

ABSTRACT

A COMPARISON OF RHYTHM SYLLABLE SYSTEMS USED IN
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BEGINNING INSTRUMENTAL INSTRUCTION

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by

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Eighty-one band students were divided into three groups. The teaching procedures used for each group were identical except for the rhythm syllable system used. After twelve weeks of instruction the subjects were administered a meter recognition test and the subject's performances of four rhythm etudes were rated by two independent judges using a rating scale.

Subjects taught using either Gordon or no syllable system performed significantly better than those using the "l e and a" system in triple meter. No other significant differences were found.

	Introduction.....	36
	Results.....	37
	Summary of Results.....	48
	Interpretation.....	48
	TABLE OF CONTENTS	
	V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.....	52
Chapter	Summary.....	Page
	LIST OF TABLES.....	viii
	LIST OF FIGURES.....	ix
I.	INTRODUCTION.....	1
APPENDICES	Early Research.....	1
a.	Less: Studies Investigating Rhythm Syllable Systems.....	5
b.	Intro: Instrumental Method Books.....	6
c.	Cont: Music Learning Theory.....	11
d.	Meas: Definitions of Rhythmic Terms.....	13
e.	Meas: Rhythm Syllable Systems.....	15
f.	Divis: Summary.....	18
g.	Divis: Purpose and Problems.....	19
II.	REVIEW OF RELATED LITERATURE.....	20
i.	Meas: Related Studies.....	20
j.	Divis: Summary.....	24
III.	METHOD.....	25
k.	Divis: Subjects.....	25
l.	Tripl: Criterion Measures.....	25
m.	Temp: Procedures.....	28
n.	UCR: Teaching Procedures.....	29
o.	Teach: Statistical Design and Analysis.....	34
IV.	ANALYSIS AND INTERPRETATION OF DATA.....	36

	Introduction.....	36
	Results.....	37
	Summary of Results.....	48
	Interpretations.....	48
V.	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.....	52
	Summary.....	52
1.	Means and Conclusions.....	53
	Subject of Recommendations.....	54
2.	ANOVA Test Implications.....	56
	APPENDICES.....	57
	a. Lesson Plans.....	57
4.	b. Introductory Letter To Band Directors.....	75
5.	c. Consent Form.....	77
6.	d. Macro/Microbeat Patterns In Duple.....	80
7.	e. Macro/Microbeat Patterns In Triple.....	81
8.	f. Divisions Patterns In Duple.....	82
9.	g. Divisions Patterns In Triple.....	83
10.	h. Examples Used For Meter Recognition Test.....	84
11.	i. Meter Recognition Test Answer Sheet.....	86
12.	j. Duple-Prepared Etude.....	87
13.	k. Triple-Prepared Etude.....	88
14.	l. Duple-Unprepared Etude.....	89
15.	m. Triple-Unprepared Etude.....	90
16.	n. Sample Judge Form.....	91
17.	o. UCRIHS Approval.....	92
18.	p. Teaching Materials Used.....	93
	LIST OF REFERENCES.....	96

... Petzold reported four results pertaining to rhythm learning. He reported that there was no significant difference between boys and girls in the learning of rhythm. He found that boys were more accurate when responding to the rhythmic content than to the melodic content on a melodic-
 rhythm task. There was no significant difference, though, in the accuracy of

CHAPTER ONE

INTRODUCTION

Early Research

Instructors and students in beginning instrumental music classrooms are often dependent upon the organization of popular band method books as their instructional tools. Many of these band method books contain the word "comprehensive" in their title (Pearson, 1982, 1993; Rhodes, Bierschenk, Lautzenheiser, and Higgins, 1991). *The New Lexicon Webster's Dictionary Of The English Language: Encyclopedic Edition* defines "comprehensive" as "including much" or "all-inclusive" (Cayne, 1989, p. 201). Use of the term "comprehensive" in referring to these method books seems to be in conflict with the existing research into how children learn rhythm. These books address the learning of rhythm, but articles exploring the process involved in teaching rhythm make the observation that little experimental research has been done in this area compared with the process involved in teaching tonality (Bebeau, 1982; Colley, 1987). In order for these method books to be truly comprehensive, a better understanding of how to teach rhythm to beginning instrumentalists is necessary.

Early information on how children learn rhythm came from studies of children's auditory perception. Petzold (1969) designed several studies to identify the ways in which children "[ages 6 to 12] perceive and respond to the auditory presentation of musical sounds" (p. 82). While the report of Petzold's methods were not defined, the two groups were compared using the results of

studies did not include descriptions of the methodologies used, it did provide brief descriptions of the results.

