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**A comparison of the effectiveness of three teaching methods  
based on rote learning, improvisation, and tonal conceptual  
development on melodic performance skills achievement of music  
teachers in a beginning guitar class**

**Lorenz, Kevin Wayne, Ph.D.**

**The University of North Carolina at Greensboro, 1993**

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A COMPARISON OF THE EFFECTIVENESS OF THREE TEACHING  
METHODS BASED ON ROTE LEARNING, IMPROVISATION,  
AND TONAL CONCEPTUAL DEVELOPMENT ON MELODIC  
PERFORMANCE SKILLS ACHIEVEMENT OF MUSIC  
TEACHERS IN A BEGINNING GUITAR CLASS

by

Kevin W. Lorenz

A Dissertation Submitted to  
The Faculty Of The Graduate School At  
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The purpose of this study was to investigate the effects of three methods of teaching melodic performance skills on melodic performance skills achievement of music teachers classified as beginning guitar students. The subjects in the study consisted of 20 elementary and middle school general music teachers who had little or no experience playing the guitar.

Treatment was administered using three teaching methods based on rote learning, improvisation, and tonal conceptual development during a seven week instructional period. A control group received traditional instruction in note reading on the guitar. Following treatment the four groups were tested using a researcher-designed test, the Melodic Guitar Skills Achievement Test. The following null hypothesis was tested: There is no significant difference between posttest mean scores of groups employing rote learning, improvisation, and tonal conceptual development methods as measured by the Melodic Guitar Skills Achievement Test.

The statistical treatment for the study was a univariate analysis of covariance with scores on the Advanced Measures of Musical Aptitude (Gordon, 1989) serving as the covariate. The analysis of the posttest data showed that melodic performance skills instruction on the guitar had no significant effect on subjects' melodic performance skills achievement and the null hypothesis was retained. Guitar teachers

**in classroom situations may use any of the teaching methods employed in this study to teach melodic performance skills in a seven week instructional period and expect relatively little variance in performance achievement as a result of the methods.**

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APPROVAL PAGE

This dissertation has been approved by the following committee of the faculty of the Graduate School at the University of North Carolina at Greensboro.

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CHAPTER I  
INTRODUCTION

The guitar gained status in the public schools when music curricula were expanded beyond traditional ensemble offerings as a partial reaction to the youth movement beginning in the mid-sixties. In the decade that followed, there was a monumental increase of interest among students in studying and playing the guitar (Bartel, 1990; Decker, 1984; Janzen, 1980; ASTA-GAMA, 1979). The introduction of the guitar to public school education during this period of growth represented, in part, music teachers' adaptation to changing times. Even though the current movement toward electronic keyboard and MIDI technology has influenced students' choice of instruments, the guitar continues today to be one of the most popular instruments in the United States (Bartel, 1990).

As compared with many other instruments, the guitar is versatile in regard to the variety of texture available in the literature. Music can be performed on the guitar that is representative of three main textural classes present in music: monophonic, polyphonic, and homophonic. The popularity of the guitar as an accompaniment instrument for voice or other instruments has encouraged many music teachers in various educational settings to use the guitar

in music of a homophonic nature. The focus of this study, however, is music of a monophonic nature as applied to guitar playing skills because (a) monophonic music is not taught in guitar classes as frequently as homophonic music and (b) monophonic music has extended possibilities for applications in music education (Bartel, 1990; Decker, 1984; Callahan, 1978). The skills needed to perform melodic music on the guitar within the context of this study consisted of (a) psychomotor and (b) literacy skills, the latter including practiced note reading and sight reading elements. These two principal skills are referred to collectively in this study as melodic performance skills (MPS).

The term melodic performance skills has been adopted in the current study to delineate skills identified as the principal components necessary for performing monophonic-style music with a guitar. While recognizing that psychomotor and literacy skills are not mutually exclusive and that other related factors enter into guitar performance, no attempt is made herein to further define or dichotomize these two skills. Further, the specific area of music reading, including both practiced music reading and sight reading, is combined into a generic classification under the rubric of music performance skills. The juxtaposed and interactive characteristics of psychomotor and literacy skills as defined above comprise the main



observable and measurable performance element in this study entailing melodic performance skills.

The phenomenon of reading efficiency is complex and includes many performance components such as reading at sight, practiced reading, and combinations of connected skills involving experience, practice, and symbolic associations. No attempt was made in the current study to differentiate between reading categories, levels, and expertise; therefore, melodic performance skills are defined operationally as the ability to perform with an elementary level of proficiency on guitar using standard notation as the stimulus. This definition adequately meets the objectives of this study in that it encompasses psychomotor and literary skills and assumes a merger of practiced and sight reading without concerns for boundaries or distinctions between these common classifications.

Regarding literacy, this study was founded upon the assumption that reading skills are within the range of a continuum that traditionally extends from reading music without preparation, termed sight reading, to the performance of music after extensive practice. Music teachers presumably can sight read at various levels of proficiency, depending on performance focus, as a result of years of training; however, reading at any level of competency on the reading continuum for a secondary instrument such as guitar depends primarily on opportunity,

exposure, and subsequent instruction, practice, and motivation.

This study, therefore, is based on the assumption that sight reading at an elementary level forms an integral foundation leading to advanced reading proficiency, and these reading skills at some point on a proficiency continuum are necessary for the effective use of guitar performance in formal music education environments. There is no presumption therein that music reading skill on other instruments can be transferred easily to guitar performance, although, because of typical teacher education training, music teachers presumably can sight read using their voices or instruments other than the guitar.

Learning to read music using any instrument requires study and practice often initiated in public school band or string classes. Students learning to play guitar, however, learn mostly by rote through informal means outside the school setting. The principal research objective for the current study was to determine the effectiveness of specific methods of teaching melodic performance skills with guitar to adult music teachers. The anticipated end product of the study was to provide relatively quick, easy, and efficient guitar instruction which would enable music teachers to make more effective educational use of the guitar in music classrooms.

### Notational Systems for the Guitar

Music written specifically for the guitar is published primarily in three different notational systems: standard notation, tablature, and chord symbols. Guitar music written with standard notation is the same as music in standard notation for other instruments. Guitar music is notated in the treble clef usually with left hand fingering indicated above the notes.

The tablature system of notation does not show printed notes, but employs letters or numbers written on horizontal lines that represent the strings. The letters or numbers indicate which string the player plucks and which fret is depressed to produce the desired pitch.

Chord symbols are small symbolic representations of the first four or five frets of the guitar neck that include dots indicating finger positions on the fingerboard. Beginning guitar students often learn to play the guitar by utilizing chord symbols or tablature and may learn to read chord symbols or tablature without exposure to instruction in reading standard notation. In accordance with the research objectives, music reading in this study was restricted to the use of standard music notation.

Reading and playing from standard notation on the guitar incorporates fingering, notation, and coordination problems unique to plucked string instruments. Quine (Dodgson & Quine, 1975) states:

The guitar does have its special reading problems, of course, but none of them is so intractable that it will not yield to a certain amount of intelligent application and industry. It cannot be doubted that there are many guitarists who would work with great energy and enthusiasm to remedy the deficiencies in their technical and musical armory if only they knew how, but the average guitarists' failure to measure up to the musical standards of other performers, is more often due to lack of method and discipline than to inherent problems in his chosen instrument. (preface)

The "special reading problems" that are solved by "intelligent application and industry" in the preceding citation from Quine presumably include notation problems unique to the guitar that influence melodic performance skills achievement.

#### Melodic Performance Skills and Music Reading

The importance of reading skills for the guitarist is supported by Ryan (1984), who stated, "Being able to read music well is certainly not all there is to being a good musician, but for serious guitarists it is an almost indispensable skill" (p. 257). Assuming validity in the premise that reading is important to the guitarist, the observation can be made that there are probably fewer skilled sight readers on the guitar than on other instruments. Tyrrell (1947) stated:

If any guitar player who is interested in the matter of sight-playing can get an opportunity to turn the pages for a good pianist who is playing difficult music at sight, he will be treated to an

object lesson that should be of greatest benefit, for it may give him cause for reflection . . . the guitar is much too beautiful an instrument to have its precious literature sink into decay simple because sight-players are so scarce. (p. 31)

In agreement with Tyrrell, Williams (1990) stated:

Nevertheless, the guitar has been on the sidelines in the development of European 'art' music or 'classical' music of the last five hundred years and the resulting lack of experience is the reason that guitarists, performers, teachers, and students alike, are inferior to most other instrumentalists at sight-reading, listening, phrasing, and playing together. (p. v)

Reading and performing music from notation is a goal that is supported by the Music Educators National Conference (Ernst & Gray, 1965), the Tanglewood Symposium (Choate, 1968), and the participants of the Yale Seminar (Mark, 1986). In addition, the Tanglewood guidelines recommend expanded programs in performance that specify the inclusion of the guitar in the instrumental offerings in the schools (Choate, 1968).

Sight reading skill, as a component of music reading skills and also a defined rudiment of melodic performance skills, may be one of the most valuable assets an instrumentalist can possess. Newman (1974) supports three advantages regarding the development of piano sight reading skills; sight reading greatly facilitates the learning of new pieces, gives accessibility to a variety of basic literature, and introduces the student to a wealth of new

technical, stylistic, and interpretive experiences. Newman's advantages may be directly applied to melodic performance skills when considering the multiplicity of musical styles inherent in the musical literature available to the guitarist. Guitarist Elliot Fisk (1987) stated:

With a solid foundation in solfeggio, music history, and theory as a point of departure we need to prove that there is practically no style where the guitar is really out-of-place from the elegant counterpoint of the old masters to the colorful music of Latin origins to the abstract conundrums of Henze and Carter. (p. 11)

Therefore, music literacy, incorporating the merger of practiced reading skills and sight reading skills into what is termed herein as melodic performance skills, creates a composite reading factor in guitar performance that merits study.

#### Melodic Performance Skills and Music Education

Current elementary and middle school basal texts that include guitar instruction emphasize the performance of accompaniments for folk or popular songs and do not provide instruction on reading standard notation, as exemplified in the basal texts published by Silver Burdett (Culp, Eisman, & Hoffman, 1988), Holt, Rinehart, and Winston (Andress, Meske, Pautz, & Willman, 1988), and Macmillan (Staton & Staton, 1991). These texts contain chords notated with a tablature system rather than standard notation. Guitar method books frequently used in class guitar situations in high schools

and colleges often do not incorporate melodic performance skills as defined in this study. Instruction therein typically includes reading chord progressions and the development of psychomotor skills, but the sight reading component of melodic performance skills often is not emphasized in the method books.

