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**TUBA STUDIO TEACHING: THREE CASE
STUDIES OF HIGHLY EFFECTIVE
TEACHERS**

by
Robert Steven Call

A dissertation submitted to the faculty of
The University of Utah
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

**Department of Music
The University of Utah**

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THE UNIVERSITY OF UTAH GRADUATE SCHOOL


SUPERVISORY COMMITTEE APPROVAL

of a dissertation submitted by


Robert Steven Call

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3-21-00


Chair: Edward P. Asmus

3-21-00


Mark Ely

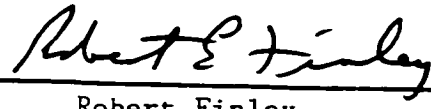
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Roger L. Miller

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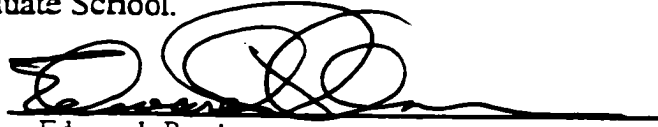
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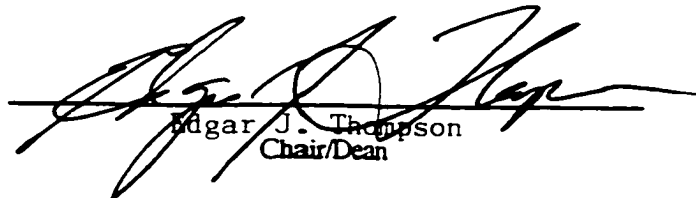
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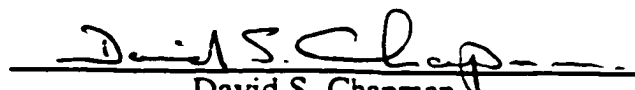
3-24-00
Date


Edward P. Asmus
Chair, Supervisory Committee

Approved for the Major Department


Edgar J. Thompson
Chair/Dean

Approved for the Graduate Council


David S. Chapman
Dean of The Graduate School

ABSTRACT

It was the purpose of this study to answer specific research questions about the work of three highly effective tuba studio teachers: R. Winston Morris, Harvey G. Phillips, and Arnold Jacobs. The study was carried out in two phases.

In Phase I, a case study for each teacher was created. These case studies were based on reviews of published materials, interviews with teachers, interviews with select students and through the examination and evaluation of live, videotaped, and audiotaped teaching sessions conducted by each teacher. Four research questions guided each case study: What is the underlying teaching philosophy? What is the basis of that philosophy? What are specific practices, procedures, and ways of interacting with students which facilitate the remarkable results this teacher is known for? What principles emerge from the master teacher's teaching practices? A set of principles emerged from each case study and was presented as a tuba teaching paradigm.

In Phase II principles illuminated in each case study were compared, contrasted, and examined in relation to each other, resulting in the creation of the Global Paradigm for Highly Effective Tuba Studio Teaching. Research questions were as follows: What principles are shared by teachers? What principles are unique to teachers? What accounts for the uniqueness?

Findings for Phase I appear in the cases studies in detail and are summarized in the Conclusion chapter. Findings for Phase II contribute to the creation of the global paradigm. Principles of the global paradigm, principles of effective teaching found in education literature, and related concepts in music education were compared and discussed.

It was concluded that Morris, Phillips, and Jacobs employ many of the same principles that most effective teachers use. Some principles set forth in the global paradigm, however, were related to the music education concepts of “comprehensive musicianship” and “mental practice.” Jacobs’ paradigm was found to have more unique principles when compared to Morris and Phillips. Two principles were found to be unique to the global paradigm when compared with other principles of effective teaching. They were Arnold Jacobs’ principle of playing various roles in the studio and Harvey Phillips’ principle of teaching students to be promoters of the tuba.

A review of the 21 principles of the global paradigm revealed that each principle fits logically into one of three spheres of competence in tuba studio teaching: interpersonal, musical, and pedagogical. Each sphere of competence was discussed as a comprehensive model based on a composite view of the three master teachers. Possible further research in the field of studio teaching is proposed.

**To my wife, Monica, my two sons, Joseph and Bruce, and my parents,
Robert and Mary Lou Call, who loved and supported me through
this project. Also to my teachers: Earl Swenson, Glenn Fifield,
Alvin Wardle, Charlie Eckenrode, Carson
Sharp, and David Kuehn.**

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CHAPTER 1

INTRODUCTION

Statement of the Problem

The state of student tuba playing of the 1960s is summed up by David Kuehn (1966), “We expect less from tuba players—and we get it” (p. 66). The subsequent 30 years have witnessed great strides in the quality of tuba playing and teaching in the United States (Phillips, 1995). This has been accomplished through the leadership of a handful of artist-teachers who have redefined the pedagogy, artistic expectations, and teaching standards for the instrument (Leeka, 1977; Self, 1978).

Such advancements have contributed to the success of numerous young performing artist-teachers of tuba (Nelson, 1996). More universities and colleges now have capable full-time faculty tuba specialists (Call, 1996b; Nelson, 1996). In addition, abundant solo tuba recordings as well as books and articles on tuba performance techniques have been published in recent years (Davis, 1996; Fischer, 1996).

It is documented that many of today’s young professional tubists who have won coveted orchestra, military band, and university teaching positions have studied with one or more of a handful of tuba studio teachers (Nelson, 1996). These teachers’ successful teaching is based on

more than simply “what” they teach. Their personal qualities, organizational techniques, and teaching strategies all contribute to their success. Such qualities and strategies are often not obvious and normal observation may not reveal the more hidden skills of a great teacher. Through established methods of qualitative research, including detailed observation, interviewing, and reflective analysis, these aspects of master tuba teachers are identified (Cozby, 1987; Seidman, 1991; Stake, 1978).

Purpose of the Study

A number of highly successful tuba studio teachers have pioneered teaching approaches and materials (Bobo, 1988; Frederiksen, 1996; Phillips, 1995). Although they exhibit varying results, from good to astounding, their methods and approaches are quite different. Comprehensive case studies of highly effective tuba teaching and published paradigms for effective tuba teaching do not exist (Brewer, 1991; Fischer, 1996; Stees, 1996).

It is the purpose of this study to answer specific research questions about the work of three highly effective tuba studio teachers: R. Winston Morris, Harvey G. Phillips, and Arnold Jacobs. It is carried out through the creation of three comprehensive case studies of highly effective tuba studio teachers, three tuba teaching paradigms based on the case studies, and a global paradigm for highly effective tuba studio teaching based on the combined work of R. Winston Morris, Harvey G. Phillips, and Arnold Jacobs. The global paradigm is created through the combination and

analysis of the three individual case studies. In addition, the individual case studies of Morris, Phillips, and Jacobs stand alone as detailed illustrations of how each exhibits effective teaching.

Background

First patented in 1835, the tuba is relatively new to the art of music. It did not become a regular member of the symphony orchestra until the second half of the 19th century (Beven, 1978; Marzan, 1972). Because of its youth, the instrument's role in various kinds of ensembles, its literature, and its pedagogy are not so well defined as those of other instruments (Phillips & Fowler, 1976a).

A vast majority of instructional materials for tuba from the 19th and early 20th centuries were reworkings of methods and études for other instruments (Young & Graves, 1996). Although one may draw generalizations between the performance techniques and pedagogical principles of all brass instruments, the tuba is simply not just a larger version of the cornet. First, effective tuba performance requires more control of specific air flow rates and air volume not essential in the performance of other brass instruments. Second, there are extremes in the openness of the oral cavity based on register. Third, inherent articulation problems due to the openness of the oral cavity point to the need for specialized training. In order for talented tuba students to achieve their artistic potential, these problems must be appropriately addressed (Frederiksen, 1996; Phillips & Winkle, 1992; Watson, 1982).

Pedagogical principles and materials for tuba were pioneered by American tubist, William J. Bell. He is considered by many to be the first important artist-teacher of the tuba in the United States (Marzan, 1972; Phillips, 1988). Beginning with his *Foundation to Tuba and Sousaphone Playing* in 1931, Bell began publishing method materials and educational solo literature which were a major improvement to the small body of tuba literature. Bell's popular recordings and performances of Hupfield's *When Yuba Plays the Rhumba on the Tuba* (1931) and Kleinsinger's *Tubby the Tuba* (1945) introduced the tuba as a solo instrument in light classical and popular music (H. Phillips personal communication, November 1996). The publication of Bell's transcriptions of Bach's *Air and Bourée*, and Beethoven's *Variations on the Theme of "Judas Maccabeus,"* both published in 1937, elevated the quality of tuba solo literature to new heights (Morris, 1973b).

The 1950s saw the publication of the first great solo works for tuba by major composers. Paul Hindemith's 1954 *Sonate* and Ralph Vaughan Williams' 1955 *Concerto for Bass Tuba and Orchestra* set the stage for the serious study of the tuba as a solo instrument (Marzan, 1972) and it was Bell who introduced these works to American audiences and tuba students (H. Phillips personal communication, November 1996).

The three tuba artist-teachers selected for this study followed Bell and emerged in the mid-20th century as important performers, leaders, and teachers. Central to establishing what has been called the golden age of the tuba are R. Winston Morris, Harvey G. Phillips, and Arnold Jacobs.

R. Winston Morris studied with William Bell and is a prolific author of books and articles on tuba literature. He has been a major innovator in creating tuba performance opportunities as well as opportunities in teaching. He is the driving force behind the development of the modern tuba-euphonium ensemble (McAdams, 1996c). As professor of tuba at Tennessee Technological University, Morris has produced numerous outstanding artist-teachers (Nelson, 1996).

No individual is more responsible for the development of modern solo tuba literature than Harvey G. Phillips. A student and protégé of William Bell, Phillips has commissioned and inspired composers to write for solo tuba. As New York City's leading tubist and teacher in the 1950s and 1960s, and later as Distinguished Professor of Tuba at Indiana University, Phillips has taught hundreds of tubists who have advanced to significant musical careers (Balliett, 1994; Nelson, 1996). Through his organizational skills, leadership, and philosophy, he has had a major effect on the growth of TUBA, the Tubists' Universal Brotherhood Association (Balliett, 1994).

As principal tuba with the Chicago Symphony for over 40 years, Arnold Jacobs is considered by many to be the greatest orchestral tuba player of his generation (Stewart, 1987). He is also arguably the greatest brass pedagogue of the 20th century, having taught more leading professional brass instrumentalists than any other single teacher (Rohner, 1994; Stewart, 1987).

Study Overview

The primary focus of the present study is on how three master tuba teachers teach. Because some aspects of tuba pedagogy are yet to be standardized, I believe that it is also important to include some of the substance of what is taught. Such substance includes specific approaches to developing effective performance techniques such as tonguing, breathing and mouthpiece buzzing, as well as methods and materials used to achieve such goals. These aspects are discussed in individual case studies and in the construction of individual tuba studio teaching paradigms.

This is a qualitative research study. The research questions are investigated using carefully gathered data through interviews and observation of teaching. Findings are validated through methods of triangulation consistent with qualitative research practices (Seidman, 1991). Through analyzing case studies of each master teacher, I constructed a tuba studio teaching paradigm for each (Becker, 1990). A global paradigm for highly effective tuba studio teaching is constructed by combining and distilling the three paradigms. The global paradigm is then viewed in relationship to established principles of effective teaching from education literature.

Definitions

Master Teacher

Hundreds of teachers give private tuba lessons, but those who ascend to and retain positions at the major schools of music and conservatories are

usually some of the most accomplished teachers. Of that select group, only a handful of master teachers have proven themselves by the quality of students that they have attracted, passed through their studios, and launched into successful careers in performance and teaching. These individuals are well known and recognized because of their reputations as successful teachers (Nelson, 1996).

Studio Teacher

A studio teacher teaches private lessons, group lessons, master classes, or all three on a regular basis. Advanced instrumental music instruction in the United States is primarily carried out by studio teachers (National Association of Schools of Music, 1997; Tanner, 1970a).

Studio

Among professional musicians and university teachers, the term “studio” means more than just the room where lessons are taught. Studio also refers to the collection of students playing like or related instruments who are taught by a principal teacher. In larger studios, a principal teacher may have one or more teaching assistants who handle some of the undergraduate teaching. Depending on the scope and size of a studio, there may be just one instrument taught (tuba studio) or two instruments taught (tuba- euphonium studio). Most larger universities employ one specialist who teaches both tuba and euphonium (Call, 1996b; Nelson, 1996).

Private Lesson

In the United States, the private lesson is the method through which most advanced instrumental music instruction is conducted. The standards established for graduation from curricula leading to baccalaureate degrees in music by the National Association of Schools of Music (1997) include “continued practice in creating, interpreting, presenting, analyzing, and evaluating music . . . acquiring capacities to integrate musical knowledge and skills . . . and accumulating capabilities for independent work in the music professions” (p. 75). In most colleges, universities, and conservatories, each student is taught a private lesson once a week. Depending on the studio policy, the lessons may last 30, 45 or 60 min. (Tanner, 1970a). By contrast, the European approach to advanced instruction makes more use of group lessons and more frequent master classes (H. Phillips, personal communication, November 1996).

Master Class

The regularly scheduled master class is a part of most university or conservatory instrumental music performance curricula. Sometimes referred to as “performance classes,” master classes are usually scheduled weekly, but sometimes are scheduled semimonthly or monthly. Regular master classes are usually conducted by the principal teacher of the studio. Although variations are common, the standard format provides for regular opportunities for students to perform solos and excerpts for other members of the studio, teaching assistants, and the principal teacher (H. Phillips,

personal communication, November 1996). Performing students are coached and critiqued by principal teachers. Often teaching assistants and other members of the studio are invited to give comments and suggestions.

Such settings benefit the student who performs. Of equal importance is the benefit to all participants in the studio; watching a master teacher solve performance problems and teach musical interpretation gives all students present opportunities for significant vicarious learning. In summary, students and teaching assistants learn how to teach while watching a master teacher in action.

Case Study

A case study constructs a description of an individual. In this study it has elements of field observation study combined with qualitative interviews and library research. According to Cozby, case studies are valuable because they can bring to the fore conditions that are “rare or unusual and thus not easily studied in any other way” (1987, pp. 54-55). Insights gained also may lead to the construction of hypotheses which may be tested using other methods.

Qualitative Interview

Interviews are conducted in this study for the purpose of finding meaning in the lives of tuba teachers and tuba students. Participants are asked to tell their stories. Seidman states that through telling stories, people select details from their experiences through stream of consciousness. The process of selecting details, reflecting on them, ordering them, and thus

deriving sense from them makes this process a “meaning-making experience” (1991, p. 1). Further, interviews can reveal teaching philosophy, principles practiced in teaching as well as thoughts on teaching procedure.

Principles of Effective Teaching

Textbooks and published articles on effective teaching often catalogue lists of the qualities of good teaching and principles that good teachers follow. Lists of principles of effective teaching compiled from various sources are presented in Chapter 7 as a standard to which teaching exhibited in cases studies is compared to.

Qualities of Effective Teachers

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Philosophy of Teaching

Mautner (1996) writes that “philosophy of . . .” is widespread, ambiguous, and denotes either a “field of inquiry, or a theory” (p. 320). The term, “philosophy of law,” . . . can denote a set of legal principles (probably on the basis of a rational theory of justice) or a study of the nature of laws

and legal systems.” Philosophy of tuba teaching in this study is a set of principles that guides a tuba teacher’s professional thoughts and actions.

Tuba Studio Teaching Paradigm

Originally a scientific term of the Greeks, paradigm today means a “model, theory, perception, assumption, or frame of reference.” It is the way we see the world in terms of “perceiving, understanding, interpreting” (Covey, 1989, p. 23). Tuba studio teaching paradigm is a term I have developed to describe a teaching-learning model that is a list of principles that emerge from the study of the philosophies, practices, and procedures of three highly effective tuba studio teachers.

Global Paradigm for Highly Effective Tuba Studio Teaching

Global paradigm is the term that I developed to describe the combination of the individual tuba studio teaching paradigms that emerged from each case study. It may be thought of as a master plan of teaching elements shown to be effective in tuba studio teaching.

Research Questions

In Phase I of the study, I constructed case studies of three master teachers and developed a tuba studio teaching paradigm for each. Research questions that guided the case studies follow a sequence of philosophy, practice, principle, and paradigm. Thinking (philosophy) leads to action (practices and procedures) and patterns of observed actions are recognized

as principles. Combined principles are seen as a paradigm. Research questions in individual case studies of teachers are as follows:

1. What is the underlying teaching philosophy?
2. What is the basis of that philosophy?
3. What are specific practices, procedures, and ways of interacting with students that facilitate the remarkable results these teachers are known for?
4. What principles emerge from each master teacher's teaching practices?

Phase II of the study compares and contrasts the principles set forth in each tuba teaching paradigm. The result is the Global Paradigm for Highly Effective Tuba Studio Teaching. Research questions are as follows:

1. What principles are shared by teachers?
2. What principles are unique or conspicuous to teachers?
3. What accounts for the uniqueness or conspicuousness?

Preview of Dissertation

This dissertation consists of seven chapters and references cited. Chapter 1 presents the research problem. Chapter 2 is a literature review that reports on research in brass and tuba teaching. Chapter 3 sets forth the methodology of the study. Chapters 4, 5, and 6 are case studies with the construction of accompanying tuba studio teaching paradigms based on the work of R. Winston Morris, Harvey G. Phillips, and Arnold Jacobs respectively. Chapter 7 is an in-depth exploration of principles illuminated

by this research and the resulting construction of the Global Paradigm for Highly Effective Tuba Studio Teaching. Principles of the Global Paradigm are discussed in relation to established principles of effective teaching. Chapter 7 also calls for further research in the field.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

This literature review begins with a brief history of brass and tuba pedagogy. Following the discussion of historical material, recent trends in tuba pedagogy are examined. Finally, there is a discussion of qualitative studies in brass and tuba teaching. Most instructional materials and literature on brass teaching deal primarily with what is taught more than how brass teaching is carried out. As published materials and information about individual teachers are discussed, teaching procedure is the principal focus.

History of Brass Pedagogy

Brass instruments found their way into Western art music through musicians who acquired their performance skills within trade guilds, families, and the military. Beginning in medieval Europe, brass instrument playing was considered to be a trade more than an art. In many European cities and towns, it was the function of brass instrumentalists to provide signals from city watchtowers (Smith, 1972). By the late 16th and early 17th centuries, the music played by these musicians became more sophisticated. In Germany, the resulting body of brass music, called

turmblasen, or tower music, was created and played by town musicians called stadtpfeifer. Much of this music is performed today by modern brass ensembles (Rasmussen, 1960).

Stadtpfeifers, literally, town pipers, were the most privileged group of brass musicians of their time, yet were considered to be uncultured in the eyes of the aristocracy who employed them. Stadtpfeifers were expected to play as many as six different instruments including brass, winds, and strings. They provided music for all kinds of noble and community events. In the context of their professional society, stadtpfeifers initiated apprentices in the moral and social obligations of the guild and so were required to be mentors of proper conduct as well as teachers of performance technique (Rasmussen, 1956). As in many trades, knowledge and skill were often passed on within families, father to son. Some families produced several generations of prominent brass players (Sorenson, 1987).

Trumpeters and drummers were employed by the military as communications specialists, providing tactical signals on the battlefield. Because of the secrecy of their work, close-knit guilds provided training for these musicians and little is known about how they were taught. As trumpets and kettledrums were added to orchestra performances, their parts were composed to sound reminiscent of the battlefield.

Most trumpeters continued to be trained in the military fashion through the 17th and 18th centuries. However, a class of trumpeters who specialized in a high, florid style developed the ability to perform soloistically. They inspired Bach, Handel, Purcell, and others to compose

works that featured prominent high trumpet parts. These trumpeters also received their training in elitist guilds, and some of their instructional materials have survived (Smith, 1972).

With the first known brass instrument tutors, a record of a fledgling pedagogy began to emerge. Girolamo Fantini (fl. 1631-42) was principal trumpeter to Ferdinando II, the Grand Duke of Tuscany. His major enterprise and sole legacy to future generations was *Modo per imparare a sonare di tromba*, a trumpet tutor published in 1638. This, the first known surviving printed brass instrument instruction manual, offered a departure from the ubiquitous military style. Fantini's work emphasized artistic aspects of trumpet performance technique (Merideth, 1985).

Speer revealed substantial information on trumpet performance of his time in his 1687 *Instruction in the Musical Art*. This volume contains information on teaching style and technique. Smith quotes Speer describing the way that "true teachers" deal with students who puff their cheeks. They "are accustomed to box the ears of their pupils to cure them of this bad habit" (1972, p. 390).

The most significant instruction on trumpet playing of the 18th century was Altenburg's 1795 treatise, *Versuch einer Anleitung zur heroisch-musikalischen Trompeter-und Pauker-Kunst*. Smith's complete translation of the title is a comprehensive description of the work: "Attempt at an Introduction to the Heroic-Musical Art of the Trumpeters and Kettle-Drummers, Historically, Theoretically, and Practically Described and Explained with Examples, to the Better Prospering of the Same" (p. 390).

The works of subsequent brass pedagogues published in the 19th century shed light on performance practice, yet little is known about the manner in which brass teachers taught. Jean Babtiste Arban's *Complete Conservatory Method*, first published in 1894, gives the most detailed written instruction information on brass performance to that time including all aspects of brass performance technique. Arban was one of the greatest cornet soloists of his time, as well as a composer, conductor, and celebrated teacher. Perhaps much of Arban's success as a teacher was due, in part, to his personality. Jule Rivière reminisced that "this clever cornet player was also a particularly affable man, and instances of his good nature were constantly occurring" (Riviere, 1996, p. 1).

History of Tuba Pedagogy

The earliest instructional material for the serpent, an ancestor of the tuba, was Beaugeois's 1827 *Nouvelle méthode de plainchant, de musique et de serpent*. Various tutors for ophicliede, and the newly invented saxhorn followed such as Cornette, ca. 1835; Richault, ca. 1840; Caussin, ca. 1840; Garnier, ca. 1845–1850; Dodworth, c. 1855; Bayley, 1860; Sax, n.d.; Kappey, ca. 1874. Most were little more than fingering charts and simple exercises with a minimum of instruction information.

The opening of the 20th century saw a flood of published tuba tutors. Kietzer (1900) published his *Schule fur Tuba* in Germany; it had more instructional material than its predecessors because the book was designed to be a self-instruction manual for all kinds of bass brass instruments

including tubas in Bb, C, Helicon, and the Sousaphone. Numerous tuba instruction books were published in the United States (Atkinson, 1904; Langley, c.1890; deVille, 1905), yet Arban's cornet method was the book of choice for many leading tuba players and teachers at that time (Young, 1996). Both Harvey Phillips and Winston Morris reported that their first lessons with Bell included studies from Arban, with special attention to clean attacks and accurate rhythm (personal communication, November 1996; personal communication, February 1998).

Bell's 1931 *Foundations to Tuba and Sousaphone Playing* marks the first important method book written by an established performing artist of the tuba. Other methods written by well-known and respected tubists include *The Geib Method for Tuba* (1941) and the *Kuhn-Cimera Method for Tuba* (1941). Fred Gieb was tubist for Radio City Music Hall and the New York Symphony in the 1930s and 1940s, while John Kuhn, "The Chief," was former first chair tuba with the Sousa Band (Nelson, 1996). Although these books have some pedagogical information, teaching technique is not mentioned.

Apart from various editions of Arban, most of the standard étude and study material used by tuba teachers today became available beginning in the late 1940s, continuing through the 1960s. Materials written by low brass professors of the Moscow Conservatory, including Blazhevich (1965) and Vasiliev (n.d), were published in the United States by Robert King Music of North Easton, Massachusetts. Two other widely used tuba books published during this period are Tyrell's (1948) *Advanced Studies for BBb*

Bass and Rusch and Jacobs' (1963) Advanced Studies For Tuba . Bell (1970), edited and created additional pedagogical material specifically for tuba in his *Arban for all Tubas*. Along with Arban studies, this volume included Bell's own extensive scale studies and his editions of Blazhevich studies, Bach cello suites, and Marcello sonatas. The book has more written instructions on performance technique than previous tuba books.

Recent Research in Tuba Pedagogy

Literature

Various lists of solos, method books, and études appeared in music education magazines such as *The Instrumentalist* beginning in the 1950s (Conner, 1954; Rasmussen, 1954). State music education organizations also published lists as well as the Music Educators National Conference (MENC). In 1972, a comprehensive list of solo literature was compiled cooperatively by MENC and the National Association of College Wind and Percussion Instructor (n.a.). A more inclusive list of tuba materials was published in Rasmussen's 1968 *A Teacher's Guide to the Literature of Brass Instruments*.

Winston Morris has been an author or editor for most books on tuba literature since 1967. With William Bell, he produced *Encyclopedia of Literature for the Tuba* in 1967, which presented the first comprehensive annotated lists of compositions and materials for tuba. Marzan (1972) wrote a similar book which focused on 20th-century compositions. Morris

(1973b) updated his earlier collaboration with Bell, resulting in the *Tuba Music Guide*.

Dissertations

The 1970s, 1980s, and 1990s saw publication of several dissertations on tuba literature, most of them with annotated lists of materials and often including pedagogical considerations. They dealt with method books (Sorenson, 1973), études (Brewer, 1991), unaccompanied solo works (Funderburk, 1992), works for solo tuba and band (Sparks, 1990), French solo literature (Thompson, 1991), 20th-century ballet repertoires (Easter, 1970), works for tuba and electronic prepared tape (Holmes, 1985), and avant-garde repertoire (Randolph, 1978).

Other dissertations focused on the music of specific composers and national styles, with regard to tuba performance and performance preparation. Schultz (1980) studied two solo tuba traditions characterized by the 1954 work of Vaughan Williams and the 1957 work of Hindemith in. Young (1980) conducted performance analysis of the tuba parts from symphonic works of Bruckner and Mahler. Smith (1979) reported on his study of the symphonic poems of Richard Strauss. Brandon (1974) examined the use of tuba in orchestral compositions of Stravinsky, Prokofiev, and Shostakovich, and Kuehn (1974) reported on use of the tuba in Wagner's operas and music dramas.

Beyond tuba scholarship a number of dissertations on brass pedagogy employing qualitative research have emerged in recent years. They include

studies on French horn teaching, bass trombone study, and a survey of knowledge about tuba pedagogy.

Howe (1966) conducted a qualitative study of literature, material, opinions, and practices related to French horn teaching. He studied the pedagogical aspects of horn playing procuring input from a variety of brass players, teachers, as well as capable students. Studying the musico-technical aspects of horn playing from J. S. Bach through contemporary composers, he concluded that the historical “cor-basse” tradition is appropriate for the development of modern horn players. The perpetuation of the “cor-basse” tradition provides for more low register was appropriated for 2nd through 4th year students. He concluded that “deep musical experience” found in major works is better study material than that in existing études and methods and made recommendations for practice techniques and approaches for teaching.

Donald Bauer (1987) conducted a study on bass trombone playing and teaching in an attempt to help students competently deal with orchestral bass trombone performance. The goals of the project were to “document techniques currently in use by selected bass trombonists in major American symphony orchestras, to identify common pedagogical trends, and to trace, when possible, the origins of these trends and techniques” (p. 23557A). He interviewed bass trombonists in major symphony orchestras in the United States. His findings suggested the existence of two schools of orchestral performance and pedagogy: a Chicago

school and a New York school. Further research is necessary to confirm the actual existence of these two schools.

McAdams (1988) conducted an extensive survey of instrumental music educators in an attempt to discover the extent of their understanding in tuba pedagogy. The majority of music educators surveyed did not have a working knowledge of specific pedagogical considerations associated with the tuba. He concluded that there was a significant need for teacher training with regard to specific aspects of tuba pedagogy which are not necessarily consistent with existing practice in overall brass pedagogy.

Other Qualitative Studies in Brass Pedagogy

Paul Tanner (1970a, 1970b, 1970c) researched the state of trombone studio teaching in the United States, reporting on a research trip he took in the spring of 1969. He drove 15,000 miles and visited over 100 colleges and conservatories throughout the United States. His goal was to “find out exactly how trombone is being taught in higher education” (1970a, p. 346). His findings dealt with both the philosophical and the practical.

He classified three categories of teachers. The first had been successful over a number of years and had systematized their teaching in a way that worked best for them. They were open to new ideas that would create improvement in their students. The second group were young, less experienced performer-teachers who had yet to stabilize their methods and were anxious to learn “approaches, method, systems, concepts, or exercises that are being successfully utilized by others” (1970a, p. 347). The third

group had studied with established teachers and had a tendency to “hand down the ‘word’ given to them as though it were gospel” (1970a, p. 347). Tanner found that diverse ways of teaching fundamentals such as tone production and articulation achieved good results and that there was really no national consensus of trombone pedagogy in the United States.

Bellamah (1976) published results of a survey of those he considered to be the greatest teachers and brass performers in the United States. Well-known tuba teachers who took part in this study included David L. Kuehn, Ronald Bishop, Walter Major, E. E. Moore, Abe Torchinsky, and Harold Walters. Most of the study was concerned with technical aspects of playing such as embouchure, warmups, and articulation. Several elements of Bellamah’s work are relevant to the present study including his findings about practice routines, teachers playing along with students during lessons, critical analysis of current brass teaching, and perceived weaknesses of present-day brass players.

Bellamah reported that 88% of respondents favor a rigid practice routine and that most brass authorities set up routines for their students. Respondents also emphasize the value of using a tape recorder in practice sessions.

With regard to teachers playing with students during lessons, 25% recommend very little playing, 55% suggest some playing at every lesson, and 20% state that the teacher should play as much as possible. Of responses from tubists, Ronald Bishop recommends just enough for

demonstration of tone and to provide duet experience where E. E. Moore suggests a considerable amount of playing to demonstrate methodology.

Respondents' critical analysis of brass teaching suggests a need for total musicianship training, more emphasis on breathing and tone production, as well as a need for more ensemble experience such as duet playing during lessons. It was also pointed out that there was too little concern about the individual needs of each student.

In discussion of obvious weaknesses of current brass players, most respondents comment on lack of musical expression and overemphasis of technical achievement. Ron Bishop states that too many students are being trained for jobs that do not exist and that only exceptional students should be trained. Abe Torchinsky was encouraged with the fact that brass players are better than ever.

Books on Brass Pedagogy

Books on brass pedagogy designed as textbooks for music education courses usually included chapters on tuba (Brown, 1981; Hunt & Bachelder, 1994; Mueller, 1968; Whitener, 1990). The first comprehensive book on tuba playing that was not a method book was *The Tuba Handbook* by Canadian tubist, Kent J. Mason (1977). Others that followed included books by Griffiths (1980), Little and Ployhar (1984), Cummings, 1984), as well as Phillips and Winkle (1992).

To date, the most significant single volume devoted to the tuba is *The Tuba Source Book* (1996). Compiled and edited by Morris with the

assistance of Edward R. Goldstein, this work is the most comprehensive collection of reference material ever published for the tuba (Watson, 1996). It includes 19 chapters compiled by eight editors with contributions by 23 authors with the assistance of 40 international consultants, who are mostly professional tuba artists native to the countries they represent. *The Source Book* contains chapters on literature for tuba and keyboard, tuba and band, tuba and orchestra, tuba in mixed ensemble, unaccompanied tuba, tuba and tape, multiple tubas, methods, studies and orchestral excerpts. Other contents include a discography, a bibliography, biographical sketches of professional tubists, articles on doubling, the tuba in jazz, and the freelance tubist. Also included are guidelines for composers, orchestrators, and arrangers as well as information on equipment.

There is a significant quantity of pedagogical information in *The Tuba Source Book*. In it Troiano compiled an annotated list of recommended basic repertoire for the high school tuba student. Most of the study materials recommended are consistent with existing practice by informed teachers of tuba. Although the materials listed are a blend of old and new (Bell, 1931; Adler, 1978), the core of material is that which was written or came to light in the 1950s and 1960s. This chapter includes étude books by Tyrell and Rusch and Jacobs, as well as tuba editions of étude transcriptions for horn and voice. Troiano's work also includes a comprehensive graded list of solo works for tuba.

Also in *The Tuba Source Book*, Perantoni and Dunn report on university level tuba instruction material and compile a course of study for

freshman through senior years. This work includes études, solos, and excerpts. Again, materials published in the 1950s and 1960s are at the core of the études and study materials. The Russian material is expanded to include King's edition of Grigoriev études. Although editions for tuba were available for Arban, Clarke, and Charlier, Perantoni and Dunn chose to include original editions of these trumpet studies. They also include original editions of trombone studies by Rochut and Blume, as well as horn études by Pottag and Reynolds. Also this study offers concise lists of solo literature and orchestra excerpts.

Qualitative Studies in Brass and Tuba Pedagogy Articles

Informal qualitative studies on brass and tuba teaching began to appear in the 1950s in music magazines such as *The Instrumentalist*, *The School Musician*, and others. These articles were usually profiles of prominent brass performers and teachers, often written by students or former students of the teachers profiled. Those who had significant profiles of their teaching appear in these sources include Anton Horner (n.a., 1951), Leonard Falcone (Behrend, 1986; Bowman, 1979), and Phillip Farkas (Neidig, 1979).

