

# A Critical Examination of the Figurative Language Used by Physical Education Student Teachers 體育實習教師使用的圖像語言的一次重要考試

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## Abstract

In order to follow up previous studies focusing on figurative language amongst physical educators, the following study was performed to determine the amount and type of figurative language used by three physical education student teachers. This study examined and classified three types of figurative language and attempted to identify common pieces of figurative language used by three physical education student teachers. It was found that the three student teachers studied, used figurative language throughout their lessons frequently, however, did not have any common pieces of figurative language.

## 摘要

為了接著集中於圖像語言的早先研究在物理教育家之中，以下研究被進行確定三個體育實習教師和類型使用的圖像語言的數額。這項研究審查了並且分類了圖像語言的三個類型，並試圖辨認三個體育實習教師使用的圖像語言共同的片斷。它被發現三個實習教師頻繁地學習了，半新圖像語言在他們的教訓中，然而，沒有圖像語言任何共同的片斷。

## Introduction

People frequently use figurative language to communicate. Hawkes (1972) declares that figurative language is the type of language in which "it doesn't mean what it says" (p. 1). The opposite of figurative language, then, is literal language. It can be assumed that if one is using literal language, he or she means exactly what is said or written. Types of figurative language include but are not limited to metaphors, analogies, personifications, hyperboles, and similes. Although teachers may use figurative language, this

teaching skill has not been studied very thoroughly. The following study was conducted in order to examine the amount and type of figurative language used by three physical education student teachers in their daily classes.

Several articles (Gassner, 1999; Griffey, Housner, & Williams, 1986; Holt, Ratliffe, & Hannon, 2005; Housner & Griffey, 1994) have indicated that physical education teachers and coaches frequently use figurative language to express the critical aspects of a motor skill. Authors have speculated that critical cues provided through figurative language are understood and interpreted with the

same or better amount of accuracy and efficiency as cues provided through literal language (Carlson, 2001; Gassner, 1999; Housner & Griffey, 1994; Holt, Ratliffe, & Hannon, 2005; Masser, 1993). Important in guiding this study, Griffey, Housner, and William's (1986) discovered that basketball coaches use as much as 60% of their language in what the authors identified as figurative language. Modeling their findings, in which coaches were studied, the researchers of this study intended to identify the figurative language that three physical education student teachers used during class, as measured in ratio per seconds. Since Griffey et al., studied coaches rather than teachers, the classification for the intended purpose of identified figurative language will be different. Therefore, the researchers have turned to Siedentop's (1991) text in which he identifies three categories that anything said or done by a teacher can be classified into. Those three categories are 1) management, 2) directions or instructions, and 3) monitoring of the class which includes any verbal feedback. This focus provided a more meaningful interpretation for the ratios collected by the researchers.

The purpose of this study was to examine the use of figurative language by three physical education student teachers. This study was designed to determine the frequency and type of figurative language used by these student teachers. The following research questions were developed to help guide the procedures of this study:

1. How frequently is figurative language used amongst student teachers (physical education) at the elementary, middle, and high school levels?
2. What percentage of the figurative language used by the three student teachers are considered (1) managerial, (2) for instruction or directions, or (3) for monitoring and feedback?
3. Which of the three student teachers (elementary, middle, or high) used higher amounts of figurative language while teaching their classes?
4. Are there any existing common pieces of figurative language existing amongst the high, middle, and elementary school student teachers in this study?

## Methodology

### Participants

The participants for this study were three physical education student teachers completing their internships in a Southeastern United States school district located in the city of a state capitol. One participant was a male, in his early thirties, teaching at a new high school located north of the city limits. This high school has an attendance of mainly middle to upper class students. A second participant, also male and in his mid-twenties, was teaching at a middle school located within the city limits that was attended by mostly lower to middle class students. The third participant was a female in her mid-twenties teaching at an elementary school, also located within the city limits and having majority lower to middle class students. All three pre-service teachers agreed to have their lessons audio taped for the purposes of this study.