Melodic performance skills proficiency among students has long been of concern in music education. According to Wright (1984), over the past twenty years there has been a decline in sight reading skills at all levels of musical performance from elementary grades through college. Elliott (1982) and Albert (1977) express concern about a general lack of understanding of the sight reading process among students and educators and about inconsistencies in methods of teaching students to develop sight reading skill. Melodic performance skills involve complex psychomotor and reading tasks that are difficult to analyze. Schleuter (1984) stated:

The instrumentalist must recognize notes that represent pitch, rhythmic symbols that indicate time and temporal relationships, and interpretive symbols that indicate musical expression. While reading these notes and symbols, the performer must (depending on which instrument is being played) be concerned with technical manipulation of valves, keys, bows, or slides; posture, embouchure, and breath support; tone production; intonation; various types of articulation; and coordinating the performance of numerous tasks simultaneously. (p. 12)

### The Usefulness of Melodic Guitar Performance Skills for Music Teachers

The general music teacher can effectively use melodic performance skills with the guitar in a variety of ways. Melodies played on the guitar can serve as a model for students to learn to sing or play different pitches; to demonstrate various concepts or elements of music such as form or melodic intervals; to play introductions, codas, and interludes in songs; or to play descant or countermelody parts. The guitar, as a melodic instrument, also can be used to lend an appropriate atmosphere to songs originating in cultures where stringed instruments are part of the folk tradition (Nye and Nye, 1964). Creative activities such as song writing and improvisation can be demonstrated by the teacher or learned and practiced by the students while using melodic guitar playing techniques. Love (1974) states "the ultimate achievement [for the guitar class] is to create both the melody and the harmony" (p. 37). The guitar also can be used for its own intrinsic value and to demonstrate basic music elements utilizing its unique tone and capabilities within the context of the general music class (Zvengrowski, 1980). Finally, music teachers can use melodic performance skills within the context of a general music class, where guitar skills are taught as a unit, or within the context of an homogeneous guitar class in public



schools, teacher preparation classes, or with adult music teachers.

Obviously, there is a need for music teachers who can play and teach the guitar in educational environments but music teachers typically do not possess adequate melodic guitar performance skills (Bartel, 1990; Callahan, 1978; Decker, 1984; Zvengrowski, 1980). A method for teaching melodic performance skills on the guitar, derived from proven sight reading methods for other instruments, would provide music teachers with an effective tool for solving special reading problems on the guitar and transferring reading skills to guitar performance. Teachers could then use the guitar as a viable tool to achieve educational goals and objectives that benefit students.

#### The Need for the Study

A paradoxical situation is often present in educational environments wherein many music teachers do not receive performance training adequate for teaching guitar. Decker (1984) cites a survey of guitar teachers in public schools that provides an example of typical teacher training on guitar. Decker found:

The teachers (as guitarists) are self-taught and possess beginning to intermediate level performing skills. Guitar is not their principal instrument, and their teaching assignment had been changed to include guitar since they were hired. (p. 60)

In agreement with Decker, Callahan (1978) also recognized problems with the assignment of teachers who are not skilled in guitar performance teaching guitar classes and identified an additional paradoxical situation wherein guitar classes are scheduled before assigned music teachers have the opportunity to develop competency on the instrument.

The Decker and Callahan citations represent only a small sample of the literature regarding the absence and misuse of the guitar in formal music education. In addition, observational experiences in public schools and higher education often reflect the absence of music teacher guitar performance training resulting in teachers who do not possess literacy in guitar performance. In fact, guitar instruction in music education classes often includes only the introduction of basic chords (ASTA-GAMA School Guitar Survey, 1979). The instructional application of the guitar in public schools, therefore, is limited both as a teaching tool and a means for student performance. If melodic performance skills on guitar are to serve viable educational goals, psychomotor and literary skills obviously must be developed on the instrument to the point that teachers can function on higher levels of music proficiency.

This study was designed to determine if music performance skills can be enhanced by specific instructional approaches. The research objective was to identify

effective methodology for the development of psychomotor and literacy skills so that teachers and students can use the guitar to its maximum potential in the classroom.

Therefore, based on previous assumptions, this study was intended to contribute to the literature in the area of developing melodic performance skills on guitar. If the premise that melodic performance on guitar in the music classroom can be educationally beneficial to students is accepted, effective and efficient methodology for adult music teachers must be explored.

#### Problem

Published research involving the guitar and melodic performance skills is limited. In addition, melodic performance skills applied to guitar instruction involves problems unique to the instrument that are not addressed in the literature. To facilitate the capabilities of the guitar in the classroom, teachers must possess effective melodic performance skills; however, most music teachers do not possess these skills to the extent that they can effectively use the guitar when teaching. Therefore, supported by previous statements of Wright, Elliott, and Schleuter, the current study is based on the premise that the lack of melodic performance skills and the lack of knowledge about the instruction of melodic performance skills reduce the potential pedagogical benefits and subsequent effectiveness of the guitar in music education.

### Purpose

The purpose of this study was to investigate the effects of three methods of teaching melodic performance skills on melodic performance skills achievement of music teachers classified as beginning guitar students. In addition, the attitudes of the subjects regarding several factors relevant to the methods were assessed and evaluated. The independent variable, melodic performance instruction on the guitar, contained three levels: (a) pre-reading instruction emphasizing rote melody playing, (b) instruction utilizing pitch improvisation, and (c) instruction emphasizing tonal conceptual development. These methods were structured on three previous studies involving sight reading on instruments other than the guitar. The first method was based on rote learning of the melody during a prestudy period prior to reading music. A second method was based on improvisation of rhythms used in a melody during a prestudy period prior to reading music. A third method was based on the development of a tonal vocabulary that can be applied to visual patterns on the guitar fingerboard. Specifically, the research objective for the study of melodic performance skills development incorporated foundations established in sight reading studies involving piano and band instruments by Fincher (1983), Montano (1983), and Grutzmacher (1985).

The use of sight reading studies as models for the study of melodic performance skills is justified because (a) psychomotor skills are included in the model studies, and (b) literary skills, involving practiced note reading and sight reading skills, are included in the model studies. Therefore, the model sight reading studies involve skills that meet the definition of melodic performance skills as defined in this study. Since the model studies met these criteria and no specialized characteristics were identified that conflicted with parameters established for melodic performance skills, the sight reading factor was considered to be a compatible element within the limits of the study.

#### Summary

Music reading skills are as valuable for the guitarist as they are for other musicians, according to Williams (1990), Ryan (1984), and Tyrrell (1947). The need for more information about instruction of melodic performance skills on the guitar is supported in the literature.

This study was designed to investigate the effectiveness of three relatively simple instrumental sight reading methods for teaching melodic performance skills adapted to guitar performance. Music teachers who acquire these skills can then utilize the guitar in a variety of ways that are not available to other music teachers. The development of melodic performance skills as an instructional tool for teachers may subsequently benefit

music students, resulting in heightened achievement of educational goals and objectives.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

Studies about melodic performance skills on the guitar, as defined for the purposes of this study, are limited; however, the literature provides related studies that support the current research. When studying melodic performance skills a number of factors should be considered. Melodic performance skills involve psychomotor and literacy skills working in complex ways to produce musical results. Therefore, many areas of study are needed to form a basis for the current research. Specifically, areas important to a study of melodic performance skills on guitar deal with sight reading, aural imagery, rhythm, effects of preliminary study, and the ability to give tonal meaning to the musical material.

Three instructional methods were used as models in the study. Two methods involved aural imagery: a rote learning method based on pre-reading instruction emphasizing rote melody learning, and a method emphasizing tonal conception development that included aural imagery of major and minor tonalities. A third method, based on improvisation, entailed rhythm patterns and focused on rhythmic sight reading skills.

### Model Studies

Rote learning. The purpose of a study by Fincher (1983) was "to investigate the effects of playing the melody by rote during the prestudy procedure upon sight reading skill development of beginning class piano students" (p. 2). The researcher believed that playing the melody by rote before seeing the printed notes would lead the student to concentrate on melodic shape, direction, phrasing, and fingering, thus significantly enhancing sight reading skills. Two sight reading skills, pitch accuracy and rhythmic accuracy, were measured by a posttest administered to four groups of students; two of the groups were exposed to the experimental treatment, rote playing, and two of the groups were control groups, no rote playing. The researcher found that playing the melody by rote during the prestudy procedure improved sight reading skill development, and concluded that there was a significant difference between the experimental and control groups with regard to the sight reading skills measured.

Improvisation. The purpose of a study by Montano (1983) was to investigate the effects of "regular" practice in improvisation and in sight reading on the achievement of rhythmic accuracy in sight reading. The researcher compared two courses of study for college elementary group piano students. One group of students received instruction in sight reading that included the improvisation of pitches in



rhythm patterns that were subsequently used in sight reading exercises. Another group of students received identical instruction in sight reading practice excluding the improvisation exercises. Montano concluded that the experimental group who received the improvisation practice showed greater achievement of rhythmic accuracy in sight reading than the control group who did not receive practice.

Tonal conceptual development. The purpose of a study by Grutzmacher (1985) was "to investigate the relationship of tonal pattern instruction utilizing harmonization and vocalization to the tonal conceptual development and melodic music reading achievement of beginning wind instrumentalists" (p. 14). The researcher compared two courses of study: one emphasized tonal conceptual development by utilizing tonal patterns as course content with harmonization and vocalization as teaching techniques; the other followed a traditional single-note identification approach. Tonal conceptual development included instruction in which students experienced major and minor tonalities through singing, playing, listening, and comparing major and minor patterns separately and within the context of a song. Grutzmacher concluded that instruction using tonal pattern content presented to the students through the use of harmonization and vocalization activities improved the melodic sight reading skills of beginning band students significantly more than a traditional method.

### Aural Imagery Studies

Studies that examine research on the importance of aural imagery in the sight reading process are important because of the possible relationship between aural imagery and rote learning. Similarly, there is a possible relationship between aural imagery and tonal conceptual development.

Luce (1958) conducted a study in which he examined the relationship between instrumental sight reading and "ear playing," i.e., the ability to "reproduce music immediately by ear" (Luce, 1958, p. 104). Sight reading and ear playing tests were administered to band and string students in grades nine, ten, and eleven in a public high school. A significant correlation of  $r = .50$  was found between sight reading and ear playing by both band and string students, indicating that ear playing might be a reliable predictor of sight reading ability. Luce concluded that ear playing should be employed to teach sight reading.

Taylor (1974) investigated the perception of tonality in melodies. The 63 college students in the study were chosen because of their abilities to vocalize pitches from memory. These subjects were assigned to high, medium, and low ability groups based on scores from the researcher-developed Melodic Perception Ability Test. The subjects listened to short melodies and were asked to sing the note they thought represented the tonal center of the melody.

Results showed a strong correlation between the scores on a test evaluating both sight singing and singing back phrases, and estimates of tonality for melodies outlining a key. Taylor concluded that perception of tonality in melody is a learned phenomenon.

### Multiple Factor Studies

Multiple factor studies examine the role of a combination of factors like rhythm reading skill and memorization skill within the sight reading component of melodic performance skills. These studies contain parallel factors to those in the current study such as preliminary score study, ability to give meaning to printed music symbols, components of psychomotor skill when performing, the ability to perform melodic or rhythmic patterns, and rhythm reading ability.

Lannert and Ullman (1945) conducted a study with nine advanced piano students to determine the relative importance of eight selected factors in the music sight reading process. Among the factors investigated relevant to the current study were: (a) ability to give meaning to the material (after playing a selection, the students were asked to state time, key, and modulations), and (b) ability to profit from preliminary study. Of importance to the current study are Lannert and Ullman's conclusions that the ability to give meaning to the material and the ability to profit

from preliminary study are significant factors in the music sight reading process.