Creation of professional organizations such as the International Horn Society, Trumpet Guild, and International Trombone Association, assured that brass pedagogy research had more widespread dissemination. Prominent brass teachers showcased in these publications include horn

teacher Reginald Morley-Pegge (Bate, 1972) and trombone teacher John Coffey (Appert, 1986) and many others.

Tubists Universal Brotherhood Association

With the organization of the Tubists' Universal Brotherhood Association (TUBA) in 1970, came the publication of the *TUBA Newsletter* which later became the *TUBA Journal*. Numerous articles were published which shed light on the teaching of the three teachers who are the focus of this study. Other important tuba teachers featured in articles over the next 20 years were August Helleberg, Sr. (Murrow, 1982), William Rose (Frazier and Frazier, 1990), and John Fletcher (Jones, 1988).

Books on Tuba Pedagogy

The only tuba teacher who has had complete books written specifically about his pedagogical procedures is Arnold Jacobs. In *Arnold Jacobs: The Legacy of a Master*, Dee M. Stewart (1987) chronicled the career of this celebrated teacher, compiled previously published articles by and about Jacobs, and included individual articles by Jacobs's students written specifically for the book.

A more ambitious volume about Jacobs was written and published by Brian Fredrickson in 1996. In *Arnold Jacobs: Song and Wind*, Fredrickson, although covering much of the same kind of material in Stewart's book, provides more specific information about Jacobs's pedagogy from Jacobs's own point of view. It also covers biographical material, information about the Chicago Symphony and talks about Jacobs's legendary York tuba.

CHAPTER 3

METHOD

This study was carried out through the creation of three case studies, three tuba studio teaching paradigms, and a global paradigm. First, each case study was assembled by examining published material related to and by each of the master teachers studied, through qualitative interviews and observations of teaching. Second, each case study was analyzed and distilled to a tuba studio teaching paradigm based on the work of the teacher who was the focus of the case study. Finally, a global paradigm for highly effective tuba studio teaching was created based on the contributions of Arnold Jacobs, Harvey G. Phillips, and R. Winston Morris.

Study of Published Material

A comprehensive study of written material including books, articles, musical compositions, arrangements, and recordings made by and about each teacher was conducted. The research questions guided the study and analysis of this material as it is included in case studies.

Qualitative Interviews With Teachers

Two of the 3 teachers participated in a series of in-depth, phenomenological interviews following the model of I. E. Seidman (1991). I scheduled three 90-min. sessions with both Winston Morris and Harvey

Phillips during research visits. Each interview was semistructured and consisted of a few questions at most. Participants were asked to elaborate on certain responses until the relevant topics were adequately covered.

In the case of Arnold Jacobs, personal interviews were not possible due to his poor health. Fortunately, two complete books and many articles about Jacobs have been published. In addition, numerous published interviews, transcripts of lectures, and articles by Arnold Jacobs exist which provided substantial background information. In interviews with Morris and Phillips, questions were modeled after those proposed by Seidman (1991).

Interview 1 puts the participant's experience in context by asking him to talk about his beginnings as a tuba teacher as well as events which led him to his current position. The question was: "How did you come to be a teacher of tuba?" Follow-up questions led the participant to the illumination of subject areas pertaining to the research questions.

Interview 2 deals with the details of experience. The purpose is to understand particulars of the participants' experiences in tuba studio teaching. The initial question was: "Will you describe your current work as a tuba studio teacher?" Follow-up questions asked him to talk about relationships with students, mentor, other faculty, administrators, and the wider community. In addition, each was asked to reconstruct a day which reasonably detailed every waking hour. Responses to these questions were valuable in relating to the understanding of details with regard to teaching relationships and teaching activities.

Interview 3 deals with reflection on the meaning of the teacher's experience. Through reflection on one's life's work, participants offer more information about personal philosophy than in responses to the previous questions. Questions are meant to elicit answers about the participant's personal connection between his work and his life. The question was: "Given what you have said about your life before you became a tuba teacher and given what you have said about your work now, how do you understand tuba teaching in your life? What sense does it make to you?" Follow-up questions pertained mostly to philosophical issues.

Qualitative Interviews With Current and Past Students

Six students of each teacher were identified and interviewed. Four current and 3 past students of Morris participated. Since both Phillips and Jacobs are now retired from regularly scheduled studio teaching, 6 past students of each were selected and agreed to interviews. Each interview lasted about 30 min. and consisted of seven basic questions:

1. What is your present situation pertaining to tuba performance and teaching?
2. What have been the length and frequency of study with the teacher?
3. How has this teacher helped you meet your goals?
4. Describe your first lesson with the teacher.
5. Describe your last lesson with the teacher.

6. Describe a typical lesson with the teacher. What was the substance, sequence, and types of concepts covered?

7. Is there anything else you would like to add?

After each question was answered, a few follow-up questions were used to help fill out answers to the research questions.

Observations of Teaching

I observed both live and recorded teaching sessions. Private lessons given by Morris and Phillips were examined and videotaped for review. Master classes were also observed and videotaped for review. Detailed written descriptions of teaching sessions were constructed with special attention to clues and answers to the research questions.

In the case of Arnold Jacobs, opportunities for personal observation were not possible. Fortunately, dozens of hours of Arnold Jacobs master classes have been preserved on videotape at the Marjorie I. Mitchell Multimedia Center at Northwestern University in Evanston, Illinois (Jacobs, 1987-1991). I observed all of these and other videotapes belonging to Richard Frazier at the University of Oregon, transcribing portions of select teaching sessions. It is believed that these tapes reveal the essence of his teaching style and teaching content.

Along with the videotapes procured during research visits, other video and audio tapes of lessons and master classes were collected for study and analysis. Sections of some tapes were transcribed. The research questions guided the study and analysis of this material.

Construction of Tuba Studio Teaching Paradigms

Out of each case study, a tuba studio teaching paradigm was constructed illuminating the most important teaching principles identified in each teacher. This was carried out by analyzing and reflecting on examples of teaching in light of the teacher's stated philosophy as well as practices and procedures reported by students and observed in teaching situations.

Construction of a Global Paradigm

Tuba studio teaching paradigms of each master teacher were compared, contrasted, and combined. Overriding principles are identified as the Global Paradigm for Highly Effective Tuba Studio Teaching. It is examined in light of identified principles of effective teaching from education literature. Recommendations for the implementation of principles from the Global Paradigm in tuba studio teaching are made. Recommendations for further research are also suggested.

CHAPTER 4

CASE STUDY: R. WINSTON MORRIS

Biographical Data

Overview

Winston Morris is a man of incredible energy and enthusiasm who loves music and sees every aspect of performing and teaching as a unique challenge. He was drawn to and pursued excellence with the tuba because of the challenges it presented. His search for challenging music to perform led to lifelong research in tuba literature, resulting in three major publications and numerous articles on the subject (Bell & Morris, 1967; Morris, 1973b; 1988; Morris & Goldstien, 1996). He produced the first tuba–euphonium symposia, launched and promoted the first highly successful university tuba–euphonium ensemble, pioneered the tuba as a jazz instrument, and became perhaps the most published author of tuba related materials ever. When in our interview I asked about each of these accomplishments, his answers always referred to the challenges involved in each situation (personal communication, February 1998).

Musician

Early Musical Training

Born in 1941, Morris grew up in a small town in South Carolina. Although his father was a pharmacist and his mother a nurse and they may have had medical aspirations for Morris, they supported his musical ambitions. He studied piano as a child and joined the school band playing trumpet in seventh grade. He enjoyed the challenge of learning new instruments—he often took home an unfamiliar instrument along with its beginning instruction book. After an evening of practice, he was able to play everything in the book. He played various instruments in the band and finally settled on tuba in the eighth grade. No one else in his school wanted to play the instrument, and he decided that he would take up the challenge. Morris reported that he had an affinity for the tuba from the beginning, especially after hearing the recording, *Bill Bell and His Tuba* (c. 1956). He participated in solo festivals and performed works such as *Solo Pomposo*, *His Majesty the Tuba*, and *Beelzebub*. Morris reports that from an early age, he was certain that he was going to have a career in music (personal communication, February 1998).

University Undergraduate Studies

Morris had no lessons on any brass instrument before enrolling at East Carolina University in Greenville, North Carolina. At the time, he considered this school to have one of the best music departments in the

Southeast United States. Majoring in music education, he studied tuba with James Parnell, whose specialty was horn.

Morris recalls Parnell as a “wonderful musician” and a “fine teacher.” Morris felt that he did not accomplish much as an undergraduate student and that he had floated along. “I just showed up and played the book. I threw some solos together.” There were no other serious tuba students and no challenge. He finished his undergraduate degree in 3 years by attending through summer sessions (personal communication, February 1998; McAdams, 1996b. p. 36).

Early Teaching Experience

While at East Carolina State, Morris helped to teach some of the other tuba students. After graduation, he accepted a public school teaching position in Martinsville, Virginia. Finding this kind of teaching lacking in challenges, he was ready for a change after 2 years.

While teaching in Martinsville, Morris played the tuba very little. He found, to his surprise, that he began to miss playing the instrument. Because he had been inspired by William Bell’s recording in his youth, Morris decided to seek out Bell to ask to be accepted as a student. His primary goal was to study tuba with Bell; when he found that Bell was teaching at Indiana University, a master’s degree became a secondary goal.

Graduate Studies

Master's degree: William Bell. Morris had first heard Bell on an LP record released in the mid-1950s. This record had inspired him to develop as a tuba player throughout high school. During his undergraduate studies, the record had become his model—in terms of tuba playing—and the only approach he was aware of.

Morris enrolled in graduate school at Indiana University in 1964. At the time, Bell had a studio of 18 to 20 tuba students, many of whom, such as Paul Krzywicki, Don Harry, and Ivan Hammond, were accomplished performers who later went on to distinguished careers.

Morris discovered that he had some “major catching up to do,” and that he “didn’t have a clue” about what he was getting into. Bell’s example of professionalism and high standards were assimilated quickly by Morris. He was motivated to spend 4 to 6 hr. in the practice room every day or “whatever it took” (personal communication, February 1998).

First lessons were geared to becoming acclimated to the CC tuba. Bell had all of his students “start from scratch” in the *Arban Method*, regardless of their performance level. Morris was introduced to Bell’s extensive scale routines that included arpeggios as well as extended range. Bell coordinated these scale studies with various kinds of excerpts. Students were expected to play a long involved scale study, then go directly to an excerpt. Other curriculum included orchestra excerpts as well as étude studies by Kopprasch, Rochut, and Lachman.

Morris stated emphatically that Bell was the biggest influence on his musical career. “No one was even remotely close” (McAdams, 1996b, p. 37). When describing his first lessons at Indiana, Morris said that when Bell picked up the tuba to demonstrate simple scale studies, there was “this incredibly gorgeous sound, . . . everything he did was just so musical” (personal communication, February 1998).

Morris especially admired Bell’s commitment to making music and his high musical standards. Bell put a lot of pressure on the students in the studio. He pushed them hard and was very harsh with the students. Bell’s mood or whim could dictate the direction of the lesson. “It drove people crazy” because students never knew what to expect. Many students could not handle the pressure and dropped out or changed majors.

Morris discovered very quickly that he needed to seize control of his lessons with Bell. He began to attend each lesson with a specific agenda. Morris brought studies, excerpts, and solo literature he wanted Bell to help him with. Morris reported that “this suited him [Bell] just fine.” In this way Morris was able to get more from his lessons with Bell than did many other students.

Although Bell could be a “tyrant” in the lesson, he was a “pussy cat” and a “party animal” outside of his studio. Morris struck up a deep personal and professional friendship which led to collaboration on professional projects. The most notable was the publication of *Encyclopedia of Literature for the Tuba* in 1967.

Morris completed a Master of Music in Tuba Performance in 1 year and 1 semester. He accepted a teaching position at Mansfield State College in Pennsylvania. Because within 6 months or so the job description for his position changed to include marching band responsibilities for the following year, Morris choose to return to Indiana to pursue another postgraduate degree.

Doctoral: Farkas, Adams, and Van Haney. In the fall of 1966, Morris began a course of study in brass pedagogy with the goal of earning a Doctor of Music degree in brass pedagogy. His intellectual curiosity led him to seek answers about brass performance technique and pedagogy. He wanted to explore all aspects of brass playing

from the highest note on the piccolo trumpet to the lowest note on the tuba. Is there a continuum there? What are the similarities? Is there anything different? . . . What is there about the trumpet, the French horn and the trombone that could help my tuba playing and help me teach the tuba? (personal communication, February 1998)

He studied horn with Phillip Farkas, trumpet with Bill Adams, and trombone with Lewis Van Haney. (He had taken private lessons from each of them in his master's program the year before.) As a doctoral student, he studied brass pedagogy with each and observed many of their lessons. Morris reported that he learned much from each of these teachers.

He observed in Farkas a high degree of organization. Not only was his studio immaculate, but his approach to teaching demonstrated high levels of forethought and design. Morris observed and learned from Farkas's structured approach, ways of utilizing études, solos, and other literature. As a former trumpet player himself, Morris enjoyed studying

with Bill Adams. He reported that Adams had a grasp of the mechanical aspects of sound production on brass instruments. His procedures for working on air flow away from the horn was of value in Morris' development as a brass teacher. He also had philosophical discussions about brass playing with Adams. Morris learned a great deal about articulation and instrumental facility from Lewis Van Haney. Morris developed his own approach to teaching legato technique and finger facility for the tuba based on Van Haney's approach to slide and legato aspects of trombone performance. He also learned that many students "faked out" Van Haney. Morris reports that Van Haney was such a "nice guy" that students "got away with a lot," often showing up unprepared and bluffing their way through the lessons (personal communication, February 1998).

After 2 semesters and a summer, Morris was offered a teaching position at Tennessee Technological University in Cookeville, Tennessee. He accepted the offer with only about 18 hr. of course work remaining toward his doctorate and he never returned to complete the degree. Once he started at Tennessee Tech, he chose to put his energy into his work there as well as into other projects (personal communication, February 1998).

Professional Influences

Besides Bell, Farkas, Adams, and Van Haney, Morris considers Harvey Phillips to be a significant influence in his professional development. Phillips was a guest clinician for the annual Tennessee Tech Tuba Symposia for 10 years. They became good friends and collaborated on many

professional projects. Morris calls Phillips a “major source of inspiration” and a “musical dynamo” (McAdams, 1996c, p. 49).

Major Contributions

Organizer and Educator

Morris established tuba symposia at Tennessee Tech beginning as early as 1969. These events featured guest artists, clinics, and massed tuba–euphonium ensemble performances. They began 7 years before TUBA was formally organized. Phillips, a regular clinician at these events, was inspired by Morris’ tuba symposium format, and used it as a model in organizing the First International Tuba–Euphonium Symposium at Indiana University in 1973.

Morris was a motivating force in the organization of the TUBA. He participated in organizational meetings, the drafting of its constitution, and served as the first editor of the *TUBA News Letter*, which became the *TUBA Journal*. He also served as president of TUBA from 1975 through 1977 (personal communication, February 1998).

Arranger and Editor

Morris has arranged and edited numerous compositions for tuba and piano and tuba ensemble. His motivation for doing so was prompted by the lack of acceptable editions of Baroque, Classical, and Romantic solo literature for the tuba. He recognized students’ need for the challenge of

playing such literature and its importance in the development of tuba students.

Teacher

The many achievements of his students validate the fact that Morris is one of the most successful tuba teachers of his generation. Since 1967, 31 of his students have received graduate assistantships. Twenty-five have won auditions for professional ensembles. Sixteen have been finalists in TUBA competitions or performed in all-star ensembles at TUBA conferences. Seven of his former students are now university professors (McAdams, 1996b).

The Tennessee Tech Ensemble

The Tennessee Tech Tuba Ensemble “has become the best-known university tuba ensemble in the world” and has “become synonymous with quality tuba ensemble performance” (McAdams, 1996b, p. 34). Morris has done more than any other person to promote the educational value, literature, and standards of performance of the tuba-euphonium ensemble. “Clearly, Winston Morris is the ‘Father of the Tuba Ensemble’” (McAdams, 1996b, p. 34).

Beginning in the mid-1960s, Morris’ earliest experience with tuba ensembles was under William Bell at Indiana University. Bell sometimes showcased as many as 12 tuba players in performances of Paganini’s *Perpetual Motion* and the second movement of the 1957 Hindemith *Sonata* in unison with one piano accompanying. At about the same time, only two

other universities had organized tuba ensembles. Rex Conner, at the University of Kentucky, was experimenting with small ensembles such as duets and trios. At the University of Miami Connie Weldon was also fostering tuba and euphonium ensemble activity (personal communication, February 1998).

When Morris was first appointed to the music faculty of Tennessee Tech in the fall of 1967, the approximately 10 tuba and euphonium students' only musical outlets were the band and orchestra. Morris recognized that these students were "under-challenged and bored, and needed something to motivate them" (McAdams, 1996c, p. 47). This was Morris' reason for creating the Tennessee Tech Ensemble.

In Morris' mind, the ensemble has always been "a means to an end" (personal communication, February 1998). The end was that each individual be challenged to the maximum. He told McAdams (1996c) "that was the purpose behind the ensemble then, that is the purpose today" (p. 47). Morris credits the success of the many graduates of his program to the musical challenges which the Tennessee Tech Ensemble provided.

Morris attributed the success of the ensemble to the fact that there was a pool of under-challenged players, a teacher who had a need to "involve students in a way that they have never been involved before," and a supportive chairperson. A fourth condition was ignorance: Morris was able to convince the university administration that there was such a thing as a tuba–euphonium ensemble, when in fact, there was not. Morris made

the ensemble part of the curriculum from the very beginning (McAdams, 1996c, p. 47).

After organizing the ensemble, Morris was determined to transform it into a serious performing group. His experience at Indiana was that of inadequate preparation for performances and playing beer drinking songs while the audience laughed at the novelty of the group. He began commissioning original works and transcriptions for the ensemble. Starting with local and regional performances, the group began to receive recognition. In the spring of 1976, the Tennessee Tech Ensemble played the first of several performances in the Carnegie Recital Hall in New York City. The ensemble continues to tour each year and has produced seven complete recordings (personal communication, February 1998).

Contributions to Jazz

Morris has done much to promote and further the development of the tuba as a jazz instrument. He cultivated a love and an ear for jazz in his early years, but because the tuba was not accepted as a jazz instrument at the time, he had little opportunity or motivation to become a jazz improviser. He began commissioning jazz works for the Tennessee Tech Ensemble as early as 1975 because he loved the music and because tuba and euphonium players had no opportunities in the school jazz bands. Again, students needed the challenge. Because the majority of his students are music education majors, and most will be required to direct jazz bands

in the public schools, Morris believes that it is important for them to understand the jazz idiom.

The sound of the Tennessee Tech Ensemble playing jazz compositions and arrangements was an inspiration to Harvey Phillips who, along with Rich Matteson, created the Matteson–Phillips Tuba Jazz Consort in 1976. Morris was a member of this ground-breaking ensemble of three euphoniums, three tubas, and rhythm section, and toured and recorded with the group (Call, 1996a).

Further Developments in Tuba– Euphonium Ensembles

The Tennessee Tech Ensemble has inspired numerous colleges and universities to establish tuba–euphonium ensembles. At International Tuba–Euphonium Conferences presented by TUBA, select university tuba–euphonium ensembles are showcased. High school and college students may audition for all-star ensembles which participate in these events. Members of the premier armed forces bands in Washington, D.C. have organized mass ensembles for various performance. Recently, a professional tuba–euphonium ensemble, called Sinfonia, was organized. It consists of college and university teachers and is directed by Winston Morris who continues to be at the center of nearly all prominent tuba/euphonium ensemble activities.

Case Study

Published Materials

Because of the limited amount of published material which shed light on Morris' teaching, only the philosophical aspects will be covered in this section. Those aspects of Morris' teaching that address research questions involving interaction with students, organization of lessons, and lesson content are covered in the following sections.

In published materials that illuminate aspects of Morris' philosophy, three overriding principles emerge. First is a commitment to hard work and personal excellence. Second is an emphasis on teaching fundamentals. Third is the philosophy that there is no single valid approach to tuba performance and pedagogy for every teacher and every student.

McAdams (1996b) described Morris as a "tireless promoter of the tuba and euphonium," who does so with "unlimited zeal and humor" (p. 34). Morris is further described as "extremely demanding of himself and others" (p. 34). He admits to being a workaholic. When he does not "have at least a half-dozen projects," he has a "panic attack." He is a goal-oriented person who goes "from one project to the next." He applies this drive to everything he does (McAdams, 1996c, p. 50).

Morris sees his work in the studio as a means for teaching the skills needed to be a successful performer. This involves emphasis on fundamentals. Although over 25 of his students have won auditions for professional ensembles, Morris reports that he spends no time specifically preparing students for different kinds of auditions. If students are

preparing for an audition, he helps them to identify what they need to work on but does not work with them on specific audition material—such as orchestral excerpts. He states that he “is still teaching them how to play the horn most efficiently and as musically they can” (McAdams, 1996b, p. 40).

Morris reports that he is “constantly learning, changing, and evolving” in his teaching (p. 40). He also believes that there is a significant amount of misinformation taught about the physical aspects of playing the instrument. He points out that just because an accomplished player/teacher thinks he is doing something physically to produce a musical result, that does not mean that it is the correct way for another person to play. Further, Morris believes that many accomplished players think they know what they are doing to accomplish a specific musical task, when in reality, they are doing something else (McAdams, 1996b).

Interviews with R. Winston Morris

Three 90-min. qualitative interviews were conducted with Morris, over a period of 4 days in February 1998 (personal communication). Interviews were analyzed and results showed additional information of philosophy, student interaction, as well as lesson organization and content. One short telephone interview was conducted in May 1998 to clarify a few points from the first interviews (personal communication).

Philosophy

Philosophical principles identified in published material by and about Winston Morris included work ethic, emphasis on fundamentals, and a

multiplicity of approaches. In the Morris interviews, six other important aspects of his philosophy of tuba teaching emerged. The first four were gleaned from responses to questions in the interviews. These included his high level of commitment to the students, the need for models in establishing and upholding high musical standards, his ideas about enthusiasm, and the fostering of a cooperative studio environment. The final two principles—do not expect recognition and do expect setbacks—were stated directly as his “negative philosophies.” Although positive results have grown from them, they are admitted by Morris to be negative.

Within the context of the interviews with Morris, it became apparent that he has an unusually strong commitment to his students. He reported that lessons, whether 30 or 60 min., are “always intense; it will always be in your face.” Further, he said that he makes a “lifetime commitment” to his students. He keeps track of all former students on a database and sends out newsletters twice a year.

Morris believes that high musical standards require a model. When discussing his lack of progress before studying with Bell, he pointed out that lack of an adequate model hindered his development. “You only rise to the occasion. If what you know is what you can rise to, and your knowledge is limited, then that’s how far you are going to go. You have to have some clue about what the possibilities are.”

Morris shows a high level of enthusiasm in everything he does. I have personally experienced the effect of his enthusiasm. While

collaborating with him on my two chapters for *The Tuba Source Book*, of which he served as editor, his enthusiasm served to motivate and encourage my work. He periodically phoned me, inquired about my progress, and complimented me on the quality of my work. When first talking to Morris by telephone about this dissertation research and my planned research visit, his natural enthusiasm escalated as we spoke. Contagiously and instinctively, I raised my level of enthusiasm and by the end of the call, both of our voices had raised in tessitura, volume, and speed of articulation. I felt charged up.

Morris related a story about a biology teacher he had as an undergraduate student. He said that this man could make anything interesting by the way that he presented it. Morris said that he made a decision early in his career to have a high degree of enthusiasm about everything he did professionally.

Morris' specifically articulated two basic, admittedly negative, philosophies. The first was "nobody really cares." The second was "expect the worst." Although on the surface these are negative statements, Morris uses them to produce positive outcomes. In reflective analysis of the two statements, I have concluded that most highly successful and innovative individuals must have similar philosophies, even if not stated in such a dramatic way.

Anyone approaching a personal mission without expecting recognition and accolades will not be deterred by a general lack of acceptance. Morris could not have been successful in his many innovations

and accomplishments if he had been concerned with the approval of others. Books on tuba literature and developments in the tuba ensemble movement were often thought esoteric and did not receive support from many professional colleagues. Morris still moved ahead with his mission. By expecting the worst, Morris has been able to follow through with his goals. When things work out badly, “you say that’s what I expected. . . . I expect the worst and when anything good happens, I’m extremely happy.”

Interaction With Students

“Whatever it takes” is a phrase often used by Morris. He applies this motto to every aspect of his life. In the context of the studio, it applies to his commitment to students. Further, “what ever it takes” also describes Morris’ expectations of students. When discussing assignments given to students, he states that he expects the student to do “what ever it takes” to fulfill the assignment.

Morris discussed with me his methods of motivation. I had witnessed some unexpected interaction with students which included somewhat crude name calling and teasing. When asked about these episodes, Morris shared his ideas about motivation including his use of humor, his demanding expectations, and teacher-to-student feedback.

Morris enjoys joking around with his students both in and out of the studio. He sometimes calls them names and teases them. When asked about this, his response was, “The fact is that they are just kids; I have to tie a few knots in their tails and yank about twice a week just to get their

attention.” He claims that most students enjoy being razzed a little and that sometimes they take pride in “what Mr. Morris called me today.” Morris says that, in reality, he is intensely serious about his work and the students know it. He says that he almost never loses his temper, but when he gets close, the students know it and respond appropriately.

He identified two roles in the studio: teacher and student. His job as teacher is to “do whatever it takes” to motivate student achievement. The student’s job is to be a “dipstick student” and probably “take the course of least resistance.” Morris pointed out that even with the best of students, it is rare for them to rise above that impulse.

The large majority of students, by virtue of the fact that they are students, are still trying to decide what professional commitment really means; what it is to take a project and go all the way with it. It’s just their nature. This is not a negative statement . . . but if I just let them go at their own pace, it will be “glide city.” If you are gliding, there is only one way you can go. You can scoot up a little bit but in the long thing, you are gliding down.

Morris further explained that he had been “a BS artist from undergraduate days. I know it when I see it.”

During observation, it was noted that Morris had a unique way of giving students feedback on their progress. He complimented and, at the same time, let the student know that more was expected. He would say something like “that was half-decent.” Morris commented on the importance of complimenting the students on small improvements. Often, however, he says something like “Go fix that crappy sound, practice” and gave specific instructions. “Do what ever it takes!”

With regard to motivational issues, Morris acknowledges that every student is different. He finds himself “reaming out” one student and “sympathizing” with another. He feels that because of his years of experience he has developed a sense for what a student needs in terms of motivation at any particular time.

Organization of Lessons

In discussing the organization of curriculum and lesson sequence, Morris mentioned listening, scale, tone, and articulation studies, etude books (usually Bordgoni and Tyrell) and solo literature. In addition, he provides a “listening station” in his studio. It is an assortment of sound equipment including headphones along with an extensive collection of tuba and euphonium recordings. He reported that students may come in and utilize it at almost any time, even during other students’ lessons. He told me that he encourages students to listen to as many different recordings of the pieces they are working on as possible.

Morris describes his routine for working on fundamentals including scales, tone, and articulation as a one-page document. Students are to transpose exercises into various keys. He does a “complete review” each fall semester with all of his students utilizing this routine. He often spends time in lessons working with these concepts as they apply to the literature students are working on.

Morris makes extensive use of Bordgoni’s *Bel Canto Studies for Tuba and Bass Trombone* as well as Tyrell’s *Advanced Studies for BBb Tuba*.

Morris reports that he uses these materials because of their contrasting nature. Bordgani is used to develop a legato approach and phrasing and Tyrell is used to develop clear articulation and speed.

Morris says that after working from the etude books, students spend the remainder of the lesson time working on solo literature. He points out that the majority of his students are music education majors and are only required to present part of one recital their senior year. Most, however, choose to perform in recitals each semester. Some present a full recital every year.

Lesson Content

Morris uses no syllabus. "It just means nothing because every student is just so different." He takes each student "where they are when they walk in the door" and does a "complete review." Lesson content includes solving specific performance problems during scale studies, followed by étude studies and solo literature.

Morris' one-page handout outlines his approach and expectation for scale and articulation studies. These studies are not as extensive or time intensive as Bell's elaborate scale studies. Since every scale is not written out, it is the responsibility of the student to transpose the studies into the other keys.

Morris believes that what some may consider a student's bad sound is, in reality, a good sound that has been "messed up on the front end because of a stupid tongue" and is "messed up on the back end because of a

stupid tongue or problems with coordinating valves.” He believes that his scale studies are therapy for these problems.

Interviews of Morris’ Students

In 1998, seven 30-min. telephone interviews were conducted. Three former students and 4 current students answered a series of questions designed to elicit responses which could shed light on the research questions. Former students included Dave Porter (personal communication, May 12, 1998) of the U.S. Air Force Band, a 1980 graduate; Timothy Northcut (personal communication, May 26, 1998), instructor of tuba at the Cincinnati Conservatory of Music, a 1983 graduate; and Marcus Arnold (personal communication, May 26, 1998), a 1978 graduate who is a professional tubist and leader of Mr. Jack Daniel’s Original Silver Cornet Band. Current students interviewed were Andrew Lynn (personal communication, May 25, 1998), Grey Bach (personal communication, May 25, 1998), and Scott Beaver (personal communication, May 25, 1998). In addition, William Thiessen (personal communication, May 23, 1998), an amateur tubists who has studied with Morris, was interviewed.

Philosophy

Of the nine philosophical principles identified in published materials and qualitative interviews with Morris, the first seven were specifically discussed by the students without being directly asked about them. They included Morris’ commitment to work ethic, his emphasis on fundamentals, his multiplicity of approaches, his high level of commitment

to students, his belief in the importance of models, his ideas about enthusiasm, and the fostering of a cooperative studio environment. There were no signs of his two personally described “negative philosophies” in responses from past and present students.

Work ethic. All 7 students commented on Morris’ professional commitment and hard work. They also talked about the commitment and work expected of them in being a Morris student. Porter, upon arriving at Tennessee Tech as a freshmen, learned very quickly that “you show up at your lessons prepared or you get fussed at.” Continuing, Porter said that when he had not practiced much, Morris knew it right away, explained what had to be done, and gave instructions on how to practice. Lynn commented on how, after taking a lesson from Morris while still in high school, he understood what standards he would be held to if he choose to study tuba at Tennessee Tech. “I was puffing my cheeks out and had some really screwed up embouchure things going on. He said ‘if you’re going to come study with me, you’re going to have to fix this.’ So I got to work on that right away and pretty much had it fixed by the time I got there.”

Fundamentals. Morris teaches fundamentals in every aspect of each lesson. In interviews students report that Morris emphasized a good sound and proper breathing first, followed by articulation and valve control. Because knowing how to practice is basic to learning fundamentals, he incorporates instruction on how to practice into almost every lesson.

His concepts of fundamentals are introduced to students in the first lessons and are constantly reinforced in étude and solo literature. This is

accomplished through what Thiessen calls “Winston’s famous scales” and what Bach refers to as the “R. Winston Morris Fundamentals Clinic.” They are describing the one-page handout which includes an example C major scale in legato, staccato, and marcato articulations. The document also gives instructions on utilizing velocity and extended range on scale patterns. Students then transpose these studies into all keys.

For both current and recent students, the scale study was taught in their first lessons. Bach reported that Morris “stripped me all the way down to bare fundamentals because I couldn’t even play legato scales correctly; . . . he would just have me play the repeated pitch then the ascending scale, repeated pitch then descending.” In Bach’s case, he had difficulty with uniformity of the repeated notes before the scale, so his first lesson was just legato, repeated “C” until he accomplished clarity and uniformity. He reported that it took him four lessons and many hours of private practice before he got the repeated notes to sound right. Lynn observed that Morris started everyone the same way during the first couple of lessons. “If I was 10 times better than another guy, we would start pretty much at the same level. . . . We spent several weeks on just refining some fundamental things before we got into any kind of music or anything.”

It was also reported that Morris referred to the scale studies often, linking fundamentals with particular performance problems encountered in études and solos. Bach reported that about half of the time, the lesson “would go from whatever I was playing at the time, back to fundamentals—to breathing and to tone production.”

Morris selected solo literature for new students that could be linked to the fundamentals introduced in his scale studies. Bach was given an assignment to prepare a solo work to perform at Octubafest, about 6 weeks into the first semester. His assigned solo was Handel's *Honor and Arms*, a transcription in which the melodic lines are largely made up of scale patterns in the middle range. Even though Bach was basically starting over, he "could play a quality piece of music and make it sound good. By playing the solo, he [Morris] was teaching me how to apply the fundamentals that I was learning to the solo. That was how my first lessons went all the way through Octubafest."

