A SURVEY OF CHORAL METHODS INSTRUCTORS AT NASM-ACCREDITED INSTITUTIONS: PEDAGOGICAL CONTENT KNOWLEDGE ORIENTATION AND THE CHORAL METHODS CLASS

by

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ABSTRACT

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A Survey of Choral Methods Instructors at NASM-Accredited Institutions: Pedagogical Content Knowledge Orientation and the Choral Methods Class

Dissertation directed by Professor James R. Austin, Ph.D.

Research concerning undergraduate choral teacher education is relatively limited despite the fact that annually about 10,000 students are enrolled in choral music education degree programs and just under 2,000 graduate with credentials leading to a choral music teaching license. Few researchers have specifically focused on the question of choral music educator expertise or the types of knowledge and skill that should be cultivated during preservice training so as to ensure future professional success.

The primary purpose of this study was to determine how choral methods courses are structured and situated within the undergraduate choral music education curriculum, and the extent to which choral methods instructors emphasize major facets of choral music teacher knowledge and skill as defined by Shulman's teacher knowledge framework: *Content Knowledge* (CK), *Pedagogical Knowledge* (PK), and the merger of the two – *Pedagogical Content Knowledge* (PCK). Relationships among instructional emphasis ratings (reflecting amount of instructional time and assessment weight), methods course characteristics, choral methods instructor attributes, and instructor beliefs pertaining to the major categories of choral teacher knowledge and skill also were explored.

An on-line survey methodology was employed and the Choral Methods Instructor Inventory (CMII) was developed. The questionnaire items were created based upon previous work that explored choral and instrumental methods courses, investigations focused on utilizing

Shulman's framework in music teacher research, in consultation with experts, and through pilot testing. Content validity for items used to measure teacher knowledge orientation was established by expert music teacher educators, who independently classified specific knowledge and skill items with 91% agreement. Internal consistency estimates provide evidence of adequate-to-strong levels of reliability. To access the target population (choral methods course instructors) a multi-step sampling process was utilized as follows: (a) NASM-accredited schools offering an undergraduate degree leading to a music teaching license were identified; (b) music administrators at those schools were contacted to obtain the choral methods instructor's email address; (c) when follow-up inquiries to these administrators did not yield the information, the school's faculty biography section was searched in an effort to identify the person most likely to teach choral methods; and (d) these individuals were sent an invitation to participate in the study.

Music instructors representing 490 NASM-accredited schools were invited to participate. Of those, 242 (49%) responded to Section I items that address institutional demographics, but 60 (25%) indicated that a stand-alone secondary choral methods course is not offered at their institution. This left a pool of 376 eligible participants and 161 completed all CMII items. This 43% (161 instructors out of 376) response rate exceeds typical rates associated with web-based survey formats, and study participants represent a sizable population whose responses provide significant contributions for the choral teacher education profession. The typical choral methods class occurs as a two or three credit hour course taught in one semester. Only 60% of schools offer a concurrent field experience with the choral methods class. Course instructors typically have an undergraduate degree in music education with an emphasis in voice training, graduate degrees and work experience in either choral conducting or music education, teaching experience primarily at the college level and some at K-12 levels. Instructors with a doctoral degree in

music education or teaching responsibilities in music education were more inclined to emphasize PCK development in the choral methods class. Overall, instructors rated each area – CK, PK and PCK – as *critically important* or *very important* and emphasized specific PCK knowledge/skill items slightly more than PK items, but significantly more so than CK items.

A conceptual model based upon Shulman's teacher knowledge framework is presented and specific factors (instructor work experience and educational background, specialized and contextualized training and field experiences, and time and credit hour realities) that may impact the knowledge and skills emphasized in the choral methods class are discussed. Implications for choral music teacher educators and avenues for future research are explored.

ACKNOWLEDGEMENTS

Many who have completed a dissertation or other significant work recognize the encouragement and support from family, friends, colleagues and teachers in helping them accomplish their goals. I would be remise if I did not publicly thank the people who have helped me complete this work, and though there is not enough space to mark the contributions of each person, I wish to recognize several who have had a significant impact.

I was fortunate to attend an elementary school where in addition to general music; I enjoyed singing in the choir, playing percussion in the band, and piano in the elementary district jazz band – *Half Pint Jazz*. With encouragement from my parents I continued on into Junior High and High School choir, band and vocal and instrumental jazz ensembles. In addition to the several fine K-12 music teachers, I had experiences with many thought-provoking teachers outside of music, who with their music teacher colleagues helped draw out my interests and stimulated my thinking. Several music and education instructors at Midland Lutheran College, the University of Northern Colorado, including the late Elza Daugherty, and the University of Colorado further expanded and sharpened my skills and capacities as I earned undergraduate and graduate degrees in music education. I express my heartfelt thanks to these teachers and the many student friends in those classes who helped shape my character along the way. In my K-12 teaching career there have been many students and teaching colleagues I taught and learned from at Briggsdale K-12, Conrad Ball MS, and Mountain View HS, who provided many learning opportunities as well as those students and colleagues more recently from Washington State University and Arkansas State University.

More specifically I would like to thank James Austin, my dissertation advisor, for his countless hours providing research design direction, encouraging thought expansion between theoretical and practical perspectives, and reviewing/editing drafts throughout the process.

Dissertation committee members - Margaret Berg, Susan Jurow, Martina Miranda, and Daniel Sher - each contributed unique and valued perspectives to both the development and final product of this research project as well as Sue Williamson who helped guide initial research thrusts. Along the way several outside committee members provided general support and valuable feedback in developing the theoretical framework (Hildegard Froehlich and Joshua Russell), the Choral Methods Instructor Inventory - CMII (Jennie Whitcomb - a former student of Lee Shulman and several "anonymous" questionnaire reviewers), and database creation for contacting study participants (Lori Gray).

Finally, I express gratitude to the many friends and family members who extended encouraging words (and prayers!) in my behalf. My sisters and their families as well as my father-in-law supplied housing and food whenever I needed a home away from home. Though I lost my father at the end, both he and my mom (Dennis and Diana) have always been a foundation of support. Most importantly and with the deepest sincerity I humbly thank my Father in Heaven who not only blessed me with many capacities to help accomplish a portion His work, but blessed me with a stalwart wife and nine choice spirits to share this life and the next. Jamie has been the epitome of the perfect spouse, and beyond raising our many children and managing the family while I have been busily engaged in this enterprise, she has served with continual vigor, alongside our two eldest daughters with gifted minds (Kyandra and Kalysha), in providing significant editorialship and shares in this signal professional accomplishment.

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CHAPTER I

INTRODUCTION

In the United States, education has been hotly debated over many decades. Questions regarding how best to educate students and prepare teachers for the profession have been at the center of this debate (Abeles, 2010; Duncan, 2009; Labaree, 2008; Sedlak, 2008; Wilson & Tamir, 2008). Presently, state departments of education and their companion legislative bodies are recommending a restructuring of higher education degree coursework, including degree coursework leading to teacher licensure (Imig & Imig, 2008; Murray, 2008; Wilson, 2008). Many professional organizations and accrediting agencies also are pushing for greater teacher educator accountability or advocating more directly for alternative teacher education approaches that emphasize content area expertise as well as clinical field experience (Boardman, 1990; Zeichner & Conklin, 2005). Traditional and innovative notions of teacher education are merging with proposed reforms to K-12 education, thus creating a complex context for change (Adler, 2008; Kennedy and Archambault, 2012).

Different perspectives exist regarding the key elements or characteristics of quality teacher preparation programs, and the assumptions underlying these various perspectives must be considered when seeking to understand how teachers develop expertise or how preparation programs might be optimally structured. Grossman (1990) stated that "the content and structure of teacher education owe more to historical precedent than to a conceptual understanding of how teachers learn to teach" (p. ix). Indeed, the history of teacher education in the U.S. reflects changing views as to the nature of teaching as a profession, the process of teacher development, and appropriate pathways to teaching (Pulliam & Van Patten, 2001). In the 19th century, teaching was not yet considered a true profession, and anyone with an eighth grade education, who could pass a test of general knowledge could be hired to teach; it was assumed that teachers

would develop specific subject area knowledge and pedagogical expertise once in the classroom. As teacher institutes and normal schools evolved in the late 1800s, however, teachers received more thorough training in academic subjects and pedagogy, and were certified before entering the classroom. Through the course of the 20th century, teacher certification was linked to completing both a major in a traditional academic subject and extensive coursework in pedagogical theory. This structure was pervasive until the advent of the current educational reform era in the mid-1980s, when bodies such as the Holmes Group and the Carnegie Task Force on Teaching sought to bridge theory and practice and integrate content with pedagogy by focusing less on the completion of courses and tests, and more on the development and demonstration of professional competencies through authentic learning contexts (Cochran-Smith, 2001).

The content and structure of the music education degree program also has remained largely unchanged since the early 1900s (Oberlin Conservatory offered the first four-year music education degree in 1921), and is based on a conservatory model that emphasizes musicianship and/or a comprehensive music school version that emphasizes musicianship and discipline-specific pedagogy (Colwell, 1985; Gohlke, 1994; James, 1968; Keene, 1982; Kratus, 2009 SMTE Symposium; Mark & Gary, 2007). Regardless of the model, there frequently have been tensions as to the amount of teacher education coursework that should be required for a music education degree and the degree to which pedagogical knowledge is needed for effective K-12 music teaching. In 2008 a special music teacher preparation working group was convened by Samuel Hope, executive director of the National Association of Schools of Music (NASM), to establish guidelines for reviewing undergraduate music education degree programs. One of the major premises underlying these guidelines is the need for institutions to make difficult choices

regarding program content.

> The body of knowledge and skills is large and constantly expanding. However, time is not. This necessitates content and associated choices about what is absolutely basic. Basic does not mean simple or easy. These choices are difficult; there is no single right or best answer for every institution or situation. (NASM, 2011, Question Set I: Curricula, p. 6)

The working group also proposed a dozen alternative curricular patterns for music education degrees that vary in terms of the blend of musicianship and pedagogical studies.

Choral music education, a subspecialty within music education, is the focus of this dissertation. In an effort to describe or interpret choral music education programs, researchers typically address the sequence of coursework and the types of topics covered. Instructor experience, expertise and beliefs, and how such characteristics shape teaching-learning dynamics or promote an orientation toward subject area mastery as opposed to pedagogical skill, however, are often overlooked. Nor have scholars adequately considered the degree to which programmatic decisions are driven by larger systems and evaluative frameworks (e.g., NASM Accreditation Standards, National Music Standards, and National Board Certification Standards) as opposed to the beliefs and values of individual faculty members charged with preparing future choral music educators. Arriving at an understanding of these complex individual and institutional networks that shape teacher education (Borko & Putnam, 1996; Cochran-Smith & Zeichner, 2005; Corrigan & Haberman; 1990; Hess, Rotherham & Walsh, 2004; Leal, 2004; Tom, 1997) and disentangling various interactions is difficult work (Froehlich, 2009; Grossman, 1990, Zeichner & Conklin, 2005).

Problem Statement

With over 500 higher education institutions in the United States that offer a program of study leading to an undergraduate music education degree and state sponsored music teacher licensure, there is a need for more research that determines how music teacher education programs are structured, which course-related activities and field experiences are most common, and which dispositions, skills or areas of knowledge are viewed as central to the development of confident and competent music educators (Doerksen & Ritcher, 2007; Wing & Barrett, 2002). Of the major areas of specialization within music education (choral music, general music, instrumental music), choral music education is arguably the least studied (Turcott, 2003) and understood (Drafall & Grant, 1997).

Drafall and Grant (1997) noted how many of the challenges associated with planning the first Allerton Retreat for Choral Music Education centered on identifying the constituency:

> Many of us involved in choral music teacher education are choral conductors in colleges and universities and are not considered to be music education faculty. Some of us do not hold music education degrees. Additionally, topics regarded as choral methods are often covered in elementary or secondary music education courses, conducting classes, or ensembles. This led us to define our first and most basic question: Who are we and what do we do? (p. 3)

Dolloff (1994) observed how teaching proficiency in *choral* music involves both teaching expertise and expertise in music, and such expertise typically develops through immersion in music performance and cognitive apprenticeship – observation of master choral teachers as they conduct and rehearse choirs. Similar views may exist within general music and instrumental music education circles, but choral music education likely embodies the notions of teacher as

artist and student as apprentice musician more fully, and choral music educators seem less inclined to separate music education from performance as distinct processes with different goals (i.e., Doreen Rao's *performance-based music education philosophy*).

While there are several journals (e.g., *The Choral Journal, Journal of Singing, American Choral Review*) that publish opinion and practical articles related to choral music teaching, choral music education studies are generally under-represented in the major music education research journals. In a review of choral music education research, however, Turcott (2003) observed that there is a discernible trend toward more choral music education research at the doctoral level and beyond, and that continued interest in vocal pedagogy, conducting, rehearsal techniques and other pragmatic topics have been accompanied by a greater number of studies focused on major teacher education topics such as choral curriculum and assessment.

The centerpiece in teacher education degree coursework is the methods course (Boardman, 1990; Colwell, 1985; Leonhard, 1985; Teachout, 2004), and as such, the faculty member who teaches the choral methods course is in a position to exert great influence over future choral music educators (Frego, 2003; McCaslin & Good, 1996; Wilcox & Upitis, 2002). Decisions regarding methods course content, instructional materials and activities, and assignments or assessments will often reflect the choral methods instructors' prior training and experience, as well as their views regarding the nature of teaching and learning and their beliefs about what students need in order to be successful educators. But the perspectives and underlying assumptions that choral methods instructors bring to the teacher education process have not been studied directly, in adequate detail, or in reference to a larger theoretical framework. If future choral music teachers are to be better prepared, then it is critical to address this problem; otherwise, music teacher educators may find themselves lost in the debate

surrounding quality and innovation in education (Colwell, 1985; Kratus, 2007; Lehman, 1992). In the next section of this chapter, the larger social context within which teacher education functions is explored, and Shulman's teacher knowledge framework is introduced.

Context and Background

The function of the following section is to place the students, teachers, and content of the choral methods class within the overall context of the undergraduate music education curriculum and the larger organizational/societal forces that shape practices therein (Corrigan & Haberman, 1990; Feiman-Nemser, 1990; Lamb, 2010; Shulman, 1987). Socio-ecological systems theorists (Bronfenbrenner, 1979) posit that the individual (micro), organization (meso), community (exo) and culture (macro) function as a set of nested systems, and social influence exists both within each system as well as across systems. While systems theory did not serve as the primary interpretive framework for this study, some background regarding top-down education policy influences on curricular and instructional practices at the music school or music education department levels may be helpful to the reader. After providing this background, Shulman's teacher knowledge framework, with *Pedagogical Content Knowledge* (PCK) at the center, is introduced, and I clarify how this framework may be utilized as a lens for interpreting teacher knowledge/skill acquisition and development within the choral methods class.