Eaton (1978) examined the relationship of keyboard sight reading facility to the following factors: previous keyboard training, note reading skill, psychomotor skill, and memorization skill. A diverse group of subjects participated in the study, sixty four pianists and nine organists ranging from ages seventeen to forty. A test, designed by the researcher, consisted of four sections: (a) sight reading facility, (b) note reading skill, (c) psychomotor skill, and (d) memorization skill. Eaton found correlation coefficients generally to be low and concluded that previous keyboard training, note reading skill, psychomotor skill, and memorization skill are not significantly related to keyboard sight reading facility.

Elliott (1982) conducted research in which he examined the relationships among instrumental sight reading achievement and seven selected variables. The seven variables selected for the study were: (a) technical proficiency (the ability to fluently perform patterns of scales, thirds, and arpeggios from memory), (b) sight singing ability, (c) rhythm reading ability, (d) cumulative grade point average, (e) cumulative music theory grade point average, (f) cumulative performance jury grade point average (an average of grades assigned by faculty members for student performances at the end of each semester), and (g)

major instrument grade point average. The students were tested for sight reading ability, technical proficiency, sight singing ability, and rhythm reading ability using Form A of the Watkins-Farnum Performance Scale, a test constructed by Elliot, the Criterion Sight Singing Test, and David Boyle's (1968) same-pitch adaptation of the Watkins-Farnum Performance Scale respectively. The results produced correlations of .90 between rhythm reading ability and sight reading ability, .80 between technical proficiency and sight reading, .75 between technical proficiency and rhythm reading, .74 between sight reading scores and theory grade point average, and .81 between cumulative grade point averages and theory grade point averages. Elliott, therefore, concluded that the best predictor of sight reading scores of wind instrumentalists was a combination of scores from the rhythm reading test (Boyle's adaptation of the Watkins-Farnum Performance Scale) and jury scores from the sight reading test (Form A of the Watkins-Farnum Performance scale).

### Guitar Studies

The purpose of a study by Gouzouasis (1990) was to develop a tonal and rhythm pattern taxonomy to improve guitar instruction. Gouzouasis specifically attempted to determine the comparative effects of two types of tonal pattern instruction and two types of rhythm pattern instruction on the guitar performance of students who

possess high and low levels of tonal music aptitude. One group of sixth grade students received instruction with hierarchically ordered tonal and rhythm patterns in three levels of difficulty and a second group received instruction using non-ordered tonal and rhythm patterns. Gouzouasis concluded that although hierarchically ordered tonal pattern instruction does not enhance tonal aspects of guitar performance skills, hierarchically ordered tonal pattern instruction does enhance rhythm aspects of guitar performance skills.

Petschauer (1972) developed and tested a guitar method designed for educators who teach in public schools. Part of the method covered the development of basic performance skills needed to play the guitar, including sight reading a single note melody at a moderately slow tempo. The sight reading instruction consisted of modeling by the instructor, discussion of techniques and problems in the music, and individual and ensemble practice by the students. A test designed by the researcher was developed to evaluate the performance skills of the subjects. Petschauer concluded that sight reading skill was improved as a result of a program of instruction emphasizing the teaching techniques described above.

### Rhythm Studies

Boyle (1968) investigated the importance of rhythmic imagery in the sight reading process. Twenty four junior

high school bands were divided into two matched groups: an experimental group with twelve bands and a control group with twelve bands. The bands in both groups used the same instructional materials for thirty minutes per week for one semester. The experimental group also received instruction involving bodily movement in the form of foot tapping to mark the underlying beat and hand clapping to practice rhythm patterns as a supplement to learning and performing rhythmic exercises practiced by both groups. The students were tested using two criterion measures, the Watkins-Farnum Performance Scale, and a test that consisted of rhythm patterns extracted from the Watkins-Farnum Performance Scale, which were notated on a single pitch to free the subject from involvement with a melodic factor. The scores from the two measures were analyzed using the student's  $t$  test for determining the significance of difference between independent means. The results of the analysis indicated that the experimental group had significantly higher scores on both criterion measures. Therefore Boyle concluded that the experimental treatment, prescribed rhythmic movements during rhythm exercises, was effective and recommended its utilization in the teaching of sight reading.

Skornicka (1958) also conducted a study with elementary band students in which foot tapping to the metric pulse represented a physical response to meter during performance. An experimental group began with exercises written in

quarter notes and progressed to rhythms using other note values while tapping the foot to the metric beat. A control group began with exercises written in whole notes and progressed to rhythms using other note values but did not utilize foot tapping. Skornicka concluded that a constantly utilized physical response to meter during performance significantly increased rhythmic and melodic sight reading skill.

#### Null Hypothesis

There is no significant difference ( $p \leq .05$ ) between posttest mean scores of groups employing rote learning, improvisation, and tonal conceptual development methods as measured by the Melodic Guitar Skills Achievement Test.



## CHAPTER III

## PROCEDURES

This study was designed to determine if differences in melodic performance skills occurred as a result of three methods of guitar instruction. The subjects involved in the study were general music teachers who had little or no experience playing the guitar. Musical materials used in the study were developed by the researcher to coincide with the skill level of the subjects and the musical and physical characteristics of the guitar. Subjects were instructed using methods involving rote playing (group I), improvisation (group II), tonal conceptual development (group III), and traditional teaching (group IV). Melodic performance skills were measured using a researcher-designed test, the Melodic Guitar Skills Achievement Test. Data were analyzed using analysis of covariance with Advanced Measures of Musical Audiation (Gordon, 1989) scores serving as the covariate. The independent variable was melodic guitar performance instruction and melodic performance achievement as measured by the Melodic Guitar Skills Achievement Test served as the dependent variable.

Subjects

The subjects in the study consisted of 20 elementary and middle school general music teachers employed in Dekalb

County, Georgia. Following an announcement to all general music teachers in Dekalb County, subjects enrolled for guitar classes on a voluntary basis and completed a preinstructional questionnaire (see Table 1).

Table 1

*Subjects' Background Information from Preinstructional Questionnaire*

	I	Group II Rote (N=5)	Group III Improv (N=5)	Group IV Tonal (N=5)	Group Trad (N=5)
<b>Education:</b>					
Bachelors*		5	5	5	5
Masters*		4	5	3	2
Performance Degree		0	0	2	0
Formal College Guitar Class		1,1**	0	0	2
Informal Guitar Training***		0	3	2	1
<b>Major Instrument:</b>					
Piano		3	1	2	2
Voice		1	3	2	2
Organ		0	0	1	1
Flute		1	1	0	0

\*Degrees in music education

\*\*1 college course, 1 workshop

\*\*\*Self taught, basic chords

Three teachers who enrolled for the class were eliminated from the study because of the extent of their previous experience reading music on the guitar, resulting in the final number of 20 subjects. All subjects had undergraduate degrees in music education. The subjects had little or no experience playing the guitar or reading standard notation on the guitar and were not string players.

#### Pre-treatment Measures

The subjects were administered a questionnaire to determine their previous musical experience (see Appendix B). The questionnaire assessed the subjects' general educational experience in music, previous guitar playing experience, previous music reading experience on the guitar, previous experience on stringed instruments other than the guitar, age, and handedness. Prior to instruction, the Advanced Measures of Music Audiation (AMMA) (Gordon, 1989) was administered to all subjects as a measure of musical aptitude.

Subjects were assigned to four groups, each with five members. Information from the questionnaire and scores from the AMMA were used when assigning to groups to obtain optimum balance for experiential and aptitude factors between groups. The groupings providing the most equitable distribution of subjects is shown in Table 2. The group with the lowest mean scores on the AMMA was the group that contained the most subjects with previous formal guitar

instruction. The groups with the highest mean scores on the AMMA contained no subjects with previous formal guitar instruction (see Table 2).

Table 2

*Relationship Between Distribution of AMMA Scores and Guitar Experience*

Group	N	<u>AMMA</u> Mean Scores	Guitar Instruction*
Group I	5	59.8	1 college, 1 workshop
Group II	5	66.2	0
Group III	5	63	0
Group IV	5	53.6	2 college

\* The numbers under the column heading "Guitar Instruction" refer to the number of subjects with college level guitar instruction in that group. The word college refers to a college course with guitar instruction.

#### Development of Instructional Materials

The same melodic instructional exercises were used by all groups to ensure uniformity and provide control of factors that could jeopardize internal validity. All instructional exercises were composed by the researcher based on procedures written by Farnum (1950) for adapting the Watkins cornet scale for use with band instruments and violin.

Farnum's procedures are listed below:

1. The test [by Watkins] was transposed into a key suitable to the instrument being tested.
2. The range of each instrument was considered and the notes of the exercises were kept within these limits.
3. The limitations and difficulties of each instrument were not exceeded. (p. 30)

The melodic exercises used in the study were divided into seven lessons with an introduction that preceded the first lesson (see Appendix C). The length of the melodic exercises in the lessons ranged from six to ten measures, the exception being the introduction, which consisted of four measure melodic exercises. The introduction provided the subjects an opportunity to: (a) practice psychomotor skills with a minimal amount of note changing and (b) provide practice matching notes with positions on the fingerboard of the guitar. Each lesson included notes on every string of the guitar. The melodic exercises were the same for all groups; group II (improvisation) was an exception because additional notated exercises were needed. Group II utilized notation that consisted of only rhythms corresponding to the melodic exercises; the rhythmic notation was used during pitch improvisation practice.

Lessons one through three each contained six melodic exercises, each containing combinations of notes on one string of the guitar. The melodic exercises were similar to exercises composed by Noad (1974) and Hunt (1977) containing musical characteristics corresponding to the performance

level of the subjects in the current study. Lessons four through seven contained melodic exercises in which the technique for playing melodies composed of notes on more than one string was introduced.

### Introduction to Natural Notes

The researcher-composed melodic exercises on the first page were an introduction to the natural notes in first position on the guitar. The exercises were modeled after exercises composed by Noad (1976) for the purpose of introducing notes in the first position and were consistent with Farnum's procedures listed previously. Each four measure melodic exercise consisted of the natural notes in first position on one string arranged so that each of the three notes on a string were repeated four times before changing to another note. Fingering was indicated above the notes (see Figure 1). The melodic exercises began with notes on the first string and progressed in sequence to the sixth string with an exercise for each string structured with the same characteristics as the exercise on the first string.

### Notes on the First String (Natural Only)



**Figure 1.** Exercise from page one; "Introduction to Natural Notes," composed by the researcher.

### Lesson One

The six melodic exercises in lesson one were a combination of natural notes with simple rhythmic values including half notes and quarter notes (see Figure 2). All of the melodic exercises were written in 4/4 time with the intent to facilitate subject's concentration on psychomotor skills.



Figure 2. Partial exercise from lesson one. Lorenz, 1992)

The melodic exercises, each consisting of notes on a single string, were constructed of three notes in different combinations, the single exception being the third melodic exercise, which was limited to two notes because there are only two natural notes on the third string of the guitar in first position without repeating the open "B."