An important aspect of Morris' teaching of fundamentals is specific instruction on how to practice. Porter described how Morris taught him to practice. "I was having trouble hitting a couple of notes dead center without the sputtering. . . . He talked about how when you have a problem, you need to find a couple of hours and go to the practice room, and play that note over and over and over and over until it 'becomes a part of you' so there is no way you can miss it." Porter told of how, after leaving Tennessee Tech, he worked up *The Carnival of Venice* using practice techniques learned from Morris. "I practiced it slowly for 3 months, over and over every day until my fingers knew what to do without me having to tell them."

Multiplicity of approaches. Because Porter already had a good basic sound and approach, Morris did not give much instruction on the physical aspects of playing. Porter was aware of other students who had problems

with basic playing. “He would work with them for hours having them try everything including new embouchure, moving the lip, moving a tooth, anything and everything; . . . the first thing was a good sound. That was before music, before study books, before anything; . . . he taught the concept of what a tuba ought to sound like to be pleasing.”

Commitment to students. Several students talked about how Morris freely gave of his time and energy. Porter reported that even when students were not prepared, Morris used the lesson time to practice and drill the music which should have been prepared. Several students said that their 30 min. lessons were often expanded to hour-long lessons when other students canceled.

Morris often spent time counseling students on career issues. Lynn described how his lessons often turned into counseling sessions. In his first lesson, Morris asked about his goals. This helped Lynn get “on a path” of curriculum suited to his goals. Four years later, in his last lesson before graduating, they again discussed goals. The discussion turned to teaching position openings in the public schools and Morris’ confidence in him. Lynn stated:

We talked about keeping in touch and making sure I was keeping the horn going, keeping the chops up—in case I wanted to get back into graduate school, I would have that worked up. He promised me that he could get me somewhere [a graduate school] if I wanted to do it.

Models for establishing and upholding high musical standards.

Students commented on how Morris encouraged listening to recordings, performances of great artists, and to each other. Thiessen, an adult

amateur student, commented on Morris' knowledge of various recordings when he said:

Winston was not one of those teachers who wants you to work everything for yourself. He said, "look, listen to the best there is." He was a great one for saying listen to it the way it is supposed to sound. Sure you can make individual changes, but he wasn't saying reinvent the wheel.

As a scientist, Thiessen made an analogy between his early experience reading the science literature and Morris' encouragement of listening to multiple recordings of pieces a student is working on. In a conversation with Andrew, he told of his work on the Halsey Stevens *Sonata* and discussed characteristics and quality of each commercial recording available.

Beginning in the 1960s, Morris facilitated performances at Tennessee Tech of the best tuba performing artists in the world. He has also provided opportunities and encouragement for his students to attend conferences where extraordinary tuba performances could be heard. Bach spoke with enthusiasm about his opportunity to attend the upcoming International Tuba and Euphonium Conference.

All of the students interviewed made a point of the many opportunities to perform solo literature at Tennessee Tech. It was reported that every student is expected to perform at least one solo at both Octubafest and Spring Tubafest. Students also reported that many choose to play complete recitals each year. They spoke of the role that older, more experienced students played in providing models for the younger students.

Enthusiasm. None of the students interviewed spoke directly about the high level of enthusiasm that I had observed and that had been written about (McAdams, 1996b). It is presumed that once a student gets acquainted with Morris, his enthusiasm is taken for granted as it is an integral part of his personality.

Cooperative environment. Students talked about the camaraderie in the studio and how the ensemble and the numerous performance opportunities contributed to a cooperative environment. Lynn reported that the students' respect for Morris contributed largely to this attitude. "Everybody believes in what Winston Morris is doing. I don't think that there are any students who had another choice before Tennessee Tech." Lynn spoke further of the positive aspects of the studio and the role of the Tennessee Tech Ensemble when he said:

It has been the closest group of friends that I have ever had. I know there is a lot of competition between students at other schools. There is competition between us, of course, but there is more of a camaraderie. We support what each other is doing. We are not at each other's throats trying to beat the other guy. . . . Playing in the ensemble, being together, traveling together, when it comes to Saturday night and we are all hanging out, it's the same group of guys. We are a pretty close bunch.

Porter talked about the culture of the studio when he arrived at Tennessee Tech, stating:

When I got there, there was already an atmosphere or aura of what you were in and what was expected. The seniors would put a lot of pressure on the freshmen to perform at a certain level. The tuba ensemble was very important. We rehearsed almost as much as the symphonic band did. . . . If you were serious about music, you just knew without anybody really having to tell you what you needed to do.

Porter told of an experience as a freshman in which he discovered his role in the studio and the level of loyalty to Morris that other students felt.

Admitting that he had a “rather bold mouth,” he questioned why Morris did or did not do a certain thing. Several of the seniors took him aside and said, “Here is how it is. He am the conductor. You am the conductee!”

Morris promotes a cooperative studio environment by involving students in the administration of campus events such as Octubafest and tuba symposia, and delegates much responsibility to the them. Porter reports that “we all learned how to run conventions and other gatherings; . . . that’s why you see so many of his students involved in the tuba organization [TUBA]. We all learned organizational skills like that during college.”

Interaction With Students

Students reported much about Morris’ encouragement, counseling, and friendship. Porter commented:

[Morris] always said to just do my best. What ever my best is would, in his opinion, take me where I wanted to go. He talked a lot about goals and career decisions and advised me on how to accomplish my goal. It was up to me to try to follow his counsel or not. As long as I was trying, he never put any pressure on me to achieve a certain level.

Some students talked about how Morris used humor. Porter reported that “by the time you were a senior, Winston would get points across by laughing about it with you in front of the other students. The other students would have an opportunity to make fun of you. . . . If you took it lightly,

eventually you would get a serious talk. ‘Why are you not showing up, why are you not practicing?’”

Morris often gave elaborate sales pitches about practicing. Initially, students often found that following Morris’ instructions in practicing fundamentals were “discouraging” and “frustrating.” Morris built up Bach’s confidence and sold him on his methods to a degree which motivated him to overcome his frustration. Bach recalled the time when Morris said:

Grey, man, you’ve got to be totally committed. You are going to be discouraged; you’re going to be frustrated.” He said, “I have had people with half the problems of yours quit the tuba because they were frustrated. In three or four years from now, if you keep on, you’re going to be playing some really good tuba.

Organization of Lessons and Lesson Content

There was a diversity of reports on how lessons were organized in the Morris studio. Most students reported that the proportion of time on various activities changed as performance ability improved and that sometimes they only worked on one or two things. Although not all areas were covered in each lesson, a common sequence of lesson activities emerged. First, students played scale studies as previously described. Second, Morris had students play assigned legato études. Third, students played from technical études. Fourth, students played from solo repertory being prepared for performance. Etude and solo time often reverted back to scale studies as Morris related fundamentals to an étude or solo work. Students also described several exceptional lesson situations that did not follow a particular sequence.

Much has already been said about Morris' scale studies. All of the current and most of the former students made frequent reference to it. Most reported that their first lessons were primarily focused on fundamentals, following the scale studies format.

Morris makes a logical transition from legato scale patterns in the scale studies to legato études. Students first work from Fink, *Legato Studies for Tuba* and then graduate to Marco Bordogni, *Bel Canto Studies for Tuba*. All students reported that although these studies were not covered in every lesson, they were expected to be working through them, and, at some point, would pass them off to Morris. Porter said that Morris had his own copies and followed along, pointing out what did and what did not sound good and that Morris also often demonstrated concepts by playing.

Legato études were balanced with technical études that came next in the sequence. It was reported that Morris' books of choice were Tyrell, *Advanced Studies for Bbb Tuba*; Kopprach, *60 Studies for Tuba*, and Blazavitch, *Advanced Studies for Tuba*, in that order. Beaver had already played all the way through Tyrell, working with a private teacher before attending Tennessee Tech. Morris convinced him that he should work through it again with improved technique. "He [Morris] said that Tyrell was the basic stuff; if you can play that, you could build on it and could play anything."

Students reported that lessons usually ended with work on solo literature. Much was said about Morris' emphasis on performing solos. When speaking with students and former students, they often brought up

the subject of solo literature they had performed. Pieces they had played and those they were preparing seemed to be an important part of their identities as tuba players. Beaver recounted with pride the literature he had performed in recitals, as though playing all of the movements of the Vaughan Williams *Concerto* in a freshman recital was a badge of honor.

Atypical uses of lesson time were reported by students, such as lessons when most of the time was dedicated to career counseling. Most students said that they did not get much past the scale studies in their first months of lessons. Lynn told of how he spent a whole lesson practicing one note. Bach reported that sometimes Morris coached his small ensemble during his lesson time. Thiesen had only a lesson about once each month. He reported that he would bring what he wanted to work on to the lesson and Morris let him run the agenda.

Observations of Teaching

During a research visit in February 1998, I spent 3 days with Morris, observing lessons, ensemble rehearsals, and a master class. I videotaped six private lessons for study and analysis. Some lessons were completely transcribed and described. These tapes and transcripts are in my possession.

Morris' Philosophy of Tuba Studio Teaching

Nine principles have been identified that describe Morris' philosophy of tuba teaching. These come from published materials, interviews with

Morris himself, as well as from interviews with past and present students.

They are:

1. The significance of hard work.
2. Emphasis on fundamentals.
3. Recognition of a multiplicity of approaches.
4. Importance of enthusiasm.
5. A high level of commitment to students.
6. The need for models in establishing and upholding high musical standards.
7. The fostering of a cooperative studio environment.
8. Low expectations of other's acceptance.
9. The expectation of setbacks.

Information collected from interviews with students confirmed a consistency between philosophical aspects identified in published literature and interviews with Morris in principles 1 through 7. In observing teaching in the Morris studio, principles 1 through 7 also manifested themselves clearly. Again, principles 8 and 9, his self-described "negative philosophies," were not apparent in student interviews or observed teaching.

The following uses excerpts from observed teaching sessions to further validate the essence of Morris' philosophy of tuba teaching in action, point by point. There is also much about interaction with students, lesson organization and lesson content in the following.

Work ethic. Morris exerts a great deal of physical and mental effort in lessons. He also expects a high level of involvement from his students

during lessons. When students are playing, Morris often plays along. When not playing on his tuba, he models by singing, conducting, gesturing, and often defining rhythmic subdivisions by clapping and tapping his feet.

This high level of involvement serves to keep students' attention on the tasks at hand. It also provides a model for musical interpretation. While working with Josh on scale studies, there was much call and response playing, with Morris playing a phrase of a few notes with Josh repeating, followed by quick comments from Morris, then more modeling. The following excerpt took place in less than a minute and is representative of the energy exhibited in all the lessons observed.

Morris: How does that sound to you? Better? Yeah?

[Morris and student return to modeling scale patterns. Intonation and tone improving.]

Morris: Are you feeling a little more comfortable with it?

Student: Yes.

Morris: That sounds pretty good. I want it a little more smooth and a little more connected.

[Morris does more modeling on slow legato repeated notes and scales.]

Morris: You're getting a great sound, man.

[Modeling continues, now a little faster. Morris coaches and encourages as the student plays.]

Winston Morris expects hard work from his students during their lessons and practice sessions. He continually gives explicit instruction on how to practice.

You've got to nail it, be confident with it. . . . Play it with the metronome set at 82. After 10 min. you go to 86, then 88, then 90 and 2 hr. later you are nailing those two bars and you'll never have problems with them again. . . . If you are going to perform this piece at 120, then you have to have it worked out at 132 or 136.

Fundamentals. Fundamentals were stressed in every lesson observed. With Josh, the least experienced student whose lesson was transcribed, Morris spent about half of the lesson on scale studies that included work on articulation, tone, and range. Later in that lesson, when Josh was playing a legato etude, tone problems appeared in the same *tessitura* he had been working on during the scales studies, so Morris said: “You have the same problems on this as the other things we played today. You’ve got to lick the problem. **The problem!**”

Often Morris expressed to students the importance of working on fundamentals. Andrew, an advanced student, was involved in student teaching (music education practice teaching); he was also preparing for a recital which was about 5 weeks away. He was concerned about his ability to adequately prepare for the recital in light of his time commitment to student teaching. Morris said:

You’re breathing a little on the wimpy side. It’s one of the first things to go, man. When you don’t pay your dues on the horn, your breathing really goes under. If you don’t do anything else . . . if you can only get 15, 20, 30 min at night, you just sit there and you do some really good scale things . . . and breathing. . . . You can play the music, the music’s not going to be a problem. If you get too far off as where fundamentals are concerned, you’ll be in trouble.

Multiplicity of approaches. Morris claimed that, because of his 30 years of experience, he could “size up a student fairly quickly.” In each lesson observed, Morris had a different agenda and a different way of relating to the student. With the three transcribed lessons, each student was at a different level, from very inexperienced (Josh), to intermediate

(Jason), to advanced (Andrew). The personalities of each student were quite different as well.

Morris provided a different format for each lesson. In Josh's lesson, more than half the time was spent on fundamentals, using Morris' scale studies. Although Josh was showing some improvement, Morris complimented him only a little. He encouraged him and provided much instruction in practice technique.

It appeared that Jason was more prepared for his lesson than he had been in the past and that he was in need of and deserving of encouragement. After playing one of his études, Morris commented:

As much as it pains me to admit it, you sound halfway decent. It really hurts to have to be able to compliment you. . . . That sounded pretty dad gum good for a dip-stick freshman. You are really getting a beautiful sound. . . you're really close to really nailing it. . . . That's A work, now how about an A+. You can always do better can't you?

Andrew exhibited signs of stress in his lesson. Although he said that his student teaching was going well, it was apparent that he felt bad about not keeping up on his tuba preparation. At the end of the lesson, Morris spoke with Andrew about the upcoming recital: "You're sounding good, man. I know it's tough [student teaching schedule]. I know you will do what you need to pull it off. I'm not worried about it at all. You are, though."

Andrew, responding to me: "He has more confidence in me than I do sometimes."

Enthusiasm. A high degree of enthusiasm was always present during the lessons. As students entered the studio and prepared to play, Morris

often said, “I want to hear something really great from you today.” As one student was leaving and another, arriving, he often commented on how the departing student did on his lesson. “You should have heard [so and so]—he really nailed the [such and such] today.”

The previously described kidding around with students was also a manifestation of enthusiasm. The tone and tempo of Morris’ voice also contributed to his enthusiastic approach to teaching, as when he addressed Justin, he called him “Justeeeen” in a singing tone of voice.

Commitment. The degree of concentrated energy generated by Morris during the lessons not only demonstrated his work ethic and enthusiasm but also demonstrated his level of commitment to the students. In the lessons he attempted to foster commitment in his students as well. His detailed instruction of practice procedures were presented like a sales pitch or a motivational sermon. He said things such as “Are you going to do that for me next week? I’m excited. I *am* excited!” and “If you can sound that good with a little more presence and do some musical stuff too, I’ll really appreciate that. I’ll like it a lot.”

Models. In interviews with Morris he talked about how the lack of models hindered his early development as a tuba player. Morris incorporates modeling in his teaching in four ways. First, he plays for and along with his students. Second, he facilitates students’ listening to recordings. Third, he facilitates students’ exposure to live performances by accomplished artists. Fourth, he has his students play often for each other.

Morris is an accomplished performer. He has presented solo recitals throughout the world and has played with prestigious ensembles such as the Phillips-Matteson TubaJazz Consort. His students have the opportunity to hear him rehearse and perform with the Tennessee Tech Faculty Brass Quintet. He played with and for his students in every lesson observed. He also models phrasing by singing and conducting during lessons.

Modeling through listening to recordings is facilitated by Morris' "listening station," previously discussed. During lessons, it was observed that students quietly entered the studio and went to the listening station while other students were having their lessons. Also, Morris and students discussed, during lessons, various recordings of pieces that were being prepared.

Each year performing guest artists present recitals and master classes at Tennessee Tech. Morris also takes the Tennessee Tech Ensemble to conferences and symposia where the world's greatest tuba performing artists perform. During lessons, Morris discussed with students performances at the U.S. Army Band Tuba Symposium, that they had recently attended. Andrew discussed a recent performance at Tennessee Tech of Gene Pokorny, principal tuba in the Chicago Symphony. Andrew was preparing the same piece.

Morris holds a weekly master class in which students play for each other. This provides for further modeling as the less advanced students hear the more advanced perform. It also provides feedback to all the

students from Morris and other students. Discussion regarding master class preparation took place during lessons.

Cooperative studio environment. Morris sees the Tennessee Tech Ensemble as a means for developing musicianship while fostering a cooperative, as compared to a competitive studio environment. Morris believes that students support and encourage each other because of their involvement in the ensemble. If the ensemble sounds bad, everyone sounds bad. In observed lessons the activities of the ensemble and its upcoming tour were often discussed. In several instances, Morris told a student about how well another student was playing.

Interaction With Students

In my observation of lessons, Morris was constantly involved with students in personal and musical ways. This communication always involved one of three kinds of dialogues, verbal, musical, and nonverbal/nonmusical.

Verbal dialogue began with pleasant conversation as the student entered the studio. Often the discussion was about the performance and accomplishments of the student who was just leaving a lesson. During lessons, Morris asked questions of the students constantly. In doing so, he required students to think by asking questions such as “how did that sound?” “does that feel better?” “how should this be phrased?” “what is rule #1?” All of this provided for constant mental activity on the part of the student.

As students played during lessons, a musical dialogue ran throughout. This was done by way of Morris' unique method for modeling. During warm-up scale studies, he modeled by playing back and forth with the student, playing along with the student, and singing, conducting, clapping, etc. While students were playing their prepared études and solo excerpts, Morris would often let them play for an extended period. During this time Morris would always be conducting, singing, clapping, or stomping. This helped students model accurate subdivision of rhythms, phrasing, and musical expression.

Nonverbal/nonmusical communication took place in subtle ways. Morris often folded his arms and sighed while smiling to communicate his satisfaction with the performance of a particular phrase or excerpt. He also tapped students on the shoulder to reinforce correct articulation or tone while working on fundamentals.

Organization of Lessons and Lesson Content

Although Morris does not follow a syllabus, he has a mental plan for each student. Information gleaned from interviews about lesson organization proved to be absolutely accurate when compared with observed lessons. He followed the sequence previously described: (a) scale studies, (b) legato études, (c) technical études, and (d) solo literature. All étude books used in the observed lessons had previously been identified in the Morris and student interviews. They were Fink, Bordogni, and Tyrell.

The use of Kopprasch and Blazavitch was not a part of the lessons observed or videotaped.

Excerpts from lesson transcripts that were quoted previously give an accurate description of the kind of content observed in lessons. The majority of teaching in lessons dealt with instruction in fundamentals, instruction on how to practice, and instruction on musical interpretation.

The R. Winston Morris Tuba Studio Teaching Paradigm

Ten principles are identified as The R. Winston Morris Tuba Studio Teaching Paradigm. The first seven principles have been validated through triangulation of published material, interviews with Morris, interviews with students and through observation of teaching. They are as follows:

1. Model a superior work ethic.
2. Demonstrate personal commitment to each student.
3. Model effective performance habits.
4. Reduce fundamentals to a set of overriding principles and organize lessons in ways which facilitate the application of these principles to any repertory.
5. Employ a multiplicity of approaches.
6. Foster a cooperative culture among students.
7. Understand students' tendencies regarding commitment.

Morris' ideas about enthusiasm which he discussed in his interviews and observed in his teaching were not mentioned in interviews with his students but belong in the paradigm.

8. Teach with enthusiasm.

Morris' so-called "negative philosophies" were not apparent in published materials, reports of teaching, or in observed teaching. However, I believe that these two philosophies contribute significantly to Morris' extraordinary success because they may explain his tenacity. Thus, I will list them as principles 9 and 10 in the Morris paradigm.

9. Do not expect the support of others.

10. Expect setbacks.

CHAPTER 5

CASE STUDY: HARVEY G. PHILLIPS

Biographical Data

Overview

No individual has done more to bring recognition to the tuba and the art of tuba playing than Harvey Phillips. Frederiksen (1996) reports that for over 30 years, “Harvey Phillips has been *the* driving force behind the acceptance of the tuba” (p. vi). In 1977, Arnold Jacobs commented on the increased interest in the tuba as a solo instrument and acknowledged Phillips’ vital role in “conditioning” audiences into accepting the sound of the tuba (Haugan, 1977, p. 10). Sam Pilafian, in a 1997 master class, said that Phillips has done more for the tuba than anyone else (unpublished proceeding at Rafael Mendez Institute, Tempe, Arizona).

Phillips is both a visionary and an activist: through his dedication and tenacity he realized possibilities for the tuba that were previously unthinkable. A leading figure in the development of 20th-century solo tuba repertory, Phillips has pioneered innovative new roles of the tuba in the musical world. He has helped establish and promote numerous musical organizations such as Tubist Universal Brotherhood Association (TUBA), the International Trumpet Guild (ITA), and Summit Brass. As an author

and lecturer he has made significant contributions to the expanding pedagogy for the tuba.

Musical Background

Early Musical Training

Most of Phillips' early musical training was self-initiated. Because his family could not afford a band instrument, Phillips started in the school band playing his family's violin. Once he had an opportunity to have use of a school sousaphone he found his musical love and the instrument became his constant companion. He practiced at home, playing from a hymnal while his mother listened and often sang along. "If I hit a clinker, or played something out of tune, she'd come running in, 'Now Harvey, I don't think that's right.' She'd correct me, so she was probably my first teacher" (personal communication, November 1996). Phillips reports that at an early age he learned a great deal about phrasing and expressing emotion in music. As he practiced hymns, the words dictated the way he interpreted the music.

Phillips took to the tuba naturally. He never had any incorrect habits such as puffing cheeks or pulling back corners of his mouth. He reports that in regards to the physical aspects of tuba playing, he was "totally self-taught." His high school band director, Homer Lee, was a former circus bandmaster.

The Circus

Phillips was first introduced to circus musicianship through Homer Lee, and after attending the University of Missouri for 1 year, Lee helped Phillips get his first professional job as a circus musician with The Ringling Brothers, Barnum and Bailey Circus in 1948 at the age of 19. Phillips credits much of his versatility as a performer to the experiences he had playing with the circus. "We played every kind of music imaginable." They played the classics, such as *The Ride of the Valkyries* to bring out the high trapeze act. Light classics, popular songs, and ragtime numbers were also played. Phillips said in a 1996 interview that because of his extensive training in the circus, when he started playing professionally in New York, "he wasn't afraid of anything" (personal communication, November 1996).

Several circus band members were former Sousa bandsmen and had musical contacts throughout the country. Phillips learned much from these musicians and those who were introduced to him in his travels with the circus. Tubists Johnny Evans and William Bell were significant influences on Phillips' musical and personal development. Phillips did not realize until years later that his contacts and associations with former Sousa musicians and circus musicians had such a large impact on his career.

Julliard

Phillips moved to New York in 1950 to study at the Julliard School of Music. Within a year he had a solid reputation that led to many opportunities to perform and record, a situation he credits to contacts with

Sousa musicians. Sometimes he asked to be excused from classes at Julliard to accept lucrative performing and recording engagements. Much of Phillips' musical development was self-initiated. While at Julliard, Phillips made a comprehensive list of the orchestral instruments and studied the literature of each. Phillips then spent time playing with outstanding instrumentalists, learning how to blend with the subtleties in sound and articulations of each instrument. For example, he practiced playing timpani études on tuba with a timpanist. Through this experience he learned complex rhythms while the timpanist learned how to match pitches (personal communication November 1996 and June 1997).

Studies With Eric Hauser and William Bell

When he first moved to New York City, Phillips stayed with William Bell in his studio. He shared a room with Eric Hauser, a former Sousa bandsman and a "wonderful horn player" who had published a method book for the horn in the 1920s. Hauser listened to Phillips practice and offered suggestions. Phillips' first exposure to Bell's teaching approach was through Hauser.

I learned a lot from Eric Hauser. I felt that he was a surrogate Bill Bell teacher, because he had been around Bill Bell for so many years. He knew how Bill Bell thought, and he knew how Bill Bell taught. I was lucky to have that alter-ego of Bill Bell sitting right there in the room with me when I practiced. And I was practicing 6 hours a day! (personal communication, November 1996).

Hauser never tried to correct anything about Phillips' basic sound, but worked with him on extending range and precision of rhythmic

subdivision. Phillips only had about four formal lessons in which Bell critiqued him. However, Phillips spent significant time with Bell playing duets and orchestral excerpts, and observing him in both professional and social settings. While with Bell, Phillips absorbed valuable musical and professional knowledge. Phillips reported that he was always learning from Bell, no matter what the activity. “He oozed information and attitude.” Bell became Phillips’ role model and mentor. Phillips said that Bell “was just one of God’s perfect humans, I’d say—as perfect as humans can get.” Phillips learned much about professionalism from watching Bell at work (personal communication, November 1996).

The New York Music Scene

Although Phillips had only a small number of formal tuba lessons with private teachers, he says that he always had “big ears.” He credits much of his musical development to his experiences working with and listening to the great instrumentalists with which he worked in New York City. They included horn player, John Barrows; trumpet player, Robert Nagel; and cornetist, Jimmy Burke. He also played music from the repertory of various instruments on the tuba, interpreting the music with these performers as models. Because the literature for the tuba was in its infantile state, exploring the repertory and performance practices of other instruments was vital in developing new performance techniques and pedagogy for the tuba. Phillips state that “we learn a lot from emulating and copying those we admire. We just have to admire the right people.”

Phillips always felt strength from working with great players. “They elevate my ability for the moment, if not forever” (personal communication, November 1996).

Early Teaching Experience

Phillips began teaching privately in New York during the early 1950s. Some of his students were referred to him by William Bell. Phillips taught at Yale University, Hartt School of Music, and Mannes School. He eventually established studios at Carnegie Hall, where students came to him for lessons. This worked better in accommodating his busy recording and freelance performing schedule. He also subleased his Carnegie Hall studio space to other musicians, an early sign of his entrepreneurial abilities.

At this time, Phillips began teaching some of his most celebrated students, most of whom traveled to New York from Washington D. C., where they were members of the U. S., armed forces bands. These students included Jim Self, Dan Perantoni, Don Waldrop, and Mel Culbertson. Phillips never charged service band musicians for lessons. He scheduled their lessons between his professional engagements, often taking them along to recording sessions and pit orchestra jobs. In this way he began mentoring in the way that Bell had mentored him. Many of the lessons he taught were “open-ended”: they had a starting time, but no specific ending time. Sometimes they would go for 2 or 3 hr. Often Phillips and his students had dinner together after the lessons (personal communication, November

1996). With Phillips, teaching was not a confined experience; it was a lifestyle. This phenomenon began with his “studies” with Bell and continued in Phillips’ teaching and mentoring process. The process included a lesson, exposure to the professional world, and socializing. I observed manifestations of the same philosophy when I spent 3 days with him at TubaRanch, his farm outside of Bloomington, Indiana, and a week with him at the Rafael Mendez Institute in Tempe, Arizona. Much of the most valuable information was obtained informally as we conversed over dinner and as we walked together.

Professional Influences

Phillips had many professional influences beginning with individuals associated with the circus and Sousa bands, such as Hauser, Bell, and Johnny Evans. Because of his wit, intelligence, charm, and artistic credibility, Phillips established long-term personal relationships with some of the greatest composers, conductors, and instrumentalists of our time, such as Gunther Schuller, Morton Gould, Leonard Bernstein, and Igor Stravinsky. Several composers wrote new works for tuba, expanding the technical and expressive possibilities for the instrument. Phillips absorbed concepts of phrasing and tonal expression from the conductors and instrumentalist.

Major Contributions

Freelance Tubist

Phillips was the leading recording tubist in New York City during the 1950s and 1960s. Besides playing with the New York Brass Quintet, the Burke-Phillips All Star Concert Band, the Goldman Band, Symphony of the Air, Bell Telephone Hour, New York Ballet, and the Sauter-Finnegan Orchestra, he made hundreds of jazz and commercial recordings (Call, 1996c; personal communication, November 1996). He also became a music contractor for orchestras and record producers, utilizing and further developing his interpersonal skills and organizational abilities (personal communication, November 1996).

Visionary and Activist

As a student at Julliard, Phillips began to explore the solo literature of other instruments and asked composers to write pieces for the tuba. Phillips asked noted American composer Vincent Persichetti, then a professor at Julliard, to write a piece for him. The result was the *Serenade No. 12 for Solo Tuba*, now a standard in the tuba solo repertory. Dozens of other tuba solo works were composed for Phillips by New York composers in the 1950s and 1960s. Because of Phillips' involvement in jazz and commercial music, he initiated the composition of many works by composers such as Alec Wilder, Manny Album, and Johnny Carisi.

In his first Carnegie Hall recital, Phillips played the French horn part of Brahms' *Trio* on the tuba. A *Washington Post* music critic liked it

better than when played with horn and wrote “now the tuba has another staple in it’s repertory.”

Phillips further expanded the tuba’s performance possibilities when he organized the first series of tuba recitals at Carnegie Hall and founded high-profile events such as TubaChristmas and Octubafest. A founding member of the New York Brass Quintet, Phillips helped to establish the brass quintet as the predominant brass chamber ensemble of the second half of the 20th century. Phillips’ work was so influential that many universities established faculty brass quintets and hired tubists in order to play in the quintets and teach tuba students. In 1998 Winston Morris told me that everyone teaching tuba in colleges and universities in the United States “literally owe their jobs to Harvey Phillips” because of his work establishing the New York Brass Quintet (personal communication, February 1998).

Phillips began to expose new audiences to the tuba through performing and recording with ensembles such as the New York Brass Quintet. He also produced solo tuba recordings for the Golden Crest record label. Phillips’ objective in commissioning works for and performing with tuba and various types of chamber groups such as string quartets, woodwind quintets, and saxophone quartets in an attempting to “infiltrate” audiences who otherwise would not hear and grow to appreciate the sound of solo tuba (personal communication, November 1996). Phillips saw his promotion of the tuba, in part, as being ecclesiastical.

Every preacher feels great satisfaction to save a sinner . . . to convince that sinner to see the straight and narrow and to change his life. This is what we do with people who are ignorant about our instrument or malign our instrument. To me, they are like sinners. They are prejudiced against us. There is great satisfaction when you feel you have won over a person or room full of people to think differently about your instrument. (personal communication, November 1996)

Teacher

Becoming a studio teacher evolved from Phillips' interest and activities as a performer. He mentored and taught many young tubists during his New York years. In 1971 Phillips was appointed professor of tuba at Indiana University, replacing the retiring William Bell. At Indianian University he taught and mentored many students who have since had distinguished careers around the world. He retired with the rank of Distinguished Professor in 1994 (Nelson, 1996). Phillips believes that an effective studio teacher must be concerned with much more than teaching instrumental technique. "Half of the job is working to generate more opportunities for the students you teach. How can you justify teaching that instrument if you are not involved in future possibilities of that instrument. . . . There should be no boundaries for what we teach or what we encourage our students to explore" (personal communication, November 1996). For example, Phillips relates a story of a brilliant student at Indiana University who was a very good tuba player. He counseled this student to become a surgeon because he would be able to do much more for the tuba through the people he would have contact with.

Administrator and Other Service

Phillips' administrative abilities became apparent as he began to be a music contractor in New York. He became Igor Stravinsky's manager in the 1960s and served as vice president of the New England Conservatory in 1967. A man of unceasing service, Phillips served on boards of directors and in other advisory capacities for numerous arts organizations including Chamber Music America, *The Instrumentalist*, Summit Brass, and the Keystone Brass Institute. He has also taught at Northwestern University, Keystone Brass Institute, Rafael Mendez Institute, and numerous other music camps. Phillips played a significant role in the organization of many successful organizations including Tubist Universal Brotherhood Association, International Trumpet Guild, and the Hoagy Carmichael Jazz Society (personal communication, November 1996).

Case Study

Interviews of Harvey Phillips

In November, 1996, I spent 3 days with Harvey Phillips at his farm near Bloomington, Indiana. At this time I conducted three qualitative interviews with Phillips. He said that he considers teaching a much greater challenge and responsibility than performing and approaches teaching with great humility.

When I really think about it, I shouldn't teach in studio out of absolute fear that I might not do as good a job as I want to do with students. But then I realize that someone has to do it, and my experiences have qualified me to deal with some of these problems, so I might as well do it.

Phillips' Philosophy of Tuba Studio Teaching

There is an underlying principle from which all of Phillips' philosophical principles grow: "Teaching is an outgrowth of performing." In his career as a performer, Phillips had every imaginable kind of musical experience one could have. He played all kinds of music with the best professional musicians in the world. These vast experiences, combined with his extraordinary intellect, organizational ability, and personality, make him an exceptional teacher.

Ten philosophical principles were identified in interviews with Phillips.

1. Foster personal relationships that allow the teacher to know the student.
2. Prepare students for a life in music and a life of dedication and service.
3. Prepare student in comprehensive musicianship.
4. Teach students how to practice.
5. Teach students to accept and develop their own sound.
6. Reduce complex concepts to simple metaphors.
7. Transfer concepts from one musical context to another.
8. Teach professionalism and career development.
9. Foster a cooperative studio environment.
10. Teach students to be promoters of the tuba.