National and Professional Influences on the Choral Music Education Curriculum

On a global level, all individuals, belief systems, eco-systems, and institutional practices and policies are connected either directly or indirectly (Corrigan & Haberman, 1990; Lamb, 2010; Froehlich, 2009; McCarthy, 2002; Paul & Ballantine, 2002). In the United States (U.S.) government, the House of Representatives Committee on Education and the Workforce (Labor), the Senate Committee on Health, Education, Labor, and Pensions, and the United States

Secretary of Education, who serves as head of the Department of Education, function as legislative and executive governing bodies. Collectively they exercise delegated authority, through the election process or by appointment, in representing the interests of citizens pertaining to education policy.

Accrediting agencies bridge the gap between national and state level institutions and also influence education policy and practices. By appointment, the Secretary of Education spearheads education initiatives, and through the U.S. Department of Education as mandated by law, publishes lists of accredited institutions. Accreditation is the means by which professional peers self-regulate ways to help maintain and increase quality learning and teaching practices (Eaton, 2011; Lehman, 1992). Though accreditation institutions are not representatives of the government, the Secretary of Education recognizes those institutional and specialized agencies as "reliable authorities as to the quality of education or training provided by the institutions of higher education and the higher education programs they accredit" (U.S. Department of Education Database of Accredited Postsecondary Institutions and Programs website).

A subject specific accrediting agency is the National Association of Schools of Music (NASM), which oversees the majority of institutions that offer a music degree leading to teacher certification. NASM and the Council for the Accreditation of Educator Preparation (CAEP, which is a new accreditation agency formed from the merger of the National Council for Accreditation of Teacher Education or NCATE and the Teacher Education Accreditation Council or TEAC) make recommendations regarding standards, degree program components and preservice teacher competencies (Boardman, 1990; Cochran-Smith, 2001; Goodlad, 1990; Kos, 2010; Steiner & Rozen; 2004; Sykes & Burian-Fitzgerald, 2004; Walsh, 2004).

Professional associations also help shape educational policy (Rotherham & Mead, 2004), and to some degree they influence teaching-learning practices within the teacher education, music education and choral music education curricula (Colwell, 1987). The major professional organization representing music teachers in the U.S. is the National Association for Music Education (NA*f*ME), formerly known as the Music Educators National Conference (MENC). In recent years, NA*f*ME and affiliated groups such as the Society for Music Teacher Education (SMTE) have sponsored conferences and symposia, created special commissions and task forces, and produced position statements and publications designed to improve the effectiveness of music teacher training (Brophy, 2002a; Kimpton, 2005; Lewis, 2002; Rees & Hickey, 2002).

State, Community and Institutional Influences on the Choral Music Education Curriculum

As is true at the federal level, individual U.S. states have similar governance structures by which elected and appointed officials represent the education interests of the public and provide oversight of teacher licensing and higher education degree accreditation (Corrigan & Haberman, 1990; Henry, 2005; Rotherham & Mead, 2004; Tom, 1997). State governance structures also interact with P-16 education institutions, and the individuals within those institutions, to shape education policy (Boardman, 1990; Collins, 1997; Conway, 2010; Corrigan & Haberman, 1990; Hess, *et al.*, 2004; Rotherham & Mead, 2004; Tom, 1997; Wilson & Youngs, 2005). For example, state legislatures set funding levels and empower state departments of education to prescribe the credentials by which teachers are licensed, which impacts teacher education programs situated within colleges and universities (Colwell, 1987; Conway, 2010; Goldhaber, 2004; Goodlad, 1990; Henry, 2005; Rotherham & Mead, 2004).

Teacher education programs are also influenced by the political climate within higher education at large (Cochran-Smith & Fries, 2005; Colwell, 1987; Corrigan & Haberman, 1990;

Goodlad, 1990; Tom, 1997). University committees, in conjunction with administration, help set policies and general degree coursework expected of all students. Additionally, committees within the education and music units typically develop policies and degree requirements that shape educational experiences for teacher candidates (Colwell, 1985). Depending on the higher education shared governance structure, the respective members of these committees may have preferences for or against certain policies and/or coursework, which can result in varied learning experiences for teacher education students across institutions (Goodlad, 1994; Tom, 1997).

Important qualitative differences in teacher education also arise as a result of higher education partnerships with P-12 schools situated in surrounding communities. Such partnerships, which result in preservice teachers being assigned to field experiences or student teaching placements, and being mentored by cooperating teachers and teacher educators, exert more direct influence on the undergraduate choral music education curriculum than governmental or professional organizational associations (Conway, 2010; Goodlad, 1994; Kos, 2010; NCATE Blue Ribbon Report, 2010; Tom, 1997).

While it is important to recognize larger-scale influences on teacher education, the most profound and pervasive influence likely exists at the micro-level - within the music school unit - where faculty control over the music teacher education curriculum fundamentally resides. The aim of teacher education programs is to prepare students to teach, which is also true of music teacher education programs. Gohlke (1994) stated that music teacher training has undergone change and that "in the music education programs of colleges and universities across the nation teacher educators and their students – preservice teachers – confront an explosion of pedagogical methods and technique, technological advances, [and] overarching curricular reforms in K-12 education…" (p. 1). Collins (1997) noted that changes in choral music education teaching had

occurred, in both positive and negative ways, and suggested the need for future music teachers to receive distinctive training in meeting 21st century educational demands.

Substantive changes made to music teacher education training (Corrigan & Haberman, 1990) are most likely to take hold if they occur at the course level, with instructors making informed decisions regarding content and procedure. One music education course that is viewed as an amalgamation of degree coursework is the methods class. One way to explore choral music education teacher training is to survey the instructor of the choral methods class to determine the degree to which a *Pedagogical Content Knowledge* (PCK) orientation may drive instructional decisions and priorities where future choral music educators are concerned.

Shulman's Teacher Knowledge Framework

The brief overview of various organizational and institutional influences on teacher education in the United States provides a valuable backdrop for introducing an important and influential teacher knowledge framework that centers on teacher *Content Knowledge* (CK), *Pedagogical Knowledge* (PK), and a dynamic merger of the two – *Pedagogical Content Knowledge* (PCK). In the section that follows, I will briefly describe Lee Shulman's (1986, 1987) teacher knowledge framework, highlight the use of this framework in teacher education research, and conclude by explaining how Shulman's conception of teacher knowledge development has been realized within music education. Thereafter, I will explain how specific types of music teacher knowledge and skill are operationalized within this study.

Pedagogical Content Knowledge: Origin and Definition

According to Cochran-Smith (2001), education policy and practice driving teacher education reform in the mid-to-late 20th century centered on teacher attributes, effectiveness, and knowledge. The emphasis on what personal qualities teachers possessed and developed

(attributes), progressed to strategies and processes employed (effectiveness). These eventually gave way to questions about what teachers should know and be able to do (knowledge). As public dissatisfaction with schools ushered in the modern era of educational reform in the 1980s, considerable attention was focused on the scholarship of teaching and the status of the teacher education profession (i.e. Carnegie Task Force on Teaching as a Profession, 1986; and Holmes Group, 1986). Shulman recognized the complexity of trying to explain the teaching-learning dynamic as interplay between theory and practice (Leglar & Collay, 2002). As a result, he focused on observable practices at the classroom level by which teachers demonstrate their knowledge specific to context, students, subject area content and pedagogy (Grossman, 1990). While Shulman acknowledges the work of Dewey, Schwab and other educational theorists, his ideas about teacher knowledge primarily emerged from research being conducted on teacher effectiveness (Berliner, 1986; Brophy & Good, 1986), as well as his efforts to design a national board assessment for teaching. Researchers subsequently developed models to explain why there may be differences in teacher behaviors or effectiveness, and among these there were four general components in common: subject matter knowledge; pedagogical knowledge; pedagogical content knowledge; and knowledge of context (Grossman, 1990).

One of the four areas, pedagogical content knowledge, emerged as the key element to be considered in determining how best to educate future teachers. Shulman and colleagues observed that skilled teachers exhibited more than procedural know-how; rather, they were content experts who could convey subject matter in meaningful ways to students in various contexts. According to Shulman, PCK constitutes "…the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations – in a word, ways of representing and formulating the subject that makes it

comprehensible to others" (1986, p.9). He added that PCK "also includes…the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning [process]" (p.9). In short, effective teachers were able to combine their content expertise, pedagogical teaching approach, and their understanding of teaching/learning context into a knowledge base framework – PCK (see Figure 1.1).

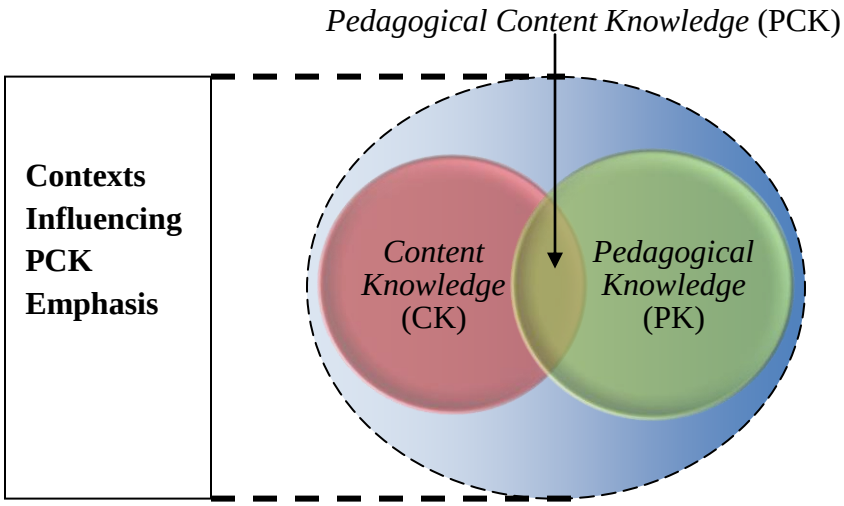

Figure 1.1. Shulman's Simplified Teacher Knowledge Framework.

Modified Conception of Teacher Knowledge and PCK

Over time, Shulman (1987) expanded his conception of teacher knowledge to include seven distinct but related areas as follows:

1. Content knowledge;
2. General Pedagogical knowledge, with special reference to those broad principles and strategies of classroom management and organization that appear to transcend subject matter;
3. Curriculum knowledge, with particular grasp of the materials and programs that serve as "tools of the trade" for teachers;

4. Pedagogical content knowledge, that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding;
5. Knowledge of learners and their characteristics;
6. Knowledge of educational contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures; and
7. Knowledge of educational ends, purposes, and values, and their philosophical and historical grounds. (p. 8)

Shulman viewed PCK as functioning at the center of this teacher knowledge constellation and submitted that, "[PCK] is the category most likely to distinguish the understanding of the content specialist from that of the pedagogue" (p.8). He contended that skilled instructors develop teaching attributes that allow them to apply their content and pedagogical expertise in a specific context and in a way that becomes meaningful to learners. This conception advanced teacher training, and soon thereafter other researchers/theorists began to expand upon the idea.

Over the years Shulman's teacher knowledge framework has been applied to multiple teaching-learning domains including English, math, science and social studies (Grossman & Gudmondsdottir, 1987; Peterson, Fennema, Carpenter & Loef, 1989; Veal & MaKinster, 1999; Wineburg & Wilson, 1988). Veal and MaKinster (1999), for example, created a taxonomy as a "categorization scheme for future studies of PCK development in teacher education…" (p. 16) with pedagogy skills, which should be developed among all teachers, at the foundation. The hierarchical conceptualization is intended to represent the "process by which prospective

secondary science teachers obtain different knowledge bases contributing to their PCK development…" (p. 7) within a discipline, a domain, and topic (see Figure 1.2).

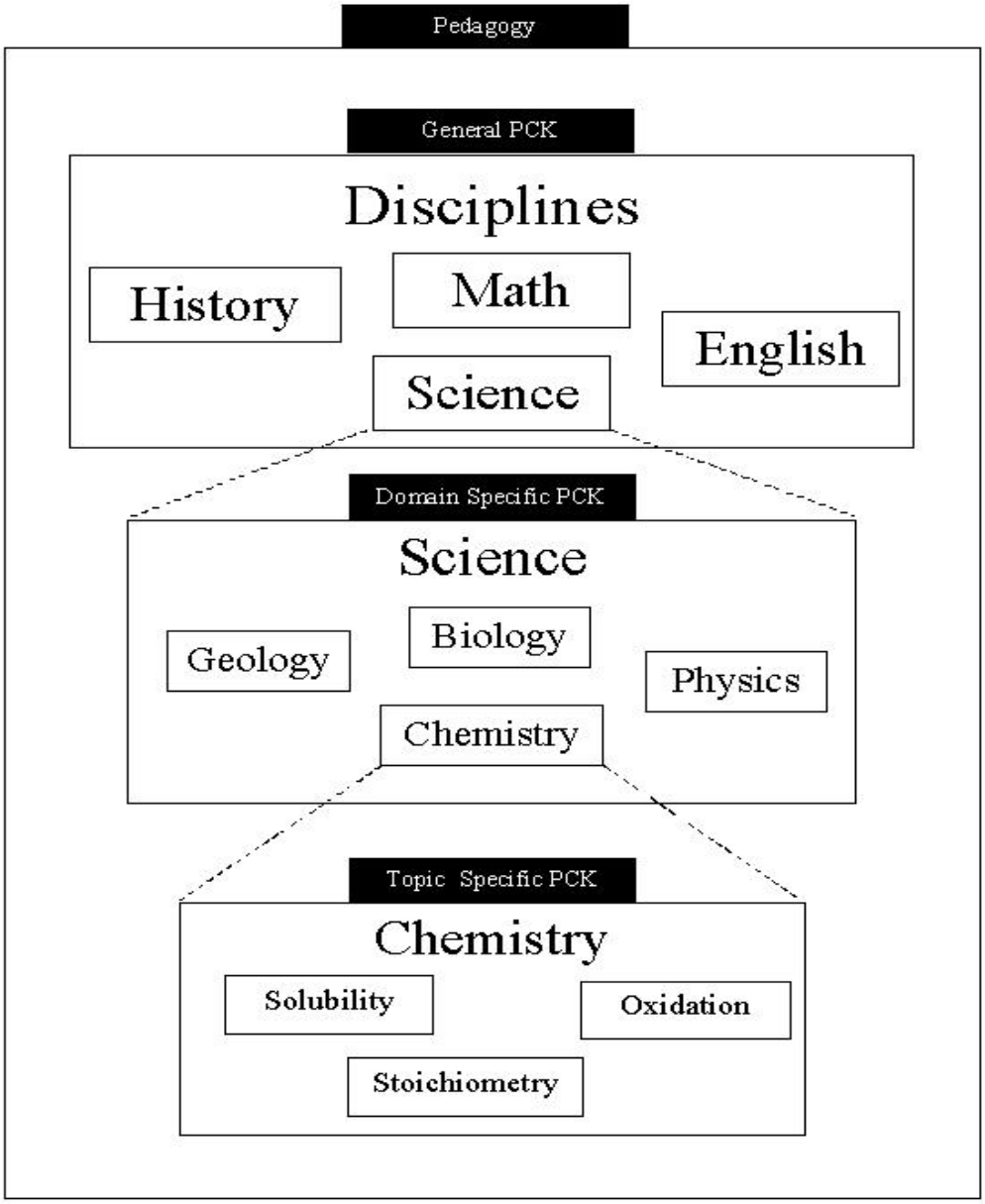

Figure 1.2. PCK Taxonomy in Science Education, from "Pedagogical Content Taxonomies," by W. Veal and J. MaKinster, 1999, *Electronic Journal of Science Education, 3*, p. 9.