Fingering was not indicated above the notes for two reasons: (a) the fingering for particular notes was the same as the fingering indicated on the page titled "Introduction to Natural Notes," and (b) the subjects in all four groups were instructed to play the note on a particular fret of the fingerboard using the corresponding finger with the same number. The first finger, for example, was used to play notes that were on the first fret of the guitar, the second finger was used to play notes on the second string, and so

forth. This fingering procedure applied to all exercises throughout the lessons.

### Lesson Two

The musical elements contained in the exercises of lesson two were the same as those in lesson one but accidentals were combined with natural notes so that every possible note in first position on a particular string was contained in an exercise (see Figure 3).

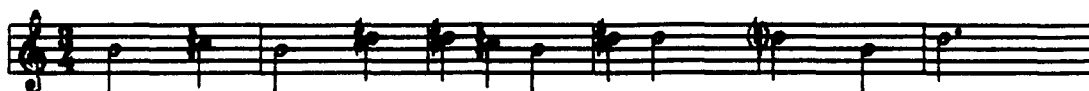


Figure 3. Partial exercise from lesson two. (Lorenz, 1992)

Key signatures were not used, rather each accidental was written with the intent to provide optimum concentration on psychomotor skills. The exercises were composed so that tonal elements presented to group III (tonal conceptual development) were exemplified in some of the measures. During the first four measures of exercise number four, as an example, the tonality changed from d minor in the first two measures to D major in the next two measures because group III was receiving instruction regarding the difference in major and minor patterns at this point in the instructional sequence (see Figure 4). Exercises were written with meter signatures of 4/4 and 3/4.





Figure 4. First four measures from exercise four, lesson two, illustrating major and minor patterns. (Lorenz, 1992)

### Lesson Three

No new notes were introduced in lesson three but key signatures were used for the first time and more complex rhythmic elements were introduced: rests, eighth notes, ties, and triplets (see Figure 5).



Figure 5. Partial exercise from lesson three. (Lorenz, 1992)

New notes were not introduced in lesson three for two reasons: (a) the subjects were provided time to practice playing the notes presented in lessons one and two in conjunction with more complex rhythms before adding more notes to their vocabulary to avoid progressing too quickly, and (b) the subjects in group II (improvisation) were provided time to practice more complex rhythms during the improvisational section of their lesson to realize the potential of the improvisation practice.

### Lesson Four

Lesson four was written to introduce the technical skills required to play notes on two adjacent strings in





rhythmic combinations of quarter and half notes (see Figure 8).

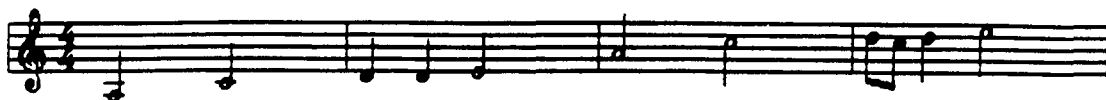


Figure 8. Partial exercise from lesson six. (Lorenz, 1992)

All of the intervals that had been used to this point for instruction of group III (tonal conceptual development) were used at some location in the melodies: major and minor thirds, perfect fourths, perfect fifths, and octaves. A new technical skill, shifting from position one to position five, was introduced in lesson six; therefore, one of the exercises included a shift from position one to position five (see Figure 9).

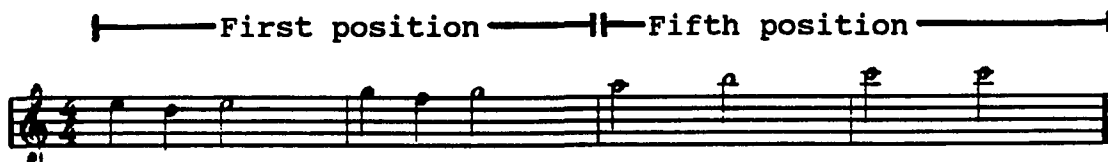


Figure 9. Partial exercise from lesson six, illustrating the shift from position one to position five, from measure two to measure three. (Lorenz, 1992)

### Lesson Seven

Notes on all six strings were used in lesson seven, as in lesson six, but more complex rhythmic elements were utilized in the exercises (see Figure 10).



Figure 10. Partial exercise from lesson seven. (Lorenz, 1992)

More rhythmic complexity without adding new notes was necessary at this point for the same reasons employed in lesson three. As in lesson six, the exercises were composed to include a shift from first position to fifth position. Exercises were written with meter signatures of  $4\backslash 4$ ,  $3\backslash 4$ , and  $2\backslash 4$ .

Lesson seven was written to provide preparation for the posttest, the Melodic Guitar Skills Achievement Test; therefore, the basic musical elements and level of complexity in lesson seven and the posttest were structured similarly. Lesson seven and the posttest had similar rhythmic figures and used the same meter signatures, the same key signatures, and a shift from first position to fifth position.

#### Treatment Description and Procedures

The classes met in schools after student dismissal. Consideration for convenient time and location was provided for each group. The researcher taught all classes and traveled to each school according to the preestablished schedule. Each class met once a week. The study covered a period of eight weeks.

The study was designed to determine if differences in melodic skills performance achievement were affected significantly by the use of three different instructional methods for guitar. The instructional methods used by the three experimental groups in this study were developed from previously published studies involving rote playing (group I), improvisation (group II), and tonal conceptual development (group III). Group IV received a traditional method of instruction. The melodic exercises used in the current study were developed to correspond with the musical characteristics of the model instructional methods by Fincher (1983), Montano (1983), and Grutzmacher (1985). In addition, the fingering, notation, and physical coordination problems of the guitar were taken into account when the exercises were composed by the researcher.

The treatment and materials given to the three experimental groups in the current study were modified from the treatment and materials in the model studies because (a) the model studies involved instruments other than the guitar, thus requiring changes in clefs, staff systems, keys, and range, (b) the model studies involved subjects with musical achievement levels different than musical achievement levels of subjects in the current study; therefore, musical exercises in the current study could represent an advanced knowledge of music on the part of the subjects, and (c) the model studies utilized equipment that

was inappropriate for use in this study. Any modifications specific to an individual method are explained in the following paragraphs. The experimental and control groups used identical musical exercises in the same sequence. Exercises were composed, however, to be relevant for all groups. For example, format and sequential order in regard to which strings were used was important to group I (rote instruction), and the melodic intervals used within the exercises were important to group III (tonal conceptual development).

Group I received instruction using a method based on teaching an exercise by rote with the teacher serving as an aural model. The instructional procedures were based on procedures used by Fincher (1983). The musical exercises were in a format that allowed the subjects in group I to increase skills sequentially. The instructor could, for example, precede the performance of an exercise used in a rote instructional procedure with parameters limiting the choices made by the subjects who were repeating the exercise. In the subsequent lesson, the parameters would be expanded slightly to increase the parameters from which the subjects could chose.

Group II received instruction using a method based on improvisation of pitches while imitating the rhythmic structure of a melodic exercise. The subjects improvised within certain parameters while reading the notated rhythm

of an exercise without the pitches. Parameters, which changed for each exercise, included left hand fingers to be used, notes to be used, the position on the fretboard in which to play, and which frets to use. The subjects then played the same exercise using notated rhythms and pitches. The instructional procedure employed in this method was based on the procedure used by Montano (1983).

Group III received instruction using a method based on the development of a tonal vocabulary appropriate for application to visual patterns on the guitar fingerboard. The instructional procedures used in this method were based on the procedures used by Grutzmacher (1985). In addition to musical exercises group III utilized visual aides in the lessons consisting of a chart representing the fingerboard of the guitar with dots indicating the visual shape of intervals. The visual aides indicated intervals pertinent to a particular lesson.

Group IV received instruction based on a traditional method of teaching melodic guitar skills. The traditional method used by group IV was developed by the researcher on the basis of years of teaching and personal observations of guitar classes, personal discussions with class guitar teachers, and analysis of class guitar method books, particularly those written by Noad (1972) and Petschauer (1976).



### Instructional Logistics

All classes were taught by the researcher in classrooms in schools within Dekalb County, GA. The same classroom was used by a class for the duration of the study. Each group met once a week for eight weeks. The subjects used student model classical guitars with nylon strings. Each instructional period lasted for one hour. Materials were distributed and instruments were tuned before each instructional session commenced. The guitars were tuned by the researcher until the subjects were independently proficient at tuning.

The one hour instructional period was divided into two segments in all four groups. Melodic guitar performance skills instruction lasted thirty minutes in each group with the remainder of the instructional period devoted to guitar playing techniques not related to melodic performance skills; that is, chord playing, strumming techniques, open tunings, and learning song accompaniments. The subjects retained the required materials after each instructional period and were required to practice for one hour each week. Subjects were requested to maintain written records of their practice and submit the records at the conclusion of the study. Each group met once a week for eight weeks; there were seven weeks of instruction and the posttest was administered during the eighth week.

## Teaching Methods

### Experimental Groups

Each thirty minute session of instruction in melodic performance skills for the three experimental groups was divided into two parts with a duration of fifteen minutes each. The first part of the session consisted of review and practice in readiness skills that were required in the second part of the session, while the latter focused on the instructional concept of each method, i.e., rote learning, improvisation, or tonal conceptual development, as applied to acquiring melodic performance skills on the guitar.

The subjects in experimental group I (rote instruction) began the first part of each instructional session by practicing exercises designed for the development of melodic performance as applied specifically to the guitar: finger numbers, positions, and locating notes on the guitar. The instructor also gave suggestions for playing by rote; an example is the relationship between notes that rise in pitch and fret positions on a specific string. After practicing melodic performance a short review of melodic exercises from the previous instructional period was conducted. The second part of the lesson began with the instructor presenting a verbal explanation of the parameters of each exercise: identification of the strings, the positions, and left hand fingers. The instructor then played the first two measure

phrase of the exercise while sitting at the back of the room, therefore not allowing the students to see the sequential placement of the fingers on the fingerboard of the guitar. The subjects then attempted imitate the same phrase with the teacher without looking at the notes. This step was repeated one time. The next phrase of the exercise was performed using the same procedure described for the first phrase, and this procedure was repeated until the entire exercise was completed. The students then played the entire exercise while reading the notes. The same procedure described above was then repeated for each exercise in the lesson.

Each thirty minute session of melodic performance skills instruction for experimental group II (improvisation) consisted of two parts: improvisation instruction (with review) and melodic performance instruction. After a review of melodic exercises played during the previous lesson, the improvisation instruction began with verbal instructions consisting of parameters to be used for improvising pitches to the rhythm of the exercise. Parameters included a specific key, upper and lower pitches, specific string or strings to play, and specific fretboard position or positions to use. The parameters used for improvisation practice were the same as parameters in the exercise that would be used in subsequent steps of the learning sequence. Therefore, the subjects practiced with one set of parameters

throughout the instructional sequence of verbal instruction, simultaneous improvisation, and reading the exercise. The subjects then practiced improvising simultaneously following a procedure wherein a tempo was set using a metronome, the instructor counted for one measure, and the subjects improvised in ensemble to the rhythm of the first melodic exercise within established parameters while maintaining a steady tempo. Subjects were instructed that they could use the notes available within the established parameters in any order they wanted while improvising. Repeated notes were permissible, but subjects were advised that excessive repeated notes were not desirable because left hand psychomotor skills could not be developed while playing repeated notes. After the improvisation practice period, the class practiced the same melody simultaneously using rhythm and pitch notation. The same procedure described above was repeated for each exercise in each lesson.

