Research in Music Education

An Introduction to Systematic Inquiry

Edward L. Rainbow
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PREFACE

This book is a reflection of our collective experiences in teaching research to both beginning and advanced graduate music education students. These experiences include introducing master-level students to basic concepts of research, developing skills of critical analysis in doctoral students, and guiding doctoral candidates in dissertation work. In all these situations it appears that the main problem in bringing research close to the minds of the students lies in their diverse views of what music education is.

For many, the content of music education consists of the methodologies and skills employed in teaching music to people from 5 to 18 years of age. For others, the content is found in the acquisition of knowledge about appropriate music and teaching literature. A third group tends to equate music education with any form of music teaching wherever it occurs—in schools, universities, church programs, camp activities, or private studios.

Because of the diverse goals most music education students have set for themselves, a research book in music education should have a two-fold aim: to train the future researcher and to make those who do not wish to conduct research comfortable with the role of disciplined thinking in music education. The book should be general and specific at the same time. *Research in Music Education* attempts to be that book.

In this book, a description of the field of music education is integrated into the concept of research as disciplined inquiry. The thought processes inherent in that inquiry take precedence over the specific techniques of how to conduct research. This focus reflects our contention that the logic of specific research techniques tends to become clear once the logic of the research process itself has been understood.

Music educators often categorize research according to the primary methodology utilized in an investigation. A study may thus carry the label of experiment, descriptive survey, quantitative-analytical investigation, sampling, speculative, historical, or qualitative-analytical research. The classification refers to both the investigative techniques employed in an investigation and the purpose for which the techniques are being utilized. As a result of that dual reference, the categorization of research has become somewhat confused. After all, a study may be historical, yet use quantification techniques; an investigation may be experimental and also employ a questionnaire in order to assess attitudes and perceptions of different groups of people.

It is hoped that the categorization of disciplined inquiry into three modes—historical, philosophical, and empirical—helps to clear up some of the misconceptions about the types of research found in music education. Each of

the modes of inquiry represents an established view or perspective from which one looks at a problem. Since each of the modes has its own acknowledged set of rules, guidelines, and limitations, the chosen perspective ultimately determines the type of findings that provide the answer to a given question.

This book should not be taught in its entirety in one course. Such an undertaking is likely to be unrealistic and impractical. Instead, the instructor should make a judgment as to what sections or chapters to use. Parts 1 and 2 (chapters 1 to 5), along with the suggested additional reading and some written work, are intended as the basis for teaching the aspect of understanding the thought processes of research. Depending on the instructor's focus, these chapters could provide the major content of a quarter or semester course on an introduction to research in music education. Only selected chapters of Part 3 (chapters 6 to 10) would in that case be included in such a course. An instructor might wish to look at all three modes of inquiry (historical, philosophical, and empirical), or one mode might be emphasized over the others. Criteria that pertain to skills in critical reading and research evaluation are addressed in chapters 5 to 9. If the focus of a course centers on research techniques, then an in-depth study of chapters 6 to 10 would be appropriate. Part 4 (chapter 11) is intended primarily for the master's or doctoral candidate who is writing a thesis or dissertation.

Some of the chapters are lengthy. In many instances the subsections of a chapter were therefore written in such a way that they would stand by themselves and allow for specific reading assignments of manageable proportions. Also, the often lengthy lists of references included in the text should be viewed as an invitation to the students to begin the reading process that becomes the foundation of all research. The references should not be treated as material that must be covered in a course. Wherever appropriate, a chapter concludes with a number of suggested readings that we would call "thinking books." It is unreasonable for any or all of these books to be assigned or made mandatory reading. Many of the publications simply represent good reading since the authors have often looked at the usual in an unusual way. The books provide food for thought and represent some of the "spirit" of research.

A word about questions for discussion. First, it has been customary for textbook writers to present at the end of each chapter a series of questions by which the material in the chapter is reviewed. We have found that these questions seldom meet the rules of a specific class since the students themselves usually generate better questions than the author. Second, the kind of questions to ask depends entirely on the focus the instructor has chosen for the overall course. Because the book seeks to be useful for a variety of teaching situations, we have decided not to pose too many specific discussion questions. Instead, we have listed a few topics from which questions could be developed. But even these topics are only suggestions. It is our opinion that the instructor should teach "around" the book, not "by" the book.

We wish to extend gratitude and thanks to our students at North Texas State University. They used and critiqued preliminary drafts of the text and made many excellent points. All of the comments were appreciated and, where

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appropriate, incorporated into the present version of the text. As research is an ongoing process, so is writing: We do not claim that this version has reached the stage where one could call it final any more than one would consider the performance of a musical composition in recital to be the final product in one's career as a musician. Music performance is the process of moving toward the goal of perfection; it is of secondary importance whether that goal is ever reached. The same holds true in research and writing: A research result or a written report is never more than a step in the process of searching for knowledge. With each step, one hopes to gain more knowledge, yet more questions and, consequently, more plans for further work arise.