Foster personal relationships that allow the teacher to know the student. Through his personal warmth, mentoring skills, and sincere

concern, Phillips gets to know his students in ways that foster life-long relationships. He understands the importance of students liking and respecting their teachers, which Phillips recognized in his own experiences studying English. He reports that he did poorly in high school English because he did not care for the teacher. At the university, however, his English teacher was “so special” that he developed a lasting love for the English language. He reads the dictionary and thesaurus for fun. Phillips takes personal relationships with students quite seriously.

Phillips believes that being a studio teacher is an “incredible challenge and responsibility because studio teachers are dealing with fragile human beings with feeling, with predetermined goals.” A teacher should know how much criticism a student can tolerate and react to in a positive way. He should know when to “back off in order to maintain a personal relationship with the student.”

Just as William Bell was a mentor to Harvey Phillips, Phillips is a mentor to each of his students. He consistently teaches and models the highest personal and professional standards. He is involved in their lives and is concerned about how his students are doing in school and how their home situations are.

Because of his many years of teaching experience he knows what personal traits to watch for in his students and begins to evaluate them from the time they audition for entrance at the university. Phillips relates an aspect of Philip Farkus’ philosophy of teaching that presumes that there are basically three kinds of students: those anyone can teach because they

are so organized and motivated; those no one can teach because they lack talent, interest, and drive; and those whom a teacher must learn how to teach. Phillips believes that with these, one must become a different teacher for each student. "You find dozens of ways to say the same thing until you see a sparkle of recognition in the eyes of the student." As Phillips becomes personally involved with the student, his knowledge of his or her personality and temperament dictate his approach to teaching that student.

Phillips makes professional development a vital part of his tuba studio curriculum. He calls this aspect of his studio teaching his "course in survival." Phillips asks students to make lists of their perceived 10 strengths and their perceived 10 weaknesses. List items include aspects of appearance and personality as well as musical abilities and other talents. A student's objective, over time, is to move items from the list of weaknesses to the list of strengths. He teaches that a student should exhibit strengths at all times in public and keep weaknesses very private, "but work on them like crazy. When you feel they are now strengths, exhibit them publicly."

Phillips counsels students based on what he observes in their temperament. "We have players whose temperament would not survive in an intense professional orchestra situation, but they would survive very well in a brass quintet with four other understanding and equally motivated individuals."

Phillips encourages students to be friendly and outgoing, often advising students to "never be the second person to extend a greeting to a colleague." He encourages his students to approach great people and ask for

help. He says that most professional people are willing to help students, but often students are reluctant to ask for help.

He encourages students to market their strengths. He says that too often “students try to market their dreams and not their strengths.” Although a student may dream of being a high profile professional performer, he or she may not have “what it takes” yet may have all the qualities to become an exceptional teacher or other professional in the music world. Through this process, students learn to market their strengths and continue to improve on their weaknesses.

Prepare students for a life in music and a life of dedication and service. While teaching at Indiana University, Phillips met with his students at the beginning of each school year and told them that because they were there, he assumed that they wanted “a life in music.” If this was true, he told them that he could “guarantee each of them a life in music.” Phillips repeatedly points out that not all students will have careers as performers, but all can have a meaningful career in music.

Phillips tries to instill in his students a sense of service in all aspects of their lives, especially their musical lives. Phillips expressed his desire for the individuals in his studio to excel as outstanding musicians and citizens in university ensembles as a service and responsibility to the university. He constantly inquired of students how they were doing in their performing ensembles and worked with them on band and orchestra excerpts.

Phillips reports that he has found meaning in life from the service he has been able to give others. “I have tried to serve the needs of those I’m

charged to serve.” A student has a talent that needs “nurturing, shaping, focusing, and guiding.” He recognizes the importance of guiding those with talent into an attitude about the profession that recognizes musical diversity so that a student does not consider that there is “music beneath his position in life.” He highly values the music education profession and believes in being committed to it. “Someone who goes into music education ought to have the same commitment as someone who goes into religion.”

Prepare student in comprehensive musicianship. Phillips teaches in a way that brings together all of the disciplines of music study including music theory, ear training, and music literature. For instance, he often had his Indiana University students bring their theory books to lessons. They learned to express their musical knowledge through performing.

I believe that whatever knowledge a student has acquired in his studies at the school I am teaching at can be put through his instrument. Knowledge must be expressed on the instrument. Don't just learn on paper and through listening, but be able to play that knowledge.

Pointing out that virtually any piece of music is made up of chords and scales, Phillips describes an exercise that emphasizes to his students the importance of expressing knowledge of music theory. He gives a student a copy of one page of a solo work along with a blue pencil and a red pencil. The student is asked to circle in blue the groups of notes that are part of a triad and circle in red the groups of notes that are part of a scale. Students learn that their playing will be much more efficient if they develop three basic abilities: first, learn to effortlessly play arpeggios on all major, minor, diminished, and augmented triads as well as all major and various forms of

the minor scales; second, learn to identify chords and scales at sight; third, learn to look at larger groupings of notes on the page.

Ear training is an important part of his curriculum because he believes that “a student cannot progress beyond his ability to hear.” Phillips describes a simple ear training exercise in which the teacher plays a note or groups of notes and the student plays back what is heard. The student should not only reproduce the notes but also reproduce tone, dynamics, articulation, etc. The teacher and student then switch roles. The student becomes a prime communicator in the process.

Phillips challenges and expands students’ knowledge of music literature through what he calls “cross-referencing,” comparing and relating two standard works from the solo tuba repertory. For example, since the tempo, style, and mood of the second movement of the Hindemith *Sonate* can be related to the last movement of the Vaughan Williams *Concerto*, a student who has done significant work on the former piece can instantly transfer concepts of tone, articulation, tempo, attitude, etc. to the latter piece.

Phillips teaches that “music is one language, but it has many dialects.” Just as an actor learns to speak in various dialects in order to expand the number of roles available to him or her, students need to do the same with various types of musical dialects. A musical dialect can be specific to both genre and composer. “There is a baroque dialect, a classical dialect, a romantic dialect, a contemporary or Schoenberg dialect that is applied to all kinds of music. There is ragtime, Dixieland, swing, etc.”

He illustrates this concept by writing a two-octave scale on a blackboard and asking individual students to play the scale as a Bach scale or a Mahler scale. The student must make adjustments in sound, emphasis, and articulation to play in the given dialect. When teaching orchestral excerpts, Phillips teaches students that they should know about the “musical dialect” of the composer and the musical context of the excerpt. He talks about national styles and individual dialects of composers. He says that too many students try to play their orchestral excerpts in the style of Wagner. He points out that “you’ve got to be able to sing for me what happens just before that soli in *Die Meistersinger*. Don’t just learn the excerpt, learn the music.”

Teach students how to practice. Phillips believes that the teacher’s responsibility is only a fraction of student learning; most of the responsibility is on the shoulders of the student. He agrees with Roger Bobo’s (1988) premise that a primary part of studio teaching should be teaching students to be their own teacher. In order to do this the teacher must “hone in on what you consider, as a teacher, to be the absolute basics of performance: placement of the mouthpiece, fingers on the valves at all times, finding the center of an instrument’s balance, endurance, embouchure, etc.” (H. Phillips, personal communication, November 1996).

When discussing practicing, Phillips stated that students need to answer the following questions with the following desired responses:

Why practice? (To have the option of a career as a performer.)

When should I practice? (At every opportunity.)

What should I practice? (Everything you can't do.)

Where should I practice? (The most private, secluded place you can find so you can sound terrible for 3 or 4 hr if you need to.)

Phillips believes that students should understand the distinction between practicing and rehearsing. Practicing is working on the things you need to improve on, whereas rehearsing is preparing oneself for public performance. In practicing, the student works on establishing good performance habits. In rehearsal, however, a student is "looking for artistic nuance" and preparing for performance. He believes that bad playing habits are almost impossible to break, the student and teacher need to "work around them."

Teach students to accept and develop their own sound. Phillips points out that "every instrument is 95% human. . . . It does not become an instrument until there is human involvement" (personal communication, November 1996). Even though his goal is to develop the student's basic sound, it is the student's responsibility to create that human involvement on a personal level. Phillips reports that when someone tells him, "I didn't know that student studied with you," he feels that he has done his job well. "It means I don't have a school and students aren't trying to play like me. I have been successful enough as a teacher to get them to play like them." He points out that those who win orchestra auditions do so because there is something about their sound and approach that is unique.

Reduce complex concepts to simple metaphors. Phillips is a master at explaining difficult concepts in simple terms. One example is what he calls

“the vertical keyboard.” He uses the image of a piano keyboard turned on its side to help dictate what is required physically in playing various registers of the tuba. The attached strings and sound board also have metaphorical meaning. “The little short, thin strings play the high notes; and the long, fat, loose strings play the low notes. And then there are all those strings in between.” He teaches that the low register requires a larger oral cavity like the larger portion of the sound board and more lip and a looser lip to vibrate like the longer, looser, and thicker bass strings. He also teaches that every note on the tuba has a different air column just as each note on the piano has a specific string or set of strings.

Phillips reports that he often has students put words or a thought with the music they are working on. “Take the words to a love song and create it. Don’t just play it but create it. It is you. You have a love song and you are singing it to the person you love the most in the whole world.”

Foster a cooperative studio environment.

I always tried to create a kind of family atmosphere in which we cared for each other. I told students when they came in, “Look, I want the tuba students in this school to be known as the friendliest people in the school. Don’t ever be the second to say hello to somebody.”

He encourages his students to support each other and learn from each other.

If you hear someone doing something you can’t do, both of you should be mature enough so that you can walk up to that person and say “Hey, that’s terrific! I really admire what you are doing. How do you do that?” The other student ought to say “get a chair and sit down, if you have some time. I’d be glad to talk to you about it.”

Teach students to be promoters of the tuba. Phillips has dedicated his life to promoting the tuba. He seeks to pass on his zeal to his students because they need to generate opportunities for themselves and the students they teach. Phillips asks his students, “How can you justify teaching (the tuba) if you are not involved in future possibilities of that instrument. . . . There should be no boundaries for what we teach or what we encourage our students to explore.”

Interviews of Phillips’ Students

Six former students were interviewed about their studio lessons with Harvey Phillips. The interviewees were each from different fields within the music profession and included James Self (personal communication, December 31, 1998), Rudolph Emilson (personal communication, December 30, 1998), Steven Shoop (personal communication, January 6, 1999), Craig Fuller (personal communication, January 3, 1999), Patrick Sheridan (personal communication, January 6, 1999), and Gary Bird (personal communication, March 22, 1999). James Self, a freelance tubist in Los Angeles, California, records many television and motion picture soundtracks, is a member of several professional orchestras, and teaches tuba and chamber music at the University of Southern California. Rudolph Emilson has been the tuba instructor at the State University of New York in Fredonia for since 1968. Steven Shoop is a high school band director, a tuba clinician, an arranger and publisher of music for tuba ensemble, a Dixieland tubist, and is completing a PhD in music education at the

University of North Texas. Craig Fuller is principal tuba with the Omaha and Lincoln Symphony Orchestras and is tuba instructor at the University of Nebraska. Patrick Sheridan is a freelance soloist appearing with orchestras, wind bands, brass bands and in recitals around the world. He is a visiting professor of tuba at both the Royal Northern College of Music in Manchester, England, and the Royal Scottish Academy of Music and Drama in Glasgow, Scotland. Gary Bird is professor of music at Indiana University of Pennsylvania where he teaches tuba and euphonium performance, a position he has held for 28 years. He is principal tuba with the Westmorland and Johnstown Symphony Orchestras.

Because each former student worked with Phillips at a different level of their musical development, each reported a different kind of teaching situation. As a member of the United States Army Band, stationed in Washington D.C. in the 1960s, Self commuted to New York City 15 to 20 times over the period of about a year to study with Phillips. Emilson and Bird had both been teaching at the university level for several years and were mature performers when they attended Indiana University as a graduate students and studied with Phillips. Shoop studied as a graduate student at Indiana University, his major focus being music education. Fuller studied with Phillips for 4 years earning an undergraduate degree in tuba performance. Sheridan studied with Phillips at TubaRanch during the summers of his teenage years.

Phillips' Philosophy of Studio Teaching

The 10 philosophical principles that emerged from interviews with Phillips were confirmed through interviews of 6 of his former students.

Foster personal relationships that allow the teacher to know the student. All former students interviewed spoke of how Phillips fosters personal relationships, learns much about his students, and personalizes lessons. Each described a close, personal relationship with Phillips that continues to the present day and commented on Phillips' way of communicating and connecting with people, what Emilson called "people knowledge." All students also spoke of how personal relationships led to informal settings in which learning took place.

Students described how, in their first lessons, Phillips tried to find out as much as possible about their background, interests, and goals. As they reported about their lessons with Phillips, each described courses of study that varied markedly from each other. Phillips took a highly individualized approach with each of these students. I further believe that this individualized approach is based on Phillips' extraordinary knowledge and understanding of each student that Phillips develops. The inquiry process that Phillips engages in helps to determine the approach that he takes with each student, accounting for the differences in lesson content that various students reported.

An example of inquiry shaping lesson content is revealed in Phillips' teaching relationship with Sheridan. Sheridan reports that Phillips taught him to figure out what he did well and encouraged him to "find a niche"

that allowed him to do what he did well and was most interested in. From his earliest study with Phillips, Sheridan exhibited a passion for playing solo literature and Phillips encouraged him in this. "That's why I always came back to working on my solo playing. He believed in me right from the beginning."

Phillips always creates an informal and collegial atmosphere around the private lesson that facilitates immediate rapport between teacher and student. Emilson's first lesson was at TubaRanch. He recalled that he and Phillips had a few drinks, played duets, and had a cook-out. Sheridan, who also studied with Phillips at TubaRanch, told of having a short informal lesson, then going for a walk or feeding the chickens, after which they returned to the lesson.

Students all described the care and concern Phillips had and continues to have for each of them. Emilson described an incident that demonstrates Phillips' depth of concern for and commitment to his students. Emilson was in the Indiana University tuba studio observing a lesson while Phillips talked to a student about a personal problem the student was having. The student was obviously under the influence of drugs, and Phillips, with tears in his eyes, told the student about friends of his who had ruined their lives and careers with drugs. He told the student that he needed to realize how dangerous drug use was and told the student that he could no longer study with him. Emilson reported that Phillips took the student into his home for a week to "dry him out." Phillips contacted the student's parents and arranged for his transportation home. In my

1996 interview with Phillips, he told a similar story about “drying out” a student and sending him home to his parents. I do not know if it was the same student.

Phillips seems to make friends with everyone he comes in contact with. His personal warmth made an impression on me the first time I met him in 1972. When I introduced myself as a tubist, he conveyed a genuine interest in me, and as our paths have crossed over the next 27 years, our relationship has grown. Another example of this is illustrated in the Shoop interview. In 1998, Shoop suggested to a local newspaper reporter that she call Phillips to get information for an article on TubaChristmas. Shoop reports that through that telephone call, the reporter and Phillips became good friends. Phillips told her that if she were ever in the Bloomington area, she should stay at TubaRanch, and “He meant it!” Sheridan said that, as a teenager, what kept him going back to TubaRanch each summer was how much fun he had and how Phillips made him feel good.

Prepare students for a life in music and a life of dedication and service. Phillips models what a life in music can be. Sheridan says that Phillips is a “total inspiration in terms of what he did as a tuba player, a mentor, an administrator, a teacher, and as a spectacle of what can be done with one life,” Emilson reports that “there is not a day that goes by that my students don’t hear his name.” Phillips had a profound influence on Emilson because of his “sense of integrity, honesty, humility, simplicity,” contrasting Phillips with people in the music profession who are “takers and not givers.”

Because of Phillips' influence, Emilson was able to overcome a major professional obstacle. He has had difficulty with his tuba playing since studying with Phillips because of dental problems. His top teeth were extracted and playing with upper dentures presented many challenges. Emilson believes that without his experiences with Phillips, he would not have continued playing the instrument after the onset of these difficulties. "I felt a duty to honor the fact that I had been given the privilege to work with Phillips; that I should keep on playing no matter what. If I hadn't gone through that, I might have quit under different circumstances."

In studying with Phillips, Self learned to be a good citizen.

I have two mottos I live by which Harvey had a lot to do with. One, do what you say you are going to do and two, finish what you start. Those two things are driving forces in my career. I know that Harvey had a lot to do with them because his whole life is based on them.

In reflecting on the "lifestyle" aspects of teaching he experienced with Phillips, Self has recently started adopting some of Phillips' model with his own students. "Sometimes I've just taught the student. I have not brought them into my home, my life, or brought them to rehearsals. I am working on changing that."

Prepare students in comprehensive musicianship. Phillips prepares students comprehensively by exposing them to a variety of literature through modeling a variety of styles, always emphasizing the musical over the technical aspects of performance.

Rather than just learning pieces, students are taught and are expected to know specific styles and approaches to playing music of various

composers. While working on a piece by Brahms, Phillips encouraged Sheridan to study other works of Brahms. Together they listened to recordings of famous singers singing Brahms songs and recordings of orchestras playing his symphonies. They would then return to the lesson and work on the Brahms piece Sheridan was preparing. Sheridan said that he learned more than the piece; he learned all about Brahms' music.

Because Self was working mostly on solo literature for his master's recital and orchestral literature in preparation for an orchestra audition, his lessons just focused on that literature. "I don't remember lessons being formalized. He didn't have me do a routine. His assignments were to get pieces ready for next time." Much of what Phillips taught Self was by example. Self reports that Phillips played for him frequently and played duets with him. "He is a great guy to play duets with. He has great time, pitch and he can read anything. It was good for me to play with someone with that solid kind of playing." Through Phillips' modeling, Self learned to be precise with rhythm and consistent with all notes, "emulating his strength and his sound."

Fuller reports that Phillips prepared him for the professional world in many artistic ways. "Technically, I was very capable, but musically I was very immature." Fuller considered his studies with Phillips more musical coaching sessions than the kind of lessons that dealt with the fundamentals of playing such as breathing, embouchure, etc. In his first lessons, Phillips had Fuller working from Arban, focusing on articulation, rhythm, and subdivision. He learned to play these basic studies very

musically. Fuller recalls how Phillips wrote in dynamics on every measure of a basic Arban study. This taught him about shaping musical line. As Fuller progressed, they worked on advanced repertory such as the operas of Berg and Strauss as well as Reynolds' *Sonata*. As Fuller's musical maturity grew throughout the course of four years, they returned to the Vaughan Williams *Concerto* a number of times, each time striving for a higher artistic level.

Teach students how to practice and how to teach. Phillips believes that students should be trained to be their own teachers (personal communication, November 1996). This is illustrated in Sheridan's experience at TubaRanch. Because Sheridan only studied for a few weeks each year, Phillips made sure that he learned to be an independent musician, taking responsibility for his own development. At the last lesson of one summer, Phillips posed questions and answers to Sheridan. "How do you get better? Here are your staples; Arban, Schlochburg, Clarke, etc. Just work through them. Do one a week and I'll see you next summer." Sheridan says that he drew upon Phillips' encouragement received during summer lessons throughout each following year and continues to do so.

Phillips helps students diagnose as well as prescribe solutions for their performance problems. His ability as a diagnostician and his placement of personal responsibility onto the student are described by Emilson.

He can size up someone's musicianship and playing skills instantaneously and tell the student how to solve the problem. He doesn't give you all the nitty gritty details. He makes you search it out. He tells you what the problem is and if you have enough moxie to go through the growth process, then you learn

it. He is not going to give you all the secrets of playing; he'll show you the way. . . . He's the greatest teacher I've ever seen.

Fuller reports that Phillips taught him how to practice. He recalls three principles of personal practice that Phillips taught:

1. Break practice up into small increments.
2. Take the difficulty out. "If you can't play something high, take it down an octave or fifth; if you can't play something fast, take it slower; if you can't play something slow, play it faster."
3. Add the difficulty back in, "working from strengths toward weaknesses."

Teach students to accept and develop their own sound and approach to making music on the tuba. Through inquiry and observation, Phillips develops an understanding of each student's interests and motivations. He then guides students in developing their own sound and approach. For example, Sheridan was interested in playing transcriptions and although another of Sheridan's teachers disapproved of his literature preference, Phillips was supportive of his interests. He encouraged Sheridan to follow his musical preferences. Due in part to Phillips' encouragement, Sheridan has developed into one of the leading tuba soloists in the world. Other teachers may not have considered the potential of a solo career for a tubist

Although Phillips has strong opinions, he is willing to consider a student's musical sensibilities that may be different than his own. For example, Phillips was flexible in his approach with Emilson who preferred tempos on Halsey Stevens' *Sonata* that were different from the standard

interpretation. Originally Phillips disagreed with Emilson's choice of tempo because he knew that the composer felt strongly about performers observing his marked tempos. After Emilson played it at his preferred faster tempo, Phillips agreed that he also liked it better and changed the tempo marking on the music.

Some students reported that they did not adopt some technique which Phillips taught, yet they felt accepted. For example, Self did not employ Phillips' pivot principles, bending a little at the waist as one changes registers. "That just didn't work for me. I remember the broader things. He wasn't picky about preparing études and studies. We were dealing with literature." Bird also reports that although Phillips teaches specific techniques such as an embouchure pivot system, his students are not required to adopt them. Bird felt comfortable adopting aspects of the pivot system that worked for him and felt no need to please Phillips by accepting all of his pedagogical principles.

Due to Phillips' personalized approach, he does not overteach. Fuller says that more than learning to play the tuba, he learned to teach it, starting with himself. "I learned to retain my own child-like simplicity toward playing the instrument."

Reduce complex concepts to simple metaphors; transfer concepts from one musical context to another. Instructional techniques using metaphorical language and transfer principles were described by Phillips in interviews and observed in teaching sessions. Students interviewed, however, focused on his personal warmth, encouragement, and mentoring.

This may be due to the lack of specific inquiry about these principles in the interview questions. However, one example of Phillips' metaphorical descriptions was recalled by Fuller. He reports that Phillips taught him to think of variations of articulation as an "articulation pallet." A performing artist needs "not just two or three articulations, but a whole pallet of colors in articulation" in musical interpretation.

Teach professionalism and career development while fostering a cooperative studio environment. . What Phillips described as his "course in survival" (personal communication, November 1996) had an obvious impact on former students interviewed. Shoop reports that any encounter with Harvey Phillips "is always something more than just learning to play the tuba."

Phillips teaches and models goal setting, networking, and business skills, as well as many kinds of personal development skills. This is illustrated in a description of Shoop's first lesson. Phillips asked him about his interests and goals in studying the tuba. Shoop's answers led Phillips to give networking suggestions. After Shoop informed Phillips that he also played electric bass, Phillips recommended that he audition for the jazz professor, Dominic Spera. This led to an opportunity to play electric bass at the university and further study in arranging with Spera. Shoop now recognizes that Phillips made sure that he was well networked on electric bass as well as tuba. Because of this, doors into professional arranging and electric bass performance were opened.

As a matter of course, Phillips incorporates business aspects of music into the studio scene. Shoop reports that in Phillips' master classes, all aspects of the music profession were covered. At one master class, Shoop was asked to present a class on business issues related to music.

One of Self's most memorable "lessons" was an unexpected opportunity to observe Phillips in a professional setting. Self had traveled from Washington, D. C. to New York City for a lesson, and it turned out that Phillips was overbooked with playing engagements and could not work a lesson in. With an invitation to go to a performance with Phillips, Self purchased an inexpensive black suit so that he could sit in the orchestra pit with Phillips as he played *The Nutcracker* Ballet. "I was knocked over by the precision and power of his playing." Self was able to observe Phillips' interaction with colleagues. He was impressed with the lifestyle of professional musicians, recalling that the brass players left the pit between acts to play poker.

For Self, Phillips provided a model in the professional sense. "What Phillips did as a freelance player was what I wanted to do. I wanted to emulate him. I think I have succeeded to some extent. What I do now in Los Angeles is sort of what he did in New York in his time." Phillips' management and organizational abilities made a significant impression on Self, who continues to model those aspects of professionalism. "I am still stunned by the million projects he has going and his vision. Also, he is a very articulate person. He is what I call a good citizen. . . . He is definitely a role model."

Following Phillips' example, Self has organized and produced annual TubaChristmas events for 24 years. Self said that "the most important stuff I got from Phillips was learning to take the bull by the horn, take chances, and make my career happen. He made me think about the future as possibilities."

Phillips continues to guide and mentor many of his former students today. Each interviewee spoke of the continued professional support they receive from Phillips. He was helpful in Shoop's career as recently as the week previous to his 1999 interview. In a phone call unrelated to Shoop's publishing career, Phillips brought up the subject of Shoop's tuba-euphonium ensemble arrangements. Shoop recalled Phillips' conversation with him. "Steve, I was thinking about you recently. Have I done everything I have told you I would do to help you with your ensemble publications? If you want me to do more, let me know."

Fuller reports that Phillips prepared him for the profession of music and for life. He learned about the importance of knowing about the *Wall Street Journal* and business, getting along with colleagues both in the music profession and outside the profession. He learned how to be a "hustler," a person who really gets things done, by watching Phillips do it and by participating in events such as TubaChristmas. Fuller reports that the organizational skills he learned from Phillips later became very useful as he became manager of a youth orchestra in Omaha.

Through his association with Phillips, Bird learned about thinking big. He points out that Phillips made him think in terms of expanding on

his organizational ideas. As they discussed organizing a local conference, Phillips pointed out that it is not much more work to do it on a larger scale transforming a regional conference to a national conference.

Teach students to be promoters of the tuba. Phillips' zeal for the tuba is contagious to other tuba players who associate with him. This is demonstrated by the fact that every student interviewed, with the exception of Sheridan, is a regional coordinator of Phillips' annual TubaChristmas events.

Phillips believes that to become an informed promoter of the tuba one must understand and have an appreciation for the historical context from which the instrument emerged in this century. Emilson gave an example of how he was taught the importance of the major literature for the tuba. As Emilson told Phillips that he was not impressed with Vaughan Williams' *Concerto for Bass Tuba and Orchestra*, "He just about tore my head off. He said it's the only concerto we have by a major composer. I should be grateful that I have it and I had better change my attitude."

Interaction with Students

Most students commented on Phillips' relaxed nature, his patience, and his personal attentiveness. Emilson points out that he never heard Phillips use a negative word or get angry. "He was always gentle." Fuller reports that Phillips was the "most patient teacher" he had ever worked under. "If I couldn't do something one week, he would say 'just bring it in next week and you'll have it.' He was very supportive and patient, showing

sincere confidence.” Emilson described Phillips’ studio setup as an atmosphere of concentration and interaction. Phillips sat directly across from him with his tuba in hand and a music stand. “He looked me directly in the eye.”

In interaction with students in lessons, Phillips draws on his extensive experiences. Sheridan states that there were often inspiring and involved stories of how Phillips had come to find his own answer to the very same question that Sheridan had. For example, when Sheridan was seeking reassurance that it was acceptable to focus his efforts on playing transcriptions, Phillips related a story about when he was a student at Julliard and was frustrated with the lack of solo literature. Like Sheridan, Phillips had turned to transcriptions for repertory. Phillips spoke with noted professor and composer Vincent Persichetti and was reassured that the great composers whose creative works were produced before the tuba was an established solo instrument “certainly wrote music to be heard.” Persichetti told Phillips that those composers would be delighted that an artist of his caliber had found interest in their music. “So go ahead and play it.” Sheridan stated that Phillips’ answering of his question by sharing this complete story was much more meaningful and lasting than if he had said, “ok, just play what you want to play.”

Lesson Content and Organization

With regard to lesson content, Phillips’ students reported different curricula which reflected various levels of development at the time of the

lessons as well as various kinds of student goals and interests. Self worked primarily on solo literature he was preparing for a masters' recital as well as orchestra excerpts in preparation for an audition. After demonstrating to Phillips that he had mastered Bell's warm-up routine, Emilson also worked on solo literature. Shoop described a few lessons that exposed weakness in minor scales. The resulting specific assignments were designed to remedy his shortcomings. Sheridan was a very young and eager student who had a passion for playing solo literature of instruments other than the tuba. Phillips prescribed the standard étude and study literature and encouraged his development in transcription performance. Fuller, the only interviewee who completed an undergraduate degree in tuba performance under Phillips, reported a curriculum that I believe is representative of the sequence and literature studied in Phillips' Indiana University studio. Fuller reports that "Phillips prepares a complete musician." In his lessons, Phillips had him working on a variety of étude material.

1. Legato études of Fuller's choosing such as Bordgoni
2. Technical études from Kopprach, Arban or Blazhevitch.
3. Solo works.
4. Ensemble music from band and orchestra
5. Excerpts.

Together they made a list of major orchestral excerpts and Phillips had him collect lists of audition materials that they worked through. Phillips instructed him to listen to recordings when preparing excerpts.

Bird reports that in his study of solo literature, etudes and brass quintet excerpts with Phillips, he got a sense of melodic ideas. "He teaches from melody." Bird says that the most valuable aspect of studying with Phillips was learning melodic interpretation.

Observations of Teaching

In June 1997, I observed and recorded six of Harvey Phillips' teaching sessions at the Rafael Mendez Brass Institute at Arizona State University in Tempe. These included private lessons with students whom I will refer to as "John" and "Jack," a master class, a brass quintet coaching session, and two tuba-euphonium quartet coaching sessions. Jack is an adult amateur musician who plays with a brass quintet that was preparing for an upcoming concert. Jack came to the lesson with a detailed list of questions and concerns about performance problems that he was working on. He also wanted help on brass quintet music that he was preparing for. John is from the midwest and is a university tuba performance student. He has a particular interest in developing his orchestral excerpts on both F tuba and CC tuba. In the master class, Phillips coached two tuba students on fundamentals and solo literature. Ensemble coaching sessions observed included a brass quintet and tuba-euphonium ensemble. The quintet consisted of two adult amateur trumpet players, a student hornist, a student trombonist, and a student tubist. The tuba-euphonium quartet consisted of high school and college-age student musicians. Both ensembles were organized by the Mendez Institute.

Phillips' Philosophy of Studio Teaching

The 10 philosophical points that emerged from interviews with Phillips and confirmed through interviews of his former students were all observed in his teaching. An 11th principle identified in observing his teaching deals with his extensive repertory of verbal instructions and will be discussed at the end of this section of the case study.

Foster personal relationships that allow the teacher to know the student. Phillips builds personal relationships and assesses students' instructional needs through cordial conversation, questions, and observation. Phillips was exceptionally personable as he greeted each student before the teaching sessions began. I found this high level of congeniality to be normal for him in every situation. The actual teaching sessions observed opened with Phillips asking questions of students. He asked about their musical background, experience with their instrument, and what their goals were. Then he closely observed students playing before moving into instructional content. Following conversation and questions, Phillips asked John to play some scales because "I want to get to know you a little." As John played scales, Phillips attentively watched and listened.

Phillips sets the format for the teaching session based on information gleaned in such informal conversations, responses to questions, and initial observations of playing. He accepts each student where he or she is musically and builds upon what is expressed by the student and how the student plays. Jack had a specific agenda for his lesson in the form of an extensive list of questions and subjects that he wanted to cover. Phillips

went down Jack's list, dealing with each issue. John's approach was to play the literature he was currently working on with no agenda to solve specific problems. As a matter of course, Phillips went along with each student's agenda and addressed professional issues and performance problems that he assessed in the initial conversation, questions, and observation.

Phillips makes use of his exceptional personal rapport in motivating students. As Phillips progressed further into Jack's lesson, they appeared to become more emotionally bonded. As the lesson proceeded further, Phillips asked Jack to make a commitment to improve specific aspects of his playing. Phillips sang four notes of the phrase that was a problem for Jack with smooth articulation of notes and pointed out that most players are not aware of such problems.

They think it is just a characteristic of their instrument, so they put it out of their mind. I don't want you to put it out of your mind. Now that I have called attention to it, I want you to have that be a goal in your playing. Take out all of those inequities of the valve combinations. There is too much motion in the lower jaw in the articulation.

As Jack followed Phillips' instructions, his sound and smoothness between notes improved. Phillips exclaimed, "Beautiful! Using syllables will often times get you the right air stream." Phillips then gave Jack credit for his improvement. "That's good! Not because I told you to do it. You are blowing naturally into the upward scale."

Prepare students for a life in music and a life of dedication and service. As I spent 4 days at the Mendez Institute with Phillips, I observed him consistently modeling service and empathy for the students who

worked under him. He often asked students about their interests and goals both in teaching sessions and informally. In the master class, Phillips made an important point that he made applicable to musical settings as well normal life settings. He admonished students to

always be aware of the needs of others. . . . If you see someone who has both arms full, open the door for them. It can permeate your whole attitude throughout your life. Be aware of the needs of others musically, and give it to them. It may mean playing a note a little sharper than you would ordinarily play it.