Millican (2008) subsequently referenced the taxonomic approach used by Veal and MaKinster (1999) in modifying Shulman's teacher knowledge framework to better fit practice

within instrumental music teacher education. He proposed that in instrumental music teaching, *knowledge of educational contexts* provides a foundation for *administrative knowledge*. These two superordinate knowledge areas, in turn, frame and support synergies among the four traditional areas of teacher knowledge (*content knowledge, curriculum knowledge, pedagogical knowledge, and knowledge of learners & their characteristics*). Millican's adaptation (2008) highlights the complexity underlying teacher knowledge development in different subject areas, or even specific domains of teaching and learning within a given subject area (see Figure 1.3).

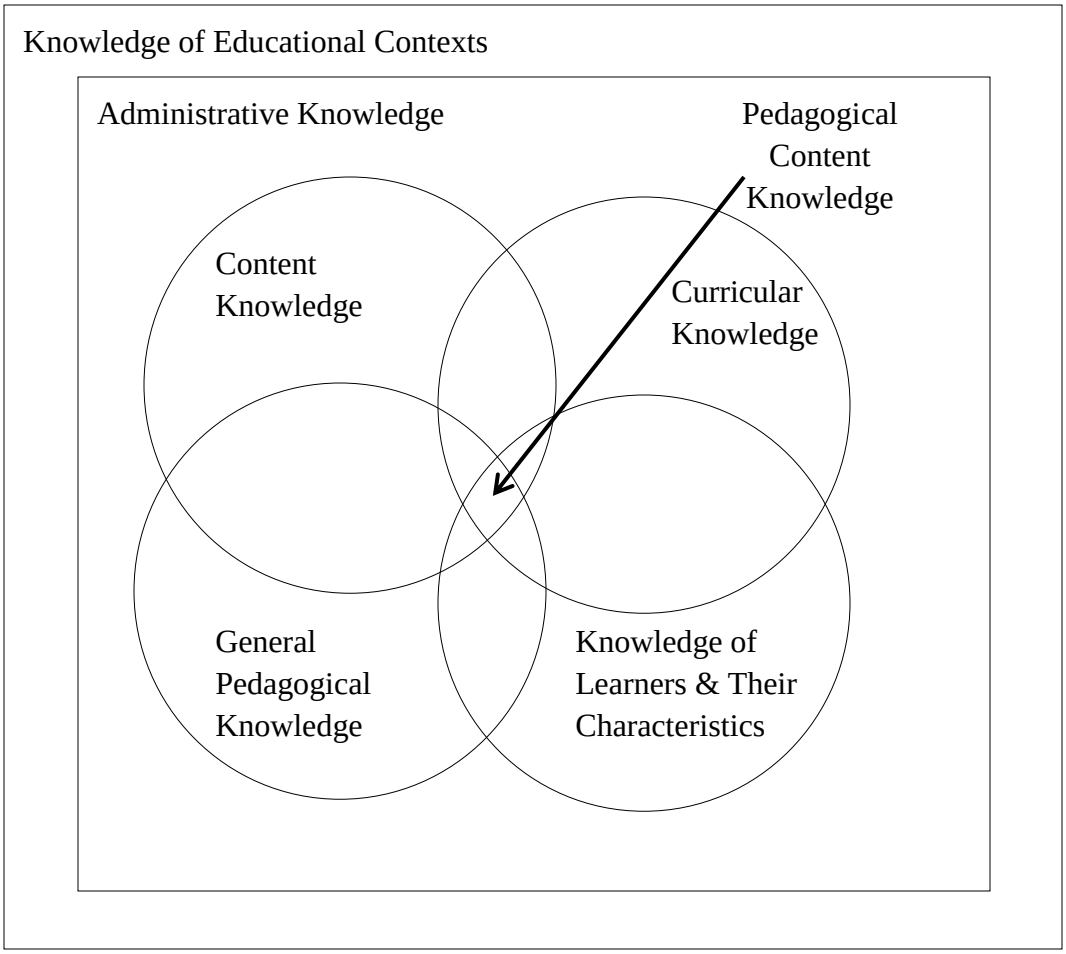

Figure 1.3. Modified Shulman (1986, 1987) Knowledge Base Framework, from "A New Framework for Music Education Knowledge and Skill," by J. Millican, 2008, *Journal of Music Teacher Education, 18,* p. 69. Copyright 2008 by MENC.

Millican has applied his framework to research within instrumental music teaching, but there are obvious implications for other areas of music education. Venesile (2010), for example, focused on PCK acquisition in the choral domain, but with educators working specifically in the vocal jazz idiom (sub-domain).

Situating Pedagogical Content Knowledge in Choral Music Teacher Education

Typically, preservice music teacher education requirements are categorized in three areas: general education, content training, and pedagogical instruction. General education is an expected body of knowledge commonly taught to all undergraduate students. In music education, content training consists of applied study and ensemble performance, theory and composition, musicology, and conducting (Nierman, Zeichner & Hobbel, 2002). Traditionally, content training has received the greatest emphasis in music teacher programs (Brophy, 2002a; Gohlke, 1994; Grant, 1984; Kimpton, 2005; Kratus, 2007; Nierman, *et al.*, 2002; Rees & Hickey, 2002; Trollinger, 2006). Pedagogical instruction stresses an understanding of learning theories and how to apply those theories, for example, through lesson planning, classroom management, utilizing technology, and devising meaningful assessment strategies (Nierman, *et al.*, 2002).

Presently, NASM-accredited institutions follow general guidelines for the proportioning of credit hours within the various professional and liberal arts oriented degree programs. For professional degree programs in music education, guidelines specify that at least 50% of coursework is designated for music content; about 30-35% for general education; and about 15-20% for professional education studies (2011-2012 NASM Handbook). As noted previously in this chapter, these coursework distributions have not changed much since the inception of the music education degree (Colwell, 1985; Gohlke, 1994; James, 1968; Keene, 1982; Kratus, 2009; Mark & Gary, 2007). In response to current societal trends impacting careers in music and

music education, NASM guidelines have come under some criticism and the organization itself has begun exploring alternative models for configuring music teacher education curricula (Bidner, 2000; Henry, 2004; Kimpton, 2005; Kratus, 2007; Rees & Hickey, 2002; Spurgeon, 2004; Trollinger, 2006; Wiggins, 2007; Williams, 2009).

At the heart of the music education degree is the methods class (Boardman, 1990; Colwell, 1985; Frego, 2003; Leonhard, 1985; Teachout, 2004), which is optimally positioned at the juncture of prior coursework (general studies, musicianship training, and pedagogical instruction) and clinical field experiences. Depending on the size and scope of the music education program, methods classes might be configured according to instructional level (elementary or secondary music teaching methods), instructional area (general music, instrumental music, or choral music), or some combination. In contexts that allow for area-specific courses in music teaching methods to be offered, a choral methods course would typically address a range of topics germane to choral music teaching, such as choral curricula and repertoire, vocal pedagogy, rehearsal teaching strategies, and program administration. The choral methods course instructor must inevitably make critical choices as to which topics to include or emphasize in such courses. As a result, some facets of choral music teacher knowledge and skill, reflecting content knowledge, pedagogical knowledge, and pedagogical content knowledge, are likely to be developed to a greater extent than others. One way to understand how these knowledge/skills are emphasized and developed among choral methods students, and specifically PCK, is to explore how the instructor of that course embodies, embraces and cultivates the various facets of choral music teacher knowledge and skill. Pedagogical content knowledge resides at the confluence of these three areas, though as Nierman, *et al*., state, "…it is also a representation of additional knowledge and skills that

excellent teachers possess" (p. 827). Nierman and his colleagues submitted that PCK is the teacher's ability to see the whole learning environment and devise teaching strategies that are meaningful to students, promote learning and represent excellent teaching.

The Choral Methods Instructors' Influence on PCK Acquisition and Development

Choral methods course instructors influence what students learn not only in terms of their decisions regarding what material is covered and how, but also through the way they think about, describe and model "effective" teaching – all of which stems from their prior professional training and teaching experiences (McCaslin & Good, 1996; Wilcox & Upitis, 2002). Instructors with content expertise but limited pedagogical training, for example, likely teach differently than those with strong pedagogic skills who may lack content mastery. In turn, methods instructors' disparate beliefs about the importance of developing content area expertise, pedagogical skill, and *PCK* likely result in specific topics, experiences and instructional approaches being emphasized to varying degrees in courses and field experiences (Wideen, Smith & Moon, 1998).

Beyond choral methods instructors' beliefs and dispositions, the interaction of instructor, student and context may ultimately determine whether PCK is developed or acquired. Darling-Hammond stated that "…people will understand ideas differently depending on their prior experiences and context" (1999, p. 334). Though instructors may not "...realize how they are interacting with students" (Madsen & Yarbrough, 1985, p.6), explicit decisions and implicit messages surrounding the choice of choral methods class content - how topics are sequenced, prioritized and presented to students, and to what extent students are expected to show mastery - create a vision of professional practice for preservice choral music teachers.

A conceptual model, built upon Shulman's simplified teacher knowledge framework, highlights some variables that may influence PCK emphasis in the choral methods class. In this

model, methods course instructor characteristics and experiences shape beliefs and values associated with teacher education (e.g., What are the most important attributes of effective K-12 music teachers? In what types of settings do novice music teachers develop the greatest confidence and competence?). These beliefs and values, in turn, influence the degree to which specific facets of teacher knowledge and skill (CK, PK, PCK) are emphasized in the choral methods class, as moderated by institution-level curricular structures (e.g. degree requirements and course sequencing). See Figure 1.4.

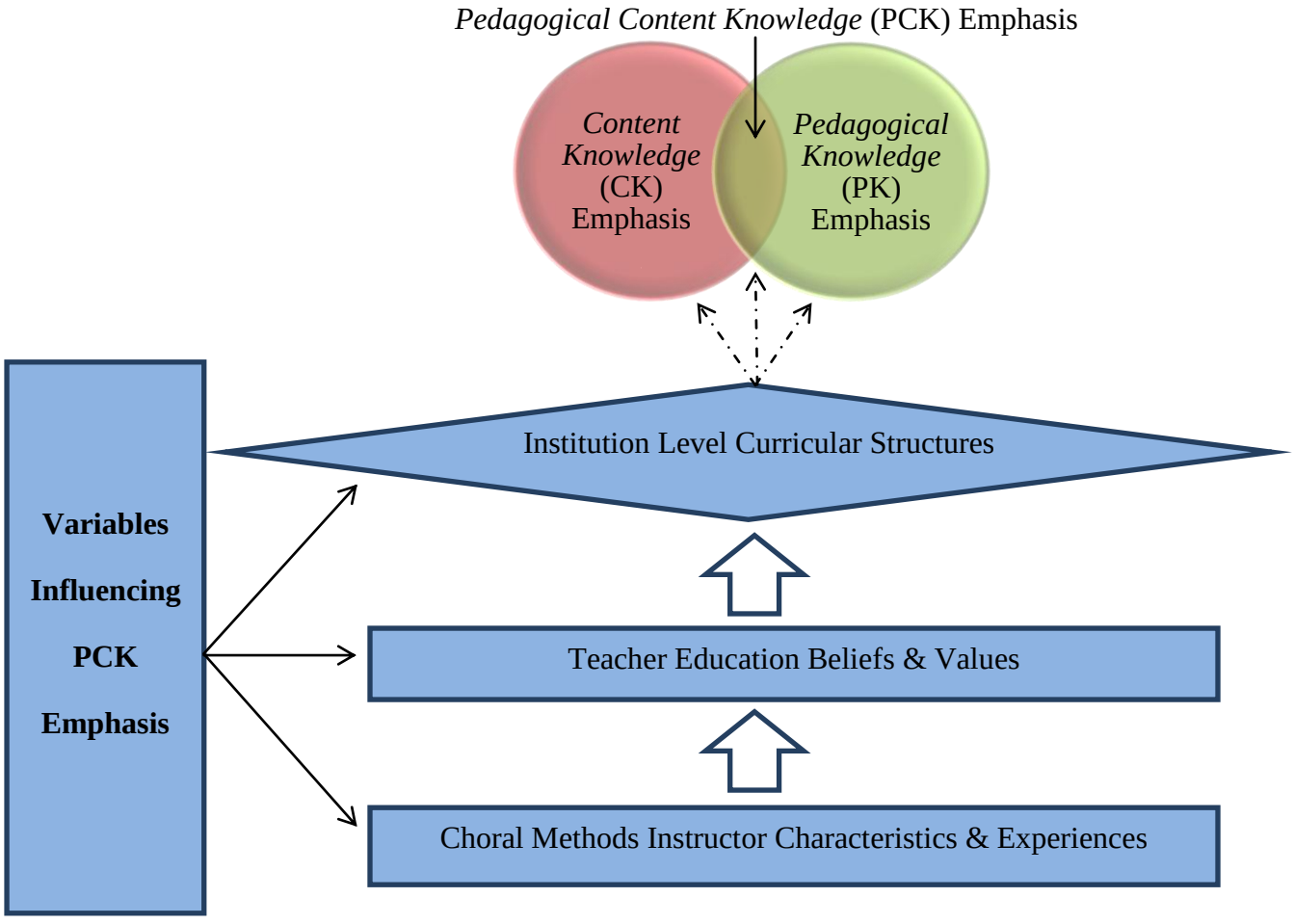

Figure 1.4. Conceptual Model of Influences on Teacher Knowledge/Skill Emphases in the Choral Methods Class.

