### Imagery and Metaphor: Effective Wind Band Pedagogy for Expressive Musical Performance

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#### Abstract:

Much of the musical instruction time for a young musician is allocated to refine areas such as posture, tone, rhythm, and intonation, causing teachers of young musicians to spend less instructional time on coaching expressive skill development. The purpose of this research was to examine the effects of metaphor/imagery statements upon music performance regarding specific expressive elements (i.e., crescendo, decrescendo, etc.) within the expressive properties of loudness, tempo, and style/note duration. The researcher examined verbal instruction using imagery/metaphor statements (MI) on the participant's expressive musical performance. Sixty randomly sampled students, enrolled in two seventh-grade wind band programs located in the southeastern United States, participated in an expressive performance procedure (EPP) consisting of a pre-test recording, an instructional condition, and a post-test recording followed by computer analysis of the loudness, tempo, and style/note duration expressive properties. The results of the matched pairs t-tests indicated the MI instructional conditions affected the mean difference score sets with statistical significance (p < .05).

Furthermore, results suggested the MI conditions to be significantly effective in affecting all elements examined in the expressive property of loudness, expressive performance in a slower tempo, and in the multi-faceted style, *marcato*.

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# **Condensed Bio:**

Dr. David W. Vandewalker is the assistant director of bands at Georgia State University. During his tenure at GSU, the marching band has received several honors and accolades including an invitation to march in the 2014 Macy's Thanksgiving Day Parade, participation in the 57th Presidential Inaugural Parade, and a national top-ten honor by the 2013 College Band Directors National Association (CBDNA). He taught for many years in both middle and high school settings in Texas and Georgia. He is a recipient of the *Sudler Flag of Honor*, nine-NBA *Citation of Excellence* Awards, three *National Wind Band Honors* Awards, is recognized in multiple editions of *Who's Who Among American Teachers*, and in 2013, became an elected member of the American Bandmasters Association.

Vandewalker has led concerts before esteemed audiences such as the College Band Directors National Association/National Band Association Southern Division and the Midwest Clinic. He is published in numerous volumes of the *Texas Bandmaster Review*, multiple volumes of the *Teaching Music Through Performance in Band* book series published by GIA, and *Foundations for Wind Band Clarity- Arrangements for Concert Band, Foundations for Wind Band Clarity- Instructional DVD, Everyday Stuff Every Director Needs to Know, Boosters to the Rescue*, and *Strategic Plans for a Successful Booster Club* published by Vision Publications.

David and his wife, Pamela, reside in Marietta, Ga. She is Minister of Creativity and Worship Programming at Johnson Ferry Baptist Church where she has over 900 children actively involved in music making each week.

## Imagery and Metaphor Research: Effective Wind Band Pedagogy in Expressive Musical Performance

#### Introduction

The goal of all performing musicians should be the achievement of an expressive performance (Gabrielsson, 1999). Indeed, expressivity is one factor that is considered to distinguish highly skilled performers from those who are less developed (Gabrielsson, 1988; Woody, 2002). Research indicates that most music educators regard expressivity as a critical aspect of performer's skills (Lindstrom, Juslin, Bresin, & Williamon, 2003; Laukka, 2004). In order to develop and nurture musical and expressive experiences that lead to self-growth, self-knowledge, enjoyment, and self-esteem, musicians need to be taught expressive skills effectively in the initial stages of pedagogical practice (Elliott, 2005). Importantly, an expressive performance is one of the most challenging, yet crucial factors in the education of a young musician. More elusive, however, are effective pedagogical practices employed by music educators for teaching expressivity (Juslin & Persson, 2002).

Much of the musical instruction time for a young musician is allocated to refine areas such as posture, tone, rhythm, and intonation, causing teachers of young musicians to spend less instructional time on coaching expressive skill development (Kotchenruther, 1999). However, novice wind band students can perform music with expression when expressivity instruction is presented as part of their education and training (Cofer, 1998; Sousa, 1988). Clear attention to variables such as timing, metrical accents, dynamics, tempo and articulations allow students to increase their expressivity skills. In order for young students to develop an understanding of expressivity and what skills are needed to perform with expressivity, expressive skills must be taught along with technical skills at early stages of a student's musical development.