The subjects in experimental group III (tonal conceptual development) began each instructional session with a warm-up period consisting of short melodic exercises using vocalization with syllables. Recognition of major and minor tonal patterns and specific intervals was then practiced with verbal guidance from the instructor using vocalization with syllables, visual diagrams, and playing specific intervals in different locations on the guitar

fingerboard. Material was presented aurally before it was presented notationally. Subsequently, a short review of past lessons was presented. After the warm up and review period subjects practiced isolating, vocalizing, visualizing, and playing intervalic patterns as a group. The exercise was then played in its entirety two times. The same procedure described above was repeated for each exercise in each lesson.

#### Control Group

The control group received a traditional program of instruction for reading notes on the guitar. The students were introduced to the notes in first position on each string starting with the first string and finishing with the sixth string. Notes in the fifth position were introduced to the control group in lesson five, the same lesson used to introduce notes in fifth position to the experimental groups. One significant factor in the instructional method used for the control group differed from the method used by the experimental groups; that factor being the continuous accessibility of the notated exercise during the lesson. The subjects in the experimental groups received instruction during the first part of the lesson without the availability of notated music, but the subjects in the control group had continual access to the notated music during the entire lesson.

Each thirty minute session of instruction was divided into two parts, similar to the division of instructional time experienced by the experimental groups. The first part of the session consisted of review and practice in readiness skills, the second part of the session consisted of ensemble practice and practice playing melodic exercises individually. In each lesson the instructor began with a short review of previous exercises and continued with a verbal explanation of the names of the notes on a specific string or strings that would be emphasized in that lesson. Subjects then practiced, in ensemble, playing individual notes after the instructor announced the names of the notes. Melodic exercises were introduced to the subjects using modeling and verbal explanation. The subjects referred to the notation as they needed to individually. The exercises were then played in ensemble with the instructor assisting subjects as needed by playing or verbally. The instructor then answered questions and assisted subjects individually as they played the exercises.

#### Development of the Measurement Instrument

Published tests for guitar class that measure melodic performance skills achievement are not currently available. Following treatment, therefore, the four groups were tested using a researcher-designed test, the Melodic Guitar Skills Achievement Test (MGSAT), based on the Watkins-Farnum Performance Scale (WFPS) (Watkins and Farnum, 1954) adapted

by the researcher for use with the guitar (see Appendix D). The previously described criteria written by Farnum (1950) were used in the development of the MGSAT. Idiosyncracies of the guitar such fingering, the relationship between open strings and closed strings, and shifts between positions were considered by the researcher while designing the test. The length, complexity, variety of key signatures, and variety of meter are elements in the MGSAT that were developed from similar elements in the WFPS and the Melodic Sight Reading Achievement Test (Grutzmacher, 1985). Melodic patterns in the test occurred on four levels; patterns consisting of notes limited to the first position on individual strings, patterns consisting of notes limited to the first position on adjacent strings, patterns consisting of notes limited to the first position using all strings, and patterns consisting of notes extending into the fifth position on the first string. The melodic patterns were written in five keys representative of keys common to guitar literature. The longest rhythmic value in the patterns was the half note since tones played on the guitar have a relatively fast rate of decay. Meter signatures were limited to 4\4, 3\4, and 2\4, corresponding to those used in the instructional exercises. A panel of two experienced guitar teachers reviewed the MGSAT and determined that it was satisfactory and appropriate for the intended purpose of the study.

### Measurement

The MGSAT was administered individually to each student during the regular class time the week after lesson seven was finished. The postinstructional questionnaire was administered to each subject at the beginning of class (see Appendix E). The researcher verified the tuning of the guitars before the MGSAT began. Each student was allowed no more than thirty seconds to study each melodic exercise before playing. A metronome (mm=66) was used to establish the tempo but was turned off after the subject finished the first measure. The subjects could begin playing any time after the metronome started. The metronome setting was established from an observed norm of the four guitar classes thus ascertaining a tempo that would be comfortable for most subjects. The metronome setting did not change throughout the test.

The researcher read the following instructions to the subjects before they began the test:

Play the following melodic patterns on the guitar. A tape recorder and video recorder will record your performance. If you make mistakes, keep on playing. Before you begin to play, the metronome will be set to a tempo. Start when you are ready and maintain that tempo. The tempo will remain the same for all of the melodies in the test. The metronome will be turned off after the first measure. You will be given no help during the test.



Performances were recorded on audio cassette tape and on video tape concurrently. A Technics tape recorder, model M11MK2, was used with an Audio Technica stereo microphone, model AT9400, for the audio cassette recordings. An Hitachi camcorder, model VM2400A, was used for the video recordings.

The test was scored according to procedures established for the WFPS; any rhythm or pitch error within the measure was counted wrong. The rating scale and procedures were the same as those used in the WFPS; each measure of notation is the unit of scoring. There were forty measures in the test and the final score was determined by subtracting the number of wrong measures from the highest possible score.

Performance technique was not evaluated.

Scores were compiled from the Melodic Guitar Skills Achievement Test, the dependent variable, by a panel of adjudicators consisting of the researcher and two other adjudicators. The adjudicators who assisted the researcher in the measurement process were both guitar professors at the university level. The independent variable, melodic performance instruction on the guitar, existed on four levels, three experimental groups and one control group. Descriptive statistics were compiled using the Statistical Package for the Social Sciences (1990). Data were analyzed by a univariate analysis of covariance with subjects' AMMA scores serving as the covariate. Analysis of covariance was used for data analysis in the current study because of the

inability to use random or matching techniques when selecting and assigning subjects.

## CHAPTER IV

### RESULTS

#### Introduction

The purpose of this study was to investigate the effects of three methods of teaching melodic performance skills on melodic performance skills achievement of music teachers classified as beginning guitar students. Data analysis included descriptive statistics, Pearson product-moment correlations, and analysis of covariance.

#### Preinstructional Procedures

Twenty elementary and middle school general music teachers volunteered to participate as subjects and were assigned to one of four groups based on information from the musical experience questionnaire and scores on Gordon's (1989) Advanced Measures of Music Audiation (AMMA) administered at the beginning of the study. To further control for differences between the groups, the AMMA test scores served as the covariate for an analysis of covariance (see Table 3).

Table 3

AMMA Means and Standard Deviations

Group	N	Mean	Standard Deviation
Group I: Rote	5	59.80	4.658
Group II: Improvisation	5	66.20	7.791
Group III: Tonal	5	63.00	4.848
Group IV: Control	5	53.60	7.570

Group II, who received instruction emphasizing improvisation, had the highest preinstructional group mean with group III, group I, and group IV following respectively. The Bartlett test for homogeneity of variance indicated that homogeneity of variance assumptions for the covariate were met,  $F(3, 461) = .53738, p = .657$ .

Posttest Data Analysis

Instruction began after administration of the questionnaire and AMMA and continued for seven weeks. After instruction, the subjects were audio and videotape recorded during the administration of the Melodic Guitar Skills Achievement Test (MGSAT) which served as the posttest. The audio tapes were then randomized, condensed to a single cassette, and evaluated by three adjudicators: the

researcher, a guitar major, and two university guitar performance instructors. The adjudicators independently evaluated the audio tape of the MGSAT following a modified procedure established by Watkins and Farnum (1954); measures with pitch or rhythm errors were marked on evaluators' copies of each subject's MGSAT. To ensure scoring accuracy the three adjudicators were instructed to listen to the tapes as many times as was necessary to verify which measures contained errors. The number of correct measures was then summed to determine the final MGSAT score of each test for each subject. The highest possible score on the MGSAT was forty. For further verification of scoring accuracy, the adjudicators were instructed to view the video tape to confirm measures that were questionable because of possible indistinct tonal production by the subjects. The video tape was not used, however, because all three judges were consistent when identifying errors using the audio tapes. Accuracy was confirmed by high interjudge reliability coefficients between adjudicators A, B, and C on MGSAT scoring (see Table 4).

Table 4

*Interjudge Reliability Matrix for MGSAT*

	Judge A	Judge B	Judge C
Judge A	1.0000	.9964**	.9967**
Judge B		1.0000	.9928**
Judge C			1.0000

\*\*  $p < .001$

The posttest scores from the MGSAT served as the dependent variable and were analyzed to determine effects of instructional treatments. Table 5 presents the group means and standard deviations of the unadjusted scores on the MGSAT.

Table 5

MGSAT Means and Standard Deviations

Group	N	Mean	Standard Deviation
Group I: Rote	5	28.400	7.266
Group II: Improvisation	5	27.200	4.207
Group III: Tonal	5	21.200	9.121
Group IV: Control	5	23.400	6.189

Note: Maximum score = 40.

Group I, who received instruction emphasizing rote learning, had the highest unadjusted group mean, with group II, group IV, and Group III following respectively. The Bartlett test for homogeneity of variance indicated that homogeneity of variance assumptions for the MGSAT were met,  $F(3, 461) = .69692$ ,  $p = .554$ .

Group means were adjusted by the ANCOVA procedure for preexisting differences on the covariate, the AMMA. Table 6

presents the adjusted group means of the scores on the MGSAT with the AMMA serving as the covariate.

Table 6

MGSAT Adjusted Means With AMMA as Covariate

Group	N	Adjusted Mean
Group I: Rote	5	28.683
Group II: Improvisation	5	25.355
Group III: Tonal	5	20.419
Group IV: Control	5	25.744

Note: Maximum score = 40.

Group I, who received instruction emphasizing rote learning, had the highest group mean with group IV, group II, and group III following respectively. While the rote group retained the highest mean, the sequential order of two groups changed as a consequence of adjusting the means for preexisting differences identified by the AMMA; group II and group IV reversed positions in the sequential order. When comparing Table 5 and Table 6 the means show some influence of the covariate on the dependent variable; however, the covariate was not significant ( $p > .05$ ).

The null hypothesis was tested by the Statistical Package for the Social Sciences (1990) analysis of covariance procedure with the subjects' AMMA scores serving as the covariate. Alpha was set at .05 for statistical analysis.

The group and total mean scores were computed for the items on the postinstructional questionnaire. The items on the questionnaire, originally in the form of a Likert scale, were organized into tabular form (see Appendix F).

### Main Analysis

Results of the univariate analysis of covariance comparing subjects' melodic performance skills achievement using the MGSAT is presented in Table 7.