PCK and the Literature on Music Teacher Education

The application of PCK as a foundation for research in education contexts has gradually emerged over the past quarter-century (Shulman, 2009), but utilization of this framework in music education research has been scant (Millican, 2008). Music education researchers have referenced or utilized PCK as a framework within their work (presented chronologically): Duling (1992), Gohlke (1994), Snow (1998), Ballantyne and Packer (2004), Millican (2008, 2009), Haston and Leon-Guerrero (2008) and Venesile (2010). Duling (1992) interviewed and observed two middle school general music teachers to determine how each developed PCK as part of their teaching skills. Gohlke (1994), Snow (1994) and Haston and Leon-Guerrero (2008) also studied how PCK was acquired and developed through observing and interviewing study participants, but these were preservice music teachers. Like Millican (2008, 2009), Ballantyne and Packer (2004) as well as Venesile (2010) employed survey techniques, but targeted in-service secondary instrumental and choral teachers. Missing in this literature is a systematically-derived understanding of how music teacher knowledge and skill (encompassing PCK) might best be conceptualized, how it develops as part of preservice coursework and clinical experience, and the role of music teacher education faculty in promoting this development.

Study Need and Importance

For the 2010-2011 academic year, the more than 500 NASM-accredited institutions offering an undergraduate degree leading to a music teaching license enrolled 31,161 undergraduate music education majors. With respect to choral music education, there were 8,837 students, and of those, 1,389 undergraduate degrees were awarded leading to a music teaching license (2011-2012 NASM HEADS Data Summaries). Music teacher education is a major enterprise. Yet, there are few large-scale studies of curricular trends in music education at

the college/university level (Jorgenson, 2010). For decades, major figures in the profession have encouraged researchers to conduct more music teacher education studies (Asmus, 2000; Boardman, 1990; Colwell, 1985; Wing, 1992), and in recent years there has been a particular push for comparative evaluations of various teacher education practices (Ballantyne & Packer, 2004; Ferguson, 2007). Though research in this area may be lacking in certain regards, Jørgensen postulates "that research into higher music education has come of age and deserves to be regarded as an important research contribution in a 'new' and separate field of research" (2010, p.67). Indeed, in the past 20 years, there has been a noticeable increase in the amount of research focused on higher education, and more specifically, music teacher education.

While music teacher education research has steadily grown, choral music education research has lacked momentum (Grant & Norris, 1998; Turcott, 2003). Within choral music education, opinion-based literature is plentiful (Bidner, 2000; Darrough, 2004; Ester, 1997; Lewis, 2002; McClung, 2006; O'Toole, 1998), but the choral methods course has received little attention (Adderley, 2000; Kotora, 2005; Reames, 1995). As institutions grapple over how to best structure and manage teacher education programs, and as the profession seeks to answer critical challenges related to teacher quality and accountability, a descriptive study of choral music teacher education, focused on the choral methods course and teacher knowledge development, may provide important insights regarding the nature and dynamics of choral music teaching, characteristics of choral music education curricula, the role and influence of methods course instructors, and avenues for improving the preparation of future choral music educators (Ballantyne & Packer, 2004; Kratus, 2007; Nierman, *et al*., 2002; Teachout, 2004).

The application of PCK to music teaching and learning has been a focal point for some research conducted within the past two decades. The study participants and contexts evident in

this research, however, represent a limited segment of music education in P-12 schools and higher education: preservice instrumental music teachers (Haston & Leon-Guerrero, 2008), preservice music teachers (Gohlke, 1994; Snow, 1998), secondary school band and orchestra teachers (Millican, 2008, 2009), vocal jazz educators (Venesile, 2010), early career secondary classroom music teachers (Ballantyne & Packer, 2004), and experienced middle school general music teachers (Duling, 1992). Not a single study targets music teacher educators' perspectives on PCK or considers how PCK may function within choral music education in the broadest sense. Moreover, this research has not drilled down to the level of the capstone methods course – where music content, pedagogical training, and the instructor's expertise and students' prior life experiences meet at the core of the music education curriculum (Boardman, 1990; Colwell, 1985; Leonhard, 1985; Teachout, 2004). The distinctive position of the methods class within the degree program, coupled with the dynamic and fluid nature of student and teacher perspectives as they navigate a semester or year-long course and potential field experience focused exclusively on choral music as a specialized area of music education, provides a unique opportunity for determining how salient PCK is as both a part of the teaching education process and as an instructional outcome reflecting preservice choral music teacher proficiency.

Millican expressed concern that Shulman's PCK framework, or adaptations thereof, have seldom been employed in music education research (2008). Utilizing PCK as a framework and situating it in the choral methods class addresses this concern by advancing scholarship on PCK in music education, and providing important baseline data as to how choral methods instructors approach the process of choral music teacher development (i.e., their beliefs about the relative importance of PCK and the degree to which they emphasize various forms of music teacher knowledge and skill).

Study Purpose

The primary purpose of this study was to determine how choral methods courses are structured and situated within the undergraduate choral music education curriculum, and the extent to which three major facets of teacher knowledge – *Content Knowledge* (CK), *Pedagogical Knowledge* (PK) and *Pedagogical Content Knowledge* (PCK) – are emphasized as part of the choral methods course context. A secondary purpose of this study was to explore relationships among methods course features (e.g., semesters, credits, field experience), instructor characteristics (e.g., prior education, work experience, current job description), instructor beliefs about the importance of choral music teaching knowledge/skill, and their orientation toward developing PCK in the choral methods class. Four broad research questions guided this investigation:

Research Questions

1. How are choral methods courses configured with respect to number of semesters of study, credit hours awarded, and concurrent field experience requirements?
2. Who are the instructors responsible for teaching choral methods courses, in terms of their gender, applied music specialty, major areas and levels of prior education, prior choral music teaching experience, current academic rank, departmental affiliation, and experience teaching a choral methods course?
3. Is it possible to measure choral methods instructors' teacher knowledge orientation in a reliable and valid manner, and if so, to what extent do instructors emphasize specific facets of choral music teacher knowledge and skill (CK, PK, PCK)?
4. Which choral methods course and course instructor variables are most strongly associated with an emphasis on developing *Pedagogical Content Knowledge* (PCK)?

Delimitations

Only choral methods course instructors teaching at NASM-accredited institutions were invited to participate. Furthermore, this study is neither an evaluation of individual teaching practices nor an evaluation of the choral methods class within the degree program. Rather, it provides important baseline data regarding the characteristics, beliefs and instructional priorities of those individuals responsible for teaching choral methods courses. Finally, music teacher knowledge and skills can be categorized and studied in various ways. The teacher knowledge framework (emphasizing PCK) as presented by Shulman (1986, 1987) and advanced by other researchers in teacher education is but one way to understand the complex world of choral music teacher preparation. In adopting this framework, I chose to focus on teacher knowledge in one particular context – the choral methods course.

Definitions

Choral Methods Class – The "pinnacle" or "keystone" course of the choral music education degree typically taken near the end of the program of study but prior to the student teaching internship. This class typically incorporates an amalgamation of topics dealing with choral musicianship and pedagogical considerations all approached within the context of directing a secondary choral music program.

Choral Methods Instructor – The person directly responsible for the choice of content covered within the choral methods class; how that content is conveyed to students; the interpretation rendered with respect to various social influences on music education curriculum and choral methods course content; and the vision of the types of skills and dispositions students need to become successful choral music educators.

Content Knowledge (CK) – Knowledge and skill specific to a particular discipline, subject area or domain of learning; characteristic of a professional musician.

Pedagogical Knowledge (PK) – General knowledge and skill in the use of teaching methods and other pedagogical strategies that apply across disciplines, subject areas or domains; characteristic of a professional educator.

Pedagogical Content Knowledge (PCK) – The blending of *Content Knowledge* and *Pedagogical Knowledge* within a particular discipline, subject area or domain; characteristic of a professional music educator.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

In Chapter One, current issues in music teacher education were explored in relation to the larger context of education reform and teacher education. Shulman's conception of teacher knowledge and skill, with *Pedagogical Content Knowledge* (PCK) at its center, was presented as a framework for studying teacher education within music, more specifically, within choral music education as a specialized area of teaching expertise. In this chapter, research literature related to music teacher development and professional preparation, choral music education programs (including the choral methods class), and pedagogical content knowledge acquisition and development among preservice and in-service music teachers is summarized.

Music Teacher Development and Professional Preparation

Rath (2002) asserts that because teacher education is relatively undeveloped as an area of scholarship and lacking in common and thoroughly studied topics, researchers should make every effort to identify the most salient and important issues and explore alternative viewpoints associated with those issues. Research conducted specifically on music teacher education, defined by Leglar and Collay as the "undergraduate music education course work and field experiences that precede formal student teaching" (2002, p. 855), can take different forms, including but not limited to: investigations of coursework, field experiences (including student teaching), development of music knowledge and skills, teachers' personal characteristics, teaching dispositions, common teaching practices, and teacher identity. In most instances, data related to these topics is gathered from music teacher education stakeholders – K-12 music educators, undergraduate music education majors, and music teacher educators.

Music Teacher Educator Perceptions

Rohwer and Henry (2004) investigated college music educators' perceptions of personality characteristics, musical skills and teaching skills needed for students to become successful music teachers. Their survey of 1,000 randomly sampled College Music Society members, who were listed as music education faculty, yielded 416 useable responses. The 69-item questionnaire, which included 23 open-ended items, was divided into three categories: *music skills, teaching skills* and *personality characteristics*. Generally, teaching skills were rated most important for future teaching success, followed by personality characteristics and lastly, music skills. Within each of these categories classroom management (teaching skills), motivation (personality characteristics) and musical expression (musical skills) were rated the highest. Though musical skills, including performance skills, were considered least critical for successful music teaching, they were rated highest in importance when assessing methods students as compared to teaching skills or personality characteristics. There was a possible disconnect in the rating of musical skills least critical, but rating them the highest in importance for evaluative purposes. Furthermore, the researchers noted that music specialists (i.e. choral, general, instrumental) tended to rate the importance of the three categories differently.

Frego (2003) examined elementary general music methods course perceptions via an on-line survey sent to nine instructors at Midwestern universities. After consulting with colleagues and experts, reviewing textbooks, and conducting a pilot study, the researcher collected data related to instructor demographics, general music teaching approaches (when and how they are introduced), course content (knowledge and skills emphasized through various assignments, projects and field experiences), and approaches used to assess and evaluate students. Students commonly took the course during their junior or senior year and total contact time ranged from

37 to 121 hours. Teaching philosophy and lesson planning were emphasized as part of course content, and instructor modeling was a common means of introducing students to various general music teaching methods or approaches. Assessments emphasized lesson planning and student performance in field experience placements. While certain knowledge areas and skill sets were commonly identified by instructors as being a basic component of the general music methods course, the manner (activity type and sequencing) in which this basic content was addressed varied considerably from school to school.

Preservice Music Teacher Perceptions

Davis (2006) examined undergraduate music education students' beliefs regarding *musical*, *personal*, and *teaching skills* needed to become successful music teachers. The researcher sought to determine whether these importance beliefs differed when students were classified as being early preservice or late preservice. Members of the early preservice group (n = 55) were enrolled in an Introduction to Music Education course and the late preservice group members (n = 25) were enrolled as students teachers. Both groups were students at the same large public university and were administered a 40-item questionnaire that addressed teacher skills and behaviors as developed by Teachout (1997). Davis found that both early and late preservice music teachers rated *personal skills* as the most important for future teaching success, followed by teaching skills and then musical skills.

Campbell and Thompson (2007) investigated preservice music education teacher concerns at four different student career stages. A 45-item checklist was pilot tested, revised, and administered to 1,121 music education students from 16 U.S. higher education certification programs located within five different NA*f*ME (then MENC) regions. Students were enrolled in music education courses at four different program stages – Introduction to Music Education

(near the beginning), Methods (middle-to-end), Field Experience (prior to student teaching), and Student Teaching (culminating course prior to degree completion). The researchers found that students involved in the field experience portion of their program, where they first encountered teaching-learning situations, showed more overall concern as compared to those in earlier or later education career stages. Though it was anticipated that these concerns would be self-focused, as suggested by the model advanced by Fuller and Bown, participants were also concerned about the impact they potentially would have on students, which caused the researchers to question the applicability of this model. They also reported that females generally expressed higher levels of concern with regard to professional preparation, but that there were no significant differences based upon desired teaching level or primary area of interest.

Hamann and Ebie (2009) explored whether music education majors believed music methods courses would prepare them to teach outside of their musical expertise area. Participants (N = 159) were selected from introductory music education courses, methods courses, and conducting courses and asked to respond to three open-ended questionnaire items during the first week of class. They were asked about potential concerns associated with teaching outside their expertise area, what they hoped to learn in the methods course, and whether they felt the methods course would adequately address teaching-related concerns. Roughly one-third indicated they did not know enough about the specific techniques and performing skills needed to be an effective music teacher and expressed a lack of confidence in their ability to teach outside of their expertise area, while 25% believed they lacked the knowledge necessary to adequately help students advance as musicians. Only 10% felt confident that music education courses, including the methods course, would satisfactorily address concerns associated with teaching outside their area of expertise. Hamann and Ebie cited the

shortage of qualified K-12 music specialists in nine of the eleven U.S. regions, and suggested that due to these shortages, music teachers should be prepared to provide music instruction outside their musical expertise area. In addition, they recommended that when designing methods courses, instructors should ensure that a large portion of the content reflects teacher knowledge and skill areas in which undergraduate students commonly feel underprepared.

Teachout (2004) explored undergraduate instrumental music education majors' perceptions of instrumental methods course content and emphases. After completing a multi-semester sequence of instrumental music methods courses, participants were asked to rate the value of course teaching experiences, projects, and exam preparation using a 14-item questionnaire. Before interpreting music education majors' responses, Teachout conducted a content analysis of instrumental methods course syllabi, as presented in an MENC publication edited by Lewis (2002), to infer the amount of weight that faculty give to teaching-, project- and exam-related activities. He found that participants "value[d] teaching experience more than course projects or exam preparation and they value[d] course projects more than exam preparation" (p.80). Music education professors, as reflected in course syllabi, tended to give more weight to projects and less weight to practical teaching experiences than students would seem to prefer. Though he only surveyed 43 junior and senior instrumental music education students from two different universities with similar music teacher education programs, he argued, on the basis of these findings, that methods course activities should be aligned as much as possible with real-world experiences characteristic of K-12 music teaching.