Teaching musical expression has been the focus of recent research (See, for example, Chester, 2008; Dickey, 1991; Henley, 2001; Rosenthal, 1984; Woody, 1999, 2006). A vital instruction delivery technique is the use of imagery and metaphor (Lehmann, Sloboda & Woody, 2007). Instructors may use imagery and metaphor to teach abstract or subjective concepts by communicating word pictures drawing upon familiar points of reference. The use of imagery and metaphor is meaningful because critical concepts can become fresh and clear in a moment (Barten, 1998).

Imagery statements use vivid, sensory details and often employ metaphor, used here as an inclusive term referring to figurative language that creates comparisons or allusions. These statements can be powerful tools for evoking concrete images in the minds of students, thereby offering tangibility amidst subjective concept development. It begins with something familiar and ends as an explanation of something unfamiliar reaching into students' minds working through comparison, likeness, and the connection to things which they already understand or to which they have a reference. Connecting instruction to this pre-existing knowledge allows for a more effective instructional delivery. The effectiveness of figurative instruction can be attributed to students' previous figurative language experiences, and the opportunities for problem solving and transfer (Sheldon, 2004).

Additionally, although these statements engage students' imagination in an extremely brief manner, music learning becomes efficient, effective, memorable and, sometimes, funny (Barten, 1998). It allows the student to "see" what's being said using

the listener's own experiences. Next, it allows the listener to gain insight into how this idea affects their performance. Furthermore, this instructional technique shifts the students from the rational side of their brains (left brain) to the imaginative, emotional side (right brain). The left side of the brain shares analytic properties of music such as duration, simultaneity, pitch, sequence, and rhythm. Whereas, the right side of the brain is vital in processing elements of perception such as loudness, timbre, intonation, the expression of emotion, and allows for imagination and creative experiences (Gates & Bradshaw, 1977; Swindol, 2012). Hence, the use of imagery and metaphor in the music classroom beneficially engages parts of the brain that may otherwise remain idle due to technical demands needed to play an instrument.

Relevance is critical for an image statement to make an impact. Several researchers have identified potential problems including students' confusion and discouragement because they struggle to understand an instructor's figurative language and lack a connection to the figurative example used. (Stollack & Alexander, 1998; Thiele, 1994; Woody, 2004). Therefore, metaphor/imagery statements need to be age-appropriate and evoke something familiar to the student.

### **Purpose and Research Question**

In recent research, I found metaphor/imagery statements to be significantly beneficial compared to more traditional pedagogical practices regarding expressive musical performance when I examined three instructional conditions investigating possible effects upon overall expressive musical performance (Author, 2014). The purpose of this research was to expand on my previous research, analyzing data regarding three expressive properties of loudness, tempo, and style/note duration through the lens of metaphor/imagery statements. More specifically, this writer examined the following research questions: (1) What are the effects of a metaphor/imagery instructional condition upon seventh-grade wind band students' expressive performance regarding the expressive property of *loudness*? (2) What are the effects of a metaphor/imagery instructional condition upon seventh-grade wind band students' expressive performance regarding the expressive property of *loudness*? (3) What are the effects of a metaphor/imagery instructional the expressive property of *tempo*? (3) What are the effects of a metaphor/imagery instructional condition upon seventh-grade wind band students' expressive performance regarding the expressive property of *style/note duration*?

#### Method

This study focused on randomly selected seventh-grade participants who were enrolled in two middle school wind band programs (N= 200; n= 60) in the southeastern United States. Before emotional, expression evoking metaphor/imagery statements were created, age-appropriate melodies were selected. To insure that the melodic and rhythmic content was within the participant's technical performance abilities, *Band Expressions, Book One* (Smith, 2003) was consulted. Based on the examination of the novice method book, three public domain melodies were selected for the creation of instructional materials. The selection of the three melodies was based on the following standards: (a) age-appropriate technical elements, including simple rhythms and with a limited melodic range; (b) comparable instrument specific demands (i.e. clarinet verses tuba); (c) appropriateness for evoking emotional communication of either a happy, sad, or angry emotion; and (d) minimization of emotional and lyric bias (Hewitt, 2001). Five experienced middle school wind band educators from the southeastern United States were consulted and unanimously agreed that the three melodies met the prescribed criteria for inclusion. Then, drawing from Juslin (2003) and Woody (2006), applicable expressive properties were assigned for each of the melodies based on the previously designated emotion (see Table 1).