Finally, several specific thank yous are in order: To Alton Chan, Graduate Research Assistant, for his many hours of legwork without which the manuscript could not have been completed; and to our faculty colleagues in music education for their support during the time the manuscript was prepared. Special mention must be made of Dr. David McGuire and Dr. William May for their help in providing constructive criticism and encouragement.

E.L.R. and H.C.F.
Denton, Texas

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PART ONE

The Researcher and The Research Process

Chapters 1 and 2 serve as an introduction to the research process in music education. In chapter 1, the role of research in music and music education is discussed. In chapter 2, the attributes of those who pursue research activities are described in general. Music education is viewed as a field of study with an emerging body of knowledge. Thus, the role of research is suggested to be the same as that in other fields of study: the application of disciplined inquiry to questions pertaining to a body of knowledge.

Inquisitiveness is considered the key to the development of all knowledge. Other attributes characterizing a good researcher are suggested to be: (a) the ability to plan in a disciplined way new approaches and perspectives by which to study an issue; (b) an awareness of ideas and events in fields other than one's own; and (c) a willingness to communicate one's ideas and findings to the profession at large. All these attributes together form what may be called the mind-set of the researcher.

Chapter One

The Role of Research in Music Education: *Establishing a Body of Knowledge*

1.1 Introduction

Music has been an area of intellectual pursuit for many centuries. Early documents discussing the music of Chinese people are believed to have been written prior to 1000 B.C. (Cho, 1975). Cho refers to early writings on the music of China dating back to about 122 B.C., and specifically cites the book *Shi Chih*, in which Ssu-ma Ch'ien (97 B.C.) describes the pentatonic pattern and the twelve semitones within the octave (Cho, 1975, p.16). We have knowledge of the relationship of mathematics and music as it is believed to have existed in India, ancient Egypt, the early Greek culture, and the Arab world (see, among others, McClain, 1978; Pfrogner, 1981; Sachs, 1943, 1953).

Regarding early writings on Western music and aesthetic thought, hardly anyone fails to acknowledge the works of Pythagoras (ca. 500 B.C.) and Plato (427–347 B.C.) as the beginning of modern concepts of music (e.g., Backus, 1977; Farnsworth, 1969; Helmholtz, 1954; Lippman, 1977; Margolis, 1978; Rowell, 1983; Sachs, 1955; Winckel, 1967). Both Pythagoras and Plato sought to describe physical aspects of sound in terms of arithmetic relationships. It was Plato, however, who went so far as to speculate on the manifestation of the beautiful and its relationship to the moral development of the human character.

For many centuries the general emphasis of inquiries into the subject of music continued to focus on a description of the arithmetic and physical properties of sound and existing tonal systems (Farnsworth, 1969; Pfrogner, 1981; Sachs, 1955). Observations were organized, and reports about them served as the body of knowledge from which specific musical laws were developed. The outcome of such systematic study may be said to have resulted in the science of music—that is, musicology in its truest sense (Sachs, 1955).

The accumulation and preservation of knowledge as well as the continued

study of the various aspects of the science of music have enabled music to remain an important field of study for over 25 centuries. During this time span the field of music has evidenced a similar division and growth of investigative interests as have fields in the physical and natural sciences. Research in music is no longer confined to the examination of the physical properties of sound. Historical-chronological musicology (music history) has evolved with a research focus that differs significantly from earlier scientific pursuits in music. Today, music historians are primarily concerned with the study of musical composition and the people responsible for the development of the art.

Closely connected to research in music history is research in music theory, an area that addresses foremost the analysis of structural devices in musical compositions and how these devices determine musical style. Music theorists are somewhat less involved in the study of particular individuals who have contributed to the history of the musical art. Instead, they are more interested in the study of music from an "architectural" point of view. Inevitably, concerns of music history and theory are in some cases the same, so that a clear distinction between both areas of study is not always easy or possible.

Other music-related areas of study have emerged in response to the many questions historical musicology and theory failed to address in a systematic way. These areas include systematic musicology, ethnomusicology, music therapy, the art of composition and performance, pedagogy, and music education. Each area has defined its own scope of research, developed its own questions, and determined its own research methodologies by which to answer the questions.

Despite the specifics of different methodologies, scholars in music tend to agree on certain attributes that characterize a good researcher. Foremost among these attributes is the ability to probe the accuracy of accepted fact and seek answers to the unknown (Farnsworth, 1969; Lippman, 1977; Smith, 1976). Questions must be raised about the nature and process of composing musical works, of performing and perceiving musical sound, and of becoming musically educated through formal and informal instructional settings. Another attribute is the ability to find answers to a given question in a manner acceptable to the community of scholars. That ability must be coupled with the person's willingness to share any found answer with the profession at large. Adhering to the attributes described means to adhere to principles of disciplined inquiry.

1.2 The Nature of Disciplined Inquiry

Scholars of many different fields have addressed and continue to address the function of disciplined inquiry in the pursuit of human knowledge. To list even a small sample of these efforts would fill pages of this book. Thus, a brief introductory statement as to what constitutes the nature of disciplined

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