In-Service Music Teacher Perceptions

Brophy (2002a, 2002b) reported on an American Orff-Schulwerk Association (AOSA) project. In 1999, the current AOSA president became interested in the 1972 Ohio Commission

on Public School Personnel Policies report on teacher education, and whether advances had occurred in teacher education training practices. From this catalyst, an "Undergraduate Music Education Curriculum Reform Committee …was formed … to poll music educators [primarily K-12 but also college music faculty] nationwide about the strengths and weaknesses of their own undergraduate music education" (2002b, p. 4). The 237 respondents, who represented 43 states, completed a twenty-item questionnaire. Participants were asked one question pertaining to how useful they thought their undergraduate methods courses were in preparing them for the music teaching profession. The analysis showed that usefulness beliefs were associated with teaching experience: teachers with 21 or more years of teaching experience found methods classes to be much less useful than those with less teaching experience. However, nearly one out of three participants who likely had taken a methods class in the last 10 years rated the methods course as least useful. Based upon these findings, the researcher suggested that music methods courses be taught by an instructor who is a practitioner and in authentic settings. It is important to recognize, however, that the AOSA represents a very specific approach to curriculum and methodology and, as such, the questionnaire responses and data interpretation may not reflect the mainstream views of the music teacher education community.

The perceptions of fourteen beginning teachers who graduated from one Midwestern university were examined with respect to the quality of their music teacher preparation program (Conway, 2002). These first-year teachers taught in a variety of communities (rural, suburban and urban) and K-12 music education settings, including high school choral elementary general music, middle school and high school band, and middle school and high school strings. Evenly split among females and males, they were asked about their perception of the most valuable and least valuable parts of their preparation program, and their mentors and school building

administrators were asked to share their thoughts on the new teachers' job preparation. Participants were observed, interviewed, made journal entries, and completed an open-ended questionnaire at the end of their teaching year; and mentors and administrators were interviewed. Conway found that participants valued opportunities to observe experienced teachers and complete field experiences, but only if observation reports were contextualized and field experience placements were of high quality. Overall, respondents questioned the value of their coursework in the College of Education, but found greater value in generic education courses that were taught in an interesting manner. Additionally, some individuals expressed concern over performance faculty teaching secondary instrumental courses, because they perceived that performance faculty could not adequately prepare them for the rigors of teaching instrumental music if they themselves lacked K-12 music teaching experience or pedagogical expertise. Conway cautioned against generalizing her results to music education majors in the aggregate.

Section Summary

Individual beliefs and perceptions about preparation for the music teaching profession permeate these studies. Brophy (2002a, 2002b), Frego (2003), and Rohwer and Henry (2004) studied the views of music faculty, while Conway (2002), Teachout (2004), Davis (2006), Campbell and Thompson (2007), and Hamann and Ebie (2009) explored the professional preparation opinions of individuals in the throes of their undergraduate training or in the early stages of their teaching career. Overall, preservice and in-service music teachers are rather critical of their preparation programs and experiences. Most participant concerns center on the lack of value (Conway, 2002) or utility (Brophy, 2002a, 2002b) in what they were taught. Specific to music teaching methods courses, students question whether course content and activities can adequately prepare them for the types of challenges they will face once in the field

(Hamann & Ebie, 2009). They prefer it when methods instructors focus on practical skills learned through focused observations and field experience work rather than projects and exams detached from such experience (Frego, 2003; Teachout, 2004). Overall, the development of teaching skills and/or interpersonal skills is considered more important to future music teaching success than musicianship (Davis, 2006; Rohwer & Henry, 2004), and learning from professors (with K-12 music teaching experience) or clinical professors in authentic, real-world classrooms is considered more beneficial (Brophy, 2002; Conway, 2002; Teachout, 2004). Campbell and Thompson (2007) did not find any evidence of a clear developmental trajectory in terms of teacher concerns, but more noteworthy is the fact that no researchers explicitly studied connections between teacher preparation course work (including field experiences) and objective measures of teaching effectiveness. The absence of clear theoretical frameworks related to teacher development (with the exception of Fuller and Bown teacher concerns model, as referenced by Campbell & Thompson) also limits the extent to which these findings can serve as the basis for major reforms in music teacher education practices.

Choral Music Education – Overview and Status

In two recent literature reviews specific to choral music education research, Grant and Norris (1998) summarized the professional literature from 1982 to 1995 and Turcott (2003) from 1996 to 2002. The general purpose of these reviews was to highlight choral music education research trends as reflected in professional literary sources. Search engines utilized were *Dissertation Abstracts International* (DAI), *Educational Resources Information Center* (ERIC), *Repertoire International de Literature Musicale* (RILM), *Education Abstracts*, *Humanities Abstracts*, *International Index to Music Periodicals* (*IIMP*), and *Wilson Select Plus*. The authors also considered works cited in major music education references (*Handbook of Research on*

Music Teaching and Learning, Colwell, 1992) and research journals (*Bulletin of the Council for Research in Music Education; Journal of Research in Music Education; Journal of Research in Singing; Update: Applications of Research in Music Education, Contributions to Music Education,* and *Missouri Journal of Research in Music Education).*

Grant and Norris (1998) found that choral music education research topics were focused in the following areas: vocal physiology development for young singers; curriculum (e.g., choral literature and sight-singing); sequential patterns of instruction; effective teacher attributes (1970s and 1980s), and teacher education. Though they noted the increased professional dialogue surrounding assessment, they found only four studies out of nearly 140 they reviewed dealing with this issue. Grant and Norris indicated that progress had been made within these emerging research clusters, but suggested that in order for this progress to continue, more choral music education research of higher quality was needed. Choral music education was addressed indirectly in many of these studies, but topics related specifically to choral music teacher education were evident for only three investigations – Dahlman's (1991) dissertation on choral teacher education level and the selection of high school choral literature, Dauner's (1987) Delphi study of collegiate choral methods instructors' beliefs regarding present and future choral methods course content, and Grant's (1984) work on the status of undergraduate choral music education programs – all of which are reviewed later in this chapter.

In her review, Turcott (2003) wanted to determine:

> (a) whether research studies beyond the doctoral dissertation level in choral music education have continued to increase in number; (b) whether recent research has replicated or expanded prior studies as needed; and (c) whether the latest research attempted to solve 'real-world' problems in choral music education. (p. 11)

Turcott found that the number of published choral music education research articles had increased as compared to the time frame considered by Grant and Norris, but that about 25% of the 35 articles reviewed were direct outgrowths of dissertation research. Though the improved rate-of-publication was encouraging, Turcott cautioned that the dissertation research was of lower quality. She observed that "because of the time, money and topic constraints on many doctoral candidates, many of these studies were narrow in scope, testing small populations over short periods of time" (p. 40). With respect to her second aim, Turcott noted that though several studies were well-designed, the majority of those were not replicated or expanded. Finally, she concluded that most choral music education research did not address topics of practical concern to choral music teachers in the field. Based upon this synthesis of seven years of research in choral music education, Turcott recommended that choral music dissertations and individual studies be replicated so that choral music professionals would have greater confidence in the results. She also recommended that the choral music profession, including the editors of its primary publications (*Choral Journal* and *American Choral Review*), make a focused effort to promote systematic inquiry.

Status of Choral Music Education at Selected Institutions

In one of the earliest studies to target choral music teacher education, Leman (1974) explored the status of choral music education programs at five "Big Ten" universities, purposefully selected because they had "long occupied an important position on the national music education scene…such that they are quite frequently used as a guide for comparison by other schools of music" (p.4). Through the use of a survey methodology that included questionnaires, interviews and course content analysis, Leman obtained data from music administrators (n = 5), choral music faculty in charge of teaching choral music students (n = 5),

and recently graduated undergraduate choral music education students (n = 51). Overall, methods instructors indicated that an improvement in curricular offerings needed to occur to better prepare students for the choral music teaching profession. The five choral methods instructors agreed that conducting skills, piano skills, and vocal skills were of paramount importance. The way in which each instructor constructed, shaped and delivered the choral music education curriculum at his or her respective school, however, was unique. None of the five instructors, for example, used the same textbook for the choral methods class. While choral music education program alums believed their curriculum was reasonably balanced, they also expressed a strong desire for more work in conducting and student teaching and fewer non-music classes. Though choral methods was considered vitally important and one of the most valuable classes (along with student teaching) taken as part of the choral music education curriculum, many former students expressed a lack of confidence in their ability to effectively implement/demonstrate vocal techniques, teaching strategies (particularly those appropriate for working with elementary and junior high school vocalists), conducting skills, and keyboard facility – all competency areas in which the choral methods class has been traditionally focused. Overall, students felt they were overworked and that there was too much emphasis on performance, though 43 out of 51 indicated they would re-enroll at their respective institution.

Like Leman (1974), Grant (1984) surveyed and interviewed music education administrators (n = 5), choral music education lead instructors (n = 5), choral ensemble performance heads (n = 5), and two choral music education students from each institution (n = 10). Additionally, 94 junior and senior choral music education students were surveyed and of those, 84 replied (89% response rate). The purpose of the study was to determine the status of choral music education in reputable music programs situated within three Big Ten universities

and two small church supported liberal arts colleges in the Midwest. Undergraduate music education enrollments ranged from 60 to 208 students and a choral methods course was taught in all but one institution. The choral methods emphases ranged from teaching students how to audition and place choral singers within the ensemble to teaching choreography and associated programming in the swing choir. Choral methods students from all institutions were evaluated by means of video-recorded teaching/conducting segments and traditional written examinations, as well as their performance in pre-student teaching field experiences that varied considerably in terms of required hours and responsibilities. Student participants were asked to rate the importance of 45 different coursework and experiences; the choral methods class was rated fifth most important. Though choral methods was rated more important than choral ensemble participation (seventh) when considering responses from all participants, in the two small liberal arts colleges where the director of choral activities was also the choral methods instructor, choral ensemble participation was rated higher (third most important). Students believed they needed more time to develop music teacher knowledge and skills typically introduced in the choral methods class, including knowledge of choral literature, conducting skills, rehearsal techniques knowledge, keyboard skills, and vocal pedagogy knowledge. They also expressed a desire for more opportunities to practice implementing such knowledge and skills in the form of a lab choir or earlier field experience work.

The secondary choral music teacher degree programs at small liberal arts colleges and affiliated with the Christian College Coalition (CCC, but presently known as the Council for Christian Colleges & Universities, or CCCU), was the objective for Canaan's examination (1986). At the time of his study there were 62 member colleges located in 26 U.S. states of which 39 reported enrollments of less than1,000 students, which was the target population for

this study. Individuals representing 25 of those schools (five were NASM-accredited and 22 were not) participated. Since its inception in 1976, an evaluation of member music programs, and specifically choral music education, had not been conducted. As with Leman (1974) and Grant (1984), Canaan conducted a content analysis of the choral music education degree requirements listed in institutional catalogs, and he administered a questionnaire to music faculty and recent choral music education program graduates. He found that CCC schools accredited by the National Association of Schools of Music (NASM) required 11% more hours in music content courses than non-NASM-accredited CCC schools. But also found that "credit hours in the areas of music content courses indicated as much as 19% difference between CCC schools and state supported colleges and universities" (p. 109).

Furthermore, Canaan found that music faculty at NASM-accredited institutions expressed greater confidence in the preparation of their program graduates than faculty at the non-accredited schools. While recent graduates from both accredited and non-accredited schools felt reasonably well prepared to teach and considered their conducting skills to be quite strong, many reported being unprepared to apply general teaching theories to the choral music classroom, select secondary choral repertoire, or direct vocal jazz groups and other non-traditional choral ensembles. With respect to the choral methods class, former students cited a number of shortcomings, most of which reflected a basic disconnect between the emphasis placed on philosophical concepts in choral methods class and the practical skills (e.g., vocal modeling, piano accompanying, ensemble teaching techniques) and broad professional awareness needed to succeed in classroom settings. Though including more schools in his study as compared to Grant (1984) or Leman (1974), the individuals participating from these select schools likely are not representative of all choral music education degree granting institutions.

Section Summary

Both Grant and Norris (1998) and Turcott (2003) reviewed research literature pertaining to choral music education. A significant number of the studies examined were dissertations, and many of the journal articles emanated from those dissertations. During the 20-year period covered by both inquiries, roughly 175 choral music education studies were generated, which is less than ten per year. Because of the shorter publication window and smaller number of articles considered by Turcott, it is difficult to identify significant patterns or trends in the research encompassed by these two review articles. Nearly all of the topics pertained directly to the K-12 choral music education curriculum, and far fewer studies, by comparison, focused on the choral music education curriculum in colleges and universities, where the majority of future choral music teachers receive their professional training. Leman (1974), Grant (1984) and Canaan (1986) studied choral music education programs in institutions ranging from smaller liberal arts colleges to large research universities, but these studies were conducted over 25 years ago and likely do not reflect contemporary practices. Additionally, the school programs examined were selective and small, which points to a lack of generalizability. Participants in all three studies believed that the choral methods class was important, but desired additional time and experience to develop the knowledge/skills needed for professional success. Furthermore, students desired more conducting opportunities and authentic field experiences prior to student teaching. Choral methods instructors collectively emphasized conducting, piano, and vocal performance skills, though students indicated that performance skills were stressed too much.

The Choral Methods Class and Choral Music Education Curriculum

The music education curriculum, and the methods class in particular, should provide future music teachers with a solid grounding in both content and pedagogy so as to ensure that

their teaching efforts are successful within varying contexts (Boardman, 1990; Colwell, 1985; Leonhard, 1985; Teachout, 2004). The perceptions of choral methods course effectiveness can be studied through the eyes of preservice choral music teachers (Dauner, 1987; Grant, 1984; Leman, 1974; Snow, 1998), in-service choral music educators (Canaan, 1986; Dahlman, 1991; Kotora, 2005; Reames, 1995), and choral music faculty at the college level (Adderley, 2000; Dauner, 1987; Grant, 1984; Kotora, 2005; Leman, 1974). Literature reviewed in the sections that follow is focused on choral teacher education experiences, particular those associated with the choral methods class – how such experiences may influence the curricular decisions of choral music educators once in the field, and how choral music educators view the choral methods class when reflecting back on their undergraduate preparation for teaching.

Education, Experience and the High School Choral Curriculum

Dahlman (1991) mailed a 16-item Missouri Choral Literature Survey to 576 high school choral directors whose schools were members of the Missouri State High School Activities Association (MSHSAA) and received 148 (26%) responses. Directors were classified as less experienced (those having taught one to three years, 23% of directors) or more experienced (those having taught four or more years, 77% of directors). Of the 148 respondents, slightly less than half (45%) had earned a graduate degree. Dahlman found that previous education level and teaching experience were associated with curricular decisions regarding choral repertoire selection, including the choice of sacred versus secular texts, 20th century music as compared to music from earlier historical periods, and choral selections that are accompanied or a cappella. He suggested that criteria for selecting quality repertoire, regardless of style or genre, should be addressed in the undergraduate choral methods class.