### Table 1

## Summary of Expressive Properties and the Assigned Emotions with the Corresponding Specific Expressive Properties Presented in Each Melody

Property	Happy (Melody 1)	Sad (Melody 2)	Angry (Melody3)
Loudness	Crescendo/f	Decrescendo/p	Crescendo/ff
Tempo	Allegro	Largo	Moderato
Style/Note Duration	Staccato	Legato	Marcato

Notably, only one element of each expressive property was present in each

melody (see Figure 1) to create age-appropriate expressive demands for a novice

musician.

## Melody #1 – Happy

(utilizing expressive elements of Crescendo/*f*, Allegro, and Staccato) Allegro



Melody #2 – Sad

(utilizing expressive elements of Decrescendo/p, Largo, and Legato)





Figure 1. Melodies for the expressive performance procedure (EPP).

In the creation of the imagery/metaphor condition (MI), quality examples of imagery/metaphor statements were collected from experienced wind band instructors and the best-rated statement was utilized for each melody. Another panel of seven veteran studio wind band instructors rated the statements based on the effectiveness of each imagery/metaphor statement for producing an expressive performance from a novice wind band student. The panel's best-rated statements for each melody were used in the Metaphor/Imagery condition (Figure 2).

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Melody #1 (intended emotion – happy)
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Explanation: Play this melody like you are the Disney character "Tinkerbell" or a ballerina dancer flying, skipping and dancing along in a song.

Melody #2 (intended emotion – sad)



Explanation: Play this melody like you have to say goodbye to your best friend who is moving away for a very long time.





Explanation: Play this melody like you are thinking of a huge army of 100, 000 men marching into your home and all throwing their spears on the ground at the same time saying "Ha!"

Figure 2. Explanations in the metaphor/imagery instruction condition

To answer the research questions, the participants underwent an expressive performance procedure (EPP) consisting of a pre-test recording, an instructional condition, and a post-test recording followed by computer analysis of the expressive properties.

The collected digital audio pre-test/post-test files were saved as native files in *Audition* (Adobe Systems Inc., 2012) in order to see and measure visual wave files of each performance in sufficient detail to identify note duration/style or initiation of the tone and completion of the tone, total time of the tune until its final note, as well as the decibel amplitude. The researcher utilized computer software, *Audition* (Adobe Systems Inc., 2012), to examine each wave file and analyzed the mathematical means of the three expressive properties in the pre-tests/post-tests sets of scores for each participant.

The mean loudness level was obtained by measuring the volume difference between the initiation of the expressive element (i.e., crescendo, decrescendo) to the completion of the tone. The note duration/style of each performance was evaluated the length of each note from the beginning of a tone until the beginning of the next tone ( $d_{ii}$ ), and the duration from the onset of a tone until its offset ( $d_{io}$ ) if the offset preceded the next tone onset. The mathematical mean (M) of global tempo for each performance was obtained by calculating an overall total time of the melody. The last note was omitted from the calculations because the d<sub>ii</sub> value could not be determined.

## Results

This researcher found that the metaphor/imagery (MI) instructional condition produced significant change in all three expressive properties. The condition generated significant effects in mean differences between pre-test to post-test sets of scores indicating that the MI instructional condition may be worthy of consideration for effecting change in expressive performance.

4.1 Loudness. The greatest degree of loudness change created by the MI condition occurred regarding *crescendo* (11.36; p < .001), followed by *crescendo* to a *fortissimisso* (8.41; p < .001), then *decrescendo* to a *piano* dynamic (7.12; p < .001) and all fell within the range of significance at the p < .001 level, indicating that when teaching a variety of loudness expressive properties, the MI condition should be considered effective as seen in Table 2.

