4)


Lv 1
Social Dynamics Domain of Development
Self-Reflection
Personal Goal Setting
Sense of Belonging
Sense of "Musical Self"
Identity (SD-1)
Lv 2
Musician Role Identification
Conductor Role Identification
Social
Task
Identification of "In-group" (Leadership) & "Out-Group" (Follower) Qualities
Understand Ensemble Hierarchy
Rehearsal & Behavior Boundaries
Build Interpersonal Relationships
Role Flexibility
Conflict Resolution
Roles and Structure (SD-2)
Lv 3
Effective Communication
Emotional Intelligence
Personal Ensemble Expectations
Identify Sound Anchors
Tact & Diplomacy
Leadership Efficacy & Will
Problem-Solving Skills
Constructive Peer Feedback
Collaboration
Communication & Problem Solving (SD-3)
Collaborative Goal Setting
Lv 4
Leadership Growth
Positive Psychological Capacities
Sense of Autonomy
Peer Accountability
Empowerment Behavior
Consensus Building
Score Saturation
Emergent Peer-to-Peer Rehearsal Moments
Distributed Leadership (SD-4)

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