Prepare students in comprehensive musicianship. In teaching sessions, Phillips consistently brought to each composition a larger musical context. For example, as John played orchestral excerpts, Phillips instructed him not just to learn excerpts, but to learn composers. “For tubists who just learn excerpts, unfortunately, everything sounds like it was written by Wagner or Mahler.” Drawing on his own student and professional experiences, Phillips also encouraged John to study the sound and articulation of other instruments and apply the resulting concepts to the tuba. Phillips suggested that he start working with a cellist in alternating phrases in order to copy the string articulation in learning to play Bach and all Baroque literature.

Teach students how to practice and how to teach. As Phillips taught concepts, he gave instructions on how to practice, and in some cases, how to teach those concepts. After demonstrating to Jack the use of vowel positions through various registers of the tuba, Phillips then proceeded to explain his philosophy of the use of vowels in controlling tone quality and how he teaches the concept.

Phillips uses questions extensively in prompting students to diagnose their own performance problems. With John, he asked, "What's wrong with the last note you played?" As John learned to recognize the pitch problem, Phillips instructed him on how to solve the problem. "Don't change a thing as you do it again except go for the 'ah' sound." Phillips then instructed him on how to use a mirror in practicing. "See yourself as others see you. . . . Sit in front of a full length mirror. See how you breath, how your hold your instrument, see what you do with your fingers, see what you do with your chops."

Teach students to accept and develop their own sound and approach to making music on the tuba. Phillips is nondogmatic and flexible in his teaching. Unlike some famous teachers, Phillips does not put students through the indoctrination process. He simply learns as much about the student's motivations, accepts the student where he or she is, and teaches principles in positive ways.

Phillips told John to develop a sound that is flexible and compatible. He gave an example of how his associate in the New York Brass Quintet, John Barrows was able to match his quality of sound to whatever instrument passed the musical line to him. He encouraged John to study the way that cellists perform Bach's suites. "Don't sound like a tuba player playing Bach. Sound like a musician playing Bach."

Reduce complex concepts to simple metaphors. Phillips' use of simple metaphorical descriptions to simplify performance concepts was observed in each teaching session as can be seen in the following examples.

As Jack experienced problems with consistency of tone throughout various ranges of the tuba, Phillips taught a concept of “three hinges”: the lower lip, jaw, and the back of the torso. He demonstrates this by placing his finger on his lower lip, pivoting first his lower lip, second his jaw, and third his lower back. Using a pencil held parallel to the ground in front of his lips, he demonstrates that it takes very little movement on one end of the pencil to facilitate a wide movement on the other end.

Phillips also instructed John in the principles of the “vertical keyboard.” Phillips told a student in a tuba-euphonium quartet rehearsal to conceive of a particular attack on a note as if it were played on a chime. “Put a head on it. Use a very soft mallet, but strike it.” Phillips also uses the example of the sound of a chime as it is struck to illustrate the image of making a clear upward octave slur in John’s lesson. “Make the high note sound like an overtone of the lower note.”

In a quartet coaching session, Phillips uses the imagery of a shelf to teach clear interval placement. “If you are going to take this note from this shelf and put it on this shelf, don’t bump the other shelf.”

To solve a problem of too much “brightness” in Jack’s tone, Phillips explains that this problem is related to too many high overtones in the sound and that it could be corrected by putting more lows in his sound. “Equate it to turning up the bass knob on your hi-fi.”

Transfer concepts from one musical context to another. Phillips makes use of conceptual transfer principles in his teaching as can be seen in the following examples. To help Jack solve a problem with articulation in

an étude, Phillips sings what seems to be an unrelated jazz melody, *Four Brothers*. He sings it with relaxed sounding syllables, the way jazz musicians often communicate phrasing concepts to each other. Then he sings the problematic étude excerpt with the same kinds of syllables, but not in a jazz swing style. He points out that being able to articulate it without the instrument will help in articulation with the instrument. “You already have it in your mind.” He tells John to learn to use all the different articulations and to be able to start a note with the same impact, no matter what articulation used.

When I play large skips into altissimo range, I never use the tongue. It just gets in the way. Use only air. The great horn players like Phil Farkus and Dale Clevenger taught that to me. Usually with articulation, the tongue is the problem. Get the tongue out of the way. Use air. Ninety-nine percent of every note is air. Only that 1% gives it that character at the beginning. Then, no matter how short you play a note, you’ve got a whole sound.

Teach professionalism and career development. Phillips spoke extensively about career development in all of the observed teaching sessions as can be seen in the following example.

After greeting John at the beginning of his lesson, Phillips asks a series of questions related to career development. John’s responses to each question lead to Phillips’ next question. The questions are as follows:

1. “What are your ultimate goals?”
2. What are you going to do until the symphony job materializes?
3. How about chamber music?
4. Recitals?
5. Have you prepared a resume yet?

6. Do you do computers?"

The dialogue between John and Phillips generated by the series of questions covered a plethora of issues including self-promotion, professional preparation in various styles, becoming computer literate, and telephone etiquette.

Along with musical suggestions, Phillips dispensed much practical advise to John as he was coached in three excerpts. The advise was as follows:

1. Since music directors and orchestra committees sometimes ask audition finalists to play excerpts that were not on the original audition list, research and prepare challenging tuba excerpts from the orchestra's previous season as well as the next season.

2. When accepted as a finalist, send a list of pieces that are not on the audition list, that you are prepared to play. "This shows the audition committee the depth of preparation that you have for the orchestra position." Phillips pointed out that when Warren Deck auditioned for the Houston Symphony, he volunteered to play *The Fountains of Rome*, even though it was not on the audition list and that it helped to secure the position for him.

Foster a cooperative studio environment. Phillips creates an atmosphere that facilitates familiarity. I observed how he creates a sense of partnership among people by introducing individuals to each other while sharing information about who is being introduced. He openly discusses various projects that he is involved in as well as other's projects and

promotes dialogue, soliciting opinions. In his teaching, students become equal partners in the learning process. He also includes whoever else may be around. My experience as an observer was an example.

While I tried to be an impartial observer during teaching sessions, Phillips repeatedly brought me into discussions with students. Phillips, the students, and I ultimately ended up conferring about students' situations and how problems could be solved. I became involved in every teaching situation observed, except for the master class that was held in a large auditorium.

Teach students to be promoters of the tuba. In all teaching sessions, Phillips dispensed information about the tuba's role in the music world past, present, and future.

Phillips took a significant amount of time during the master class to teach about the history of the tuba repertory and to promote his ideas about the future of the instrument in solo and ensemble situations. He spoke extensively about the "renaissance" of the tuba, pointing out the important contributions of his colleagues, Sam Pilafian and Dan Perantoni, referring to them as "new dimensions." He then admonished students to follow the model of the present generation of tuba innovators, saying, "Some of you will be establishing even newer dimensions for our instruments in a few short years." He went on to encourage students to seek out composers and commission new works for the tuba. "You may have a 20-year-old composer in your school who is writing music right now. He may be the next Mozart. We just don't know."

In a private lesson, Phillips encouraged John to play with ensembles such as string and saxophone quartets, not only to develop musically, but to “infiltrate” audiences who ordinarily would not hear the full musical capabilities of the tuba.

Teach from a repertory of specifically verbalized principles that may be called upon to solve specific problems. Phillips seems to have developed specific sets of instructions and illustrations to solve specific problems. In teaching certain principles, his language is very clear and often sounds like written text, though he is never mechanical about the manner in which he expresses himself. As he proceeded to a discussion of the use of alternate fingerings, he admitted his tendency to be repetitive. “I say the same so many times. If I’ve said it many times, you’ll forgive me.” He went on to recite his philosophy of alternate fingerings.

Make it your business to learn every alternate fingering on your instrument, preferably with a strobe. Then you can mark how sharp or how flat any one of them are. It won’t take you long to memorize that and you will be surprised how many times you use that in playing in chamber ensembles.

As Jack is having problems playing smoothly with consistent tone and articulation, Phillips stops him and asks him to play a section without tonguing. He points out notes in the slur which are not even. Phillips then tells him a simple principle, after which he personalizes it.

Every note within a slur is some kind of breath articulation. Don’t let it be a valve articulation on the force of the air. You have to be a little delicate about getting over the bump. These notes are traditional problems. I want you to work until you get none of that.

Phillips taught members of the tuba-euphonium quartet about balance in a simple phrase. "When it's a solo, it adds at least one dynamic to it." As Phillips taught the tuba-euphonium ensemble about tonal shading and intonation, he pointed out that some of the information he dispenses may not be meaningful to them at the time, but will be helpful in the future. "The most subtle adjustment in intonation is a change of color. If you are playing a little flat, for instance, change your syllable which changes your oral cavity. The color of the note will shift just enough so that it will sound more in tune." He demonstrates with his voice. "It's very subtle. This is for future reference; someday you will dig down and say 'oh, that's what he meant!'"

Interaction With Students

In interaction with students, Phillips is attentive, methodical, and supportive. He frequently models by singing. His attentiveness is observed as Jack asks for clarification on the use of vowels in changing registers. Phillips leans toward him with continuous eye contact. He then has Jack sing downward slurs on low notes, Phillips modeling first, then intensely listening and watching the student. Phillips explains how trumpet players pivot the angle of their instrument and how with tuba playing, this may be done with syllables.

Phillips is methodical about pointing out problems and solutions. After complimenting a student on what is being done right, Phillips points out, in an organized fashion, what needs improvement as demonstrated in John's

lesson. He instructs in what to do right. "I like your sound. I like your approach. There are two things I would call to your attention: one, learn to breath inaudibly; two, learn to develop the breath as an upbeat with an immediate sound." He then proceeds to give reasons, based on his professional experience, why John should develop these qualities and gives specific instruction and coaching in how to develop them.

Phillips maintains a positive approach throughout the lesson, regardless of student negativity. This was observed in Jack's lesson, what I consider an extreme example of a student's negative thought process. Phillips praises Jack throughout his lessons, in spite of Jack's unwillingness to accept compliments.

"I don't hear a problem you described of too much brightness. It's a lovely sound. I like the sound very much. I think you're using your air very well. I wouldn't change a thing about the way you are using your air." Phillips goes on to tell him many things he is doing correctly. As Jack continues to refer to his extensive list of things that are wrong with his playing, it becomes clear that many of his performance problems are due to negative thoughts about himself as he plays the instrument. Phillips methodically addresses each issue, teaching principles and getting immediate positive results, Jack continues to make negative remarks about his playing. As Phillips helps him solve a specific problem, Jack points out additional weaknesses and wants to demonstrate those weaknesses.

Phillips demonstrates great restraint, reserving comments about low self-esteem, self-fulfilling prophecy, and Jack's psychological state. Jack, however, exhibits unusual anger and frustration with himself.

See, I buy recordings of you and Sam Pilafian. I listen to these and I think, "there's the sound I want." And dammit! it's up on this level [holding his hand above his head]. I can't close that gap. If I think I have made some headway, you guys are clear up here. I can't seem to play five or six notes in a row without missing one.

Then, as if to prove what a rotten tuba player he is, Jack points at a passage in his music. "Right here! I don't think I have ever played this where every single note is focused, and it's just four bars!" Phillips continues to sit calmly. Throughout the lesson Phillips works with Jack's playing and teaches him ways of solving specific problems. When Jack starts to focus negatively on a problem, Phillips makes positive comments and moves on to other music and other issues.

At the end of the lesson, Phillips expresses a summation of Jack's playing. "I think you have some problems that you have gone about correcting here," attributing credit to Jack and not himself. Finally, Phillips subtly and gently addresses the problem of Jack's negativity. The exact dialogue is instructive with regard to how Phillips deals with a student's negative thought process.

Phillips: I think some of your other problems are imaginary. I don't think you should be too concerned.

Jack: Yes, but they are there, like those repeated high notes.

Phillips: But that's a goal. There is a three-letter word you are not using.

Jack: Yet?

Phillips: Yes, 'yet'—'I can't do that yet.' It has to become a password for all of us. We keep trying.

Lesson Organization and Content

In the private teaching and the master class situations observed, consistent with what was reported by his former students, Phillips demonstrated no predetermined agenda. Instead, Phillips shaped each lesson based on the level and ability of the student, creating a remarkable teaching situation. If Phillips had worked with these students on a long-term basis, perhaps he would prescribe materials that would help solve specific problems. In the ensemble situations, Phillips was in total control of the agenda, determining which piece would be worked on when and to what extent while using the music that he had selected as instructional material.

Phillips frequently draws on what he has learned from other musicians and incorporates these examples into his teaching. For example, Phillips told John about what he learned by watching Bill Bell's finger position: that by keeping fingers on the valves, excess motion was minimized. He said Bell's valves moved, but it was difficult to see his fingers move.

Vocal modeling was observed as the tuba-euphonium ensemble played a jazz piece in which some members were having trouble counting and phrasing. Phillips sang along with scat syllables. He exhibited much

enthusiasm when modeling. Although Phillips did not play the tuba in observed teaching sessions, he modeled extensively with his wonderful, deep bass voice. He often created a simulation of performance situation by singing parts that went with what was being played. As Jack plays brass quintet excerpts, Phillips sings the parts of the trumpet or horn. When John plays orchestral excerpts, Phillips sings the other orchestra parts.

In the observed lessons, Phillips gave many examples and personal experiences from his professional background to teach general knowledge of the tuba, the music profession, and many aspects of life. For example, in John's lesson Phillips taught much more than tuba performance and professional development. In the course of the lesson, he shared an experience about playing the music of Revuaites and being Stravinsky's manager; he spoke of how the F tuba was first perceived as it began to be used by tubists in the United States.

The Phillips Tuba Studio Teaching Paradigm

In studying published material, conducting interviews of Phillips and his former students and through observation of teaching, a paradigm for studio teaching emerged. The paradigm is seen in the following 11 principles:

1. Know students' strengths, weaknesses, goals, and motivations.
2. Model a life of dedication and service in music.
3. Prepare students in comprehensive musicianship.

4. Teach students how to practice and train them to teach by teaching them to teach themselves.
5. Help students recognize and accept their own sound and approach to music making.
6. Teach with simple metaphorical language.
7. Transfer effective performance concepts from one musical context to another.
8. Model and teach professionalism and career development.
9. Foster a cooperative studio environment through inclusion.
10. Teach students to be promoters of their instrument.
11. Cultivate and utilize a repertory of principles that are simply stated and easily understood.

Harvey Phillips stated that his philosophy and approach to tuba studio teaching grew out of his experiences as a performer. As was illustrated in interviews with former students and demonstrated in observation of his teaching, Phillips is, above all, a musician. Phillips' "life in music" is much more than just playing the instrument; it is an attitude of professionalism and enthusiasm that runs deep in Phillips. His first professional experiences had a lasting impact on the way he has lived his life and how he teaches. The mentoring that he experienced under William Bell shaped his approach to teaching his students. With Harvey Phillips, teaching music is much more than what goes on between the teacher and the student in the studio.

CHAPTER 6

CASE STUDY: ARNOLD JACOBS

Biographical Data

Overview

Arnold Jacobs is a man who possesses extraordinary intellectual curiosity, focus, and personal motivation. A lifelong student, he has progressed far beyond his peers in the development of his abilities as a musician, scientist, teacher, and pedagogue. Those who have written about or reported about Jacobs in interviews, commented on the depth of his knowledge and mastery with regard to musical performance, physiology, psychology, teaching, and pedagogy. Jacobs' artistic development and scientific achievement, combined with his natural gifts as a teacher, have contributed to his position as a leading brass pedagogue.

Musical Background

Early Musical Training

Born in Philadelphia and raised in California, Jacobs is the product of a musical family. He credits his mother, a keyboard artist who played for vaudeville and silent movies, for his early musical development. He progressed from bugle to trumpet, to trombone, and finally to tuba. Jacobs reports that at a very early age he was challenged to interpret music

(Whitfield, 1985). As a young man, Jacobs learned to play by ear and studied solfège extensively. During a prolonged hospital stay, he maintained his tuba playing ability by buzzing on the mouthpiece. These factors may have contributed to his teaching principles (Brubeck, 1991).

The Curtis Institute of Music

Aside from his mother, Jacobs credits faculty members of Philadelphia's Curtis Institute of Music as being his most influential teachers. At age 15, Jacobs was offered a scholarship at Curtis which provided him the opportunity to study with Phillip Donatelli, Marcel Tabuteau, Renee Longy-Miquelle, and Fritz Reiner, among others.

Philip Donatelli was an Italian immigrant who had played tuba with noted American bands led by Pryor, Conway, and Vesella. At the time Jacobs studied with him, Donatelli was the tubist of the Philadelphia Orchestra and tuba instructor at the Curtis Institute. Jacobs reported that Donatelli was an excellent musician with a beautiful sound and was a strict disciplinarian. Although Donatelli rarely played during lessons, Jacobs learned much from hearing him in concerts (Frederiksen, 1996).

Marcel Tabuteau was principal oboist with the Philadelphia Orchestra and taught a course in phrasing that all woodwind and brass students at Curtis were required to take. Jacobs reported that he found this course to be one of the most rewarding experiences he had at the school. Although only 1 year of Tabuteau classes was required, Jacobs choose to participate for 3 years (Frederiksen, 1996). This was an early sign of

Jacobs' extraordinary professional commitment. In a 1944 article, Tabuteau stressed five teaching principles:

1. Each student is a unique problem.
2. An oboist (instrumentalist) should think vocally.
3. The study of solfège, piano, theory, and voice are essential to a developing instrumentalist.
4. Students should always think in terms of beautiful sound.
5. An instrumentalist must know the musical score and fit his or her specific part into the whole (p. 29).

As will be seen in subsequent text, Jacobs' own teaching style exhibits principles similar to those articulated by Tabuteau.

At Curtis Institute, Jacobs repeated a course in solfège from Renee Longy-Miquelle each year. Jacobs believes that solfège is "one of the finest studies a brass player can undertake" (Meyer, 1985, p. 32).

Jacobs' long relationship with noted conductor Fritz Reiner began at Curtis. After graduation, the two worked together in the Pittsburgh and Chicago Symphonies. Jacobs reported that Reiner did not enjoy teaching and was demanding in rehearsals of the Curtis student orchestra. He had high expectations of the young musicians. It was Reiner's philosophy that Curtis students were already musicians and were treated as such. Apart from the fact that there was more rehearsal time allotted for the preparation of a given work, Reiner treated the student musicians as he would professionals (Frederiksen, 1996). I believe Jacobs developed his

philosophy that the “student is an artist” in part, through his association with Reiner.

Early Teaching Experience

While still a student at Curtis, Jacobs began teaching private students. His first pupil was Edward J. Whitfield, who studied tuba with him for 3 years at the Curtis Institute. Whitfield (1985) wrote that Jacobs’ “early on showed the keen analysis of brass problems which has been almost as much his forte as his artistic performances” (p. 7). Whitfield later switched to trombone and euphonium and served as principal euphonium in the United States Air Force Band and the Long Beach Municipal Band.

Another of his early pupils, who later had a celebrated career, was Abe Torchinsky. Torchinsky spent most of his artistic life as principal tubist of the Philadelphia Orchestra, after which he became Professor of tuba at the University of Michigan. Torchinsky (1987) reported that he learned “a tremendous amount” from Jacobs. He learned to enjoy all kinds of music, he learned about hard work, and he learned Jacobs’ methods of teaching. Torchinsky wrote that in his own teaching, he uses much of the approach that he “learned from Arnold 50 years ago” (p. 85).

Jacobs’ Studio

The efficacy of Arnold Jacobs’ teaching is renowned. In a book edited by Dee Stewart (1987) entitled *Arnold Jacobs: The Legacy of a Master*, there appear 31 memoirs of successful professional brass players who had

studied with Jacobs. The book is truly a tribute to a great teacher. Twelve tubists provided sections, as well as three horn players, nine trumpet players, and seven trombonists. All paid tribute to the “master” in stories and accounts of past lessons. Most of these former students studied with Jacobs at his home or at his downtown Chicago studio.

University Teaching

While playing with the Indianapolis Symphony from 1937 through 1939, Jacobs was appointed to his first university teaching position at Butler University. After joining the Chicago Symphony, he began teaching at Northwestern University and in 1972, was promoted to full professor. In 1995 he was appointed Professor of Performance Studies, Emeritus. As his health permitted, he continued to present master classes at Northwestern University until his death in 1998.

Orchestral Experience

After graduation from the Curtis Institute in 1936, Jacobs joined the Indianapolis Symphony for two seasons. He then became a member of the Pittsburgh Symphony in 1939 and held that position until 1944. In 1941 Jacobs was selected as a member of the All-American Youth Orchestra that toured the United States under the direction of Leopold Stokowski. In 1944 Jacobs joined the Chicago Symphony as principal tuba, a position he held until his retirement in 1988.

In his long playing career, Jacobs worked extensively with the world’s greatest conductors. Besides Reiner and Stokowski, they included

Kubelik, Solti, Barenboim, Ozawa, Bernstein, Giulini, Leinsdorf, Monteux, Ormandy, Szell, and others. Jacobs brings experiences of a life associated with the world's greatest instrumentalists to his teaching. Other of Jacobs associates who were influential included the many outstanding orchestral musicians he worked with.

The Chicago Symphony brass section is legendary for its tonal beauty, precision, and dynamic magnificence. In instructing students in mental imagery of sound, Jacobs often uses models of Chicago Symphony musicians. In lessons and master classes he often asked students questions, such as "How would Herseth sound on that passage?" (Bud Herseth was the legendary principal trumpet with the Chicago Symphony).

Scientific Background

Jacobs is considered by many to be the "world's foremost expert on the study of respiration as applied to wind instruments" (Frederiksen, 1996, p. 97). Before Jacobs, most wind instrument breathing techniques were based on 19th-century vocal performance models. This so-called, "tight gut" approach with emphasis on a firm diaphragm to support tone, had many physiological errors with regard to how the human body functions most efficiently. Through Jacobs' research and the application of his principles, many myths about breathing, as related to wind instruments and voice, have been dispelled.

Jacobs pioneered the use of scientific instruments originally used in the medical professions and industry in the study and teaching of wind

instrument performance. Bishop (1987) described something like a scene from a *Frankenstein* movie as he wrote about his first lesson in the basement studio of Jacobs' Chicago home; "I saw all those machines, tubes, tubas, mirrors—even a skeleton!" (p. 1). Jacobs has worked closely with physicians and medical researchers. As an example, in 1987 he lectured at Michael Reese Hospital on the use of playing wind instrument as a therapeutic treatment for children with asthma (Stewart, 1987).

Medical Training

In the 1940s Jacobs's physician suggested that he take up an avocation to have a diversion from music. As a hobby, he began a lifelong study of the function and structure of the human body, originally with no intention of fusing medical principles with musical performance. He asked a family physician and friends in the medical profession to recommend books and approaches to study. He even considered quitting the Chicago Symphony and enrolling in medical school.

The study of the body and the role of the brain in body function led to an additional interest in psychology. His understanding of various "feedback loops" and "biochemical sensors" which control breathing have been incorporated extensively into his teaching approach (Frederiksen, 1996, pp. 100–101).

Major Contributions

Teacher

Brubeck (1991) states that Jacobs' "greatest achievements" have been as a teacher. "With unparalleled success, and encompassing all types of wind instruments, Arnold Jacobs' students are some of the finest wind players in the world" (p. 54). The success of his many students as well as published reports of the efficacy of his approach are testaments to his achievements. Further, Dowling (1987) reports that Jacobs' "record of over 50 years as an orchestral tubist speaks to the success of his approach" (p. 11).

Bishop (1987) reports that "Mr. Jacobs' career is an example of excellence: the attainment of the best that's in you. It is this quality that is still an inspiration to us all" (p. 2). Throughout each lesson, Jacobs "insists on relaxed, open playing combined with the highest musical standards" (Dowling, 1987, p. 11).

Langlitz (1987) writes about Jacobs' unique ability to identify and teach fundamentals. "While many other teachers are content to dance around the periphery of the essentials of musicianship, Jacobs goes directly to its source. Once the student has grasped the essentials, the details of correct physical functioning have an uncanny knack of falling into place" (pp. 51–52).

Kaenzig (1987) reported on Jacobs' personal focus in the studio.

He teaches with great energy and commitment in each lesson, seldom showing any signs of weariness once a lesson begins, touching students to keep their full attention or to emphasize a point,

expecting the most detailed imitation of sounds, the finest production of tone a student can muster with his mind and wind, and never wavering from his approach of song and wind. (p. 41)

Pedagogue

Toby Hanks (1987) wrote that “Arnold Jacobs is perhaps the most important wind player since J. B. Arban” (p. 29). Hanks defended this statement by pointing out that Jacobs’ studies and knowledge of how the body and the brain work together in effective musical performance are “unprecedented”: “Because of the curiosity of Arnold Jacobs we are all more able to develop our skills and those of our students; we are a giant step closer to meeting our potential and are able to trouble shoot problems infinitely more successfully” (p. 30).

Erb (1987) identified three major misconceptions about brass performance that Jacobs dispelled:

1. Build up air pressure behind the tongue just prior to the release.
2. Do not raise the chest when you breathe. Use the diaphragm to breathe.
3. Play with support in the abdomen.

Through his research and the application of his findings, Jacobs has demonstrated that:

1. Air is best initiated by the entire breathing apparatus working together, rather than having air pressurized behind the tongue prior to the release of a note.
2. The expansion and lifting of the chest when inhaling provide for more efficient use of air exhaled to produce tone.

3. Abdominal support causes isometric tension and can trigger the undesirable Valsalva maneuver, resulting in less efficiency of air.

Brubeck (1991) wrote that Jacobs has created “a remarkable and comprehensive pedagogy that is as simple as it is successful.” By employing innovative and insightful concepts that focus on the “fundamentals of wind and song, his approach offers a philosophy which can find use far beyond the applied studio” (p. 58).

Lecturer and Author

Along with annual week-long master classes presented at Northwestern University, Arnold Jacobs has presented lectures and clinics throughout the United States and Canada. For his accomplishments as a teacher and pedagogue, VanderCook College awarded him an honorary doctorate.

As one considers the importance of Jacobs’ teachings, it is surprising that he has written only a few articles and no significant publications. Brubeck (1991) believes that perhaps one reason Jacobs may not have published a text of his own is because of a “danger of misinterpretation by those who would seek superficially to garner a nugget here and there without understanding the underlying principles and objectives” (p. 54).

There are, however, significant numbers of published interviews, transcriptions of lectures and master classes, as well as numerous articles about his teachings (Bobo, 1981a; Bobo, 1981b; Brubeck; 1991; Haugan, 1977; Jacobs, 1995; Little, 1988; Meyer, 1985; Urath, 1978). Two

important complete books about Jacobs have been published. First was *Arnold Jacobs: The Legacy of a Master* by Dee Stewart (1987). Then in 1996, Brian Frederiksen, a Jacobs protégé, authored and published a comprehensive book entitled *Arnold Jacobs: Song and Wind*.

Personality and Character

Jacobs has been described as being encouraging, charming, and clever in demeanor, having doctors' manners and a great love for people. Other words used to describe him include tough, demanding, and firm. In his teaching, he is constantly providing students with positive reinforcement. He keeps visual contact and reinforces and refocuses students by occasionally tapping them on the shoulder (Brubeck, 1991, p. 55, 56; Walton, 1987; Yancich, 1987, p. 95).

He is humble in his approach, treating each student with kindness. Erb stated that there was "none of the 'take off 6 months, and then move into my house for a year' stuff!" (p. 17). Brubeck (1991) said that Jacobs "applies his warm and caring manner, devoted attention, and considerable charisma to each student" (p. 55). When working with new students, Jacobs often compliments them and says "how little there is to fix." He then proceeds to skillfully solve a myriad of the student's performance problems. He "clearly shows his total absorption with teaching. His dedication to the students and to the processes of teaching and learning is enormous" (p. 56).

Case Study

Published Material About Arnold Jacobs

A good picture of Jacobs' philosophy of tuba studio teaching emerges from extensive published literature including books and articles. Many contain tributes and recollections of Jacobs' teaching. Books I drew from included those by Stewart (1987) and Frederiksen (1996). Numerous articles from *The Instrumentalist*, *TUBA Journal*, as well other sources were used. Authors included were Haugan (1977), Whitfield, (1985), Stewart (1987) and Brubeck (1991).

Philosophy

Frederiksen (1996) identified eight principles in Arnold Jacobs' philosophy of teaching. These proved to be consistent with other published reports.

1. The art of music must come first; the student is an artist.
2. A student's greatest strength is the ability to learn.
3. Each student is different.
4. The teacher must understand the student.
5. Good teaching is a simplifying process.
6. A student should focus on strengths rather than weaknesses.
7. A teacher should employ a multisensory approach.
8. One must separate specific roles as performer, teacher and investigator.

There are three additional principles of Jacobs' philosophy of teaching evident in other sources. They are as follows:

9. Modeling is essential.
10. Approach solutions to all performance problems indirectly.
11. "Mentalization" is the key to effective performance.

Art of music: The student as artist. Jacobs sees each student, even the most elementary instrumentalist, as an artist who is capable of musical expression. He does not like terms such as trombone player or tuba player. He claims that musicians choose their particular instruments as a mediums for self-expression (Jacobs, 1995). Music making is of utmost importance and musicians should be story "tellers" with sound (Moore, 1986, p. 4).

Jacobs believes that it is more important to teach a young instrumentalist how he or she should sound rather than how to play the instrument. He inspires students to "excellence in the brain, even if there is mediocrity in the lips." Through Jacobs' guidance, "the two will eventually match." He urges students "to pretend that every note is worth one hundred dollars, and instructs them not to play any more ten cent notes" (Brubeck, 1991, pp. 54–55). Slaughter (1987) reports that Jacobs taught her to "remember to think about sound, not attack. Sound, not muscle activity. Sound, not tension. Sound" (p. 82).

Ability to learn. Jacobs has said that the ability to learn is far greater than the ability to teach. He eminently relies on this principle, believing that the teacher and the student have specific roles. A teacher imparts

information and “guides the student” through his or her development. Jacobs’ understanding of physiology and psychology is an important asset in guiding his students and training them in establishing proper performance habits.

Jacobs believes that often teachers tend to overteach. He believes that when students want to know the “how to” part of performing, teachers should show restraint and realize that there are a number of things that need not be taught. The mental process of music making will often naturally help students to overcome technical problems (Fredericksen, 1996, p. 142).

Brubeck (1991) reports that Jacobs trains students in “alternate learning habits.” The principles that make use of this concept effective include the following: (a) “It is better to form a new correct habit than try to alter an old, bad one,” and (b) “strangeness is good.” In establishing new habits, Jacobs employs an “additive approach” that provides students a means to keep functioning as they presently play while allowing new good habits to be assimilated. To change an old habit (“preconditioned responses”), Jacobs removes the musical instrument, has student blow on the back of the hand to feel air movement, buzz on a mouthpiece, or use a breathing apparatus. This offers the additional benefits of “keeping exercises from dulling musical passion, enhancing strangeness, allowing a multi-sensorial approach, and avoiding previously conditioned baggage” (p. 55).

Strangeness is introduced into a student's routine to change an undesirable conditioned response. Jacobs elaborates when he states:

If we want to change a situation of response, we don't do it by the study of the muscle that's responding, we do it by the study of the stimuli that's causing the muscle to respond. We must change the stimulus in order to change the pattern of response. (Jacobs, 1987b, p. 142)

Frederiksen (1996) described one way that Jacobs' used the concept of strangeness to improve air flow, using ordinary drinking straws. The student inhales and exhales through a drinking straw and is told to be aware of the strangeness of a restricted air passageway. Then, Jacobs gradually adds straws between the lips to increase the flow of air. "Ideally, the student becomes aware of the freedom of motion to the air he should experience during playing" (p. 181).

Each student is different. Jacobs recognizes the variety of natural abilities and learning styles in students. He also recognizes "different physical needs, strengths, weaknesses, experiences, desires, and other variables." His only concern is "the student sitting in the chair beside him. Often, he will tell one student one thing and change emphasis with the next student—what he is looking for are results." Because Jacobs personalizes his approach, "there is no set Arnold Jacobs method of teaching *all* students. He individualized the methodology to the *individual* student" (Frederiksen, 1996, p. 92-93).

Understand the student. It was reported that in a student's first lesson, Jacobs spends much of the time evaluating the student's strengths and weaknesses. He then sets a "course of study" (p. 94). He also spends

time in nearly all lessons talking to students in an attempt to understand the student's motivations, perceptions, and thought processes.

The simplifying process. In applying principles that rely on the student's ability to learn, Jacobs is able to simplify many performance concepts through simple metaphors, mental training, behavioral models, mnemonics, and exaggeration.

Although Jacobs is known to use highly technical language in some explanations, he often reduces his principle to such simple metaphorical phrases as "Song and Wind." Dowling (1987) believes that Jacobs intends to do this, "because these phrases serve as a summing up of his approach and distill the essence of his message" (p. 11).