Reames (1995) surveyed 263 Virginia high school choral educators who were members of MENC (NA*f*ME), and who taught at least one choral ensemble involving students in grades 9-12. The questionnaire was divided into five sections – director demographics, high school repertoire selection criteria, beginning high school choir literature sources, specific literature for beginning high school choirs, and beginning high school choral recommended literature. Participants were prompted to rate the usefulness of fourteen different sources that can be used to guide choral repertoire selection and identify the single most valuable source. Given these ratings and responses, Reames concluded that "the least valuable source for finding beginning high school choir literature" (p.130) was the choral methods class. Reames recommended that researchers explore various approaches to improving choral music teacher education programs, with specific attention directed to the content of the choral methods class.

Perceptions of Choral Methods Instructors and High School Choral Educators

Dauner (1987) conducted a Delphi study of 18 collegiate choral methods instructors' beliefs regarding choral methods course outcomes, instructional experiences, and student profiles. The sampling process began with graduate music education faculty at the researcher's doctoral institution being asked to identify quality teacher education programs from those listed in the NASM directory; a total of 90 programs were identified. Next, the College Music Society (CMS) directory was utilized to determine which faculty associated with the quality programs were most likely responsible for teaching the choral methods class. The 125 individuals identified through this process were then sent a short questionnaire to obtain basic demographic information, verify that the institution offered a secondary choral methods course, and extend an invitation for participation in the Delphi study. From the pool of 38 individuals who responded affirmatively, along with seven additional faculty recommended by an expert panel, 18 choral

methods course instructors were chosen as study participants. Participants represented all of the broad U.S. geographical regions and taught at public (n = 13) and private (n = 5) institutions with student enrollments ranging from 2,200 to 40,000.

In the first round, participants completed a questionnaire focused on what they expected would happen in future choral methods classes. Dauner analyzed these responses and sent out a second round of discrete statements with which participants could either agree or disagree. In the final round participants compared their individual responses with the "center" response of the group on each item and were encouraged, if necessary, to change their previous answer. Dauner found the choral methods class was typically taught during the junior or senior year in a one semester format for three credit hours, and respondents indicated this approach would likely change very little over time. Additionally, only 20% of respondents anticipated there would not be any change in the types of knowledge and skills typically taught in the secondary choral methods class.

Participants also considered course content and indicated that *knowledge* and *understanding* of choral artistry, as well as *skills* in leading warm-ups and rehearsals, detecting errors, and developing stylistically correct choral tone, were high priority competencies, and course content addressing these knowledge/skill areas would remain important. There was some skepticism as to the continued importance of more generic types of knowledge such as how to articulate a philosophy of music education or how to apply learning theories and other psychological principles applicable to teaching, but also practical skills such as arranging choral music and producing special performances such as musicals or madrigal dinners. Participants believed that in the future, choral methods courses would likely exhibit an increased focus on administrative duties, using the piano as an instructional tool, creating innovative teaching plans

and instructional strategies, and creating networks for ongoing professional development. Dauner highlighted participants' negative perceptions of the choral methods class (which are often tied to concerns about insufficient specificity and/or practicality), but based on the study results, he surmised that these concerns may be unsubstantiated as both: "The outcomes/experiences of the present course and those predicted for the future course are very practical" (p. 173).

Wolverton (1993) surveyed 168 (84% response rate) music education professionals in California including secondary school choral directors (n = 131), K-12 music administrators (n = 19), and college/university (n = 18) choral methods instructors. The purposes of the study were to identify desired choral teaching behaviors and compare the three subgroup's importance ratings for music specific and general teaching competencies in relation to prior music teacher competency research. Wolverton conducted informal interviews with members of the three subgroups and employed the competencies utilized in earlier research (Taebel, 1980; Taylor, 1980) to create a two-part, 99-item (69 *musical competencies* and 30 *general teaching competencies*) questionnaire. Respondents were asked to rate the importance of musical and teaching competencies on a 5-point Likert-type scale (1 being *of no importance* up to 5 being *of great importance*).

Musical competencies involving detection of pitch/intonation and rhythm errors were rated most important, which corroborated Taebel's (1980) findings. All nine of the musical detection competencies (e.g. pitch/intonation, rhythm, tone quality) were in the highest rated group as well as conducting, vocal and keyboard sight-reading skills, and knowledge of choral literature. Twenty-eight (41%) of the 69 musical competencies were rated *of great importance*, while 15 (50%) of the 30 teaching competencies were rated *of great importance*. Recognizing

students by name and recruiting individuals for choir were considered the most important teaching competencies. Wolverton found significant disagreement between the three subgroups in terms of how important they rated seven musical and five teaching competencies. When comparing importance ratings provided by participants in his study to those reported in past studies, Wolverton noted that the competencies rated most important (aural skills and error detection skills, conducting skills, vocal performance/modeling skills, managing classroom climate) were largely identical. Some competency areas, however, appeared to decline substantially in importance (composition skills) while others were viewed as increasingly important (community involvement). Wolverton did caution that differences in findings between the studies could be attributed to the distinctive job responsibilities and separate demographic regions of those surveyed.

In a survey of choral music education faculty at 20 NASM-accredited South Carolina colleges and universities, Adderley (2000) asked participants to reflect on their efforts in providing "relevant preparation" for students pertaining to the nine Content Standards outlined in the *National Standards for Arts Education* (1994) as advocated by MENC/NA*f*ME. Using a 5-point quality-of-preparation scale (poor, below average, average, good, superior), faculty indicated how prepared choral music education majors in their program were to teach each of the nine national music standards to choir students in either grades 5-8 or 9-12. Faculty generally believed that future choral teachers were being adequately prepared to teach the voluntary national music standards, though content standards focused on improvising and understanding relationships between music and other disciplines were not thought to be addressed as effectively within the choral music education program From this, Adderley recommended that materials

and experiences that strengthen the teaching of all nine standards be implemented and further evaluated for effective choral teacher professional preparation.

The purpose of Kotora's (2005) investigation was to compare the assessment practices of high school choral directors and college choral methods professors in Ohio. A total of 246 high school choral directors returned the questionnaire (43% response rate) and 20 out of 38 (53% response rate) college and university choral methods instructors participated. Two survey instruments were created – one for high school choral directors to report how they assess their students, and one for the college choral methods instructors to report how they teach their future choral music teachers to assess. Common assessment strategies and grading criteria, as identified in the literature by Kotora, appeared in both instruments: video recordings, audio recordings, singing tests, written tests, independent study/written projects, student portfolios, check sheets, rating scales, and/or rubrics, concert performances, individual performances, student participation, student attitude, and student attendance. Kotora reported that the three most common assessment strategies utilized by high school choral directors were concert performances, student participation, and student attendance while the strategies choral methods instructors reported emphasizing in class were video recordings, written tests, concert performances, and student attendance. The assessment strategy employed the least by high school choral teachers was student portfolios, and portfolios were seldom addressed by choral methods instructors.

In addition to these matched items, Kotora utilized a 5-point Likert-type scale to find out how well the high school choral directors thought their choral methods class prepared them for assessing their students, and choral methods instructors were asked to rate how well they felt their choral methods course addressed assessment in readying future choral educators for the

profession. Kotora found that roughly two-thirds (65%) of choral music educators matriculating from Ohio colleges and universities believed their college methods course did not prepare them much (41%) or at all (25%) with respect to assessing students. In contrast, choral methods instructors at those same institutions indicated that choral methods students were prepared somewhat (55%) or very well (30%) in terms of assessing choral student learning. Though Kotora did not explore relationships between knowledge and skill areas emphasized in the choral methods class with choral method faculty related work experience and educational background, he did gather demographic information for descriptive purposes.

Section Summary

College choral methods faculty reported that competencies in aural skills, error detection skills, conducting, vocal performance, and classroom management are important for choral educators, and believed that they were largely effective in helping students acquire and develop the knowledge and skills needed to become successful choral educators (Adderley, 2000; Dauner, 1987; Wolverton, 1993). On the other hand, choral educators in the field indicated that the knowledge and skills emphasized in their choral methods classes did not sufficiently prepare them for the choral teaching profession (Kotora, 2005; Reames, 1995; Wolverton, 1993). Dahlman (1991) reported a unique finding – that previous education level and teaching experience were associated with curricular decisions.

The Acquisition and Development of PCK in Music Teacher Education

Despite the prevalence and influence of Shulman's teacher knowledge framework on theorizing and program development in teacher education, there is not an extensive body of literature that has applied this framework, or notions of PCK, to the preparation of teachers in specific fields or disciplines. Within music education, the *Handbook of Research on Music*

Teaching and Learning (Colwell, 1992) includes only one chapter on teacher education, and there is no direct reference to PCK. By contrast, in *The New Handbook of Research on Music Teaching and Learning* (Colwell & Richardson, 2002), there is an entire section and seven chapters focused on teacher education. In one of those chapters, Nierman, Zeichner and Hobbel (2002) provide focused commentary regarding the role PCK plays in music learning-teaching dynamics and state "that perhaps there has been too much emphasis on the development of musical content knowledge and not enough emphasis on pedagogical domains" (p. 826). While Duling (1992), Gohlke (1994) and Snow (1998) were among the first music education researchers to utilize PCK as a framework, others within the field (Ballantyne & Packer, 2004; Haston & Leon-Guerrero, 2008; Millican, 2008, 2009; Venesile, 2010) have used Shulman's framework as a basis for studying how music teachers are prepared and develop their knowledge and skills, including CK, PK and PCK.

Preservice Acquisition and Development of PCK

Gohlke (1994) explored the acquisition of PCK by eight preservice music teachers from a small four-year private liberal arts college. Of those eight participants, four were selected for additional study based upon teaching preference (elementary general music or secondary performance) and primary applied area (instrument or voice). This "two-by-two design allowed for comparisons between… subject matter [orientation] and disposition toward teaching elementary music" (p.38). Gohlke stated:

> The purpose of this study was to investigate the content as well as the process by which preservice teachers acquire the knowledge for teaching music by means of a collegiate music methods course. This study explores the effects of experience in a music methods

course on students' prior conceptions i.e., ideas and beliefs, of teaching music to children in elementary schools. (p. 9)

Gohlke wished to determine how preservice music teachers learn to make pedagogical and curricular decisions, the source of that knowledge, and the effect a methods course and previous experience in music teaching has on those decisions. She found that PCK often emerges out of prior knowledge and skills in music and teaching, the observation of others learning and teaching music, and the application of reflection strategies when engaging in self-evaluation of music teaching.

Six undergraduate choral methods students at a Midwestern university were participants in a study by Snow (1998) that focused on the planning processes students employed when conducting choral rehearsals. Data were collected and analyzed through researcher observation of both live and recorded rehearsals as well as participant journaling, field notes, rehearsal plans and written assignments. Throughout the 15-week project, participants engaged in score immersion, visual mapping, and instructional planning while the researcher sought to determine whether understanding of musical content was related to the development of pedagogical content knowledge. Snow found that all three processes (score immersion, visual mapping, planning) contributed to growth in PCK which, in turn, resulted in choral music education majors being more effective teachers within the choral rehearsal.

The purpose of Haston and Leon-Guerrero's (2008) study was to determine influences on PCK acquisition among preservice instrumental music teachers. Six undergraduate music students at one institution completed the same three-semester sequence of instrumental methods classes team taught by the same two music education professors (strings and winds/percussion). Instruction in these courses included field experiences as well as traditional lecture and peer

teaching. After finishing these courses, participants then completed one semester of part-time student teaching followed by one semester of full-time student teaching. Participants video recorded themselves teaching a lesson and the researchers analyzed the videos to identify incidents of PCK. Next, the researchers used an interview protocol to elicit responses from participants regarding the instructional goals toward which specific examples of PCK were applied, and the curricular or experiential sources from which they believed they acquired the examples of PCK. Haston and Leon-Guerrero determined that PCK development was seldom attributed to the methods course, or to the observation of and/or interactions with the cooperating teacher. They submitted that significantly more research needs to be conducted in music teacher education to determine where students acquire PCK, and how methods courses might be better structured to promote its development.

In-Service Acquisition and Development of PCK

As part of his doctoral dissertation work, Duling (1992) investigated how PCK was developed by two middle school general music teachers. These participants (one male, one female) were purposively sampled because of their reputation as exemplary music teachers. Through observing, interviewing and videotaping as well as analyzing written documents, Duling was able to explore questions pertaining to the acquisition of teaching knowledge and skills. By asking the participants what they knew about music content, what they knew about teaching music, how they knew those things and then observing and recording, he was able to determine potential sources in the formation of PCK emphasis. Duling found that the two teachers acquired PCK by reflecting and critically examining their own teaching, the work of other teachers, applied learning theories, and applied action research-based teaching strategies. Future research recommendations focused on identifying sources of PCK for different music

teaching populations, specifically comparing music teachers trained for performance versus those trained for general music settings, and replication studies centered on PCK in building a professional body of knowledge.

Ballantyne and Packer (2004) explored early-career secondary music teachers' perceptions about their preparation to teach in Queensland, Australia. They surveyed 136 randomly sampled secondary music teachers who had earned a degree to teach secondary music from one of three Queensland area universities, and obtained a 56% response rate (76 respondents). The twenty-four item questionnaire was divided into four sections (six items per section) based upon Shulman's teacher knowledge framework: *music knowledge and skills*; *pedagogical content knowledge and skills*; *pedagogical knowledge and skills*; and *non-pedagogical professional knowledge and skills*. Participants were asked to rate the importance of each teacher knowledge/skill item, as well as the performance or effectiveness of their teacher education program in developing specific examples of knowledge and skill. The researchers evaluated the responses by utilizing factor analysis and importance-performance analysis (IPA). The factor analysis showed that all knowledge/skill items, with the exception of "musical creativity" represented the four broad categories as derived from Shulman's framework. According to the IPA, preservice teacher education programs were barely considered adequate in addressing most of the areas of teacher knowledge/skill, and this was particularly true for non-pedagogical professional knowledge and skills (program management, administration and communication). Only 16% of the respondents indicated they were 'very satisfied' with their music teacher preparation program and 36% felt their coursework preparation and experiences were 'not really relevant'. Ballantyne and Packer concluded that teacher education programs need to place more emphasis on the development of pedagogical content knowledge and skills as

well as non-pedagogical professional knowledge and skills. Participants also reported that music knowledge and skills were important, but that the development of these skills needed to occur within more varied contexts. Finally, pedagogical knowledge and skills were found to be sufficiently covered in preservice teacher education programs.