Table 7

*Univariate Analysis of Covariance  
Methods of Instruction on Melodic Guitar Performance Skills  
Achievement*

Source	Sum of Squares	Mean Square	<u>df</u>	<u>F</u>	<u>p</u>
Covariate <u>AMMA</u>	69.778	69.778	1	1.504	.239
Treatment	169.306	56.435	3	1.217	.338
Error	695.866	46.391	15		
Total	934.950	49.208	19		

No significant difference,  $F(3, 16) = 1.217$ ,  $p > .05$ , was found among the four groups' adjusted means. Therefore



the independent variable, melodic performance instruction on the guitar, had no significant effect on subjects' melodic performance achievement and the null hypothesis was retained.

### Summary

This study was designed to determine if differences in melodic performance skills occurred as a result of three methods of guitar instruction. Three adjudicators evaluated twenty subjects using a researcher-designed test of melodic guitar skills achievement. Interjudge reliability of  $r = .99$  between adjudicators was obtained.

The null hypothesis serving the research objective of the study is stated: There is no significant difference between posttest mean scores of groups employing rote learning, improvisation, and tonal conceptual development methods as measured by the Melodic Guitar Skills Achievement Test. Data collected from scores on the MGSAT were analyzed by a univariate analysis of covariance with subjects' AMMA scores serving as the covariate. The results indicated that three methods of guitar instruction based on rote learning, improvisation, and tonal conceptual development did not have a significant effect on melodic performance skills achievement; therefore, the null hypothesis was retained.

CHAPTER V  
SUMMARY AND CONCLUSIONS

Summary

The purpose of this study was to investigate the effects of three methods of teaching melodic performance skills on melodic performance skills achievement of music teachers classified as beginning guitar students. The principal musical elements of this study were based on music of a monophonic nature as applied to guitar playing. The skills needed to perform monophonic music on the guitar within the context on this study consisted of psychomotor and literacy skills, the later including practiced note reading and sight reading elements. These two principal skills are referred to collectively and are defined operationally in this study as melodic performance skills. Music educators can effectively use melodic performance skills on the guitar to achieve educational goals and objectives that benefit students, but music educators typically do not possess adequate melodic guitar performance skills (Bartel, 1990; Callahan, 1978; Decker, 1984; Zvengrowski, 1980). The independent variable, melodic performance instruction on the guitar, contained three levels: (a) pre-reading instruction emphasizing rote melody playing, (b) instruction utilizing pitch improvisation, and

(c) instruction emphasizing tonal conceptual development. The dependent variable was melodic performance achievement as measured by the Melodic Guitar Skills Achievement Test. In accordance with the purpose of the study, the following null hypothesis was tested: There is no significant difference ( $p \leq .05$ ) between posttest mean scores of groups employing rote learning, improvisation, and tonal conceptual development methods as measured by the Melodic Guitar Skills Achievement Test.

Treatment was administered using the three methods based on rote learning, improvisation, and tonal conceptual development during a seven week instructional period. A control group received traditional instruction in note reading on the guitar. The statistical treatment for the study was a univariate analysis of covariance with scores on the Advanced Measures of Musical Aptitude (Gordon, 1989) serving as the covariate. The analysis of the posttest data showed that melodic performance instruction on the guitar had no significant effect on subjects' melodic performance achievement and the null hypothesis was retained.

### Conclusions

Preface. This study was designed to be a foundational study regarding melodic performance skills for music educators classified as beginning guitar students. Conclusions from the results of this study were based on a

statistical analysis of measures of performance achievement involving twenty elementary and junior high school general music teachers. The analysis of covariance procedure was justified because of identified pretreatment musical aptitude differences. Conclusions were formulated on the basis of the failure to reject the null hypothesis. Limitations regarding the group size, composition of the subjects' experiences and performance abilities, and assignment to groups were of principal concern when formulating conclusions. Obviously, a larger and more comprehensive sample and sampling assignment procedures would be necessary to provide objective and viable results for hypothesis testing thus permitting valid generalizations about melodic guitar skills instruction for general music teachers.

Effects. There were no significant differences in melodic performance achievement among the groups receiving instruction based on rote learning, improvisation, tonal conceptual development, and the control group. After the group means were adjusted by the analysis of covariance procedure for preexisting differences in the music aptitude of subjects using the Advanced Measures of Musical Aptitude as the covariate, the group receiving instruction based on rote learning produced the highest group mean, followed by the traditional group, the improvisation group, and the tonal conceptual development group.

### Implications

The research objective of this study was to conduct a foundational investigation to identify effective methodology for the development of psychomotor and literacy skills thus providing teachers and students materials for using the guitar to its maximum potential in the classroom. Results of this study indicate that the melodic performance skills achievement of music teachers receiving instruction in beginning guitar classes are not significantly influenced by the four different methods of instruction examined in this study after accounting for differences in musical aptitude. Therefore, discounting individual teaching differences, guitar teachers in classroom situations may use any of the four teaching methods employed in this study to teach melodic performance skills in an eight week instructional period and expect relatively little variance in performance achievement as a result of the methods. Class guitar teachers consider the rote method to be the most effective and the tonal conceptual method to be the least effective as revealed by the adjusted group means, but this consideration should be tempered with an awareness that there was not a statistically significant difference between the methods used and results using music teachers as subjects may not transfer effectively to other subjects with differing experience, expertise, and characteristics.

## Recommendations for Further Study

### Principal Recommendations

Conclusions concerning the results of this study were limited to generalizations about the treatment as applied to melodic performance skills of subjects teaching general music in the Dekalb County public school system in Georgia. This study served the research objective to provide a foundational study upon which to build research of substantive content with greater conclusive power. To accomplish this, the study should be replicated involving a larger sample of the population of general music teachers from differing geographical areas with a longer and more concentrated period. Whereas the current treatment spanned seven weeks, further research would encompass a longer period to ensure the maximization of treatment. The measurement instrument for the study, the MGSAT, should be validated before replication in a study involving more subjects and a longer period of instruction.

### Secondary Recommendations

A variation of right hand techniques for use with different types of guitars is suggested. In addition to the classical guitars used for the current study, steel string acoustic guitars and electric guitars could be utilized in the context of melodic performance skills instruction. Steel string acoustic and electric guitars typically are

played with a right hand technique that involving the use of a plectrum.

A method of instruction incorporating higher positions on the guitar to facilitate a wider range is also recommended for replication. A wider range would provide a greater breadth of literature thus enabling the teacher to use the guitar to play descants, interludes, and melodies not accessible in the context of the current study because of the imposed range limitations of first and fifth positions.

A method of instruction including music reading of textural types differing from the monophonic texture is also recommended for replication. A replication study of sufficient length could include two or three part musical textures after the subjects were competent with monophonic music. The ability to play music in two parts would be useful to the general music teacher teaching music in two parts to a class or vocal ensemble.

Subjects with characteristics differing from the music teachers used in the current study could participate in a replication. Similar instructional methods may be effective with different subjects if consideration is made for differing factors such as achievement levels. Guitar classes on the high school or college level, for example, may benefit from the results of a replication study

involving subjects with a similar skill and achievement level.



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**APPENDIX A**  
**LETTER OF PERMISSION TO CONDUCT RESEARCH**



RESEARCH & EVALUATION  
DeKalb County Schools  
Georgia

October 22, 1992

Mr. Kevin Lorenz:

Your request to conduct research among DeKalb County School System Music Teachers is approved. The research topic on file is *A Comparison of the Effectiveness of Three Teaching Methods Based on Rote Learning, Improvisation, and Tonal Conceptual Development on Sight Reading Achievement of Beginning Class Guitar Students.*

Dr. Earline Brasher will supervise the staff development class composed of volunteers from among DeKalb Music Teachers. I wish you well in your endeavor, and I look forward to reading the results of your study.

Sincerely,

A handwritten signature in cursive script that reads "Su Ellen Bray".

Su Ellen Bray

SEB:js

cc: Dr. Earline Brasher

**APPENDIX B**  
**PREINSTRUCTIONAL QUESTIONNAIRE**

## GUITAR CLASS QUESTIONNAIRE

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE: \_\_\_\_\_

AGE: \_\_\_\_\_

SCHOOL: \_\_\_\_\_ LOCATION: \_\_\_\_\_

AMOUNT OF FORMAL EDUCATION IN MUSIC:

BACHELOR'S DEGREE (MUSIC ED) \_\_\_\_\_

GRADUATE DEGREE (MUSIC ED) \_\_\_\_\_

OTHER MUSIC DEGREES (PERFORMANCE, ETC.) \_\_\_\_\_

PREVIOUS FORMAL TRAINING ON THE GUITAR: \_\_\_\_\_

MAJOR INSTRUMENT: \_\_\_\_\_

ARE YOU RIGHT HANDED? \_\_\_\_\_ LEFT HANDED? \_\_\_\_\_

HAVE YOU HAD ANY EXPERIENCE, FORMAL OR INFORMAL, READING  
STANDARD MUSICAL NOTATION ON THE GUITAR? \_\_\_\_\_ HOW MUCH? \_\_\_\_\_



**APPENDIX C**  
**MELODIC EXERCISES FROM GUITAR**  
**CLASS LESSONS**

## Introduction To Natural Notes

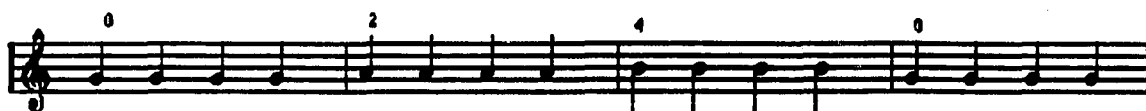
### Notes On The First String (Natural Only)



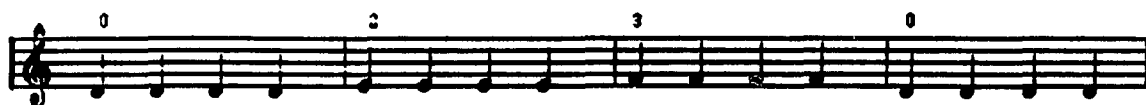
### Notes On The Second String



### Notes On The Third String



### Notes On The Fourth String



### Notes On The Fifth String



### Notes On The Sixth String



### Guitar Class Week#1

Natural Notes In First Position

1

Musical staff 1: Treble clef, G-clef, 1/4 note G4, 1/4 note A4, 1/4 note B4, 1/4 note C5, 1/4 note D5, 1/4 note E5, 1/4 note F5, 1/4 note G5, 1/4 note F5, 1/4 note E5, 1/4 note D5, 1/4 note C5, 1/4 note B4, 1/4 note A4, 1/4 note G4.

Musical staff 2: Treble clef, G-clef, 1/4 note A4, 1/4 note B4, 1/4 note C5, 1/4 note D5, 1/4 note E5, 1/4 note F5, 1/4 note G5, 1/4 note F5, 1/4 note E5, 1/4 note D5, 1/4 note C5, 1/4 note B4, 1/4 note A4.

2

Musical staff 3: Treble clef, G-clef, 1/4 note B4, 1/4 note C5, 1/4 note D5, 1/4 note E5, 1/4 note F5, 1/4 note G5, 1/4 note F5, 1/4 note E5, 1/4 note D5, 1/4 note C5, 1/4 note B4.

Musical staff 4: Treble clef, G-clef, 1/4 note C5, 1/4 note D5, 1/4 note E5, 1/4 note F5, 1/4 note G5, 1/4 note F5, 1/4 note E5, 1/4 note D5, 1/4 note C5.