Frederiksen (1996) points out that Jacobs makes a distinction between the mental and physiological aspects of performance. Jacobs believes that the conception of music must be developed in the mind because of the complex relationship between tissues and nerves. Frederiksen reported on a lecture in which Jacobs discussed the principles of *song* and *wind*. The body responds most efficiently to simple orders (*song*). To Jacobs, *song* is "eighty-five percent of the intellectual concentration of playing an instrument, based on what you want the audience to hear" (p. 139). A transcription by Don Little (1988) of sections of a 1987 clinic presented by Jacobs gives added insight into Jacobs' philosophy:

Intelligence should not be diverted inward (in terms of analysis): Put the priority on the musical idea. There must be many well-defined sounds in the brain in order to produce musical sounds. The real challenge of tuba playing is developing the mind and its [musical] potential. (p. 21)

The remaining 15% of performance is *wind*. Jacobs has found that many of the physical habits needed to be assimilated in order to perform music on a wind instrument, especially the specialized use of air, are best developed away from the instrument. Jacobs uses a behavioral model based on three elements of learning—cue, responses, and reward. This principle is employed in several aspects of his teaching. In the use of measurement instruments, the cue is the mental decision to proceed, the response is the physical activity involved, and the reward is the visual read-out on the instrument. In actual music making, the cue is the initial image of sound in the mind, the response is the production of sound and the reward is an excellent performing experience.

Another part of the simplifying process is the development of new cues away from the instrument. Erb's (1987) problems with tonguing were solved as Jacobs devised exercises based on simple speech patterns. Because these elemental patterns are developed in most humans by age two, it was a simple process to retrain the tongue.

Another way that Jacobs uses a simplifying process is through a form of mnemonics. He tells students to put words with or count numbers to the music they are having trouble with. This encourages the student to sing in the mind (Frederiksen, 1996).

Yet another aspect of the simplifying process which Jacobs uses is exaggeration. He polarizes "two shades of gray" until they are "black and white" extremes. Brubeck (1991) reported on an instance when Jacobs taught the extremes of the oral cavity. The A sound in "day" can be difficult

to distinguish between the Ah sound in “all.” In brass playing the understanding of this concept is essential for proper air flow. “Mr. Jacobs instructed a student to pronounce Kee-Tee-Yee, then take a breath, followed by Oh-Ah-Ooh and breath. This illustrates the two extremes of oral cavity resistance” (p. 55). Although the actual space in the oral cavity between the pronunciation of the two types of syllables is marginal, the difference in sound when applied to the instrument is substantial.

Work with strengths. By working with a student’s strengths, mental focus is diverted from problems. This is effective because focusing on a physical problem in an attempt to correct it, often only compounds the problem. Jacobs says that the “brain cannot process ‘not’.” Further, Jacobs works to expand the well-developed norm in middle register, middle dynamics, medium articulation, etc. Then he trains the student to expand these levels of excellence into the extreme reaches (Erb, 1987, p. 20).

Multisensory approach. Jacobs employs kinesthetic, visual, and aural clues in his teaching. By using devices such as the spirometer, draft meter, and decibel meter away from the musical instrument, he is able to provide students with experiences that make them aware of the feelings and sensations associated with correct playing. As students, work on *wind*, they *see* the effects of their air as it inflates a bag or suspends a ping-pong ball in a tube. They *feel* their breath passing over their lips or blown on their hand. They *hear* the unique sound of air properly inhaled. Brubeck (1991) says that such techniques are merely tools in developing proper physical habits

of performers. After working with these concepts, Jacobs soon “refocuses the student’s attention on musical thought” (p. 55).

Erb (1987) reports that Jacobs’ use of mechanical devices allowed objective analysis of air and body movement and their relationship to each other. Further, the devices provide simple cues without the proper physical function in performance. Although Erb found Jacobs’ detailed physiological explanations perplexing at times, his own performance problems eventually were “demystified” (p. 21). Stewart (1987) reports that an aspect of performance he learned from Jacobs that was of great importance was “the sense of resonance; the feeling of the sound in the face and the sensations of the vibrations in the hands as they hold the instrument. . .” (p. 101).

Roles: performer, teacher and investigator. Jacobs makes a point of his various roles in relation to students during a lesson. He said that he wears different hats. They include a performer’s hat, a teacher’s hat, and an investigator’s hat. Frederiksen (1996) reported that Jacobs is adept in knowing when to put a hat on. He also knows when to take a hat off. When performing, he knows it is not time to investigate or teach. His total focus is on music; otherwise the process would be too complex and might result in what Jacobs calls, “Paralysis by analysis.” Thus, focus on music is in the context of sending a message or being a “story teller of music” (Frederiksen, 1996, p. 142).

Modeling is essential. Modeling is an important aspect of developing expressive qualities as a musician. Jacobs’ own playing originally developed

through modeling. He learned to play the bugle as a child with the help of his mother. She played the bugle calls on the piano, then Jacobs reproduced the notes on the bugle (Frederiksen, 1996). He uses modeling both to teach the sound of the instrument and to teach correct performance procedures away from the instrument.

Many students emulated Jacobs' model as an artist through his recorded and live performances. Ronald Bishop (1987) was introduced to Jacobs through his many recordings with the Chicago Symphony. Bishop reports:

First Jake [Arnold Jacobs] was my idol, then my teacher, then my colleague. Now he's my idol, my teacher, my colleague and as always, a role model. . . . I'm still trying to put it all together so I can do it as easily as he does. . . . Jake's' range, his range of dynamics, his sound, and his virtuosity have served as my inspiration to this day.
(p. 1)

Corrigan (1987) wrote that hearing Jacobs in concerts provided him a concept of beautiful sound that he still considers the "ideal" (p. 8). Tolbert (1987) wrote about the effect Jacobs' modeling had on him. "Arnold could play two or three notes and suddenly I would feel an overwhelming desire to play, to express" (p. 84).

Besides the musical model Jacobs provides, he also models exercises away from the instrument. Kaenzig (1987) related a story of Jacobs demonstrating how forced air does not necessarily produce a loud sound and that relaxed, projected wind does. Jacobs proved his point by having Kaenzig buzz with the mouthpiece alone into a funnel connected by a tube to a decibel meter. "After blowing as loud and hard as possible, I managed

about a six on the meter. Then Mr. Jacobs effortlessly blew a rich, full buzz (with mouthpiece) into the same funnel and produced a ten” (p. 40).

Approach solutions indirectly. Jacobs’ uses exercises, some employing scientific instruments, to focus attention away from the problem while establishing new habits. Students direct attention on gauges, bags, and such nonmusical instruments. Thus, the initial focus is put on from the natural physical activities needed to play and placed on visual cues and read-outs. As a consequence, the student directs attention on results, rather than process.

Although he had serious embouchure problems when he began studying with Jacobs, Corrigan (1987) reports that under Jacobs’ tutelage, his embouchure gradually was corrected. It “was done with such subtlety, starting from the time of my first lessons, that I cannot report when it actually occurred. Embouchure change was never discussed.” Corrigan concludes that a principle he learned from Jacobs, as a result, was that “healthy breathing will produce a healthy embouchure” (p. 9).

Mentalization. In using Jacob’s *mentalization* principles, students focus on the product, not the process. He directs students to put attention upon the “musical message” they want to communicate, that is the *product*. This rids the student of “acute self analysis” and consideration for “machine activity” when actually playing the instrument, which is the *process* (Brubeck, 1991, p. 56).

Corrigan (1987) discusses three elements that work together in Jacobs’ mentalization process. They are the *mental picture*, proper

concentration, and proper performance of all *physical actions* needed to accomplish what was to be done, worked out away from the instrument. Work in establishing proper physical actions enhances the performers ability to express the musical message in the mind. Lawrence (1987) recalls several phrases Jacobs used in coaching mentalization:

1. "Let the brain be occupied with beautiful sounds and music making, and allow the body to do what it has to do to achieve these ends without interference."

2. "Feed the piano roll, not the keys."

3. "Think of the sound, not how it feels."

4. "Sing when you play."

5. "When playing make a statement, don't ask a question" (p. 54).

In a 1979 interview, Roger Bobo (1981a) asked Jacobs what he thought about when he played the tuba. Principles of mentalization and the simplifying process are summed up in his answer. "My whole concentration is not on what I feel like or what I sound like, but what I want the audience to hear. It's like telling a story, but instead of words you tell it with concepts of sound" (p. 45). This is the essence of Jacobs' approach.

Interaction With Students

Much has been written about Jacobs' affable persona, his generosity, and his sincere interest in students. There are several published reports of

his timely gestures of encouragement. In 1987 Charles Vernon reported an example of Jacobs' positive approach:

Sometime during that first lesson, after he had torn me down to the basics, he added, "you have an edge over many players musically," and slapped me on the arm. It was a perfectly timed comment, and gave me exactly the motivation that I needed at the time. (p. 90)

There are also a number of published accounts of Jacobs "building up" one student to another. Dowling (1987) reported that Jacobs would comment to a student "you should have heard X's lesson last week' and 'Y is sounding like a god these days. I've never heard you sound better either'" (p. 12).

Jacobs interacts with students in ways that encourage students to impart information during lessons. Kowalsky (1987) reported that in his first lessons, Jacobs illustrated elementary concepts to him, then had him "illustrate in turn" (p. 48).

Organization of Lessons and Lesson Content

Because Jacobs individualizes each student's course of study, reports of lesson organization and content varied significantly. Four elements of curriculum were identified and appeared to be taught in a specific sequence. In the first lessons, only one or two elements might be covered. The first element was the diagnostic process, second was training in respiratory function, third was "mentalization" training, and fourth was training in musical interpretation.

Diagnostic process. Many who reported about their first lessons with Jacobs, stated that significant time was used in diagnosis that usually

included a kind of informal interview, measuring of vital capacity and air flow rates, and playing for Jacobs.

He often asked students why they were there. Jacobs' pleasant personality, demeanor, and genuine interest helped students communicate their goals. With the use of equipment such as breathing bags and spirometer, Jacobs measures lung capacity. He then has students play a small excerpt or étude to assess needs.

As part of the diagnostic process, Jacobs feels various parts of the student's body as he or she plays the instrument. Frederiksen (1996) reports that he does this to feel for "muscular contractions to determine if muscle groups are fighting each other" (p. 109).

Respiratory training and therapy. Following the diagnostic process, Jacobs usually spends time educating students in respiratory function and prescribing specific exercises away from the instrument. According to published reports, this often took up the majority of the time in the first lesson or lessons. In Erb's (1987) first lesson, Jacobs observed his playing, gave an overview of the anatomy of the thorax, explained the Valsalva maneuver, and worked on respiratory concepts with the aid of mechanical devices. Milan Yancich's (1987) first 10 lessons dealt with breathing. "They were like going to a gymnasium and performing physical exercises, most of them relating to breathing" (p. 94). His next set of lessons were concerned with long tones as they applied to breath control with variations of dynamic color.

Jacobs uses the study of air to eliminate the need for dealing with embouchure, sound, articulation, and other fundamentals which many other teachers choose to focus on. Corrigan (1987) reported that major concepts covered in lessons included breathing, human physiology as it pertained to performance, and the use of mental imagery.

Several former students reported that their first lessons involved very little actual playing. Dowling (1987) reported that he “must have played all of 12 notes” in his first lesson as he worked on breathing with Jacobs’ (p. 11).

Mentalization training. Through training in mentalization, Jacobs aides students in setting high standards, elevates the student’s expectations, and helps students to focus on the stimulus of the goal in the brain. To begin with, Jacobs often demonstrates tone using the student’s instrument and mouthpiece. This removes any variables from the musician. The student is then asked to vividly imagine the sound they want to produce and is then asked to play. Students often automatically focus on process. Jacobs then redirects the students attention to product. When a student still has difficulty, Jacobs will often take them back to some breathing exercises to break the negative pattern.

Fredericksen (1996) described a way that Jacobs uses mentalization to introduce change. The student visualizes playing without the instrument, blowing and buzzing with all tissues involved except the hands fingering and holding the instrument. When the instrument is

reintroduced, playing improves because the “signal being sent to the embouchure is usually improved” (p. 148).

Musical interpretation. Diagnosis and training in respiratory function (wind), along with mentalization training, lay the groundwork for the development of musical expression (song). Through his extensive studies in phrasing at the Curtis Institute of Music with Tabuteau and his association with the greatest musicians of the century, Jacobs has developed an exceptional understanding of how notes and phrases should be organized. Much of his approach developed as a result of his imitating the phrasing of other instruments.

Many former students reported that they spent entire lessons on one or two phrases. Jacobs’ explanation is that performers must pay attention to every note as well as the big picture and that though listener senses the phrase direction, the performer must pay attention to every note.

Jacobs teaches phrasing as singing. The basic building block Jacobs uses is sound conceived in the artist’s brain. He tells his students not to play phrases but to build them; build them note upon note (Fredericksen, 1996). No specific descriptions of Jacobs’ teaching of musical interpretation were found in published articles and books.

**Articles, Published Interviews, and
Lectures of Arnold Jacobs**

Philosophy

In Jacobs' articles, published interviews, and transcripts of lectures, he addressed all of the philosophical principles previously identified. In this section, these principles will be validated and illuminated through Jacobs' own words.

Art of music. Jacobs is scientific in his approach to the study of body functions in music making, yet he has often said that music always comes first when working with a student. In dealing with a student's physical performance problems, he instructs students to work away from the instrument. Jacobs states:

We do it completely away from music until we establish normal activity and then re-apply it to the instrumental function. But when I am working with a man as a musician, I always work with his mind, not his body. And we don't stimulate the mind into asking a question, we stimulate it into issuing a statement, so the motor systems involved take their cue by the art form type of thinking. (Russo, 1973 , p. 425)

Jacobs told Russo that the study of music is the study of sound and that he treats the most elementary student as an artist with sound as the medium. Because the artist's medium is sound, he encourages students to study the sound. Thus, emphasis is not on physical aspects, but the musical aspects of performance. In this process he puts his emphasis on "very easy music" that can be played without technical knowledge. "I want the heavy questions to be what the audience is going to hear from this instrument, not the methodology of producing it."

He emphasizes the “nontechnical” aspect of teaching, “qualities of tone, emotions, rhythms, excitement and all the things that are involved in our particular art form” in the majority of the curriculum (Jacobs, 1987a, p. 133).

Student as artist. According to Jacobs, even a very elementary student should not be focused on learning how to play the tuba. Rather, he or she should learn how the tuba should sound. Thus, the emphasis is on the creative aspect of sound and what the student wants to do with it. Teachers should show restraint in issuing too much technical information too soon. The mental process of music making will often naturally help students to overcome technical problems.

Each student is different: Understand the student. Jacobs’ (1991b) teaching “is based on studying the person who plays the brass instrument and then developing that person.” He sees the main challenge as being how the player adapts to the instrument. He works with the “player’s concept; what the horn resonates and amplifies is but a mirror of the thoughts of the person who plays it” (p. 22).

Through a diagnostic process with each student, Jacobs determines a personalized course of study. In a lecture, Jacobs (1987a) recounted an extreme case. He taught a student who some would call tone deaf. He could not sing back any given pitch. Jacobs had the student think back to childhood to find a song he had learned. The student sang “It Ain’t Gonna Rain No More” with correct intervals and in tune. Jacobs discovered that the student could hear and sing intervals and that “something was

interfering” with his ability. Jacobs’ designed a course of study to “develop the regions of the brain that have to do with pitch recall” (pp. 129–130).

He used a piano, a tape recorder, and an electronic tuner, thus employing the senses of sight and sound. He helped the student develop the ability to retain a sound in the brain by “simply challenging the brain. If a person can’t walk, he has to learn to crawl first. But he goes from crawling to walking to running. So we have to start at the level the student can cope with” (p. 129). Jacobs reported that today this former student plays in a professional symphony orchestra. This example further demonstrates Jacobs’ philosophy of tuba studio teaching in action as it pertains to understanding the student, simplifying the process, and using a multisensory approach.

Work on strengths. In an interview conducted and published by Paul Haugan in 1977, Jacobs reports that once a student begins to develop and is successful in “the norms” of playing, he or she should extend correct principles into extremes. Jacobs states:

Extreme loud, extreme soft, extreme high, extreme low are all difficult. The norms lie closer to the center. And when we develop there, we move the excellence to the extremes You can’t immediately have a great sound when you play very high or very low. But you develop it just like you did the mid-range. You establish always the sense that—well, I’m elementary in the very highs and the very lows compared to the norm. So you start developing into excellence. You can take bad sounds and convert them into good sounds, but you can’t take silence and do it. You have to go through the developmental aspects. (p. 9)

Jacobs further stated that young players too often “try for extremes before they develop their norms.” He believes that the qualities of tone

should be developed and should be according to a student's advancement. "It doesn't hurt to delve moderately into extremes as long as 5% limitation is put on it, or 10%. That means 90% would be in the norm. Extension of phrase should never be at the expense of quality of tone" (p. 9).

Roles: performer, teacher and investigator. Further in the Russo (1973) interview, Jacobs spoke clearly of his philosophy of roles of student, teacher, and performer as well as the danger in blending roles. The student "must respond to the challenges of his art." The teacher "must guide" and provide "proper stimulation in the various stages of development; but it's very dangerous for a student to be thinking in terms of measurement." When he performs, Jacobs does not think in terms of measurement. He explained:

I have two tubas—one in the head and one in the hand. The one in the head is all sound and that's the one I work with. The one in the hand is a mirror of my thought and I let it be the mirror—in order to have it that way I have to give it something to reflect.
(p. 425)

Modeling. Jacobs told about how he learned to play by modeling the music in his home as a child; first through singing, imitating his mother, and second by learning the sound of pitches for bugle calls played by his mother on the piano and adapting them to his own bugle. In this way, Jacobs learned to play the bugle by ear. He emphasized that the phenomenon of imitation is one of our very powerful learning tools (Jacobs, 1987a, pp. 138-139).

Approach problems indirectly. Jacobs approaches problems indirectly by removing the instrument, by using nonmusical instruments and by introducing strangeness.

In a lecture, Jacobs (1987b) spoke of the value of removing the instrument as one works on physical aspects of performance. “By removing the horn, you have removed one of the powerful forms of stimulus that develops over the years” (p. 141). If there is a problem which needs to be changed, he immediately removes the instrument, working with just the mouthpiece or with some nonmusical, mechanical device.

He uses breathing bags, spirometers, draft meters, and other devices to train students in exercises that will help normalize their breathing away from the instrument. Jacobs told Bobo (1981b) that with many of his students, he sees his role a “therapist, working on normalizing their respiratory functions, making sure that their syndromes in terms of muscles are not involved in the wrong aspects of pressures or immobilization” (pp. 43-44).

Strangeness is a tool Jacobs uses to change an undesirable habit.

Jacobs explains when he states:

If I want to change a situation of response, we don't do it by the study of the muscle that's responding, we do it by the study of the stimuli that's causing the muscle to respond. We must change the stimulus in order to change the pattern of response. To do that you introduce strangeness or you can't create change. (p. 142)

Mentalization. Jacobs spoke extensively about the mental aspects of performance and teaching in every lecture and interview reviewed. He stated that “the study of any art form is the study of the mind—of the

individual—the creative thought” (Russo, 1973, p. 425). With brass instrument performance, the mental aspects are even more important because “the pitch source is part of the neuromuscular systems, the breath, the motor activities, the involvements of breath as motor force and function are all part of you—controlled in one way or another by your nervous system and your mind” (p. 425).

In developing mental aspects of performance, Jacobs sees much value in the study of solfège and the development of the “inner ear.” He believes solfège helps the student convert the notes on the page to sound in the mind, not into fingerings. The development of the “inner ear,” not to be confused with the part of the ear which controls balance, can be achieved by what he calls “pre hearing” and “post hearing” (Brubeck, 1991, p. 56). Jacobs trains students to pre hear a note by first practicing post hearing. This is done by having the student play the pitch, imagine it (letting it “sink in”), then sing it. Through this process a student develops relative pitch, enabling a mental image of the note just before it is played.

Interaction With Students

It was not possible to get information about how Jacobs specifically interacts with students from his lectures and interviews. He speaks in philosophical and scientific ways and does not include specific information about interaction with students. However, significant information on this subject is included in the sections on published materials, interviews with students, and observations of teaching.

Organization of Lessons and Lesson Content

Five elements of Arnold Jacobs' lesson curriculum were identified in published sources; diagnosis, respiratory training/therapy, mentalization training, and musical interpretation training. Lesson organization and lesson content are not directly addressed in transcripts of Jacobs interviews and lectures. However, Jacobs' ideas about those identified elements of lesson content are included in these sources and have been discussed in detail.

Although Jacobs makes diagnostic evaluations in order to prescribe therapy, he reported that he did not make assessments of a student's potential for success when he said:

I believe that there are hardly any limits on the human brain, and that a person who is challenged can develop and learn to be successful. Whether a person will use his ability and be willing to make the sacrifices needed to lead the kind of life musicians often lead, is another consideration. (Meyer, 1985, p. 33)

Jacobs (1987a) described steps he used in starting an elementary artist on a brass instrument. This is informative as to how Jacobs utilizes the elements of his teaching philosophy.

1. Jacobs demonstrates a good sound on the instrument.
2. Even though the student may ask how it is done, Jacobs does not answer the question. Rather, he simply tells the student to buzz lips. "Make horrible sounds, make musical sounds, do anything you want with it."
3. After the student is able to buzz lips in any way, Jacobs takes the instrument again, plays one note, and asks student to "try to demonstrate what Mr. Jacobs sounded like" (Jacobs, 1987a, p. 123).

By only instructing the student to demonstrate sound and not instructing how it is done, the student's mind is engaged as a communicator. Jacobs teaches students to be concerned with the product, not the process.

Jacobs spoke of a "conditioning" that young students must go through beginning with the first lesson. This is accomplished through scales, interval studies, and studies of music. "We can take a young mind, and we have the ability to stimulate that mind with music. This is what you do with a young player who wants to play" (Jacobs, 1987b, p. 138).

Interviews With Jacobs' Students

Six of Jacobs past students were identified and interviewed. Each had studied privately with Jacobs and attended his master classes. They included David Fedderly (personal communication, August 18, 1998), principal tuba, Baltimore Symphony and professor of tuba, Euphonium and Respiratory Function at the Peabody Conservatory of Music; Gene Pokorny (personal communication, August 18, 1998), principal tuba, Chicago Symphony Orchestra; Richard Frazier (personal communication, July 21, 1998), professor of tuba at the University of Oregon; William Winkle (personal communication, August 18, 1998), professor of tuba at Chadron State College in Chadron, Nebraska; Edward Goldstein (personal communication, August 18, 1998), freelance tubist and teacher of Baltimore, Maryland; and Richard Armandi (personal communication,

August 19, 1998), freelance tubist and teacher of Chicago, Illinois. Tapes and partial transcripts of these interviews are in my possession.

Philosophy

Art of music. Students made reference to Jacobs' physical routines away from the instrument and the musical context in which they were placed. They also reported on the musical results of such activity. Armandi stated that Jacobs "never took his focus away from making music." Fedderly reported that the demands were nearly always musical. He rarely dealt with a technical problem unless it was "done through musical means; the psychomotor function rather than with the motor itself. You can't control the motor." Jacobs demonstrated his philosophy of embouchure to Goldstein pointing out that musical thoughts shape the embouchure. "He buzzed the mouthpiece in the middle of his lips and on the corner of his lips and other parts of his lips sounding great. He said that I should not get involved in trying to analyze that part of it." Goldstein said that this concept was very new to him because his other teachers were involved in "micro-managing" what was going on in the embouchure.

Each student is different: Understand the student. It was reported that Jacobs sought to understand students through questioning and detailed observation. He used this information in diagnosing problems, recommending practice routines, and giving professional advice. In Goldstein's first lesson, Jacobs asked about his career. Goldstein told him he

played Dixieland and Jacobs asked him to play some jazz for him. Winkle commented on the intensity in which Jacobs observed him play at the beginning of the first lesson. "He watched every single thing that I did, even before I started to play. He just watched me. . . ." Armandi reported that "even in the first lesson he was intuitive and keyed into things about me as a person, as if he had known me for a long time." Jacobs talked about the fact that Armandi was Italian, and the tremendous background and history of music making of Italians. Jacobs asked him to tap into his Italian background and really "sing on the tuba."

With regard to specific content and sequence of activities in lessons, students' reports were quite different. Armandi said, "Arnold Jacobs is a man of the moment. Every student is different. It was never the same routine."

Ability to learn. Jacobs changed students' concepts about how they learned. Pokorny had observed Jacobs demonstrate psychomotor concepts. He threw a pencil at a student without warning, and the student caught it. "Your mind only thought about one thing, to catch the pencil, not all the physical process of complex motor function."

The simplifying process. Jacobs works to make playing a simple process through extensive use of graphic demonstrations and metaphorical examples. In a demonstration Jacobs used to show the power of relaxed blowing, he had Goldstein tighten his abdomen and blow against the side of an open book. After relaxing his abdomen he blew across the open book and

could see the pages fly open. “It was very graphic to me that there was a lot more air flow.”

Jacobs used a metaphorical example in explaining mouthpiece buzzing. He told Armandi that the “lips are vocal chords” of the instrument. Pokorny explained how Jacobs used the “Dolly Parton” metaphor. If someone is not breathing fully, only using the bottom of the breathing apparatus, he said to think of “Dolly Parton” as you breath. This resulted in the raising of the chest.

Work on strengths. Although this area was covered in literature about Jacobs, in his own lectures and articles, as well as in observations in teaching, it was not reported in interviews with students.

Multisensory approach. Former students described Jacobs’ use of nonmusical instruments and teaching techniques which brought several senses into the development of musical ability. When practicing lip buzzing, Jacobs taught Winkle to feel the temperature of the air with the hand in front of the mouth, teaching that the warmer the air, the fuller the sound will be. Jacobs taught him a breathing exercise involving the placement of the hand under the rib cage to feel proper “piston action” movement of the diaphragm and abdominal muscles. Winkle reported that in workshops Jacobs had students practice this exercise before taking a breath to play their instruments. “Jacobs made it a physical, voluntary movement, which when developed, became an involuntary movement. This exercise helped Winkle’s playing in terms of increased range and endurance.

Goldstein described how Jacobs taught him to use a simple piece of PVC pipe 1 in. in diameter and 4 in. long. After working with the “breathing tube” for about 30 min. a day for a period of time, Jacobs said that it was not needed any more and that he should use the principle learned from the breathing tube to take a “booster breath” when needed. To diagnose a number of problems Jacobs had Goldstein buzz with his hand in front of mouth as a “biofeedback” device. “This helped me get a much larger aperture, to get a much more relaxed chops, more open throat, relaxed tummy, and larger sound.”

In studying Jacobs’ lectures and interviews, it was discovered that he believes it is important to define his specific roles in the studio as performer, investigator, and teacher. Students did not speak specifically about various roles, and these may not have been apparent to them. The fact that students identified Jacobs in specific functions is a key point. His roles have affected his teaching. Students spoke highly of Jacobs’ playing and the efficacy of his modeling in the studio as a *performer*. They discussed the ways in which he gathered information about students as an *investigator*. They also spoke about his wonderful teaching qualities as a *teacher*. They saw Jacobs as at totally complete teacher, perhaps not being aware of how Jacobs thought of himself with regard various roles.

Modeling. Winkle said that Jacobs changed students’ performance concepts both in the way in which he explained and demonstrated them. Because Jacobs is such a magnificent performer, students naturally want to model his sound. Armandi told of the sound he heard from Jacobs’ studio

as he prepared to go into his first lesson. It was an “unbelievably massive, resonant tone coming from the basement. It was uncanny.” Others also talked about the inspirational effects of Jacobs’ playing in lessons.

Jacobs also makes use of modeling in teaching fundamentals away from the instrument. In this manner Pokorny learned that inhalation was being impeded by a closed throat. “He did some breathing and asked me to imitate the sound of his inhalation so there would not be that primary source of friction which we would hear in my throat as the air was being inhaled.”

Approach solutions indirectly. Fedderly spoke in detail about Jacobs’ indirect approach to problem solving. “He never tells you what he is going to fix in your playing, he knows what he needs to fix and gives you the right study to do it.” He contrasted Jacobs’ way of teaching with the standard academic approach of working through *étude* and method books. In Jacobs’ approach “you can’t use a check list” to cover all aspects of playing with all students. In prescribing practice materials, Jacobs finds “that key” which opens the solution to the problem that he had diagnosed. He understands that when a student focuses attention on a problem, the problem often becomes amplified. Speaking of Jacobs’ indirect approach, Pokorny says that Jacobs “tricks people into sounding better than they think they can sound.” Pokorny said that after telling Jacobs what he believed to be the problem, “sometimes they actually worked on that problem, but often he would go off on a different track because the identified problem was the result of a different problem. If he determined

that the problem apparent to the student was the tongue, he would sometimes focus on what he thought was the root of the problem, the use of air.”

After each lesson Fedderly tried to analyze what Jacobs was trying to fix in his playing that day. He said that the issues dealing with Jacobs’ solutions to specific problems were in “the chapter that is actually missing” from Fredericksen’s book, *Arnold Jacobs: Wind and Song*. “Only he can write that chapter: when you have this problem, then you do this.”

Mentalization. Students reported that Jacobs taught mentalization. Pokorny learned about the importance of having a mental concept of what he wanted to sound like (*song*) and the proper use of air (*wind*). Jacobs helped Winkle to “visualize what I needed to do personally in playing, as well as what I needed to say to students.” Armandi learned to make a mental picture and make it a reality on the instrument, “maintaining the tuba in the head so that the tuba in the mind could reflect that image.” He said that “it really boils down to wind and song.”

Interaction With Students

Jacobs’ understanding of human psychology and its application combined with his unique personality, good nature, and sense of humor make him an extraordinary communicator. This, combined with personal intensity in his teaching, contributes to his effectiveness. In Winkle’s first formal lesson Jacobs complimented him in a humorous way. He said, “You are old and you’re fat, but you’re still a good tuba player.” In working with

Winkle, Jacobs was quite critical at times. To release tension, Jacobs would laugh or be kind in saying something else that would encourage him. They would then return to business.

Once you started responding to him, he kept at it until you finally did what he was asking you to do. Each lesson he would try to see if you were on track. He kept focusing on the same stuff every time; air [*wind*], *song*, warm-up, tone, breathing.” He was very gentle and kind as well. He had all of these personalities going. . . . He was kind of mysterious.

Pokorny’s said that each lesson proceeded as he played a very short section of music for Jacobs. “I didn’t have to play too far, maybe a line or two from Rochut. Then, let the games began! Gentlemen stop your engines! He started in on the process,” the intense training dealing with breathing and mentalization.

Armandi reported that “he [Jacobs] would focus on the goal. Whatever path we could use to get there, we would try and use it.” Goldstein reported that when he did something right in a lesson Jacobs reinforced the action through the following:

1. Expressive language: “That was a glorious sound.” Goldstein thought, “wow, I got it. If he says it is good, its got to be good.”
2. Physical contact including a tap on the shoulder or a slap on the knee.
3. Personal demeanor: He became “very jolly, smiling with a twinkling in his eye.”

Fedderly reported that lessons with Jacobs “were always intense, but in a good way. You had to be ready for it. You could spend a full hour on

two lines of an étude. Jacobs was very demanding, yet very patient.”

Fedderly had many problems to deal with. In his lesson about 1 year prior to the interview, they dealt with very specific problems associated with Fedderly’s back condition. “He was very compassionate and was trying to figure out what was going on because of my injury.”

In reference to Jacobs’ mental acuity, Fedderly said that “he is as sharp today as he was in my first lesson. He is still coming up with new ideas. He recently came out with a variable resistance gauge.”

Organization of Lessons and Lesson Content

Armandi reported that in a typical lesson, Jacobs “packed a lot into a little bit of time.” The routine was often cyclic. To begin with, Jacobs would have Armandi just play music on the mouthpiece and then with the instrument while “abandoning all preconceived notions.” Sometimes Jacobs would let him keep going and sometimes he would stop him after only a few notes. The focus would usually turn to specific work on breathing. Armandi defined some similarities in the sequence of most lessons: (a) get the instrument out, (b) warm up, (c) buzz on the mouthpiece, and (d) transfer it to the tuba. There was, however, “no one set way to deal with the student because he would deal with what was necessary at that particular moment. . . . Most of the time it was about making music right from the get go. Making it happen on the mouthpiece without any encumbrances from the instrument, then transferring it over to the instrument.”

Pokorny said that he could not accurately comment on a “typical lesson” because his lessons were “one shot deals.” There was no assigning of specific material from lesson to lesson. “You walked in and played something of your choice, told him what you believed to be a problem, or identified one thing you wanted to work on.” Pokorny said that sometimes they worked on what was his perception of problem, but often they worked on something completely different.

Goldstein said that a typical lesson started with buzzing songs on the mouthpiece. Focus would then move to prepared materials such as études. Jacobs would soon move him to material that was more basic “so the music would not get in the way of the concept.” Goldstein continued:

He could reduce what ever he wanted me to get out of the lesson to its lowest common denominator. . . . If it had something to do with tonguing, he may want to explore where the tongue should go. Rather than doing it on a complex thing like a Kopprasch étude, we went to basics. . . . I always got the concept and the piece always sounded much better when we went back to it.