Millican (2008) adapted Shulman's teacher knowledge framework to examine secondary school in-service music teachers' perceptions of professional knowledge and skill. A total of 214 randomly sampled band and orchestra teachers completed an on-line paired comparison questionnaire and ranked various facets of knowledge and skill in terms of importance for professional success. The modified teacher knowledge categories were: *content knowledge, pedagogical knowledge, curriculum knowledge, knowledge of learners and their characteristics, pedagogical content knowledge, knowledge of educational contexts,* and *administrative knowledge*. In addition to ranking these categories by indicating which of each paired knowledge type was more important, participants provided background information pertaining to their teaching responsibilities and educational background. This information was then used to compare median rankings of the various forms of music teacher knowledge on the basis of background and teaching assignment variables. Millican found no significant association between participants' preference/ranking of different areas of teacher knowledge and their teaching assignment (grade level taught, staff size, school's U.S. regional location) or educational background (undergraduate institution size, length of early field experience, teaching experience). PCK was the highest ranked category of the seven, and content knowledge and pedagogical knowledge were also ranked significantly higher than the other four categories. These findings corroborated Ballantyne and Packer's results for early career music teachers' beliefs about the relative importance of various types of music teacher knowledge.

In his follow-up study of elementary and secondary level band and orchestra teachers in Texas (2009), Millican found some significant difference in music teachers' ranking of specific examples of pedagogical knowledge and skill on the basis of teaching area (orchestra teachers considered the ability to transition from one activity to the next to be more important than band teachers), and teaching level (high school teachers endorsed the importance of developing a policies and procedures handbook and enforcing classroom rules promptly and consistently to a greater extent than middle school and elementary school teachers). Overall, an instrumental music teachers' ability to organize and plan instruction, develop handbooks, enforce classroom rules and develop relationships with students were considered the key forms of pedagogical knowledge and skill.

Most recently, Venesile (2010) examined PCK in the context of vocal jazz education – a very specialized area of choral music education. A purposive sample of 271 secondary and post-secondary vocal jazz educators completed a researcher-designed inventory that addressed the perceived importance of specific examples of music content knowledge and pedagogical skill. Similar to Haston and Leon-Gurrero (2008), Venesile also asked participants to report how they acquired particular types of knowledge or pedagogical skill. Open-ended items were used to elicit narrative responses of professional challenges, turning points in professional development, and other forms of advice for the vocal jazz education profession. Additionally, basic demographic information pertaining to gender, ethnic background, highest degree earned, degree concentration, teaching experience, state teaching location, primary instrument, secondary instrument, and level of vocal jazz teaching was collected. Venesile employed a Sequential Explanatory Design where quantitative and qualitative data were analyzed separately and then incorporated into the explanation discussion of the final chapter. He reported that "all fifteen

jazz content knowledge items were rated 'important' by respondents…" with performance style skills and knowledge of influential vocal jazz ensembles rated the highest (p.102). The acquisition of these jazz content knowledge and skills was best obtained through regular listening to live and/or recorded jazz. Nearly three-fourths of participants provided open-ended responses, with major themes related to the challenge of teaching vocal jazz centering on lack of jazz training, limited experience in teaching jazz, lack of inadequate resources, and insufficient professional support. Venesile concluded that vocal jazz educators need both content and pedagogical knowledge and skills, and that this comprehensive skill set is primarily acquired through individual initiative, rather than through formal teacher education course work.

Section Summary

Gohlke (1994), Snow (1998), Duling (1992) and Venesile (2010) found that music teaching knowledge and skill emerged from practical experiences such as observing others within the field, immersing oneself in preparing for and reflecting upon professional practice, and applying knowledge/skills in authentic music teaching contexts. Ballantyne and Packer (2004) and Haston and Leon-Guerrero (2008) concurred that the acquisition and development of PCK was important, but found that methods courses were inadequate in that regard. They recommended that researchers explore ways in which PCK might be better developed, specifically by making changes to the organization and content of music methods classes. Millican (2008, 2009) also found that in-service music teachers believe many different types of knowledge and skill are needed for success in music teaching, but these teachers also ranked PCK as the most important.

CHAPTER III

METHODOLOGY

In Chapter One, teacher education was contextualized as part of the larger educational landscape within the U.S. and positioned at the center of efforts to reform K-12 education and improve student learning (Cochran-Smith & Fries, 2008; Duncan, 2009). While teacher education policy and practices may be influenced to some extent by individuals or organizations that function at various levels within the larger educational system, faculty who oversee and prepare future teachers likely exert the most direct, profound and lasting effects (Frego, 2003; McCaslin & Good, 1996; Wilcox & Upitis, 2002). Shulman (1986, 1987), who studied how teachers develop expertise and become more *professional* in their work, observed that the most effective educators demonstrate content knowledge specific to one's discipline (what to teach), pedagogical knowledge or strategies that apply to all educational disciplines (how to teach), knowledge of learners and context (who is being taught and where), and pedagogical content knowledge (teacher knowledge and skills lying at the intersection of content, pedagogy and context). The development of *Pedagogical Content Knowledge* (PCK) has been explored within content areas such as English, math, science and social studies (Grossman & Gudmondsdottir, 1987; Peterson, Fennema, Carpenter & Loef, 1989; Veal & MaKinster, 1999; Wineburg & Wilson, 1988) as well as in music education (Ballantyne & Packer, 2004; Duling, 1992; Gohlke, 1994; Haston & Leon-Guerrero, 2008; Millican, 2008, 2009; Snow, 1998; Venesile, 2010).

Music teacher education programs are designed to prepare individuals for careers as general, instrumental or choral music teaching specialists. Choral music education curricula vary to a certain extent from one university or music school to the next, but in most situations the choral methods course – with its focus on the curriculum, materials and procedures used for

teaching choral music – represents a potential nexus for developing PCK. Research pertinent to music teacher training, choral music education curricula (including choral methods courses), and the acquisition and development of PCK for preservice and in-service music teachers is reviewed in Chapter Two. Only a few researchers have studied how music teachers acquire and develop PCK, and only two of those studies are specific to choral music teaching. To date, no researcher has attempted to measure the degree to which choral methods course instructors emphasize *Content Knowledge*, *Pedagogical Knowledge*, and *Pedagogical Content Knowledge*.

Purpose of the Study

The primary purpose of this study was to determine how choral methods courses are structured and situated within the undergraduate choral music education curriculum, and the extent to which choral methods instructors emphasize major facets of choral music teacher knowledge/skills. Relationships among methods course characteristics, choral methods instructor attributes, instructor beliefs pertaining to knowledge/skill importance and emphasis, and their orientation toward developing PCK also were explored.

Survey Methodology Rationale

Scholars who have studied various facets of music teacher education have employed a range of research methodologies, including quantitative and qualitative approaches (Turcott, 2003; Wilcox & Upitis, 2002). It is important, however, that methodological decisions be made with careful consideration of the problem to be studied and the research questions at hand (Colwell, 1987; Graziano & Raulin, 2004; Labaree, 2004). Given the broad implications of this study for music teacher education (i.e., how choral methods classes are configured and how PCK is acquired and developed), the sensitive nature of music teacher educators' beliefs and practices,

and the need to capture information from a representative sample of participants, an online survey methodology was employed.

In educational research, surveys have traditionally been administered to large populations of administrators, teachers, students, parents or other constituencies as a means of describing their attitudes, perspectives, beliefs or behaviors. Survey research can be used to address a wide range of research problems or questions, provides for efficient collection of data from large samples, and (with appropriate sampling procedures) allows the researcher to generalize study findings to populations of interest (Fraenkel & Wallen, 2006; Graziano & Raulin, 2004). Interviews and questionnaires constitute the two main forms of survey data collection.

Electronic Survey Methodologies

For years, paper-and-pencil questionnaires administered in person or through the mail have been used to conduct large-scale surveys. With the rapid growth of the internet, email and other distance technologies, however, e-survey or web-survey methodologies have become more common (Reynolds, Woods & Baker, 2007). A web survey employs an instrument (questionnaire) that physically resides on a network server and that can be accessed only through a web-browser. In this sense, the web interface serves as both the questionnaire delivery and data collection point, allowing researchers quick access to the study population (Jansen, Corley & Jansen, 2007). Participation in a web-survey can come about through self-selection (i.e., survey participation is solicited but not controlled by the researcher) or through more traditional sampling methods (participants are selected at random from a larger population, invited to participate, and directed to the survey website through a link or URL address). Many researchers have turned to commercial survey vendors (e.g., *QuestionPro, SurveyMonkey, SurveyShare,*

WebSurveyor, Zoomerang) rather than designing their own web-survey instruments (Strachota, Schmidt & Conceição, 2005).

There are many pros and cons associated with web-based survey formats (Schmidt, Strachota, & Conceição, 2006; Shih & Fan, 2008). Commonly cited benefits of web-based surveys include: greater ease in accessing large numbers of potential respondents from varied geographic locations provided trustworthy email directories are available (Kaplowitz, Hadlock & Levine, 2004; Kennedy, Kuh and Carini, 2000; Schmidt, *et al.*, 2006); decreased costs given that online survey software purchase/subscription typically is less expensive than mail survey postage (Kaplowitz, *et al.*, 2004; Kennedy, *et al.*, 2000; Lin & Ryzin, 2011; Schmidt, *et al.*, 2006); faster response times; more honest responses (particularly in relation to sensitive items); more varied item formats (including audio or video/animation prompts); higher reliability (due to built-in safeguards that minimize respondent errors and the legibility of responses); and greater efficiency in data analysis – particularly when it is possible to automatically download data to statistical software programs rather than keypunching it by hand (Schmidt, *et al.*, 2006).

While web-surveys may yield many benefits, there are also unique drawbacks or challenges. Web survey development is often time-consuming and there can be unexpected costs (Kennedy, *et al.*, 2000) depending on the software program utilized and/or the company selected to manage the information. Researchers who opt to survey populations via the Web run the risk of technological problems (e.g., software compatibility and functionality); participant discomfort in using web technologies (Kennedy, *et al.*, 2000; Schmidt, *et al.*, 2006; Shannon, Johnson, Searcy, & Lott, 2002; Timmerman, 2002); identity/security issues, response bias and more limited generalizability to sub-populations that are web-savvy (Kennedy, *et al.*, 2000; Shannon,

et al., 2002; Timmerman, 2002); and difficulty in monitoring or responding to participant clarity and relevance concerns (Smith, 2008).

While opinions are mixed, researchers suggest that response rates (including the tendency for participants to submit fully completed questionnaires) for web surveys are lower than for mailed surveys (Lin & Ryzin, 2011; Shih & Fan, 2008). An average response rate of 37% (Sheehan, 2001), for example, was reported for various types of online surveys conducted from 1986 to 2000, but this figure has been declining over time as the novelty of web surveys has subsided and counter-measures designed to block spam and other forms of undesirable electronic communication have been implemented. Despite these disadvantages, measures can be taken to enhance web-based survey response rates (Kaplowitz, *et al.*, 2004; Kennedy, *et al.*, 2000; Schmidt, *et al.*, 2006; Searcy & Lott, 2002; Smith, 2008; Timmerman, 2002).

Some suggestions center around the web-survey distribution process (Strachota, *et al.*, 2005) - compiling accurate participant contact information and sending test messages to reduce delivery errors; employing subject headings that are creative or informative enough to reduce automatic deletion or spam filtering; and testing and then embedding direct URL links to the web-survey site in the invitation-to-participate message. Other recommendations are focused on design issues related to the response phase of web surveys (Dillman, Tortora & Bowker, 1998). Timmerman (2002), for example, recommended the relatively simple strategy of incorporating a progress indicator that participants may reference while completing the questionnaire. This design element has been shown to reduce frustration and the incidence of non-completion (i.e., beginning the web survey process but then navigating away before the questionnaire has been completed) to a greater extent than providing an option for participants to complete the questionnaire at a later time (Schmidt, *et al.*, 2006). A second strategy is to provide participants

with the choice of completing the questionnaire in web or print/mailed formats. Sills and Song (2002) determined that this dual format approach yielded response rates comparable to those of traditional mail surveys.

Kennedy, Kuh and Carini (2000) determined that adapting Dillman's *Total Design Survey Method* to a web-survey format can improve response rates and reduce sampling error. This method entails - a preliminary email alerting the sample pool that they will be invited to participate in an important survey; a second email that formally invites individuals to participate, addresses informed consent provisions and includes a link to the web-survey instrument; and three follow-up email reminders at regular junctures prior to the response deadline. In short, as Shannon *et al.*, (2002) stated "based on the advice from numerous research professionals, web-based surveys are best employed with well-defined, targeted populations where Internet access is widely available" (p.5). It was assumed that the target population for this study – secondary choral music education faculty at NASM-accredited institutions – had significant access to the Internet such that their participation would be maximized through the use of a web-survey methodology that presented little in the way of time and monetary demands as typically associated with paper-and-pencil formats (Jansen, Corley & Jansen, 2007).

Instrumentation – Developing the Choral Methods Instructor Inventory (CMII) Item Pool

Though a web-based questionnaire was utilized to collect data, the process associated with developing a sound instrument is the same as with the traditional paper-and-pencil survey method (Schmidt, *et al.*, 2006). Questions need to be relevant and written in a manner such that respondents can understand prompts and reply with accurate answers, and the questionnaire layout must be designed with the intent of minimizing user burden and/or fatigue (Schmidt, *et*

al., 2006; Smith, 2008). Fowler (1984) stated that questions should be constructed with these four parameters in mind:

> Is this a question that can be asked exactly the way it is written? Is this a question that will mean the same thing to everyone? Is this a question that people can answer? Is this a question that people will be willing to answer given the data collection procedures?" (p. 101)

In addition to these above considerations, Fraenkel and Wallen (2006) suggest that questions should be simply written, concise, free of bias, with one idea presented at a time and no double negatives. Beyond the technical demands of preparing a credible instrument, the sources used to develop a preliminary pool of items should be grounded in related research.

Sources for CMII Development – School Demographics and Instructor Information

A number of survey instruments were identified and reviewed as part of the item pool development phase used to develop early draft versions of the Choral Methods Instructor Inventory (CMII). In addition to the instruments employed by Ballantyne and Packer (2004) and Millican (2008) (reviewed in Chapter Two), items from two other non-published and/or in progress studies that focused on instrumental methods (Hewitt & Koner, 2011) and the choral methods class (Perry, 2012) were considered.

Perry's (2012) 13-item questionnaire addresses institutional demographics (ACDA Division location) as well as choral methods course characteristics (the number of credits earned for course completion, the program year in which students typically enroll) and music student characteristics (major applied area). Other items focus specifically on choral methods course repertoire and resources (choral literature sources, repertoire projects, estimated class time devoted toward discussing choral literature, textbook(s) selection and the number of semesters of

use), as well as several choral methods course topics (aural skills development, budget/administration, choral literature/repertoire, conducting, national standards, recruitment/motivation, rehearsal techniques, and vocal technique).

The 18-item questionnaire developed by Hewitt & Koner (2011) centers on the instrumental methods course. To develop their instrument, the authors first analyzed the content of 43 instrumental methods course syllabi. Using these content analysis results in conjunction with the National Standards for Music Education (NA*f*ME), the instrument was constructed and organized into three parts. In Part I, instrumental methods instructors use selection type items to report on institutional demographics (private/public) as well as their own teaching background/experience, education and faculty position (rank, instructional area assignment). Part II addresses information about the methods course itself (teaching resources, major instructional topics or assignments), and in Part III instructors use an 8-point rating scales to indicate the degree to which they "prioritize" various course topics and the nine National Music Standards.