### Procedures

During the three student teachers' internships, the researchers visited and audio taped a total of four lessons each for the high school and elementary school participants. Unfortunately due to time constraints, only two lessons were audio taped and coded by the researchers from the middle school participant. These audio taped lessons were coded using the Figurative Language Physical Education Teaching (FLPET) Instrument developed by the researchers and included in Appendix A.

### Equipment

Sony audio micro-cassettes recorders were used to record the data for analysis. These recorders were worn by the three pre-service teachers during their lessons and recorded all verbal statements made by the teachers. As the researchers listened to the audio tapes, the lessons were timed using a Timex stop watch. Total minutes were then converted to total seconds of each lesson in order to create the ratios and percentages presented in the results.

## Instrument and Validation

Data were collected through auditory observations of the recorded lessons. The researchers listened to and for all types of figurative language. All figurative language was classified into three categories determined by the listener. The three classification categories for this study were taken from Siedentop's (1991) classifications for the three focuses of what a teacher does. Those three focuses or categories are 1) Management, 2) Direction and Instruction, and 3) Monitoring and Feedback.

The management category contains all figurative speech used by the pre-service teachers with the purpose of managing the class and are labeled on the FLPET as "M". These phrases could pertain to management of equipment, children, or other classroom tasks not directly related to the learner outcome. For example, "freeze" is used to gain children's attention. The other two categories: 1.) Direction and Instruction, and 2.) Monitoring and Feedback, typically relate to the learning outcome that the teacher has established for the students. For instance, all utterances coded to be in the Direction and Instruction (labeled "D") category consisted of figurative language that was used by the student teachers during class instruction while the class was gathered and listening as a whole before performing the task/s. An example taken from the study is when the high school subject was giving instructions on football plays by describing "button hooks". Unlike the Direction and Instruction category, all figurative language used to give feedback to an individual or group of individuals during performance was classified in the Monitoring and Feedback category and labeled "F". The elementary school subject was observed as saying "that's cool" as a way of offering motivational feedback to a performer of the task.

It is important to note that the instrumentation was tested in previous investigations on past audio taped lessons. This pilot test of the FLPET instrument helped to insure the concurrent validity of the instrument by testing it prior to this study. Likewise, the FLPET instrument was recommended and approved by two professionals within the field having a total of over 30 years of research experience, which added to the construct validity.

## Reliability

Frequency data was collected from the event coding column on the FLPET. The frequency column was used to tally the number of times the same verbally stated figurative language piece was used. For quantitative purposes, a trained researcher tallied the figurative language pieces after they had been classified into one of the three qualitative categories. This procedure allowed the researchers to establish an intra-observer agreement after 12 days from the first to second analysis using the mathematical equation:  $[\text{agreements} \div (\text{agreements} + \text{disagreement})] \times 100$ , with a 91.7% success reliability rate.

Secondly, another researcher was trained on a master audio tape until he received a 93.9% inter-observer agreement with the primary researcher. After receiving an acceptable inter-observer agreement on the master audio-tape, the secondary researcher was then asked to code four of the ten audio-cassette lessons and scored an 83.4% IOA with the primary researcher. Van der Mars (1989) claims that inter-observer reliability rates over 80% are acceptable in physical education research, satisfying the researchers of this study.

## Results

### Total Frequency Results

The frequency data collected from the three subjects has provided interesting insights into the usage of figurative language amongst physical education student teachers. Over ten lessons, the participants averaged one piece of figurative language every 58.4 seconds (Mean ratio = 1/58.4 seconds). Table 1 provides the reader with the average usage of figurative language per each lesson coded by the researchers.