Table 2				
Summary of Metaphor/Imagery Condition				
upon Loudness Properties				
Loudness	<b>Overall M t-value</b>			
Cresendo/f	11.36 ª			
Decrescendo/p	7.12 ª			
Crescendo/ff	8.41 <sup>a</sup>			

<sup>*a*</sup> Differs from pre-test at p < .001 in repeated measures analysis of variance

<sup>b</sup> Differs from pre-test at p < .01 in repeated measures analysis of variance

4.2 Tempo. The use of metaphor/imagery was moderately effective regarding a Largo tempo (5.12; p < .001) thus, showing this conditions' potential effectiveness with the participant's understanding of a slow tempo (see Table 3). The metaphor/imagery statement regarding the melodies with *Allegro* and *Moderato* tempos did indicate slight changes in tempo but not in a significant manner.

Table 3

Summary of Metaphor/Imagery Condition upon Tempo Properties

Тетро	Overall M t-value	
Allegro	.89	
Largo	5.12 ª	
Moderato	.54	
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<sup>*a*</sup> Differs from pre-test at p < .001 in repeated measures analysis of variance

<sup>b</sup> Differs from pre-test at p < .01 in repeated measures analysis of variance

4.3 Style/Note Duration. The MI condition produced statistically significant gains

for expressing appropriate style/note duration for *Marcato* (3.13; p < .01); whereas the

condition yielded minimal results in Largo and Staccato as indicated in Table 4.

Table 4

Summary of Metaphor/Imagery Condition upon Style/Note Duration Properties

Style/Note Duration	<b>Overall M t-value</b>
Staccato	01.24
Legato	.28
Marcato	3.13 <sup>b</sup>

<sup>*a*</sup> Differs from pre-test at p < .001 in repeated measures analysis of variance

<sup>b</sup> Differs from pre-test at p < .01 in repeated measures analysis of variance

### Discussion

The metaphor/imagery statement, "Play this melody like you are the Disney character 'Tinkerbell' or a ballerina dancer flying, skipping, and dancing along in a song," suggested emotion by stating a figurative statement that was significantly effective in evoking change from the pre-test performances to the post-test expressive performances in the expressive property of loudness even though the metaphor conveyed the emotion without explicitly communicating a reference to loudness. The MI condition statement, "Play this melody like you have to say goodbye to your best friend who is moving away for a very long time," described a sense of loss or sadness. Music evoking sadness is generally performed more softly; the participants performed this melody demonstrating a strong reduction in volume, indicating a significant change in loudness. Contrastingly, the metaphor/imagery statement, "Play this melody like you are thinking of a huge army of 100, 000 men marching into your home and all throwing their spears on the ground at the same time saying, 'Ha!,'" highlighting a more action-oriented metaphor/imagery statement, was found to be effective in the expressive performance regarding loudness. In summary, all three expressive elements in the loudness properties (crescendo, decrescendo to a piano, and crescendo to fortissimo) were statistically significantly affected by the pedagogical implementation of the MI instructional condition.

Regarding tempo, music evoking sadness is generally performed more slowly; the participants demonstrated a strong reduction in speed when hearing the MI statement, "Play this melody like you have to say goodbye to your best friend who is moving away for a very long time," indicating a significant change in tempo (5.12; p < .001). The metaphor/imagery statement referencing "100,000 men marching," and saying "Ha!" was

designed to convey anger that is associated with marching and faster performance elements. The participants pre-test performances were found to have been performed at a moderate tempo that could have been characterized as a "walking" or "march-like" tempo, thus making it difficult to determine whether or not performers, in the post-test, were attempting to respond to the "march" tempo in the MI statement or whether these statistics indicate a "non-response" to that musical element. Similarly, the MI statement, "Play this melody like you are the Disney character "Tinkerbell" or a ballerina dancer flying, skipping and dancing along in a song," was to be played at an *Allegro* tempo in the post-test. Many post-test performances were found to be performed in a *Moderato* to *Allegro* tempo, but because the average pre-test tempo was also found to be moderately quick, the statistical change may not have been significant while, in fact, participants may have intended to be performing in a "skipping, dancing," manner without it being much different than their original, pre-test performance.