Petzold reported four results pertaining to rhythm learning. He reported that there was no significant difference between boys and girls in the learning of rhythm. He found that children were more accurate when responding to the rhythmic content than to the melodic content on a melodic-rhythmic test item. There was no significant difference, though, in the accuracy of responses in comparisons between the melodic-rhythmic items and the pure rhythmic items. He also found that the ability to accurately respond to the aural presentation of rhythm patterns and to simultaneously maintain a steady beat did not change significantly after second grade (age eight). Finally, he found that all children had difficulty maintaining a steady beat at slower tempos, and that children aged seven and eight had great difficulty maintaining a tempo of sixty beats per minute.

Other researchers have examined the instructional tools used to teach rhythm in the general music classroom (Bebeau, 1982; Colley, 1987; Granberry-Gordon, 1994; Jessen, 1991; Palmer, 1974; Shehan, 1987; Siemens, 1969). These studies have all provided valuable insights into methods of improving rhythmic instruction. While the general music classroom teachers often use different teaching techniques than those in the beginning instrumental classroom, many techniques may be applicable to both settings.

In 1969, Margaret Siemens conducted a comparison between the Orff method of music instruction and traditional teaching methods. She divided four-hundred-fifty-eight fifth-grade general music students into two instructional groups. One group was instructed using the Orff method and the other using traditional teaching methods. Orff and traditional teaching methods were not defined. The two groups were compared using the results of

a student interest questionnaire and two musical achievement tests. Rhythm learning in this study was not examined separately but was part of instruction for both groups. She determined that while the Orff group did not have significantly higher achievement, the students "performed at a significantly higher level in interest and attitude, in choice of music as a favorite subject, and in enjoyment of rhythmic activities and part singing" (p. 285).

A weakness in the Siemens article is that it fails to identify the content and characteristics of traditional teaching methods. In her 1982 article, Muriel Bebeau provided a good description of traditional methods of teaching rhythm. In this method, the student needs to be cognizant of mathematical concepts to decode the notation. Bebeau identifies the five steps to decode notation as follows:

- (1) determine which symbol receives one pulse in the given meter signature, (2) identify the symbol by name or meaning, (3) determine the durational value of the symbol, (4) set up a steady pulse response with accent on the appropriate pulse, and (5) make a rhythmic response on the appropriate pulse. (p. 109)

The description continues with a typical example from the music classroom.

For example, when asked to read in 4/4 meter the child must (1) know that the quarter note receives one pulse in 4/4 meter, (2) know that a dot adds half the value of the note to the note, (3) recognize that half of two is one, thus the half note receives three pulses in this case, (4) set up a steady pulse response (usually by verbally counting "one, two, three, four"), and (5) make a motor response on the appropriate pulse. (p. 109)

As will be shown later, this complex process is used by several band method books to teach rhythm.

The study described in the article by Bebeau was a comparison between the traditional method of teaching rhythm and a simplified speech cue method. The simplified speech cue method is a combination of elements from the Orff and Kodály methods. The speech cue method uses the Orff concept of "speech cues that have durational value closely corresponding to the actual value of the notes with which they are paired" (p. 109). The Kodály approach uses the pairing of set speech cues with rhythm symbols. Bebeau also included movement cues to aid instruction.

Bebeau conducted two separate experiments with two different groups of third-grade students. The results from the two experiments indicated that students trained in the combination speech cue method had greater achievement on a rhythm reading test. She also observed that third-grade students taught using either method of instruction made significant improvement "in rhythm reading as a result of systematic, regular instruction" (p. 117).

In her conclusions, Bebeau stated that she conducted her study using only one meter because the mathematical skills required to transfer between differing meters are not well established in third grade. This creates a question about whether the speech cue method would be effective when teaching different meters. Bebeau's second observation was that the ability to maintain a steady beat appears to be a requirement for accurate rhythm performance.

In 1987, Patricia Shehan conducted a study to investigate the "development of music literacy, as well as to contribute to knowledge in the related areas of memory and mnemonics" (p. 120). She compared the effects of four presentation modes on the rhythmic performance of second- and sixth-grade students. For the study, Shehan used twenty-five second-grade

students and nineteen sixth-grade students from a parochial school in the suburban midwest. The four modes of presentation were audio-rhythm, audio-mnemonics, audio-visual, and audio-visual-mnemonics. As in Bebeau's study, the rhythms Shehan used were all notated in 4/4 meter. In the audio-rhythm mode, rhythms were presented on a woodblock. The audio-mnemonics mode used syllables based on the teaching of Japanese theater drums; the syllables were unfamiliar to the subjects. While the rhythm was being performed on a woodblock in the audio-visual mode, the subjects were shown a card with the notation pictured. In the audio-visual-mnemonics mode, the notation was shown while the theater drum syllables were used to perform the rhythm. The subjects were required to memorize and perform each of the presented rhythms on a woodblock.