3

Musical staff 5: Treble clef, G-clef, 1/4 note D5, 1/4 note E5, 1/4 note F5, 1/4 note G5, 1/4 note F5, 1/4 note E5, 1/4 note D5.

4

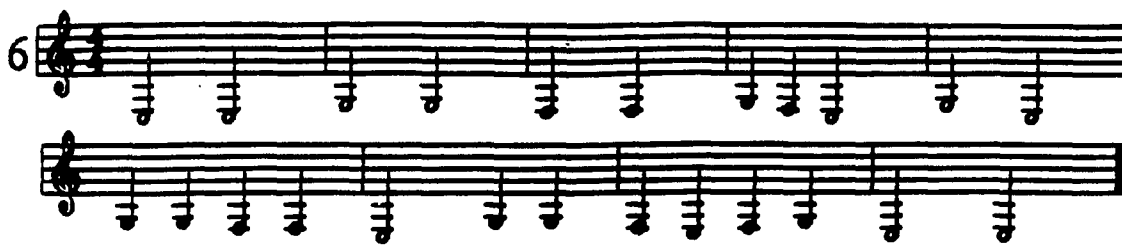
Musical staff 6: Treble clef, G-clef, 1/4 note E5, 1/4 note F5, 1/4 note G5, 1/4 note F5, 1/4 note E5.

Musical staff 7: Treble clef, G-clef, 1/4 note F5, 1/4 note E5, 1/4 note D5, 1/4 note C5, 1/4 note B4, 1/4 note A4, 1/4 note G4.

5

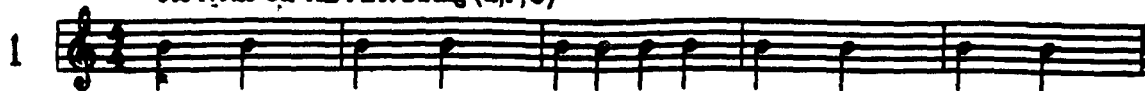
Musical staff 8: Treble clef, G-clef, 1/4 note G4, 1/4 note F4, 1/4 note E4, 1/4 note D4, 1/4 note C4, 1/4 note B3, 1/4 note A3, 1/4 note G3, 1/4 note F3, 1/4 note E3, 1/4 note D3, 1/4 note C3, 1/4 note B2, 1/4 note A2, 1/4 note G2.

Musical staff 9: Treble clef, G-clef, 1/4 note F4, 1/4 note E4, 1/4 note D4, 1/4 note C4, 1/4 note B3, 1/4 note A3, 1/4 note G3, 1/4 note F3, 1/4 note E3, 1/4 note D3, 1/4 note C3, 1/4 note B2, 1/4 note A2, 1/4 note G2.

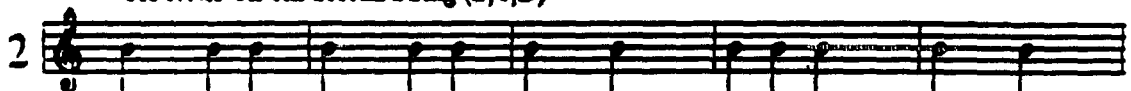


## Improvisation

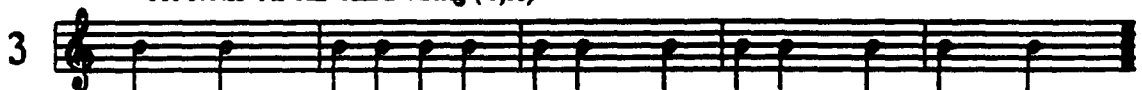
Use Notes On The First String (E,F,G)



Use Notes On The Second String (B,C,D)



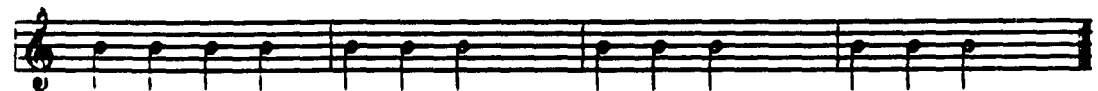
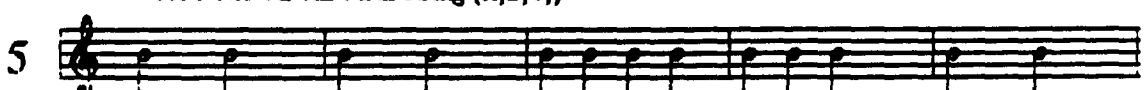
Use Notes On The Third String (G,A)



Use Notes On The Fourth String (D,E,F,)



Use Notes On The Fifth String (A,B,C,)



## Use Notes On The Sixth String

6

The image shows two staves of musical notation. The top staff is labeled with a large number '6' to its left. Both staves begin with a treble clef and a 3/4 time signature. The top staff contains four measures of music, each with a single quarter note on the sixth string. The notes are G2, F2, E2, and D2. The bottom staff contains four measures of music, each with a single quarter note on the sixth string. The notes are C2, B1, A1, and G1. The notes in the bottom staff are positioned lower on the staff than the notes in the top staff, indicating they are lower in pitch.



6

Musical notation for exercise 6, consisting of two staves with treble clefs and a key signature of one flat. The first staff contains a sequence of chords: F major, C major, F major, C major, F major, C major, F major, C major. The second staff contains a sequence of chords: F major, C major, F major, C major, F major, C major, F major, C major.

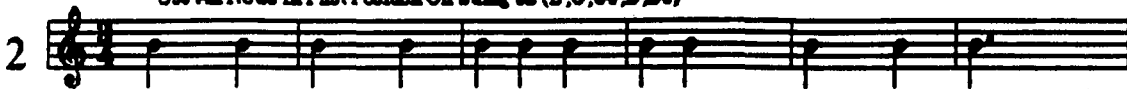


## Improvisation Rhythms Lesson #2

Use All Notes In First Position On String #1 (E, F, F#, G, G#)



Use All Notes In First Position On String #2 (B, C, C#, D, D#)



Use All Notes In First Position On String #3 (G, G#, A, Bb, B)



Use All Notes In First Position On String #4 (D, Eb, E, F, F#)



Use All Notes In First Position On String #5 (A, Bb, B, C, C#)



## Lesson #2 (Improvisation)

Use All Notes in First Position On String #6 (E, F, G, A)

6

The image shows two musical staves, each with a treble clef and a key signature of one flat (B-flat). The first staff begins with a '6' indicating the sixth string. The notes on the first staff are E4, F4, G4, A4, Bb4, and A4. The second staff continues with G4, F4, E4, D4, C4, and Bb3. The notes are written as quarter notes with stems pointing down.

### Guitar Class Lesson #3

#### Notes On The First String

1

The first exercise is written on two staves. The first staff begins with a treble clef and a key signature of one sharp (F#). It contains a sequence of notes: F#4, G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The second staff continues the sequence: B3, A3, G3, F#3, E3, D3, C3, B2, A2, G2, F#2, E2, D2, C2, B1, A1, G1, F#1, E1, D1, C1.

#### Notes On The Second String

2

The second exercise is written on four staves. The first staff begins with a treble clef and a key signature of one sharp (F#). It contains a sequence of notes: F#4, G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The second staff continues the sequence: B3, A3, G3, F#3, E3, D3, C3, B2, A2, G2, F#2, E2, D2, C2, B1, A1, G1, F#1, E1, D1, C1. The third staff continues: B1, A1, G1, F#1, E1, D1, C1, B0, A0, G0, F#0, E0, D0, C0, B-1, A-1, G-1, F#-1, E-1, D-1, C-1. The fourth staff continues: B-1, A-1, G-1, F#-1, E-1, D-1, C-1, B-2, A-2, G-2, F#-2, E-2, D-2, C-2, B-3, A-3, G-3, F#-3, E-3, D-3, C-3.

### Lesson #3 Page 2



## Guitar Class Lesson #3 Improvisation Rhythms

1 **First String**

2 **Second String**

3 **Third String**

4 **Fourth String**

The page contains four sets of musical notation, each consisting of two staves. The first set is labeled '1 First String' and shows a sequence of notes and rests on a single staff. The second set is labeled '2 Second String' and shows a sequence of notes and rests on a single staff. The third set is labeled '3 Third String' and shows a sequence of notes and rests on a single staff. The fourth set is labeled '4 Fourth String' and shows a sequence of notes and rests on a single staff. Each set of notation is numbered 1 through 4 on the left side of the page.

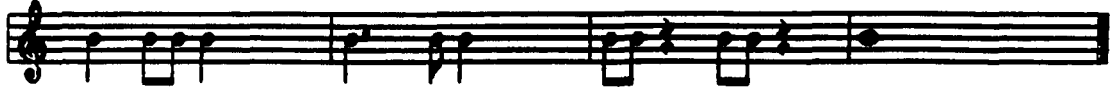
# Improvisation Rhythm Lesson #3 Page 2

Fifth String



5

Musical staff for Fifth String, first line. It begins with a treble clef, a key signature of one sharp (F#), and a 3/4 time signature. The staff contains a sequence of notes: quarter notes G4, A4, B4, C5; quarter notes D5, E5, F#5, G5; quarter notes A5, B5, C6, D6; and quarter notes E6, F#6, G6. The final note G6 is beamed with a quarter rest.



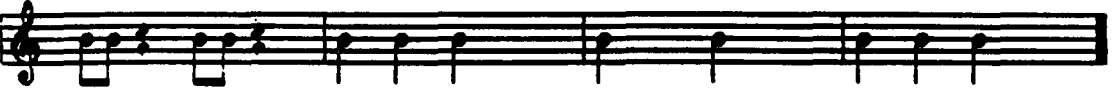
Musical staff for Fifth String, second line. It continues the sequence from the first line: quarter notes A5, B5, C6, D6; quarter notes E6, F#6, G6, A6; quarter notes B6, C7, D7, E7; and a quarter note F#7.

Sixth String



6

Musical staff for Sixth String, first line. It begins with a bass clef, a key signature of one sharp (F#), and a 3/4 time signature. The staff contains a sequence of notes: quarter notes G3, A3, B3, C4; quarter notes D4, E4, F#4, G4; quarter notes A4, B4, C5, D5; and quarter notes E5, F#5, G5.



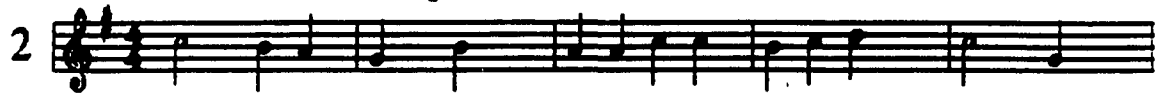
Musical staff for Sixth String, second line. It continues the sequence from the first line: quarter notes A5, B5, C6, D6; quarter notes E6, F#6, G6, A6; quarter notes B6, C7, D7, E7; and a quarter note F#7.