Fedderly reported that in a typical lesson Jacobs “always reacted to where you were.” They worked from six or seven books during a given period of a time. A reported sequence was as follows:

1. Play an étude. “You would play it for him the way he told you to play it and he would work through it, improving certain aspects of the performance. . . . He always brought you as close to perfection as he could so that he was establishing great playing.”

2. Play the étude differently. “He would have me play it in a completely different style and then maybe in another style after that. He

was forcing me to play the same music two or three different ways just like I would have to if a conductor asked me to do it differently.”

3. Taught teaching. “He once said to me, ‘If you get a job playing, you’re going to teach; if you don’t get a job playing, you’re going to teach.’”

For Fedderly, lessons focused dominantly on études such as those by Arban and Kopprasch. They rarely worked on solo literature. Fedderly did not play any orchestral excerpts for the first 4 years of his study. As for sequence of concepts covered, “he always assigned you what it is that you need to work on, forcing or pushing the playing in the direction that needs attention.”

Because Fedderly studied with Jacobs over the longest period of time and had more lessons with Jacobs than the other interviewees, I believe that Jacobs’ approach to pedagogical materials is best shown through Fedderly’s experiences. I also believe what was discovered from Fedderly is an accurate account of Jacobs’ approach for advanced literature for the tuba. Literature that he covered included French horn materials: Pottag and Andraud’s *Selected, Melodious, Progressive and Technical Studies*, Books 1 and 2, as well Gallay, and Kopprasch studies. These, combined with Arban became the “Bible” of pedagogical materials for the advanced study of tuba performance.

Observation of Teaching

I observed over 20 hr of videotaped master classes conducted by Arnold Jacobs. They included classes at Northwestern University in

Evanston, Illinois, from 1987 through 1993 as well as a series of 1990 classes with members of the United States Marine Band in Washington, D. C. The Northwestern tapes were viewed at the Northwestern University Library Media Center and the Marine Band tapes were provided by Richard Frazier, professor of tuba at the University of Oregon at Eugene. I transcribed and analyzed, in detail, six teaching sessions with individual tuba students from 1988 and 1990 Northwestern master classes.

Because students whose teaching sessions have been transcribed are not all identified by full name in the videotapes, I refer to them by first name when it is known. These students are Richard, Rich, David, John, and Heiko. There is also one unidentified tuba student, whom I will refer to as Frank. Sections of a teaching session with a female trumpet player are also transcribed. Transcripts of these teaching sessions are in my possession.

Richard is a 37-year-old tubist from Dallas, Texas. He teaches privately, plays with the Dallas Wind Symphony, and does freelance performing. He is a student of Don Little, tuba professor at the University of North Texas. Rich is a 22-year-old tuba student from Boston who studies with Toby Hanks. John is a 17-year-old student from Louisville, Kentucky. Heiko is a young professional tubist from Germany. Background information on David is not available, and there is no background information on Frank or on the trumpet player.

In a 1998 telephone interview, David Fedderly informed me that the way in which Jacobs covers material in master classes may not be totally

representative of the way he works with individual students in his studio. In lessons, Jacobs is able to be much more involved in the music itself because he is dealing only with one or two problems. In master classes, Jacobs tries to cover many more problems, addressing situations which may apply to more members of the class.

Upon viewing the recorded teaching sessions, I conclude that although there are differences in what is taught in each lesson, there is a strong consistency in Jacobs' teaching approach. This consistency is apparent among published reports, Jacobs' own words in articles and lectures, information gleaned from interviews with former students, and from observed teaching.

Students whose lessons are transcribed range from 17 to 37 years-of-age and represent professional, amateur, and student musicians. Although he shows great patience with all students, Jacobs is particularly positive and affirming to the younger students. In observed examples of Jacobs' teaching sessions, there is an apparent emphasis on the art of music as students are treated as artists, and students' abilities to learn are both emphasized and maximized. On Jacobs' part, there is an effort to understand students and account for student differences. Simplifying processes and multisensory approaches are employed as students are taught to focus on their strengths. Jacobs employs various roles throughout lessons, his modeling is ubiquitous, problems are approached indirectly, and *mentalization* skills are taught.

Philosophy

Art of music—students as artists. It is observed that when working with students, Jacobs always emphasizes music over the technical aspects of performance, instructing students to communicate with sound. He frequently coaches students to be communicators by making clear musical statements. He tells Richard to “teach these people out there the pitch, the dynamic, the emotions, the rhythm—get your story to them.” To a trumpet student he says, “You’ve got to teach me what that sound is like. I’m going to learn. You’re going to teach. Play that low C with great beauty and lots of vibrato. Lots of sound.” When teaching about increasing dynamic range, Jacobs says to increase volume as a “musical endeavor by increased sound, not increased effort.”

Jacobs’ sequence of activities in teaching sessions demonstrates how he separates technical (wind) and musical (song) aspects of performance. After asking questions of a student and engaging in a pleasant conversation, the sequence commences. First, the student plays something on the instrument, sometimes a few lines of music, sometimes a complete étude or excerpt. Second, Jacobs directs students in work away from the instrument as he teaches and prescribes breathing exercises, often working with medical devices and visual aids. Sometimes Jacobs tells the student and the class what the specific problem is, but often he does not. Third, Jacobs returns to the music played on the instrument. Performance usually improves. However, if it is not acceptably better, Jacobs returns to the exercise or teaches a different one before returning to the music. After an

interlude of respiratory training involving work with a breathing bag, Jacobs has Hieko fill the bag with air, then rebreathe the air just before playing. "Start that scale, but as an artist. You are a storyteller of sound."

Understand the student; Each student is different. Jacobs seeks to understand each student through questioning and observation. He asks many questions throughout the course of each lesson. Questions are one of three types; opening interview, questions requiring a verbal response, and rhetorical questions. The first part of each lesson is like an interview. Jacobs asks the student's height, weight, length of study, who previous teachers are, etc. This often leads to a discussion about their teachers, many of whom are Jacobs' former students. Questions requiring a verbal response are inquires into how the student is perceiving what is transpiring in the lesson. "Did you hear that?" "Did that sound better?" "Is that how you wanted to sound?" Jacobs' rhetorical questions are many, the most prevalent being, "how good is your imagination?" Jacobs always appears to be attentive to both verbal answers and to students' body language.

Jacobs demonstrates exceptional observational ability. He watches the face, neck, and torso of each student as they play. He is very attentive to students as they ask and answer questions, maintain eye contact, and observe body language.

The simplifying process. Jacobs simplifies his teaching and performance principles by (a) combining concepts and activities, (b) isolating smaller components of a larger concept, (c) using metaphorical

language, (d) moving concepts from a familiar context to an unfamiliar one, and (e) expanding on excellence.

Jacobs combines concepts to make them simpler. After warming up by playing long tones on his mouthpiece, Richard is instructed to play a simple tune rather than long tones because this both warms up the embouchure and engages the brain in sending musical messages to the lips.

In a number of instances Jacobs is observed instructing students to insert concepts from one musical context to another. Richard has difficulty achieving a quality first note in a short scale passage. Jacobs instructs him to play the phrase backwards. In the resulting configuration, the final note sounds excellent. The student is then instructed to play “that note” in place of the first note. The student successfully inserts that same good sound into the beginning of the phrase. With another student, Rich, Jacobs suggests that he supplant a problem note in a Bruckner excerpt with a note from the legato horn melody of Tchaikovsky’s *Symphony No. 6*, successfully modifying Rich’s conception of the problem note.

Through the use of metaphorical communication, Jacobs taps into the power of language, making otherwise difficult concepts simple. To Hieko, whose face is too tight and is causing isometric tension, Jacobs tells him to think of a “soggy kiss.” Richard’s tone quality is inferior on short notes; Jacobs says that any tone, even short notes, should be like a “wonderful loaf of bread. Cut a slice out of it. Give me the length and all the ingredients.” To emphasize the fact that brass players’ lips must be developed to produce any pitch on demand, he tells Rich that “woodwind

players throw away bad reeds. We can't do that with our lips. Nevertheless, we have to utilize them in such a way that we don't fight. Lips can fight back." To facilitate correct, full breathing for Frank, he uses an illustration involving imaginary dialogue "balloons" over characters in comics. He instructs the student to breathe as though he is collapsing such an imaginary balloon as he breaths. In teaching posture, he tells Hieko to stand "as if you are a puppet. We would tie a string to the top of your head and pull you up." This makes the student's upper torso and limbs relaxed and ready to inhale with maximum efficiency. To make a point about using more air, Jacobs tells Hieko that he has a "Volkswagen fuel supply" and to play the tuba, he needs fuel to "operate a truck."

Two additional powerful metaphors involving mental imagery and some intense coaching merit mention here. In an attempt to get the trumpet player to be consistent with notes in a phrase, Jacobs tells her that "every note you play is to be worth 500 bucks a note. Don't give me any 10 dollar notes. Try it again. Five [100 dollar] bills, a wonderful C. Show it off." In prompting the same student to play from images in her brain, Jacobs says, "I want you to think of being a used car salesman. You've got a lousy car and there will be a lot of money in it for you if you can just sell it. Just ham it up. I want a B that's beautiful, and I want an even better A. Sing it out."

Jacobs trains students to simplify difficult tasks by taking a level of competence and expanding it to excellence in extremes. This concept will be

discussed further in regards to Jacobs' maximizing students' ability to learn and building on students' strengths.

Ability to learn; work on strengths. Jacobs helps his students to maximize their abilities to learn (a) by recognizing and helping them acknowledge the incredible natural abilities they have as humans, (b) by asking questions of students, (c) by using expressive vocabulary, and (d) by teaching students to expand upon their strengths.

Jacobs tells a 1988 master class to let students "find their own way" and "don't overteach." He says to teach music as an art form of sound rather than to teach a student how to play an instrument. Jacobs tells Frank that he should trust his own ability to learn and realize that instant results may not occur.

Don't expect suddenly to get a new thought and have the use of this in your profession. You don't. This is like opening a door. It gives the first impression that such a thing is possible, then you go through a program of conditioning where, at the conscious level, you are doing certain things under motivation until the neural pathways begin to develop. As these develop they begin to become automatic activities for the rest of your life.

By asking questions, rather than making direct statements to students, Jacobs engages their minds, making them partners in the teaching/learning process. Through expressive vocabulary, he helps students stimulate their imaginations. He also teaches students to maximize their ability to learn by teaching themselves to expand on aspects of excellence based on thinking "simple thoughts." Jacobs instructs Rich in developing his mid-dynamic sound so that as he plays louder; the "wonderful, beautiful" core of his mid-dynamic sound is the same but

larger. "You are not motivating just loudness; you are motivating a specific quality and much larger dynamics." Jacobs says that the basis of this principle is to find the norm and then, like turning up the dynamic control of a radio, increase sound without losing the existing excellent tone quality. "At some point it will start to get raucous. You just keep pushing that raucous point further and further out in dynamics."

As he helps students recognize their natural abilities to learn, he builds their confidence, motivating them with positive statements. He tells the trumpet player that she has the ability for "great work on the instrument" while pointing out what is currently holding her back.

It's in your brain. But you're not doing it because you are tending to play the trumpet. Don't play the trumpet. It's a stupid piece of brass. It has no brain. You are the actress. The one who sells that used car. You want to influence the people with the words, with the body language. I want you to use all of the art form thoughts you can think of and have wonderful thoughts of your art form in the brain. I could care less if there is mediocrity out there. I don't work with the instrument. I work with the player.

Multisensory approach. Jacobs uses a multisensory approach as a teacher and instructs students in multisensory learning, further maximizing their ability to learn. In observed teaching he amplifies learning through sight, sound, touch, and other physical sensations. Using the sense of touch and personal physical sensation, Jacobs demonstrates to Frank and to the tuba class how the body can lie about breathing efficiency. The student is instructed to place his hand on Jacobs' chest as Jacobs takes a full breath. Jacobs then has Frank feel the same region as he takes a "false breath." The student reports that he can feel no difference between

taking in much air and no air. In another instance, Jacobs feels Hieko's stomach as he plays a very loud excerpt. Based on what he feels, Jacobs determines that Hieko is not taking a full breath. This prompts Jacobs to proceed with respiratory training utilizing various devices.

Much has already been discussed about Jacobs' use of nonmusical instrumentation. He is observed using three such devices extensively in coaching Hieko. To aid in Hieko's understanding of the volume of air needed in a full breath, Jacobs has him fill a 6-liter bag with air and then rebreathe the air before playing the instrument. He also instructs him in the use of a draft meter and the *Inspiron*, an incentive spirometer. These activities involve both sight and physical sensation and begin to solve problems associated with Hieko's restricted airway. Jacobs uses a draft gauge to demonstrate proper movement of air, pointing out the value of adding the sense of sight. With David, Jacobs discusses the use of the Conn 12-window stroboscope and decibel meters for teaching vibrato. Fluctuations of pitch and dynamics are visually portrayed and linked with the sound of the instrument.

You can remove the equipment and maintain the sound, then form the habits. It has to be done on a daily basis for a period of many months until it has established a neural pathway in the brain and its there for the rest of your life.

Jacobs frequently combines visual, oral, and kinesthetic senses in exercises to produce powerful tools for forming effective performance habits. As Hieko breathes over a tube connected to a draft meter, he is instructed to focus his attention on the visual readout of the instrument's

meter rather than the physical aspects of breathing. As Hieko breathes, Jacobs places his hand on the student's sternal region, emphasizing a kinesthetic approach. Jacobs reminds him to remember what it looks like. Jacobs also uses sound and physical feeling of various syllables, combined with the physical stimuli of moving the arm in and out as air is taken in and expelled, to train students in proper respiratory function.

Roles: performer, investigator and teacher. As I observed teaching sessions, I saw Jacobs in action in his self-described roles as performer, investigator and teacher. Although Jacobs plays very little during master classes, he models extensively through singing and physical gestures as will be described in descriptions of interaction with students. His role as a teacher has already been extensively described. As investigator, he asks extensive questions in opening interviews with students, questioning students while coaching them and observing physiological functions as well as body language.

Modeling. Former students report that Jacobs played less frequently in lessons as compared to earlier, due to his advanced age. They are still amazed, however, that while he rarely demonstrates on an instrument, he still sounds very good. In almost all observed teaching sessions, modeling is observed in the form of singing, animated gestures, clapping, snapping fingers, and stamping feet. After Richard plays an Arban étude unsatisfactorily, Jacobs models by singing the étude with an energetic lift, emphasizing the up-beats. Then as the student plays it a second time,

Jacobs snaps his fingers on beats two and four, continuing to model through singing.

Approach solutions indirectly. Because Jacobs' master classes are designed to instruct the participants in his teaching methods, he is more likely to solve problems without stating what the problem actually is. Thus, the master class does not reveal a completely accurate picture of Jacobs' reportedly indirect approach to solving performance problems. There are, however, some notable examples of his indirect approach to problem solving.

Hieko describes a problem he has with his embouchure. After looking down his throat using a flash light, Jacobs goes right to work on his air flow. Suggesting various syllables in moving air in and out, Jacobs has him experience friction away from the instrument. "Now say 'ho' in and out to feel how it should be." As his sound improves, Jacobs points out that he will need a program of reconditioning over several weeks or months in order to overcome the problem. The word "embouchure" is not used by Jacobs in discussing or prescribing a solution to his problem.

Mentalization. In the 1988 master class Jacobs spoke to the class about the importance of mentalization, stating:

You can never go by getting rid of what's wrong in the playing. Go right for what has to be right so the psychodynamics of this is very positive thinking about music. Music has sound. It has rhythm, sonority, emotion. You must actually go for the musical thoughts. If things don't go perfectly, just try it again. But do examine your thoughts. When you miss a note, what are you thinking? . . . Everything that the lip does is insured by a thought in the brain that it will be right. If you send the right note into the horn and you use

the wrong fingering, so what. That's easily corrected. But you must always send the pitch in that the horn can amplify and resonate.

Jacobs works extensively with students in the ways in which they think about the music itself. Jacobs teaches Richard about mentalizing each note of a phrase as it is played. He is told to "make a little refinement" in his thought so that he can begin to build phrases by what is done with the individual notes. "You are playing by phrase, now I want you to create the phrase by each note as you come to it." After Rich continues to make mistakes on an excerpt, Jacobs tells him to "keep the inspiration because the next time you go through, you won't make those mistakes. Don't go with what's wrong in your playing, go by what has to be right."

John is misfiring on the first note of a phrase. Jacobs tells him that he is not ready for the note mentally. "Don't check your embouchure. Don't check your meat. Don't check your body. Check your brain. Is there a beautiful concept of attack sounding? It can be imitative or it can be creative. What would be great to listen to? Imitate." John plays again, this time misfiring on the second note. Jacobs continues. "What about that Eb? If I cut it out and examined it under a microscope, it would only be a quarter of the note it should be? Can you consider a phrase where there is freshness about the Bb." After the student is still having problems, Jacobs begins to sing numbers with each note. "Two, three, four, one. . . . Can you sing that? Two, three, four, one [singing]. . . . Can you think of the numbers when you are playing so that your voice is dominant in your thoughts and not the tuba?"

Jacobs then tells the class that he does not work with the instrument; instead he works with the player. Returning his attention to John, he says "I expect you to be able to think much better than you can play. . . . Don't just play a scale, but create that scale by a wonderful B, an even better A, a super G, lots of vibrato, and lots of showmanship."

Jacobs uses basic psychological principles to explain how and why his mentalization concepts work. As John is having trouble getting a clear sound on the beginning of a particular note, Jacobs tells him that if he puts "the right stimuli in the brain he would have had a vibration in the lip." He tells him he must "sing in the brain." He goes on to say:

If we could hook wires up to the brains of great players, you would pick up activity that would be registering the activities of music. When we speak, it doesn't just come from the vocal cords, not just from structures. There is a message in our brains that we are transmitting.

Jacobs tells John that it is as easy to be a fine performer as it is to be a mediocre performer when he states:

It's done in your brain. It is not done by the constant study of tissue function. It's done by the motivation of the artist; the story he has to tell and communicate to an audience. Psychomotor. As soon as you put your voice in, instead of the brain sending a message to your voice box, it goes down the seventh cranial nerve to the lips. This becomes the voice box of the tuba. The mouthpiece and vocal chords become your embouchure.

Interaction With Students

Jacobs is involved, attentive, active, and spirited during observed teaching sessions. As Richard plays *When the Saints Go Marching In* on his mouthpiece, Jacobs animatedly snaps his fingers on beats two and four

and stamps his feet. He then asks Richard to play *The Carnival of Venice*. Jacobs sings along while the student buzzes, coaching him in style by modeling with his voice.

Jacobs shows extraordinary ability in correcting students while building their confidence. To a student with a rough sound, he says: "The sound you are getting is good. I'm not going to put you down for it. It is quite a healthy sound. It's just a little forced and a little strident. With a change in philosophy, that sound could be made to be very acceptable."

John plays well for a 17-year-old tubist although he needs improvement in many areas. Jacobs tells the class as he pats John on the back that "as I listen to this young man, he is not making my job easy for me at all." Speaking directly to John, Jacobs says, "What am I going to do with you?" He then proceeds to help John to identify and learn how to solve his many performance problems.

He also builds up Richard while pointing out that there is room for improvement: "I might want to discuss phrasing or the emotions of the music you are playing. I can't find fault with the tone production. If we are to take something good and make it better, it would be in small details, slight changes here and there."

After working with John, Jacobs says, "You are doing very well. I also would like a little more attention to character of tone. . . . I don't think we need to do any more. I think you are doing very well." Jacobs pats him on the back.

Richard has difficulty playing for the class. After a short time working with Jacobs, Richard is able to settle down and play with much more ease. Jacobs tells the class, “Here is a man with massive ability, but the brain suddenly began to go a little bit haywire in relation to what he is doing. It is very easy for him to turn that around.”

Lesson Content and Organization

Observed lessons show the kind of content and organizational approach previously described in accounts from published sources, from Jacobs’ own words in lectures and interviews and from interviews with his students. Because the lessons observed are in the context of a master class, Jacobs often makes comments to the class about general issues of pedagogy as well as issues pertaining specifically to the student being taught. As he works with individuals, the cyclic scenario previously described is very evident. Jacobs has each student tell about himself or herself, hears the student play, trains the student in physical function, and, having improved the student’s physical function, returns the student to the music. Using Jacobs’ terminology, after initial interview, the scenario begins with *song*, moves to *wind*, and returns to *song*. Along the way, he amplifies concepts of mentalization and teaches in areas of professional development.

Jacobs teaches versatility as an important professional quality through a simulation model. After telling Rich that he has a valid approach to playing a particular excerpt, Jacobs asks him to conceive of it in a different way. He points out that musicians must have versatility. Rich is

told to change his “motivation and put it into a very soloistic pattern Keep the sense of mood . . . but with mellowness.” He also tells Rich to imagine being in an audition situation. The person on the audition committee with the \$90,000-a- year job offer “is out there listing to all these little details of excellence. It’s just going to be great. Do you know what I mean by that? Show off a little. It’s only a couple of bars, but in these couple of bars, there has to be something magnificent.”

Jacobs further makes a point to the class about the importance of being able to take verbal instructions and convert them into concepts of sound. “This is a very important quality which musicians who take directions from conductors need to be able to do.”

Jacobs brings to lessons his many years as a professional musician and often shares personal experiences. With regard to maximum use of air, he tells the class that he could not have survived as a professional tubist if he had not learned to access a very large percentage of his vital capacity, telling students, “Because of that, I am able to continue.”

The Arnold Jacobs Tuba Studio Teaching Paradigm

Eight principles have been identified as the Arnold Jacobs tuba studio teaching paradigm. These principles have been validated through triangulation of published material, published interviews and lectures presented by Jacobs, interview with students, and through observations of teaching.

1. **Recognizing the art of music as paramount, teach each student is an artist.**
2. **Seek to understand each student and teach based on the recognition of student differences.**
3. **Expand on students' strengths rather than focus on weaknesses.**
4. **Understand defined roles in the studio as performer, investigator, and teacher.**
5. **Model musical sound as well as effective performance habits.**
6. **Approach performance problems indirectly.**
7. **Emphasize the mental aspects of musical performance in teaching.**
8. **Recognizing that a students' greatest asset is the ability to learn, make teaching a simplifying process.**

CHAPTER 7

CONCLUSION

The dissertation concludes with an examination of answers to the research questions, principles illuminated by this research, and the construction of the global paradigm for highly effective tuba studio teaching based on the teaching of R. Winston Morris, Harvey G. Phillips, and Arnold Jacobs. Aspects of the global paradigm are examined in relation to established principles of effective teaching from education literature as well as from music education literature. Findings are discussed with regard to their application in music studio teaching in general and tuba studio teaching specifically. Recommendations for further research in the field are proposed.

Answers to the Research Questions - Phase I

Although detailed answers to the research questions of Phase I of this study appear in the three individual case studies, findings are summarized here. Comprehensive answers about how teaching philosophies were assimilated into master teachers' teaching are beyond the practical scope of this study. Therefore, only brief, and sometimes anecdotal, descriptions of personal philosophies of the three master teachers are described here.

R. Winston Morris

Teaching Philosophy

In published material about R. Winston Morris and in personal interviews, it was found that he believes in a strong work ethic, in teaching fundamentals, and in employing a multiplicity of approaches. It was further revealed that he believes in possessing and demonstrating a life-long commitment to each of his students. He believes in the importance of strong musical models for establishing and maintaining high standards. He believes in nurturing a cooperative studio environment and in teaching with enthusiasm. He believes that professional commitment must be constantly reinforced in students. He does not expect recognition for his accomplishments. Two aspects of what Morris calls his “negative philosophy” are that life is not fair much of the time and that he expects a certain amount of resistance as well as setbacks in his professional goals.

Basis of Philosophy

Morris credits his strong work ethic to his parents and his mentors. His most influential mentors were William Bell and Harvey Phillips. His belief in the importance of teaching fundamentals and employing a multiplicity of approaches comes from many years of teaching experience. He credits his belief in strong musical models, high musical standards, and his understanding of students’ tendencies toward commitment to his own experiences as a student and a young teacher.

Practices, Procedures, and Ways of Interacting

It was observed and reported that Morris practices an extraordinary work ethic by focusing a remarkable level of attention and personal energy in each student he teaches. He frequently teaches fundamentals in lessons by applying basic articulation and scale studies to all literature, often referring students back to his scales studies handout. With enthusiasm, commitment, and exceptionally focused attention, he utilizes many approaches to solve performance problems. His use of humor and up-beat personal demeanor make students feel cared about, motivating them to high levels of effort and preparation. He constantly models through playing back and forth with students and by singing, stamping, and conducting during lessons. Modeling was further observed as students entered the studio to listen to tuba recordings at his “listening station.” He contributed to the cooperative environment through enthusiastic banter with students and by making positive remarks about the progress of individual students to fellow students. The cooperative environment was further demonstrated by the positive interaction among students, much of it facilitated through his student tuba ensemble.

Principles That Emerge From Teaching Practices

The R. Winston Morris tuba studio teaching paradigm is as follows:

1. Model a superior work ethic.
2. Demonstrate personal commitment to each student.
3. Model effective performance habits.

4. Reduce fundamentals to a set of overriding principles and organize lessons in ways that facilitate the application of these principles to any repertory.
5. Employ a multiplicity of approaches.
6. Foster a cooperative environment between teacher and student and among students.
7. Understand students' tendencies regarding commitment.
8. Teach with enthusiasm.
9. Do not expect the support of others.
10. Expecting setbacks, be resilient and steadfast in goals.

Harvey G. Phillips

Teaching Philosophy

A fundamental aspect of Harvey Phillips' philosophy is that teaching is an outgrowth of performing. He believes in fostering personal relationships that allow him to deeply know each student. He believes in modeling a life of service in music. He believes in preparing students in various musical disciplines, incorporating music theory and music literature. He believes in teaching students how to practice. He wants them to accept and develop their own sound and approach to music making. In his teaching, he believes in using metaphorical language and transferring concepts from one musical context to another. He believes that it his job to prepare students for a "life in music" through teaching professionalism,

career development, and the promotion of the tuba. He also believes in the importance of a cooperative studio environment.

Basis of Philosophy

Because Phillips' philosophy is an outgrowth of his extensive and varied performing career, many elements of it have a quality of practicability. These elements include his beliefs about incorporating various music disciplines, effective practice, the development of a personal sound and musical approach, professionalism, career development, and promotion of the tuba.

He frequently makes reference to the mentoring he received from older, more experienced musicians, particularly William Bell. Aspects of his philosophy that have their basis in these relationships include fostering personal relationships, a life of dedication and service, and a cooperative studio environment.

Practices, Procedures, and Ways of Interacting

Harvey Phillips seeks to know and build relationships with students through extensive dialogue. In the process he builds trust through his expressions of personal warmth and attentiveness. He teaches principles of professionalism by questioning students about their special abilities and goals, often asking about resumes and brochures. He prepares students in a kind of comprehensive musicianship by exposing them to a variety of literature and through modeling a variety of styles, always emphasizing the musical over the technical aspects of performance. In his teaching he

emphasizes music theory as well as stylistic considerations specific to composers and musical genres.

He teaches students how to practice and how to teach as he strives for their musical independence. This is achieved through questioning, detailed instruction in practice techniques, and the placement of personal responsibility onto the student. He teaches students to prepare challenging musical excerpts by removing the difficulty, playing it slower, lower, higher, etc. He then instructs the student to gradually reintroduce the difficult elements of the excerpt by expanding the tempo or range.

Phillips reduces complex concepts to simple metaphors, allowing the student's intellect to achieve artistic goals through his or her own musical voice. He facilitates the transfer of musical concepts from one musical context to another as he has students apply the "attitude" of a familiar piece to a piece being studied. After gaining an understanding of each student's interests and motivations, he guides students in developing their own sound and approach. He teaches professionalism and career development constantly. He refers to such teaching as his "course in survival." Topics such as goal setting, networking, developing business skills, as well as many kinds of personal development issues, are discussed frequently in teaching sessions.

Phillips teaches students to be promoters of the tuba and fosters a cooperative studio environment as he models a musical lifestyle, involving students in master classes, special events such as Octubafest and gatherings at TubaRanch.

Principles That Emerge From Teaching Practices

The Harvey G. Phillips tuba studio teaching paradigm consists of 11 principles:

1. Know students' strengths, weaknesses, goals, and motivations.
2. Model a life of dedication and service in music.
3. Prepare students in comprehensive musicianship.
4. Teach students how to practice and train them to teach by teaching them to teach themselves.
5. Help students recognize and accept their own sound and approach to music making.
6. Teach with simple metaphorical language.
7. Transfer effective performance concepts from one musical context to another.
8. Model and teach professionalism and career development.
9. Foster a cooperative studio environment through inclusion.
10. Teach students to be promoters of their instrument.
11. Cultivate and utilize a repertory of principles that are simply stated and easily understood.

Arnold Jacobs

Teaching Philosophy

Arnold Jacobs believes that the art of music must come first in teaching and that even the most elementary student should be taught as an artist. He believes in exploiting a student's greatest strength, the ability to

learn. He believes in employing a multisensory approach in teaching and learning. He deems it important to understand each student so that he can account for differences in the way he teaches them. He believes that good teaching is a simplifying process and that students should expand on strengths rather than focus attention on weaknesses. He believes that one must separate specific roles as performer, teacher and investigator, and model both sound and correct physical function in teaching. He believes in approaching performance problems indirectly to avoid focusing attention on the physical aspects of problematic playing. He works with students' musical thoughts because he believes that what a student wants to sound like is more important than how the student sounds in the studio. Thus, he works for "excellence in the brain," employing conceptual imaging of desired sound.

Basis of Philosophy

Of the three teachers who are the focus of this study, Arnold Jacobs appears to be the most original in his philosophical ideas about music performance and teaching. Based on my personal experiences with him and accounts reported by former students, I believe that this originality emerges out of an exceptional and complex intellect. It was found that many of Jacobs' beliefs about mental and physical function in performance come from his lifelong fascination and study of human physiology and psychology. His early experiences in learning to play by ear may have contributed to his ideas about mental processes in music making.

Practices, Procedures, and Ways of Interacting

Arnold Jacobs teaches music as an art and students as artists, tapping into their natural abilities to learn. He accomplishes this by working with students' conceptions of sound. This he refers to as "song." He refers to the physical aspects of performance as "wind." The teaching of tuba performance is often accomplished in cyclic patterns within teaching sessions. First, with intense mental coaching from Jacobs, the student attempts to express musical sounds which originate in the student's imagination. Second, Jacobs removes the instrument and works on some physical aspect of correct playing, such as blowing or articulation syllables. Third, he returns to the music, again using mental coaching. Throughout this process he employs a multisensory approach by directing student attention to what correct physical functions look like, feel like and sound like. This kind of process often produces stunning musical results in the studio. As he teaches using this process, he instructs students in how to apply these principles in their practice sessions.

Jacobs recognizes student differences and understands each student through detailed questioning and intense observation. Much of his teaching is seen as a simplifying process, removing a student's focus on sensory activity, and increasing the student's awareness of excellent sound, that stimulates psychomotor activity in music making. He simplifies his teaching and performance principles by (a) combining concepts and activities, (b) isolating smaller components of a larger concept, (c) using

metaphorical language, (d) moving concepts from a familiar context to an unfamiliar one, and (e) expanding on excellence.

He plays various roles as he works with students. When modeling with the instrument or with his voice, he is a performer. When coaching students in music and technical issues, he is a teacher. When seeking to understand students' motivations and problems, he is an investigator.

His indirect approach is accomplished by focusing attention on a related problem rather than what some might see as the obvious problem. For example, he coaches students in increased levels of air volume and velocity to solve problems of embouchure. In his teaching, Jacobs has demonstrated how an appropriate conception of sound, combined with appropriate air velocity and volume, produces a healthy embouchure. Musical thoughts are seen to be a vital aspect of student activity in this process.

Principles That Emerge From Teaching Practices

Eight principles have been identified as the Arnold Jacobs tuba studio teaching paradigm.

1. Recognize the art of music as paramount, teach each student as an artist.
2. Seek to understand each student and teach based on the recognition of student differences.
3. Expand on students' strengths rather than focus on weaknesses.

4. Understand defined roles in the studio as performer, investigator, and teacher.
5. Model musical sound as well as effective performance habits.
6. Approach performance problems indirectly.
7. Emphasize the mental aspects of musical performance in teaching.
8. Recognize that a students' greatest asset is the ability to learn.
9. Make teaching a simplifying process.

Answers to Research Questions - Phase II

Phase II of this study is the construction of the global paradigm for highly effective tuba studio teaching, comparing and contrasting the principles set forth in the tuba teaching paradigms of Morris, Phillips, and Jacobs. The research questions areas follows:

1. What principles are clearly shared by teachers?
2. What principles are unique or conspicuous in an individual teacher?
3. What accounts for uniqueness or conspicuousness of principles?

The teaching of three master tuba studio teachers was analyzed by examining published materials, interviews with teachers, interviews with students and observed teaching. In personal interviews and, in the case of Jacobs, published interviews and lectures, each teacher expressed philosophical ideas about tuba studio teaching. Teaching activities and student relationships discussed by teachers were analyzed in association

with teaching procedures described by students and observed in teaching sessions. Principles emerged that were used to construct a tuba studio teaching paradigm for each teacher in case studies presented in Chapters 4, 5, and 6.