Shehan found two interesting results. She observed that regardless of what presentation mode was used, "older students consistently learned the patterns twice as quickly as the younger children" (p. 124). She also found that "the use of mnemonics in the aural and visual modes reduced the number of attempts necessary for an accurate performance, although not significantly so" (p. 124). It should be noted, though, that results should not be claimed if no significant differences are found.

Studies Investigating Rhythm Syllable Systems

In 1974, Palmer compared the use of Kodály and Gordon rhythm syllables to traditional methods in the general music classroom. One-hundred-thirty-six fourth-grade students from Orange County, FL were divided into two treatment groups and a control group. The rhythm subsections of *Colwell's Music Achievement Test I*, *Music Achievement Test II*, and Gordon's *Iowa Test of Music Literacy-Level One* were used to evaluate the rhythmic achievement

of the subjects at the start and at the conclusion of the study. After five months of instruction, student performances on a performance achievement test written by the researcher were recorded and evaluated by three independent judges using a five-point rating scale. Palmer found that both the Kodály and Gordon groups performed better than the control group.

Bernadette Colley, in 1987, compared the use of the Kodály system, the Gordon system, and the word method in the general music classroom. One-hundred-sixty second- and third-grade students enrolled in two schools in southern Maine were divided into experimental and control groups. After eleven weeks of instruction the subjects were evaluated on their ability to recognize a complete measure in 4/4 or 6/8 meter, to write the notation of a measure by adding the correct stems and beams to a series of note heads, and to perform a measure correctly by clapping without the aid of a given pulse.

Colley observed that the subjects using the word method had the longest attention spans and the Kodály group the shortest. She found that the Gordon group performed the examples with a consistent metrical stress, while the word method was the most effective for improving the subject's dictation and performance skills. Finally, both the Kodály and Gordon groups had problems remembering the correct syllables.

Instrumental Method Books

All the studies discussed so far have been conducted in the general music classroom. Different systems of rhythm instruction are used in instrumental music settings. It is important to examine some of the materials available for use with the beginning band to understand how concepts of rhythm are presented. All of these method books either allude to or use some

form of "1 e and a" as a system to count rhythm. This has been referred to as the traditional method of rhythm instruction (Bebeau, 1982).

Kohut (1973) discusses the uses of the "1 e and a" system in his book *Instrumental Music Pedagogy*. He states that "the performer needs to be able to "feel" given note values, rhythmic figures, and patterns in order to play them correctly" (p. 18). To aid the performer in feeling the rhythm, Kohut recommends foot tapping. Several suggestions are made on how to mark foot position into a student's music and how to assist the student in keeping the tapping steady. To further aid students, Kohut suggests some form of time counting also be written in their music. In his opinion, the best time counting system is the "1 e and a" system. In this system, each beat in simple time is given a number and up to four divisions of the beat are assigned "e and a." For example, in a measure of 4/4, a quarter note followed by two eighth notes, four sixteenth notes, and a quarter note would be counted: one, two and, three e and a, four. In compound triple meter, the divisions are assigned "la le." For example, in a measure of 12/8, a dotted quarter note followed by six eighth notes and a dotted quarter note would be counted: one, two la le, three la le, four.

In 1994, Gage conducted an investigation into the rhythm instructional materials from several popular band method books. Based on telephone interviews with four retail music dealers located in Pennsylvania, Illinois, Kansas, and New York and visits to three dealers in Pennsylvania and Illinois, Gage identified fourteen band method books currently available. Six of these books were immediately eliminated from the study as not being "popular" due to a lack of sales. From the remaining eight books, the list was narrowed to the four most popular as identified by interviews with four experts. The four books are *Yamaha Band Student: A Band Method for Group or Individual*

Instruction (Feldstein and O'Reilly, 1988), *Essential Elements: A Comprehensive Band Method* (Rhodes et al., 1991), *Standard of Excellence: Comprehensive Band Method* (Pearson, 1993), and *First Division Band Method* (Weber, 1962).