**Table 1. Ratios and Usage of Figurative Language.**

Teacher and Lesson	Lesson Content	Total In-Class Time	Amount of Figurative Language	Total Management "M"	Total Direction "D"	Total Feedback "F"	Frequency Ratio
Elementary Lesson 1	Basketball Pass	1348 seconds 22.46min.	24	20	3	1	1/56.2 seconds
Elementary Lesson 2	Basketball Pass #2	2067 seconds 34.45min.	22	13	2	7	1/93.9 seconds
Elementary Lesson 3	Basketball Dribble	2448 seconds 40.8min.	42	20	14	8	1/58.3 seconds
Elementary Lesson 4	Basketball Dribble and Shoot	2462 seconds 41.03min.	24	11	11	2	1/102.6 seconds
Middle School Lesson 1	Soccer Game Play	1551 seconds 25.85min.	37	31	2	4	1/41.9 seconds
Middle School Lesson 2	Football Throw and Catch	1615 seconds 26.92min.	46	27	10	9	1/35.1 seconds
High School Lesson 1	Football Strategies	3329 seconds 55.48min.	64	17	39	8	1/52.1 seconds
High School Lesson 2	Football Strategies #2	2349 seconds 39.15min.	60	23	30	7	1/39.2 seconds
High School Lesson 3	Personal Fitness Lecture	2000 seconds 33.33 min.	37	30	2	5	1/54.1 seconds
High School Lesson 4	Basketball Conditioned Game Play	2236 seconds 37.27min.	44	30	6	8	1/50.8 seconds

The elementary student teacher used figurative language every 77.75 seconds on average (Mean ratio = 1/77.75 seconds). Concurrently, the high school participant averaged one usage of figurative language every 49.05 seconds (Mean ratio = 1/49.05 seconds). The middle school student teacher used one instance of figurative language every 35.5 seconds (Mean ratio = 1/35.5 seconds).

### Categorical Frequency Results

Each individual lesson was coded and the total usage of figurative language was provided. This leads the researchers to believe that physical education student teachers use figurative language frequently. The following table (Table 2) illustrates the percentage of figurative language as separated by the three categories.

**Table 2. Categorical Percentages of Usage.**

<u>Item</u>	<u>Elementary School</u>	<u>Middle School teacher</u>	<u>High School Teacher</u>
<i>Total amount of Figurative Language incidents</i>	112 (4 lessons)	83 (2 lessons)	205 (4 lessons)
<i>Total Management Figurative Language</i>	64	58	100
<i>Total Direction Figurative Language</i>	30	12	77
<i>Total Feedback Figurative Language</i>	18	13	28
<i>Percentage of Management Figurative Language</i>	57.2%	69.9%	48.7%
<i>Percentage of Direction Figurative Language</i>	26.8%	14.4%	37.6%
<i>Percentage of Feedback Figurative Language</i>	16%	15.7%	13.7%
<i>Highest Usage Occurred In</i>	Management	Management	Management
<i>Lowest Usage Occurred In</i>	Feedback	Direction	Feedback

As outlined in Table 2, all three student teachers used figurative language, mostly, to manage the class. Across the three subjects, 58.5% of their total usage of figurative language was classified as managerial. Two out of the three participants used a minimal amount of figurative language to give feedback to individuals.

## Discussion

This data is difficult to compare to the study used to guide the research (Griffey et. al., 1986), due to the fact that the previous researchers collected their findings on college athletic coaches and used four different classification systems based on coaching rather than teaching. Griffey et al. (1986), classified all figurative language used by swimming, diving, basketball, and gymnastics coaches as 1) attention to form, 2) motivation, 3) improving a movement (attention to kinesthesia), and 4) overall performance. The authors found that most of the figurative language used by both diving and gymnastics coaches were used to comment on the athletes overall

performance. Most of the figurative language found by the authors to be used by swimming coaches, however, was used to comment on the athletes form and basketball coaches used figurative language, mostly, to motivate athletes.

Although Griffey et al., (1986) studied the use of figurative language in coaches; they concluded that as much as 60% of the coaches' language was figurative. This finding is important because during this study, the researchers found ratios that concur with previous findings. The ratios presented in this study show an extremely high amount of figurative language being used by physical education student teachers. In conclusion, both coaches and physical education teachers, it can be argued, are using high amounts of figurative language during their practices/lessons.