## Lesson #4 Notes On Two Adjacent Strings

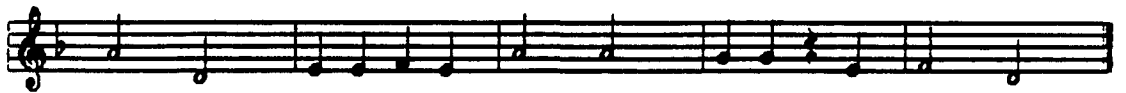
### First And Second Strings



### Second And Third Strings



### Third And Fourth Strings



## Lesson #4 Page 2

Fourth And Fifth Strings



Fifth And Sixth Strings





# Lesson #4 Rhythm Improvisation

## Notes On The First And Second Strings



## Second And Third Strings



## Third And Fourth Strings

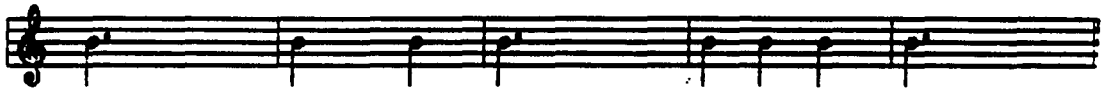


# Lesson #4 Rhythm Improvisation Page 2

## Fourth And Fifth Strings



## Fifth And Sixth Strings



# Guitar Class Lesson #5

## Notes On Three Adjacent Strings

### Notes On The First, Second, And Third Strings

1

Exercise 1 consists of two staves of music in treble clef with a key signature of one flat. The first staff contains a sequence of eighth notes across the first three strings: E4 (1st string), D4 (2nd string), C4 (3rd string), D4 (2nd string), E4 (1st string), F4 (2nd string), G4 (3rd string), A4 (2nd string), B4 (1st string), and C5 (2nd string). The second staff continues with: D4 (2nd string), E4 (1st string), F4 (2nd string), G4 (3rd string), A4 (2nd string), B4 (1st string), C5 (2nd string), D5 (3rd string), E5 (2nd string), F5 (1st string), G5 (2nd string), and A5 (3rd string).

### Second, Third And Fourth Strings

2

Exercise 2 consists of two staves of music in treble clef with a key signature of one flat. The first staff contains notes on the second, third, and fourth strings: D4 (2nd string), C4 (3rd string), B3 (4th string), C4 (3rd string), D4 (2nd string), E4 (3rd string), F4 (4th string), G4 (3rd string), A4 (2nd string), and B4 (3rd string). The second staff continues with: C4 (3rd string), D4 (2nd string), E4 (3rd string), F4 (4th string), G4 (3rd string), A4 (2nd string), B4 (3rd string), C5 (4th string), D5 (3rd string), E5 (2nd string), F5 (3rd string), and G5 (4th string).

### Third, Fourth, And Fifth Strings

3

Exercise 3 consists of two staves of music in treble clef with a key signature of one flat. The first staff contains notes on the third, fourth, and fifth strings: C4 (3rd string), B3 (4th string), A3 (5th string), B3 (4th string), C4 (3rd string), D4 (4th string), E4 (5th string), F4 (4th string), G4 (3rd string), and A4 (4th string). The second staff continues with: B3 (4th string), C4 (3rd string), D4 (4th string), E4 (5th string), F4 (4th string), G4 (3rd string), A4 (4th string), B4 (5th string), C5 (4th string), D5 (3rd string), E5 (4th string), and F5 (5th string).

### Fourth, Fifth, And Sixth Strings

4

Exercise 4 consists of two staves of music in treble clef with a key signature of one flat. The first staff contains notes on the fourth, fifth, and sixth strings: B3 (4th string), A3 (5th string), G3 (6th string), A3 (4th string), B3 (5th string), C4 (6th string), D4 (5th string), E4 (4th string), F4 (5th string), and G4 (6th string). The second staff continues with: A3 (5th string), B3 (4th string), C4 (5th string), D4 (6th string), E4 (5th string), F4 (4th string), G4 (5th string), A4 (6th string), B4 (5th string), C5 (4th string), D5 (5th string), and E5 (6th string).

### Notes In Fifth Position On The First String

5

Exercise 5 is a single staff of music in treble clef with a key signature of one flat, focusing on the first string in fifth position. The notes are: F5 (1st string), G5 (1st string), A5 (1st string), B5 (1st string), C6 (1st string), D6 (1st string), E6 (1st string), F6 (1st string), G6 (1st string), A6 (1st string), B6 (1st string), and C7 (1st string).

## Lesson #5 Improvisation

First, Second, And Third Strings

1

Musical notation for the first exercise, labeled '1'. It consists of two staves of music. The first staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: G2, A2, B2, C3, D3, E3, F3, G3. The second staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: A2, B2, C3, D3, E3, F3, G3, A3.

Second, Third, And Fourth Strings

2

Musical notation for the second exercise, labeled '2'. It consists of two staves of music. The first staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: G2, A2, B2, C3, D3, E3, F3, G3. The second staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: A2, B2, C3, D3, E3, F3, G3, A3.

Third, Fourth, And Fifth Strings

3

Musical notation for the third exercise, labeled '3'. It consists of two staves of music. The first staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: G2, A2, B2, C3, D3, E3, F3, G3. The second staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: A2, B2, C3, D3, E3, F3, G3, A3.

Fourth, Fifth, And Sixth Strings

4

Musical notation for the fourth exercise, labeled '4'. It consists of two staves of music. The first staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: G2, A2, B2, C3, D3, E3, F3, G3. The second staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: A2, B2, C3, D3, E3, F3, G3, A3.

First String, Fifth Position

5

Musical notation for the fifth exercise, labeled '5'. It consists of two staves of music. The first staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: G2, A2, B2, C3, D3, E3, F3, G3. The second staff is a treble clef with a key signature of one flat and a 3/4 time signature. It contains a sequence of quarter notes: A2, B2, C3, D3, E3, F3, G3, A3.

# Lesson #6

## Notes On All Strings

1

2

3

4

## Lesson #6

Notes On All Strings

1

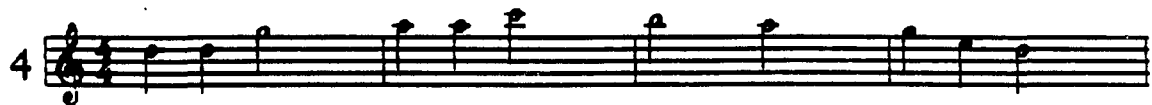
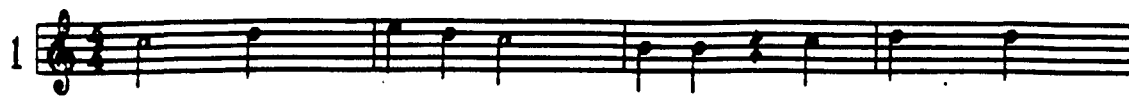
2

3

4

The image displays a musical exercise titled "Notes On All Strings" for Lesson #6. It consists of four systems of two staves each. The first system is labeled with a large "1" and the second with a "2". The third system is labeled with a "3" and the fourth with a "4". Each system contains two staves of music, likely representing the upper and lower halves of a string instrument. The notation includes treble clefs, a key signature of one sharp (F#), and a 3/4 time signature. The music is written in a simple, stepwise fashion, with notes placed on the strings of the staves. The first system shows a sequence of notes across the first four staves. The second system continues the sequence across the next four staves. The third system continues across the next four staves. The fourth system continues across the final four staves. The exercise appears to be a scale or a series of chords designed to be played on all strings of the instrument.

## Lesson #7



# Lesson #7 Improvisation Rhythms

The image contains four numbered musical exercises on treble clef staves. Each exercise consists of two staves of music. Exercise 1 is in 4/4 time and features a sequence of quarter notes and eighth notes. Exercise 2 is in 3/4 time and includes quarter notes, eighth notes, and a triplet. Exercise 3 is in 4/4 time and uses quarter notes and eighth notes. Exercise 4 is in 4/4 time and features quarter notes and eighth notes. Each exercise concludes with a double bar line and a repeat sign.

1

2

3

4



**APPENDIX D**  
**MELODIC GUITAR SKILLS ACHIEVEMENT TEST**

## Guitar Class Final Test

1.

2.

3.

4.

5.

6.

7.

8.

**APPENDIX E**  
**POSTINSTRUCTIONAL QUESTIONNAIRE**

## GUITAR CLASS QUESTIONNAIRE

1. How would you rate the overall effectiveness of the method?

Highly effective 1 2 3 4 5 not effective

2. How would you rate the difficulty of the method?

Extremely difficult 1 2 3 4 5 extremely easy

3. This is a course that will be useful for most music teachers who have not had experience playing guitar.

Highly agree 1 2 3 4 5 Highly disagree

4. I will be able to use what I learned in this course in my teaching.

Highly agree 1 2 3 4 5 Highly disagree

5. I felt well prepared for the final test.

Highly agree 1 2 3 4 5 Highly Disagree

6. The course proceeded at a comfortable pace.

Highly agree 1 2 3 4 5 Highly disagree

7. Instructional content was consistent throughout the course.

Highly disagree 1 2 3 4 5 Highly disagree

8. Musical materials were consistent throughout the course.

Highly agree 1 2 3 4 5 Highly disagree

Is there anything you would change about the method?

Additional comments:

APPENDIX F  
RESULTS FROM POSTINSTRUCTIONAL  
QUESTIONNAIRE

Post-instructional Guitar Class Questionnaire

	Grp I Rote X	Grp II Imprv X	Grp III Tonal X	Grp IV Trad X	Overall X
1. Overall effectiveness Highly eff 1....5 not eff	2.4	2	2.6	2.8	2.45
2. Difficulty Extr diff 1....5 Extr easy	2.4	[3.2] <sup>1</sup>	2.6	2.4	2.65
3. Useful for teachers Agree 1....5 Disagree	[1.6] <sup>2</sup>	2.2	2.6	2.6	2.25
4. Will use personally Agree 1....5 Disagree	2.8	[1.8] <sup>3</sup>	2.2	3	2.45
5. Prepared for posttest Agree 1....5 Disagree <sup>8</sup>	3.4	3	3.6	3	3.25
6. Comfortable pace Agree 1....5 Disagree	2.4	3	[3.4] <sup>4</sup>	2.6	3.05
7. Instructional content Consistent Agree 1....5 Disagree	1.2	1.2	1.6	1.4	[1.3] <sup>5</sup>
8. Musical Materials Consistent Agree 1....5 Disagree	1.2	1.2	[2.2] <sup>6</sup>	1.4	[1.5] <sup>6</sup>

Observations

1. The improvisation group rated their method as easier when compared to the rest of the groups, otherwise difficulty was rated about the same; moderately difficult.
2. The rote group highly agreed that their method was useful for music teachers as compared to the rest of the groups, but all groups were moderately agreeable.
3. The improvisation group would be most likely to use the method themselves, the traditional group was the least likely to use the method themselves.
4. The tonal group felt uncomfortable with the pace of instruction as compared to the other groups, but total average was moderate.

5. All groups highly agreed that the instructional content was consistent.
6. All groups agreed that the musical materials were consistent but the tonal group was less in agreement than the other groups.