The Global Paradigm for Highly Effective Tuba Studio Teaching

The combined principles of the three individual paradigms were considered and merged to create the global paradigm for highly effective tuba studio teaching. Here, 9 of the 21 principles are clearly shared by all three teachers. Morris has three principles unique or conspicuous to him and Phillips has two such principles. The Jacobs Paradigm has the largest number of principles unique or conspicuous to a single teacher, seven.

These three teachers have very different personal and professional backgrounds. Individual teaching situations may account for differences in the tuba studio teaching paradigm of each. Morris teaches at a small state institution that emphasizes music education. Most students arrive at Tennessee Technical University with little or no previous private instruction on tuba.

Phillips, by contrast, taught at one of the largest and most prestigious schools of music in the United States. The majority of his students arrived at Indiana University with previous studio training and had elected a degree program in music performance.

Jacobs' teaching situation differs from those of Morris and Phillips in that most of his tuba students were not taught as part of a university curriculum. Although he taught students for Northwestern University, the majority of his students were taught in his Chicago studio until his death in 1998. Most of his students were advanced performers at the time of this study. All of his students interviewed are now professional performers and teachers. Most of the students observed in videotaped teaching sessions were advanced students or professionals when the teaching sessions were recorded.

Among Morris, Phillips, and Jacobs, nine shared principles were identified.

1. Know the student recognizing and accounting for student differences.
2. Be a professional and personal role model for students.
3. Model effective performance practices.
4. Teach students how to practice, how to teach themselves, and how to be teachers.
5. Simplify the complexities of a comprehensive pedagogy to a set of clearly stated and understandable principles.
6. Teach simplified principles facilitated by a repertory of clear explanations aided by metaphorical language.
7. Transfer principles and concepts of effective performance to problematic areas of performance.

8. Beyond teaching simply performance, instruct students in various music disciplines (comprehensive musicianship).

9. Foster a cooperative environment between teacher and student and among students.

Principles Unique or Conspicuous to Each Teacher

Principles that are not clearly shared by all three master teachers in the context of this study are either unique or just conspicuous. Principles that are conspicuous may not be entirely unique when compared to the other two teachers but stand out in this study based on stated philosophy, reports of students, and observed teaching. Whether a principle is unique or conspicuous is not known. Just because a teacher or student did not mention it and it was not observed in teaching sessions does not mean that a particular teacher did not hold to that principle. Such principles will be stated as unique or conspicuous, without making a distinction as to which it is.

What principles are unique or conspicuous to Winston Morris? There are three principles unique or conspicuous to the Morris Paradigm. The first deals with the importance he places on enthusiasm. The second is a pragmatic view of student motivation. The third is a combination of his two so-called “negative philosophies.”

10. Teach with enthusiasm.

11. Understand students’ tendencies regarding commitment and teach accordingly.

12. Be self-motivated, expecting setbacks.

What accounts for uniqueness or conspicuousness to R. Winston Morris? Morris' ability to take average students and develop them into extraordinary tubists is documented (McAdams, 1996b). I credit these accomplishments to his driving enthusiasm, the ways in which he presents challenges, and his fostering of personal relationships with students.

Because he expects students to "take the course of least resistance," Morris utilizes his own powerful inner motivation to propel students in their musical growth. He reports that he expects setbacks and does not presume that he will be recognized for his accomplishments (personal communication, February 1998). His students report that Morris' personal motivation and enthusiasm were attributes that they wanted to model. Considering the significant number of professional tubists who graduated from the Tennessee Tech tuba studio, it is believed that a notable factor in their success is their adoption of Morris' self-motivational style, enthusiasm, and tenacity.

What principles are unique or conspicuous to Harvey Phillips? Two principles are unique or conspicuous to the Phillips paradigm.

13. Help students find their own sound and approach to performance.

14. Teach students to be promoters of the tuba.

What accounts for the uniqueness or conspicuousness? Phillips' historic role in all aspects of the tuba's development over the past 50 years as well as his missionary zeal have been discussed extensively in Chapter 5.

It is reported and observed that studying with Phillips is always a lesson in music making on the tuba as well as a lesson in the history of the instrument and its literature. Further, Phillips acknowledges individual students within a historical context, challenging them to be activists in the continued development of the tuba within the art of music.

What principles are unique or conspicuous to Arnold Jacobs?

Considering that Jacobs is recognized as a master teacher of musical performance by players of all orchestral brass and wind instruments, it is not surprising that there are more unique or conspicuous principles in the Jacobs Paradigm. Seven such principles are identified.

15. Teach each student is an artist. Emphasize musical over technical aspects of teaching performance.
16. Recognize and maximize students' natural abilities to learn.
17. Expand on students' strengths rather than focus on weaknesses.
18. Employ a multisensory approach.
19. Define and separate specific roles as performer, teacher, and investigator.
20. Teach "mentalization" as the key to effective performance.
21. Approach performance problems indirectly.

What accounts for the uniqueness or conspicuousness? I believe these principles stand out in Jacobs' teaching because of his exceptional understanding of human physiology and psychology. His emphasis on musical thought and the treatment of the student as an artist have their basis in his understanding of the workings of the human nervous system.

As a student is instructed in being a communicator with the tuba, he or she is taught the distinction between sensory and psychomotor systems.

Jacobs teaches that music making is a psychomotor activity that is stimulated by musical thoughts. Even the most elementary student must learn to be a communicator of sound in order to facilitate the complex physical functions required in playing a musical instrument effectively. If a student focuses attention on any aspect of the sensory nervous system while attempting to play music, the result can be what Jacobs calls “paralysis through analysis” (Fredricksen, 1996, p. 143).

In Jacobs’ indirect approach to problem solving, his strategic instructions keep students’ attention away from specific functions of the sensory nervous system. This facilitates solutions to specific performance problems while keeping attention on results rather than process.

As Jacobs teaches students to recognize and maximize their own abilities to learn, they learn to expand on strengths rather than focus on weaknesses. Students learn performance techniques through a multisensory approach, often away from the tuba. This avoids the powerful stimuli of the instrument that often triggers negative habits.

Jacobs’ clear, organized approach in the studio can be accounted for in his stated ideas about various roles played. Such concise roles of performer, teacher, and investigator that Jacobs plays guide the activities which transpire in the studio. In addition, students learn to understand their specific roles as performers, teachers, and investigators in facilitating their own musical development. In their role as performers, they learn

many aspects of mentalization. Their musical imaginations are challenged as they are asked to imagine the sound that they want and as they transfer musical thoughts from a piece that they are familiar with to the music being studied at the time.

**Qualities and Key Behaviors of Effective Teaching,
Comprehensive Musicianship, Mental
Practice, and Unique Principles**

Morris, Phillips, and Jacobs exhibit qualities and key behaviors consistent with effective teaching. Most of the 21 principles of the global paradigm are recognized as well-established precepts of effective teaching within various disciplines and age levels. Two principles are seen as being related to trends in music education, namely, “comprehensive musicianship” and “mental practice.” Two principles are unique to the paradigm: “teach students to be promoters of the tuba” and “define and separate specific roles as performer, teacher, and investigator.”

Effective Teaching and the Global Paradigm

Numerous authors have compiled lists of principles of effective teaching and characteristics of good teachers (Johnson & Michael, 1958; Means, 1968). In Lorin Anderson’s (1989) study guide, *The Effective Teacher*, he discusses studies that have focused on “teacher behaviors and teaching practices” in an attempt to define good teachers (p. 17). Table 1 is a composite definition of a good teacher listing ten characteristics, inferred from the results of such studies.

Table 1

Composite Definition of a Good Teacher (Anderson, 1989)

-
1. Good teachers clearly delineate goals or intended
 2. Good teachers select or develop a curriculum (including assignments and tests) that is linked directly with these goals or intended outcomes.
 3. Good teachers are able to “deliver” the identified curriculum to the students.
 4. Good teachers are concerned with “ends” more than with “means.”
 5. Good teachers care more about the impact of their behavior on students than on how that behavior might look to an outside observer.
 6. Good teachers thrive on accomplishments; both their students and their own.
 7. Good teachers have a sense of efficacy.
 8. Good teachers know their subject.
 9. Good teachers care about their students and treat them with respect.
 10. Good teachers are able to make wise and prudent decisions.
-

More recently, Borich (1996) identified 10 teacher behaviors which “show promising relationships to desirable student performance” (p. 10). Five have been strongly supported by research studies conducted in the 1970s and 1980s (Brophy, 1989, Brophy & Good, 1986; Dunkin & Biddle, 1974; Rosenshine, 1971; Walberg, 1986). Borich calls them “key behaviors” and are as follows:

1. Lesson clarity
2. Instructional variety
3. Teacher task orientation
4. Engagement in the learning process
5. Student success rate (p. 11).

Borich further lists five “helping behaviors” to effective teaching. He points out that research findings for helping behaviors are not as strong and consistent as the identified “key behaviors.” Because research results have not explicitly identified how these behaviors should be used and have not linked them to student performance and progress as strongly as the key behaviors, they should be employed in the context of the five key behaviors. They are “catalysts rather than agents unto themselves” (p. 24).

1. Using student ideas and contributions
2. Structuring
3. Questioning
4. Probing
5. Teacher affect (p. 24).

Although the five key and five helping behaviors are intended for classroom use, the five key behaviors were observed in the studio teaching of Morris, Phillips, and Jacobs; and the five helping behaviors were observed to some degree in the case studies. What follows is a discussion of the five key behaviors as observed in the three case studies.

Lesson clarity. This is a teacher's ability to communicate and organize what is to be learned. Borich (1996) states that effective teachers (a) inform learners of lesson objectives; (b) provide learners with an advance organizer; (c) check for prior learning; (d) give directions slowly and distinctly; (e) know student ability levels and teach at or slightly above a learner's current level; (f) use examples, illustration, and visual aids to explain and clarify; and (g) provide review or summary at the conclusion of a lesson.

Examples of lesson clarity are ubiquitous throughout the case studies of Morris, Phillips and Jacobs. For example, Morris provides students with a "scale studies" handout and refers to it frequently throughout lessons as problems with fundamentals such as range and articulation emerge. This informs students of expectations and is a kind of advance organizer. Each teacher made a point of really knowing the student and taught at a level that challenged each student. Each was verbally clear in instructions to students. Each reviewed important points and made appropriate assignments at the conclusion of lessons.

Instructional variety. This refers to the delivery and flexibility demonstrated by the teacher in the lesson. Borich (1996) states that

effective teachers (a) use attention getting devices; (b) show enthusiasm and animation, employ variation in eye contact, voice and gestures; (c) vary modes of presentation; (d) use a mix of rewards and reinforcers; (e) incorporate student ideas or participation; and (e) vary types of questions and probes.

Morris, Phillips and Jacobs did all of the above in observed lesson. Of special note is Morris' animated, attention-grabbing enthusiasm, Phillips' intimate verbal dialogues with students, and Jacobs' creative use of visual and kinesthetic aids such as breathing apparatuses.

Teacher task orientation. This refers to the amount of time in which the teacher is actually performing the task of teaching, how much time is used getting students ready to learn and assessing learners' performance. Borich (1996) states that effective teachers (a) develop relevant unit and lesson plans, (b) handle administrative and clerical interruptions efficiently, (c) minimize class disruption, (d) select appropriate instructional models for objectives being taught, and (e) build to unit outcomes with clearly definable events.

Morris, Phillips and Jacobs all taught with clear lesson objectives. These objectives were often verbalized, but not presented in written form. Morris stated that he did not use a syllabus because "it means nothing because each student is so different" (personal communication, February 1998). Each teacher had no observable studio disruptions, so how such events were handled was not observed. Jacobs used a wide variety of instructional models to solve specific performance problems.

It was observed in case studies that music performance instruction built momentum to student outcomes. Instruction usually led to performance of a musical passage. A remarkable aspect of this process is that all three teachers frequently made the point that they were not just teaching the piece at hand, but teaching performance principles that apply in many situations.

Engagement in the learning process. This refers to the time that students are “on task.” Borich (1996) states that effective teachers (a) get students to elicit the desired behavior immediately after the instructional stimuli, (b) provide nonthreatening opportunities for student feedback, (c) use individual and group activities when needed, (d) use meaningful verbal praises to keep students active in the learning process, and (e) monitor seat work and check progress frequently during independent practice.

Morris, Phillips, and Jacobs exhibited exceptional engagement with students during lessons. The case studies report on the focused attention of teachers and concentrated musical and verbal dialogue between teachers and students. Case studies also reported on the congenial dialogue between teachers and students. Morris provided nonthreatening opportunities for student feedback through humor and lighthearted teasing. Phillips achieved it with his amiable persona and intimate dialogue. Group participation was provided for and observed in master classes presented by each teacher. Meaningful verbal praise was masterfully used by all three teachers.

Student success rate. This refers to the rate at which students understand and correctly complete assigned activities. Borich (1996) states that effective teachers (a) establish lesson content that reflects prior learning, (b) correct errors immediately, (b) divide instructional units in to “small chunks,” (d) plan transitions to new material in easily grasped steps, and (e) vary pace at which stimuli are presented and builds toward a climax or key event (p. 24).

Morris, Phillips, and Jacobs knew their students and based lesson content on prior learning. Each teacher corrected errors immediately and divided instructional units into chunks. The variety of study materials including etudes, solos and orchestral excerpts were organized in ways which both provided for variety in performance expectations and the chunking of material. Study materials were selected and organized to progress in difficulty. Students of Morris and Phillips reported on the sequence of study materials in most individual lessons as moving from legato etudes, to technical etudes, to solo literature. Solo literature became the culminating event in most lessons.

Lesson culmination also occurred on a larger scale, as a series of lessons culminated in a master class or recital performance.

As can be seen in Table 2, there is a convincing relationship between the global paradigm of highly effective studio tuba teaching and Anderson’s qualities of effective teachers, as well as Borich’s five key behaviors of effective teachers.

Table 2

**The Global Paradigm. Key Behaviors of Effective Teaching,
and Qualities of an Effective Teacher**

Principles of The Global Paradigm of Highly Effective Studio Tuba Teachers	Borich (1996): Key Behaviors of Effective Teachers	Anderson (1987): Composite Definition of a Good Teacher
1. Know the student recognizing and accounting for student differences.	Lesson clarity: check for prior learning, know student ability levels and teach at or slightly above a learner's current level.	
2. Be a professional and personal role model for students.	Lesson clarity: use examples, illustration, and visual aids to explain and clarify.	
3. Model effective performance practices.	Lesson clarity: use examples, illustration, and visual aids to explain and clarify.	Have a sense of efficacy. Know their subject.
4. Teach students how to practice, how to teach themselves, and how to be teachers.	Lesson clarity: provide review or summary at the conclusion of a lesson. Teacher task orientation: select appropriate instructional models for objectives being taught. Student success rate: divide instructional units in to "small chunks."	Delineate goals or intended outcomes. Select or develop a curriculum (including assignments and tests) that is linked directly with these goals or intended outcomes.

Table 2 Continued

Principles of The Global Paradigm of Highly Effective Studio Tuba Teachers	Borich (1996): Key Behaviors of Effective Teachers	Anderson (1987): Composite Definition of a Good Teacher
6. Teach simplified principles facilitated by a repertory of clear explanations aided by metaphorical language.	Lesson clarity: use examples, illustration and visual aids to explain and clarify. Instructional variety: vary modes of presentations.	Select or develop a curriculum (including assignments and tests) that is linked directly with goals or intended outcomes.
7. Transfer principles and concepts of effective performance to problematic areas of	Instructional variety: vary modes of presentation. Lesson clarity: know student	
8. Beyond teaching simply performance, instruct students in various music disciplines (Comprehensive Musicianship).	Instructional variety: vary modes of presentation. Teacher task orientation: develop relevant unit and lesson plans.	
9. Foster a cooperative environment between teacher and student and among students.	Engagement in the learning process: provide non-threatening opportunities for student feedback, use individual and group activities when needed, use meaningful verbal praises to keep students active in the learning process.	Care about their students and treat them with respect.

Table 2 Continued

Principles of The Global Paradigm of Highly Effective Studio Tuba Teachers	Borich (1996): Key Behaviors of Effective Teachers	Anderson (1987): Composite Definition of a Good Teacher
10. Teach with enthusiasm	Instructional variety: use attention getting devices, show enthusiasm and animation, employ variation in eye contact, voice, and gestures.	Care more about the impact of their behavior on students than on how that behavior might look to an outside observer.
11. Understand students' tendencies regarding commitment and teach accordingly.	Lesson clarity: know student ability levels and teach at or slightly above a learner's current level. Instructional variety: use attention getting devices, show enthusiasm and animation, vary modes of presentation, use a mix of rewards and reinforcers, incorporate student ideas or participation, vary types of questions and probes. Teacher task orientation: select appropriate instructional models for objectives being taught, build to unit outcomes with clearly definable events.	"Deliver" the identified curriculum to the students.

Table 2 Continued

Principles of The Global Paradigm of Highly Effective Studio Tuba Teachers	Borich (1996): Key Behaviors of Effective Teachers	Anderson (1987): Composite Definition of a Good Teacher
12. Be self-motivated, expecting setbacks		Care more about the impact of their behavior on students than on how that behavior might look to an outside observer. Thrive on accomplishments; both their students and their own. Have a sense of efficacy. Make wise and prudent decisions.
13. Help students find their own sound and approach to performance.	Instructional variety: incorporate student idea or participation in some aspect or instruction.	Concerned with “ends” more than with “means.”
14. Teach students to be promoters of the tuba.		
15. Each student is an artist. Emphasize musical over technical aspects of teaching performance.	Instructional variety: incorporate student idea or participation in some aspect or instruction.	

Table 2 Continued

Principles of The Global Paradigm of Highly Effective Studio Teachers	Borich (1996): Key Behaviors of Effective Teachers	Anderson (1987): Composite Definition of a Good Teacher
16. Recognize and maximize students' natural abilities to learn.	Instructional variety: incorporate student idea or participation in some aspect or instruction. Student success rate: establish lesson content that reflects prior learning, divide instructional units in to "small chunks," plan transitions to new material in easily grasped steps.	Select or develop a curriculum (including assignments and tests) that is linked directly with these goals or intended outcomes.
17. Expand on students' strengths rather than focus on weaknesses.	Instructional variety: incorporate student idea or participation in some aspect or instruction. Student success rate: establish lesson content that reflects prior learning.	
18. Employ a multi-sensory approach.	Instructional variety: vary modes of presentation.	Select or develop a curriculum (including assignments and tests) that is linked directly with these goals or intended outcomes.
19. Define and separate specific roles as performer, teacher, and investigator.		

Table 2 Continued

Principles of The Global Paradigm of Highly Effective Studio Tuba Teachers	Borich (1996): Key Behaviors of Effective Teachers	Anderson (1987): Composite Definition of a Good Teacher
20. Teach “mentalization” as the key to effective performance.	Instructional variety: vary modes of presentation.	
21. Approach performance problems indirectly.	Instructional variety: vary modes of presentation.	

Comprehensive Musicianship

Mark (1986) describes comprehensive musicianship as the “inter-disciplinary study of music” (p. 183). It refers to the integration of various music disciplines such as theory, literature, composition, and performance. The term, comprehensive musicianship (CM) , emerged in the 1960s as a reform movement in music education. It came to prominence, in part, from the Contemporary Music Project at Northwestern University in 1965. It is interesting to note that both Harvey Phillips and Arnold Jacobs taught at Northwestern University in the 1960s and 1970s. It is not known if either of them were formally involved or were directly influenced by this movement.

Willoughby (1972) suggested CM as an alternative to theory and literature courses in high school and college. According to Grashel (1993), CM as it was originally conceived has not been assimilated into American education, although isolated examples like the Hawaii Curriculum Project do exist. Certain elements of CM, however, have been incorporated into some education setting from elementary school general music classes to high school and college bands, orchestras and choirs.

In 1972 Willoughby further stated that successful teachers of CM should “posses a high level of commitment to (a) the interest and needs of his students, (b) continually revitalized creative teaching, (c) a persistent search for a diversity of knowledge, and (d) music as a live art” (pp. 13-19). Nearly 20 years later, Willoughby (1990) discussed CM’s context in the education of the performing musician. He reported that the aspiring

professional performer should be “versatile, adaptive, and accommodating in repertoire and style of presentation, and yet must strive continually to be discerning in artistic judgement” (p. 39). It has been demonstrated that the teaching of Morris, Phillips, and Jacobs is consistent with both sets of objectives expressed by Willoughby.

Morris expresses elements of CM model through a literature-based approach, emphasis on listening to recordings and student involvement in the Tennessee Tech Tuba-Euphonium Ensemble. His students are expected to perform regularly in master classes and recitals. They must study and prepare an extraordinary amount of solo literature including transcriptions, major works and new works for tuba. His expectation of student listening is facilitated by a “listening station” and an extensive collection of recordings that he provides for his students.

The Tennessee Tech Ensemble prepares and performs numerous transcriptions of various styles including symphonic music and jazz. Students are expected to provide original compositions and arrangements for the ensemble’s many public performances and recordings. Morris was observed discussing arranging techniques in his ensemble rehearsals. It is no surprise that many of today’s leading composers and arrangers of tuba-euphonium ensemble literature graduated from Morris’ program.

Harvey Phillips asked students to bring theory books to lessons and demonstrated theory principles of chords and scales in relationship to performance literature. He also discussed stylistic languages of specific

composers and national styles. He encourages students to study arranging, composition, and jazz performance in order to be marketable as a musician.

Arnold Jacobs is less likely to integrate various musical disciplines into his studio teaching than Morris or Phillips. This may be because of the intensity with which he works on concepts of “song” and “wind.” In the Jacobs case study, however, there are numerous examples of this master teacher discussing diverse music literature including jazz. He encourages students to double on other instruments and to be involved in jazz performance.

Mental Practice

Jacobs’ ideas about “mentalization” are consistent with principles set forth in studies and articles about mental practice from sports pedagogy as well as music education. Harby (1952) found that in shooting basketball nets, (a) physical skill can be improved by mental practice, (b) the effectiveness of mental practice varies with the length of practice and with subjects, and (c) mental and physical practice combined is likely to be more effective than either mental or physical practice alone. (p. 11) In another basketball study, Verdelle (1960) found that mental practice, under certain conditions, was nearly as effective a physical practice.

In recent years, studies on mental practice have been conducted in music performance settings. In one such study, Ross (1985) investigated the effects of mental practice on improving trombone performance and found that the use of mental practice, combined with physical practice, can

“accrue many benefits for the skilled trombonist” (p. 121). Coffman (1989) found mixed results in a study of piano performance with regard to mental practice and physical practice. Physical practice and alternating mental/physical practice yielded significantly more favorable results than did mental practice alone. Physical practice did not differ significantly from the alternating mental/physical practice in improving performance. Consistent with these findings, Arnold Jacobs always combined mental and physical practice in accounts of his teaching in the Jacobs case study.

Mental aspects of performance are also addressed in W. Timothy Gallwey’s popular “Inner Game” books. His *Inner Tennis: Playing the Game* (1976) was followed by *The Inner Game of Tennis* (1979) and other sequels have ensued. Most are coauthored by individuals whose expertise was employed to adapt Gallwey’s principles of mental activity associated with high levels of performance to other sports and the performing arts. In 1987, Barry Green wrote *The Inner Game of Music*, adapting Gallwey’s ideas to music practice and performance.

In a 1986 panel discussion, Don Little, an Arnold Jacobs protégé, pointed out that Jacobs’ emphasis of conceptualization is similar to Gallwey’s ideas and that Jacobs was employing “inner game” concepts long before “The Inner Game” books were written. (conference proceeding, International Tuba and Euphonium Conference, Austin, TX)

Unique Principles

As is illustrated in Table 2, all but two principles of the global paradigm are correlated in some way with at least one of the key behaviors teaching or definitions of a good teaching. This helps to confirm that the majority of teaching principles employed by Morris, Phillips, and Jacobs are established principles of teaching employed by effective teachers in various disciplines. Table 2 also shows that mentalization and CM ideas are not unique to effective tuba teaching.

Two principles appear to be unique to the global paradigm: Jacobs' precept which describes playing various roles in the studio and Phillips' principle with regard to teaching students to be promoters of the tuba. Although corresponding material about teachers' playing various roles in the classroom did not appear on lists of principles of effective teaching, many teaching textbooks discuss roles that teachers must play in productive teaching. What stands out about Jacobs in this regard is that he frequently talked about "wearing different hats" and was observed as he clearly and effectively played the roles of performer, teacher, and investigator.

Phillips' ideas about promoting the tuba have been discussed in detail. His role in elevating the literature and performance standards of the instrument continue to be legendary. I agree with Phillips' ideas about the responsibility of tuba teachers to provide opportunities for their students and future generations of tubists. Tuba teachers do a disservice to students if

they encourage and develop young musicians, yet do nothing to help insure that they have performance opportunities.

Application to Music Studio Teaching

A review of the 21 principles of the global paradigm for highly effective tuba studio teaching reveals three spheres of competency in studio teaching. The three spheres of competency are interpersonal, musical, and pedagogical. Each principle of the global paradigm was placed in one of the spheres of competency. Each sphere of competency then became a comprehensive model based on a composite view of the three master teachers in that particular aspect of studio teaching.

First Sphere: Interpersonal Competence

This study illuminated much about the powerful interpersonal skills Morris, Phillips, and Jacobs exhibit in their teaching relationships. It has been shown how these skills contribute to each individual's success as a studio teacher. Each exhibits exceptional personal motivation and high levels of commitment to the art of music and to teaching. Each displays focused attention and observational abilities that enables him to know each student. This knowledge helps each teacher account for student differences. Students reported and I observed Morris and Phillips fostering a cooperative environment among students in their respective studios.

Morris reports that his motivational style is based on his understanding of students' tendencies regarding commitment. He further

states that he is committed to goals for himself and his students even though he expects setbacks and does not expect recognition.

Second Sphere: Musical Competence

All three teachers are celebrated performers, and they effectively use their musical ability in lessons through modeling. Modeling was observed in three ways: first, through playing for or along with students; second, by singing, conducting or both along with students; and third, through modeling nonmusical physical activity essential to effective performance, away from the instrument.

All three teachers facilitated modeling by encouraging students to listen to recordings. Phillips listened to recordings with students, discussing the application of what was learned from the recordings. Jacobs discussed the sound of various brass players as models, encouraging students to listen to these musicians. Morris facilitated listening to tuba recordings by providing a listening station in his studio that was always available to students. He also discussed with students, various recordings of solo literature that students were studying.

Each teacher has diverse interests and expertise in aspects of music other than tuba performance. Each expressed ideas about training students in diverse areas of music performance, fostering comprehensive musicianship. Students report of the diversity of music studied and the application of music theory, and history principles were asserted in the Phillips case study.

Third Sphere: Pedagogical Competence

Each master teacher took time during teaching sessions to teach students how to practice. Each reduced the complexities of his complete pedagogy to a set of simplified principles. These simplified principles were facilitated by a repertory of clear explanations, aided by the use of metaphorical language. Each transferred principles and concepts of effective performance to problematic areas of performance.

Jacobs demonstrates the greatest diversity and originality in his pedagogical approach. He draws a distinction between work on technical aspects of tuba performance, which he terms “wind,” and the musical aspects of tuba performance, which he terms “song.” As he focuses on the art of music making, it is always separate from the technical aspects of performance. His approach is not based on his direct teaching as much as his tapping into what he believes is a student’s greatest asset, the ability to learn. Encouraging communication with the tuba, he coaches each student as an artist. In the studio, he makes distinctions in his various roles as performer, teacher, and investigator. This helps him to focus on what specific activity is going on at the moment and clarify what a student’s needs are.

As students begin to demonstrate excellence in an aspect of performance, Jacobs has them expand on strengths. For example, an excellent sound at one dynamic level can be strived for at both louder and softer levels. The student learns to utilize the model of his or her own excellence, expanding it into areas that are in need of improvement.

Jacobs knows that when students focus their attention on a specific problem with a physical aspect of tuba performance, the sensory nervous system begins to amplify the problem. Thus, he always approaches such problems indirectly. This is what Armandi calls solving a problem “through the back door” (personal communication, August 1998).

Jacobs understands the power of a multisensory approach in learning technical aspects of tuba performance. Utilizing visual readout instruments and physical activities such as blowing on the back of the hand or feeling parts of the body while breathing, he maximizes student learning.

Application to Tuba Studio Teaching:

On Becoming a Successful

Studio Tuba Teacher

The principal findings of this study are as follows: (1) three highly effective studio tuba teachers possess the same characteristics of great teachers as defined in education literature, and (2) they employ teaching principles which have been established by education research. To be a successful tuba studio teacher one must cultivate these personal qualities and learn to implement these educational principles in teaching. In addition, one must develop as a competent and versatile performing artist and learn pedagogy unique to brass and tuba teaching.

I believe that a key to developing a personal pedagogy and curriculum in tuba studio teaching lies in the model of CM. Descriptions of the teaching of three highly effective studio tuba teachers are rich with

examples of integration of various musical disciplines. It is little wonder that many of the most successful teachers of tuba in the United States and abroad are former students of Morris, Phillips, and Jacobs.

The principles of “song” and “wind” employed by Arnold Jacobs, although conceived for all wind instrument performance, are particularly appropriate to tuba pedagogy. Because of the extremes in air volume and oral cavity movement, the development of the breathing and oral manipulation is vital to effective tuba performance.

Also of importance in the development of a competent tuba studio teacher is Harvey Phillips’ model for teaching professional development as well as his encouragement in becoming a promoter of the tuba. Like Phillips, I believe that if students are to be marketable as performers and teachers, they must be versatile, flexible, and understand the business of music. In order for tubists to continue to have new literature to perform, places to perform, and ensembles to play in, they must learn to be advocates for their instrument.

Further Research

A review of the literature on brass and tuba teaching revealed very little about how teachers of the past taught, although much information about literature, study, and performance fundamentals is known. Only in recent years, with the publication of books and articles about modern brass teachers, has such information become available. In the pursuit of this research, I have asked and answered some specific questions about three

highly effective tuba studio teachers. A number of different questions for future research were identified.

1. What specific verbal repertory do effective studio teachers use to help solve specific performance problems? I was impressed and fascinated by Phillips' clear and effective use of language in his teaching. Through his extensive repertory of statements made to students, he was able to instantaneously solve some specific performance problems. Research culminating with extensive catalogues of verbal teaching repertory of highly effective studio teachers would be a welcome addition to the growing body of pedagogical information for the tuba. Of further value would be catalogues of other such teaching repertory from teachers of other instruments.

2. What specific remediation does Arnold Jacobs use to deal with specific performance problems? Jacobs has an exceptional ability to diagnose problems and prescribe specific remediation. His diversity of approaches to solving performance problems led to speculation about possible useful research. Fedderly reports that Jacobs creates in his mind an individualized course of study for each student he works with. Activities that Jacobs prescribes vary greatly among students because of students' individual problems. Careful, repeated observation of many of Jacobs' teaching sessions on videotape and analysis of problems and procedures could produce much-needed specific diagnostic and prescriptive information in solving singular performance problems. Such a study might best be

conducted by someone who has worked extensively with Jacobs and is intimately familiar with his teaching.

3. What are the measurable benefits, if any, of specific pedagogical procedures in the tuba studio? Quantitative research might begin where this study has concluded. Although this dissertation did not focus on the details of tuba pedagogy such as how to teach tounging or mouthpiece buzzing, differences in teachers' approaches to such specific fundamentals were observed. Experimental research in these areas may shed light on more effective approaches to teaching the tuba.

4. What is the feasibility and effectiveness of quantitatively measuring achievement in tuba performance? A possible outcome of this study might be the creation of a measurement instrument for effective studio teaching based on three identified spheres of competence; interpersonal, musical, and pedagogical. Such an instrument could be of value in quantitative research studies in studio teaching.

Conclusions

Many of the principles illuminated in this study are employed by studio teachers of all instruments. It has been demonstrated that similar principles can be found in educational literature and teaching textbooks from various disciplines. In the end one might say that some or most of the principles set forth in the Global paradigm for Highly Effective Tuba Studio Teaching were common knowledge to begin with and could be considered axioms. This point may be argued. The real power and meaning in this

research, however, are in the case studies themselves because in reading them, one sees how philosophies lead to teaching practices and procedures. One also sees how the principles illuminated by the research relate to each other in actual practice.

Through reading, interviewing, observing, analyzing, and subsequently constructing three tuba teaching paradigms, this qualitative process has been what Seidman (1996) called a “meaning making experience” for me (p. 1). As others read this document in its entirety, examining reported philosophical ideas of the teachers as well as reported and observed teaching procedures, the real meaning of the study will be seen as much more than a list of principles. It will facilitate a more complete understanding of three master teachers and the principles and procedures that make them masters. It is my hope that because of this study, tubists as well as other musicians will improve their effectiveness as studio teachers.

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