Gage's investigation of these books determined that all four "made adequate use of pedagogical techniques expecting a student's a) visual response, b) auditory response, and/or c) physical response" (p. iv). He determined that the content was similar for the books, including instruction, rhythms used, terms, and concepts. Gage's final observation was that while content of the four method books was similar, the presentational sequence was not.

The following is a brief analysis of the presentational sequence of some of the band method books currently available. The *Rubank Elementary Method* (Hovey, 1933) is one of the oldest band method books still available for use. The first rhythm introduced is the whole note in 4/4 meter. The book then introduces half notes, quarter notes, eighth notes, and finally sixteenth notes. Students are instructed to count the rhythms by using the beat numbers and the word "and" for eighth notes. For example the rhythm of two quarter notes followed by four eighth notes in 4/4 meter would be counted as "1, 2, 3 and, 4 and." The recommended syllables for four sixteenth notes are "1 da and da." There are no different syllables recommended for triple meter. *Sessions in Sound* (Buehlman and Whitcomb, 1976) follows a similar progression to the *Rubank Elementary Method*, except that it stops with eighth notes. Rhythm counting is recommended and the recommended syllables are "1 and, 2 and, 3 and, 4 and" for continuous eighth notes. The same system is used for triple meter with the quarter note receiving the beat. In 1982, Pearson published his *Best in Class: Comprehensive Band Method* series.

Instruction in this series begins with whole notes, then continues with half notes, quarter notes, and finally eighth notes. The method offers no suggestions on how to teach rhythm. Instead, it instructs students to "Write in the counting on the blank lines. (Your director will tell you the counting system to use.)" (Pearson, 1982, p. 6) and provides blank lines under each note and rest.

The *Yamaha Band Student: A Band Method for Group or Individual Instruction* (Feldstein and O'Reilly, 1988) follows the same progression as *Sessions in Sound*. The only difference is that it uses an ampersand (&) rather than the word "and" for eighth note counting. The same system is recommended for triple meter, using the quarter note as the beat.

Method books began to change the order of note value introduction in response to information about how children cognitively process rhythm and meter. Gordon (1997) reports that research has been conducted to determine the difficulty levels of various rhythm patterns (p. 204-205). Studies, using large samples of students of various ages, were used to determine if certain rhythm patterns were easy, moderately difficult, or difficult. The subjects were asked to compare pairs of rhythm patterns and determine if the second pattern was the same or different from the first. Through research it has been determined that the easiest patterns to learn are patterns in duple and triple meter using only the beat and equal divisions of the beat. This is in direct educational contrast with the practice of first introducing whole-notes, then half-notes as previously occurred in instrumental methods texts.

In *Essential Elements: A Comprehensive Band Method* (Rhodes et al., 1991), the first rhythms introduced are quarter notes in 4/4. The order of subsequent rhythms are half notes, whole notes, and eighth notes. The counting for continuous eighth notes is presented as "1 & 2 & 3 & 4 &" and up

and down arrows are used to show the position of the student's foot. The same system is also used for triple meter with the time signature $3/4$ using the quarter note as the beat. Pearson published his *Standard of Excellence: Comprehensive Band Method* in 1993, and it is similar to his *Best in Class: Comprehensive Band Method*. The order of rhythm introduction is the same, but the instructions have been altered. When each new note value is introduced, there are instructions for how many beats it receives in $4/4$ meter. Occasionally the instructions "Write in the counting and clap the rhythm before you play" are placed below an exercise (Pearson, 1993, p. 6). Unlike *Best in Class*, there are no lines provided below the staff.

The final method book to be discussed is *Now Go Home and Practice* (Probasco, Grable, Meeks, and Swearingen, 1994). This book, like *Essential Elements: A Comprehensive Band Method*, presents rhythms in the order of quarter notes, half notes, whole notes, and eighth notes. It also uses the up and down arrows to indicate the student's foot position while counting the rhythm. A graphic of a shoe is also provided to show the correct position of the foot. The same system is used for triple meter, using the quarter note as the beat in $3/4$.

Before continuing, mention should be made of *The Individualized Instructor* (Froseth, 1973). This method book differs in many ways from the other books discussed. Teachers are instructed to first teach students to sing each exercise without notation before performing it on their instruments using the notation. Separate rhythm exercises are also provided. The first exercise is to teach the students how to keep a steady beat. The students are asked to "practice marching, clapping, or drumming the big beat (Tempo Beat) in music" (p. 4). Continuous eighth-note rhythms in the book are counted using "1 ne 2 ne" in duple meter and "1 na ni 2 na ni" in triple meter. The