## Discussion of Figural Themes

Qualitatively, the researchers had hoped to identify themes or common pieces of figurative language that were used by all physical education student teachers. However, after analyzing the data, only a few common pieces of figurative language were shared by the student teachers. “Guys” was used as a gender inclusive term meaning the “collective class” by all three student teachers. Concurrently, “Listen Up” was used by all three subjects in the study to gain the attention of their pupils. The term “Freeze,” as anticipated by the researchers as the most commonly used piece of figurative language, was found, only, to be used by two of the three subjects and then used sparsely to get the student to stop, look, and listen.

Interestingly, basketball was used in at least one lesson for all three physical education student teachers. However, there were no commonly used figurative language used that appears to be content specific to the sport of basketball. The researchers believe that this is an important finding since it means that shared content does not guarantee that the same figurative language will be used by different teachers. Since both the Feedback and Direction classification categories tend, arguably, to come directly from the content, it is important to note that this finding warrants further study amongst physical education student teachers teaching at the same grade/age level. It is, however, interesting to confirm the belief that high, middle, and elementary school physical education student teachers use different aspects of figurative language to describe the same content.

In conclusion, there were only a few pieces of figurative language that were commonly used by all three of the subjects in this study. All of the commonly used pieces of figurative language were found to be in the Management classification. Even though the same content (basketball) was taught in at least one lesson by all three physical education student teachers, there was no commonly used figurative language used amongst them that could have been classified into either the Feedback or Direction classifications. Arguably, this difference in choice of figurative language could have come about due to the differences in the developmental ages of the students that they taught.

## Limitations and Future Recommendations

As this study was limited to only three student teachers in the same geographic location, the researchers suggest that this study be replicated using more teachers and audio taping more lessons because more than one subject being observed in each of the three settings (elementary, middle, high school) would help identify if there are any commonly used pieces of figurative language amongst physical education student teachers in the same developmental grade level. Contemporaneously, by audio taping more lessons over several content areas the results may vary. This would eliminate any figurative language that physical education student teachers might use in, only, certain contexts. For example, the high school student teacher used a higher frequency of figurative language during his football lessons as opposed to his personal fitness lesson. This suggests that the subject matter, background knowledge, or contextual situation allows for an individual to speak more or less figuratively.

Another recommendation is to identify trends or commonalities among grade levels. For instance, in this particular study, the researcher attempted to identify commonalities in the use of figurative language in three different school levels contexts. Perhaps, it is more relevant, however, to identify trends in ratio/percentages and commonly used pieces of figurative language amongst teachers teaching to the same demographic age.

Previously discussed suggestions related directly to replicating the same study include investigating the difference in usage of figurative language between effective and ineffective teachers or years of experience in teaching.

## Conclusions

In order to answer the research questions presented at the beginning of the study, three physical education student teachers were audio taped and coded by trained researchers. In conclusion, the researchers found that all three subjects used figurative language at a frequency of about once per every minute during a lesson, regardless of the content or grade level that is being taught. Most of that figurative language was identified as tools for Managing the class. Very little of the figurative language used was classified as either Direction or Feedback. Although the middle school physical education

student teacher was identified as using the highest ratio of figurative language, it is, unfortunately, difficult to compare this finding since only two lessons were audio taped instead of the four gathered from the other two subjects. Interestingly, the researchers found that the only commonly used pieces of figurative language amongst the three participants were in the Management domain.

This study was a similar and necessary follow up to Williams, Housner, and Griffey's (1986) study in which they identified both the amount and types of figurative language used by athletic coaches. Now we are able to confirm that figurative language is also being used within the classroom environment and for management purposes. The results of this study also give credibility to previous authors (Gassner, 1999; Holt, Ratliffe, & Hannon, 2005; Housner & Griffey, 1994) who suggest that figurative language either "is being used" or "should be used" in physical education class by confirming that figurative language is, indeed, being used and at high frequencies.

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## Appendix A

### Figurative Language Physical Education Teaching (FLPET)

Figurative phrase used	Topic	Frequency of Occurrence	Type: M/F/ or D
1.			
2.			
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