Results signal that the MI condition may prove beneficial when teaching detached or separated styles based on the statistically significant findings regarding the metaphor "100,000 men marching, and saying 'Ha!'" communicating angry emotional inferences. The metaphor/imagery statement associated with *Legato*, connected note durations, and *Staccato*, separated durations, were both affected minimally. Developmental challenges due to maturation of the novice performer may have adversely impacted the range of differences associated between the pre-test to post-test sets of scores. The researcher observed a pronounced number of pre-test performances that ranged between .6 and.8 (0.0-1.0) note durations leading to the question of how connected or long of a note a wind band student with 18-months of instruction can actually produce. The post-test scores indicated few participants performing a .85 to 1.0 note duration; while a large number of participants performing .75 to .84 note durations perhaps implying a correlation as to the actual ability for a novice player generating a statistically significant difference in pre-test to post-test score analysis in *Legato* and *Staccato* style/note durations.

#### Conclusions

Several important conclusions emerged based on the analyses of the present study's data. The results of this study seem to reinforce previous researchers' findings that inexperienced performers can learn expressive skills through a variety of instructional conditions (Chester, 2008; Dickey, 1991; Hewitt, 2001). Findings from this study support assertions made by other researchers that the MI condition is valuable for teaching expressive performance skills (Chester, 2008; Woody, 2006) as the loudness expressive property was effectively understood and achieved by students. The MI condition in this study also showed positive changes in pre-test to post-test sets of scores regarding tempo (*largo*) and style/note duration (*marcato*) expressive properties.

Interestingly, the MI condition showed significant benefit when teaching more specific, multi-faceted skills such as *marcato* accents when the MI statement contained identifiable action-oriented metaphors. In construction of this study, seven experts were asked to evaluate the five suggested metaphor/imagery statements; the only statement that received an unanimous vote was the metaphor/imagery statement attached to an angry emotion addressing all three expressive properties and evoking an emotional response suggesting that this metaphor/imagery statement was the best constructed overall. The data support this notion in that significant expressive change was yielded in two of the three expressive properties associated with the metaphor/imagery "100,000

men marching," and saying "Ha!" statement. Moreover, that metaphor/imagery statement included more developmentally demanding expressive elements (i.e. *accelerando* and *marcato* than the other metaphor/imagery statements included in the study.

#### Recommendations

The music educator often shapes expressive performance; one might suggest that the best music educators are those who can think of a least forty different ways to teach a particular musical concept (Demaree & Moses, 1995). Instructors need to develop a large vocabulary of exercises, tools, and terminology to communicate expressive musical concepts to students. It may be beneficial to use metaphor/imagery statements that distinctively address expressive devices when teaching specific expressive markings (i.e. *marcato*). When using metaphor/imagery statements, it might be useful to select concept specific metaphor/imagery statements or to employ figurative language that encompasses all the expressive properties within the instructional goal. Following in this same line of reasoning, music educators may benefit from having an understanding of their student's emotional abilities so that they can implement effective MI statements that will bring about more effective expressive performance skills. Additionally, instructors may find it valuable to familiarize themselves with Juslin's (2003) particular acoustic cues so that when teaching specific technical skills they can utilize emotion-oriented metaphors to enhance traditional concrete musical instruction for a faster instructional path to expressive performance. For example, in a fast, staccato technical passage, an instructor could employ an emotion-oriented metaphor activating the acoustic cues associated with the happy emotion. Or, to play something quiet and legato, the teacher would convey a

metaphor dealing with sad emotion. Thus, emotion-oriented metaphors can enhance the expressive elements in performance.

The use of figurative/imagery language in the music classroom is vital. An effective teacher often makes use of this type of language because it speaks to students' imaginations. It also allows teachers to articulate challenging concepts while connecting with students. Paul Ricoeur states, " The characteristic of all metaphor is to make the invisible become visible, active or alive." (Ricoeur, 1975, p. 38) Music educators employing imagery/metaphor language in their rehearsals are expanding their arsenal of teaching pedagogy effectiveness, allowing research to affect the pedagogy of expressive musical performance.

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