CMII items pertaining to institutional demographics and instructor training and background were derived from the Perry (2012) and Hewitt & Koner (2011) questionnaires, and then adapted as needed. Though items focused on specific course topics, instructional materials (textbooks), and assessment tools were included in early CMII iterations, they were eventually discarded because of concerns about questionnaire length. The concept of having instructors prioritize specific course topics or music standards was not adopted for the CMII per se, but did inform deliberations regarding alternative methods (self-reports of importance, emphasis, or effectiveness; rating, ranking or paired comparisons techniques) that could be used to gauge instructor orientation toward developing *Content Knowledge* (CK), *Pedagogical Knowledge*

(PK), and *Pedagogical Content Knowledge* (PCK). For that purpose, the questionnaires designed by Ballantyne and Packer (2004) and Millican (2008) were the sources upon which teacher knowledge/skill sections of the CMII were extensively modeled.

Sources for CMII Development – Music Teacher Knowledge and Skill

With respect to measuring instructor emphasis of choral music teacher knowledge and skills, two contrasting quantitative methods were considered – the rating scale approach implemented by Ballantyne & Packer (2004) and the ipsative (ranked order, forced choice) approach used by Millican (2008, 2009). One of the challenges associated with rating scale approaches is the tendency for study participants to use only a certain range of the scale when responding to items, such that all item means fall above or below the scale midpoint. To overcome this limitation, Millican (2008) employed a paired-comparison approach. Secondary band and orchestra teachers considered the relative importance of seven teacher knowledge/skill categories: content knowledge, curriculum knowledge, knowledge of learners, knowledge of educational contexts, administrative knowledge, pedagogical knowledge, and pedagogical content knowledge. Rather than creating a set of specific items to represent each category (as was done by Ballantyne & Packer), Millican produced brief definitions for each knowledge/skill category, and these definitions appeared under the appropriate category label within each pairing.

All possible pairings of the seven knowledge categories (21 in all) were presented in a randomized order, and participants chose the category within each pair that they considered more important for professional success. For each knowledge/skill category, a prioritization score is produced by calculating the total number of times the category is selected as being more important minus the total number of times the paired or alternative category is chosen. Negative scores correspond to categories that are generally considered less important, and positive scores

correspond to categories that are generally considered more important. In a subsequent study of pedagogical knowledge and skill alone, Millican (2009) abandoned the paired comparison approach in favor of a basic ranking approach; 10 specific items (examples of pedagogical knowledge) were ranked from 1 (*most important*) to 10 (*least important*).

In both studies conducted by Millican (2008, 2009), participants expressed concern about the difficulty involved in choosing or ranking one type of knowledge/skill over another given that all of them may be considered at least moderately important, some may be considered equally important, and the relative importance of any particular type of knowledge/skill may vary from day to day or class to class. Given these concerns, as well as the fact that rating scales are psychometrically superior (reliable, statistically independent, appropriate for multivariate analysis) to rankings or forced choice data (Baron, 1996), the approach used by Ballantyne and Packer (2004) was adopted when developing music teacher knowledge/skill items for the CMII.

Ballantyne and Packer (2004) employed a more traditional rating scale approach to explore early-career music teachers' perceptions of important knowledge and skills. Based on a review of teacher knowledge literature and a pilot investigation, they created 24 items intended to represent four categories of knowledge and skill: *music knowledge and skills* (e.g., music history, conducting); *pedagogical knowledge and skills* (e.g., knowledge of learners and their characteristics, ability to plan for effective learning); and *pedagogical content knowledge and skills* (e.g., knowledge of music teaching techniques, skill in explaining or demonstrating music concepts). With this measure, respondents were asked to rate the importance of each knowledge/skill item pertaining to professional success (using a 5-point Likert-type scale with response options ranging from *not important* to *extremely important*); they also rated how effective their teacher education program was in developing these knowledge/skills. Factor

analysis (reflecting correlations among importance ratings) was then used by Ballantyne and Packer to confirm that 23 of the 24 items (music creativity being the exception) loaded on four separate latent factors that corresponded to the a priori categories of teacher knowledge.

While a rating scale approach was considered the best method for addressing music teacher knowledge/skill, the questionnaire item formats employed by Ballantyne and Packer (2004) were modified considerably for use in the CMII. Ballantyne and Packer, for example, asked secondary school music teachers to rate how *important* each example of music teacher knowledge/skill is to their personal effectiveness in the classroom. In the present study, choral methods instructors were asked to indicate how much *emphasis* (defined as the amount of class time or assessment weight) they give to each type of knowledge/skill within the methods class, and how *important* the development of various types of knowledge/skill is to their students' future success as choral music educators. It was anticipated that emphasis estimates would more accurately approximate instructors' actual decisions and behaviors, given that any number of knowledge/skill types might be considered important. To measure instructional emphasis, a 6-point scale (*no emphasis, little, some, moderate, considerable, heavy*), modeled after an approach used in research conducted by the National Center for Educational Statistics, was adopted (US Department of Education, 2011). To ensure that study participants who may have lacked familiarity with Shulman's teacher knowledge framework were not confused by the terminology and acronyms used to reference different types of knowledge/skill, items corresponding to content knowledge, pedagogical knowledge and pedagogical content knowledge were presented randomly within separate sections of the questionnaire (rather than randomized within a single section, as done by Ballantyne & Packer, 2004).

Because of the complexity of studying and understanding teaching-learning dynamics, and in consultation with a teacher education expert who is also a former student of Lee Shulman, it was concluded that it would be important to capture narrative responses from participants. For each of the three teacher knowledge/skill categories (CK, PK, PCK), methods course instructors were asked to (a) describe an instructional activity or assignment they implement in the choral methods class specifically to develop that type of knowledge/skill and (b) describe any challenges they face in developing that type of knowledge/skill within the choral methods class. Finally, in an effort to connect at least one study result to the work of Millican (2008, 2009), participants were asked to indicate how they prioritize (highest, middle or lowest priority) the three broad categories of music teacher knowledge/skill within the choral methods class.

In final form, the pilot version of the questionnaire (see Appendix A) consisted of 38 items and was organized into nine main sections: institutional demographic information, (seven items), choral methods class information (eight items), choral methods instructor educational background (three items), choral methods instructor work experience (four items), content knowledge/skills responses (five items), pedagogical knowledge/skills responses (five items), pedagogical content knowledge/skills responses (five items), and teacher knowledge/skill prioritization (one item).

Pilot Testing Procedures

Two main goals underlie the questionnaire piloting and revision process – maximizing psychometric quality (content validity and reliability) and maintaining instrument integrity when transferring the questionnaire to a web-based platform. Questionnaire drafts with varying combinations of institutional demographics, instructor and class information, and knowledge and skill emphases were explored. I received valuable feedback from my committee at the time of

the dissertation proposal defense, and with my advisor, sought to refine and truncate the instrument. Three experienced music teacher educators with extensive K-12 music teaching experience (in general, instrumental and choral music areas) were invited to complete and review the pilot questionnaire through *SurveyMonkey.com.* Pilot study experts provided feedback about estimated completion time, identified potentially confusing item stems and response formats, and made additional suggestions for improving the questionnaire design and format.

Initially there were 38 items, and though the average completion time during piloting was eight minutes, pilot study experts expressed some concern about the degree to which the typical choral methods course instructors might be aware of specific institutional/course information or familiar with questionnaire terminology specific to Shulman's teacher knowledge framework. Lack of awareness or familiarity could dissuade certain instructors from participating, cause them to abandon the questionnaire before completing it, or extend the completion time by a considerable amount. For a few items, clarity of wording and response formats also was considered problematic. As a result, each of the pilot questionnaire items was reviewed while referencing expert feedback.

Some items highlighted by the experts were retained in original form, but many were modified or deleted. All institutional demographic items from the pilot study, for example, were included verbatim in the final version. Three course related items that addressed the year in school during which choral methods is typically taken and the nature of any prerequisites were not considered central to the research questions at hand and therefore deleted. Three additional items used to report how *effective* instructors were in developing different types of music teacher knowledge/skill within the choral methods class also were discarded because of the concern that instructors would exhibit self-report or social desirability bias and have difficulty providing

objective self-evaluative assessments. In order to improve clarity, reduce measurement error and enhance questionnaire reliability, operational definitions for CK, PK and PCK that appeared at the beginning of the three main teacher knowledge/skill sections were revised, as well as the item stems for several course and instructor information questions. Finally, illustrative examples (e.g., using warm-ups to introduce new repertoire concepts) were attached to specific items (e.g., music teaching techniques knowledge) representing the three categories of music teaching knowledge/skill (e.g. PCK) to assist study participants in associating higher level concepts and terminology with specific and practical classroom applications.

To establish the content validity of teacher knowledge/skill items, a panel of three music teacher education faculty representing different institutions (one of whom was a choral expert) reviewed a randomized list of the 22 items. Based upon CK, PK and PCK conceptual definitions provided, panelists categorized each item. Panelists' decisions were paired, and for all 66 paired comparisons (three possible categorization agreements per item), panelists agreed 91% of the time. There was perfect agreement for all eight of the CK items, six of the seven PK items, and five of the seven PCK items. The degree to which panelists' item classifications were in agreement provides reasonable evidence of content validity for the items used to measure choral music teacher knowledge/skill emphasis.

Final Choral Methods Instructor Inventory (CMII) Instrument

The final version of the Choral Methods Instructor Inventory (see Appendix B) includes 32 items organized into eight sections as follows: I – *Institutional Demographics* (items one through seven); II – *Choral Methods Class Information* (items eight through twelve); III – *Choral Methods Instructor* (CMI) *Educational Background* (items 13 – 15); IV – *CMI Work Experience* (items 16-19); V – *Content Knowledge/Skills* (items 20-23); VI - *Pedagogical*

Knowledge/Skills (items 24-27); VII - *Pedagogical Content Knowledge/Skills* (items 28-31); and VIII – *Knowledge/Skill Priorities in the Choral Methods Class* (item 32). Section IX provides participants the opportunity to enter a random drawing for a $20 amazon.com gift certificate, and invites them to share their contact information if they desire to participate in a follow-up study.

Items one through four (Section I) address institutional demographics (e.g. state location, type – private/public, level of degree(s) offered, and music student enrollment) and help determine the representativeness of the respondent sample in relation to the target population of NASM-accredited music schools. Items five through seven serve to verify if the institution offers a secondary choral methods class, and if so, the instructor of record.

Items eight through twelve (Section II) are used to gather information about the choral methods class (e.g. credits needed for degree completion, credits earned for course completion; and concurrent field experience requirements). Items 13-15 (Section III) pertain to the choral methods instructors and their backgrounds (gender/sex, degree major at each level, and major applied study area). Items 16-19 (Section IV) collect data regarding the methods course instructors' faculty position (academic rank, departmental or area in which the largest proportion of their teaching load resides), their choral music teaching experience (elementary, middle school, high school and collegiate levels) and their experience teaching a choral methods class.

Sections V, VI and VII consist of parallel item sets corresponding to the three categories/types of choral music teacher knowledge/skill (CK, PK, PCK). Through a series of items that use a 6-point scale (1 = *no emphasis,* 6 = *heavy emphasis*), instructors indicate the degree to which they emphasize CK, PK or PCK in the choral methods class. Content Knowledge/Skills (CK) categories address: Aural Perception Skills, Composition/ Arrangement Skills, Conducting Skills, Musical Creativity, Music History Knowledge, Music Theory

Knowledge, Performance Skills, and Piano Accompaniment Skills. Pedagogical Knowledge/Skills (PK) items include - Knowledge of Education Purposes/Values, Knowledge of Learner Characteristics, Nonverbal Communication, Organizing/Managing the Learning Environment, Planning for Effective Learning, Responding to Student Needs, and Utilizing Varied Instructional Strategies. Finally, Pedagogical Content Knowledge/Skills (PCK) examples encompass Choral Ensemble Diagnostic Skill, Knowledge of the Voice, Music Concept Explanation/Demonstration Skill, Music Curriculum Implementation Skill, Music Learning Assessment Knowledge, and Music Teaching Techniques Knowledge.

After respondents answer the CK/PK/PCK emphasis questions, they are prompted to respond to a 5-point scale item (1 = *not at all important*, 5 = *critically important*) to indicate how important they believe the development of CK, PK and PCK is to their students' future success as choral music educators. Then, two questions with open ended response options allow instructors to describe a specific assignment and/or instructional strategy utilized within the class to develop CK/PK/PCK, and share information regarding challenges they face.

For Item 32 (Section VIII), participants are asked to indicate which of the three broad knowledge/skill areas received the highest, the middle, or the lowest priority in their choral methods class. The final version of the CMII appears in Appendix B.

CITI Training and IRB Approval

After defending the dissertation proposal on January 30, 2012, I completed the Collaborative Institutional Training Incentive (CITI) on-line course on February 15, 2012. The instrument development, discussions, and revisions described above continued throughout the months of March, April, and early May when the final questionnaire version had been

completed. Subsequently, Internal Review Board (IRB) approval was received (Protocol # 12-0237) on May 11, 2012, and the survey was launched on May 16, 2012.

Sampling Method and Study Participants

The target population for this investigation was undergraduate choral methods course instructors at NASM-accredited institutions throughout the United States. Because this population cannot be readily identified, a multi-step sampling process was employed. First, the NASM website (http://nasm.arts-accredit.org) was reviewed and accredited music schools that offer an undergraduate degree in choral music education (or the equivalent music degree leading to teacher licensure) were identified. A preliminary search revealed a potential pool of 504 such schools with the name and contact information for the designated music administrator. Two of those schools, my employer and doctoral degree granting institution, were removed from this pool leaving 502 schools.

Second, music administrators at those institutions were sent an email requesting contact information for the individual who, to the best of their knowledge, taught the undergraduate choral methods course (see Appendix C).

Third, if music administrators were unable to provide this information or failed to respond to the email inquiry, the faculty biography section of the institution's music unit website was reviewed in an effort to identify the person who most likely taught the choral methods class. When a choral methods instructor could not be identified, the director of choral activities received the invitation to participate. Contact information for potential study participants was recorded in the CMII database (see Appendix D).

As a final step, choral methods course instructors at the 502 NASM-accredited institutions were invited, via email, to participate in the study. These instructors represented a

universe or population sample in the sense that the goal was to secure participation from all eligible choral methods instructors, rather than a smaller, more selective or restrictive sample. The multi-step sampling process described above is depicted in Figure 3.1.

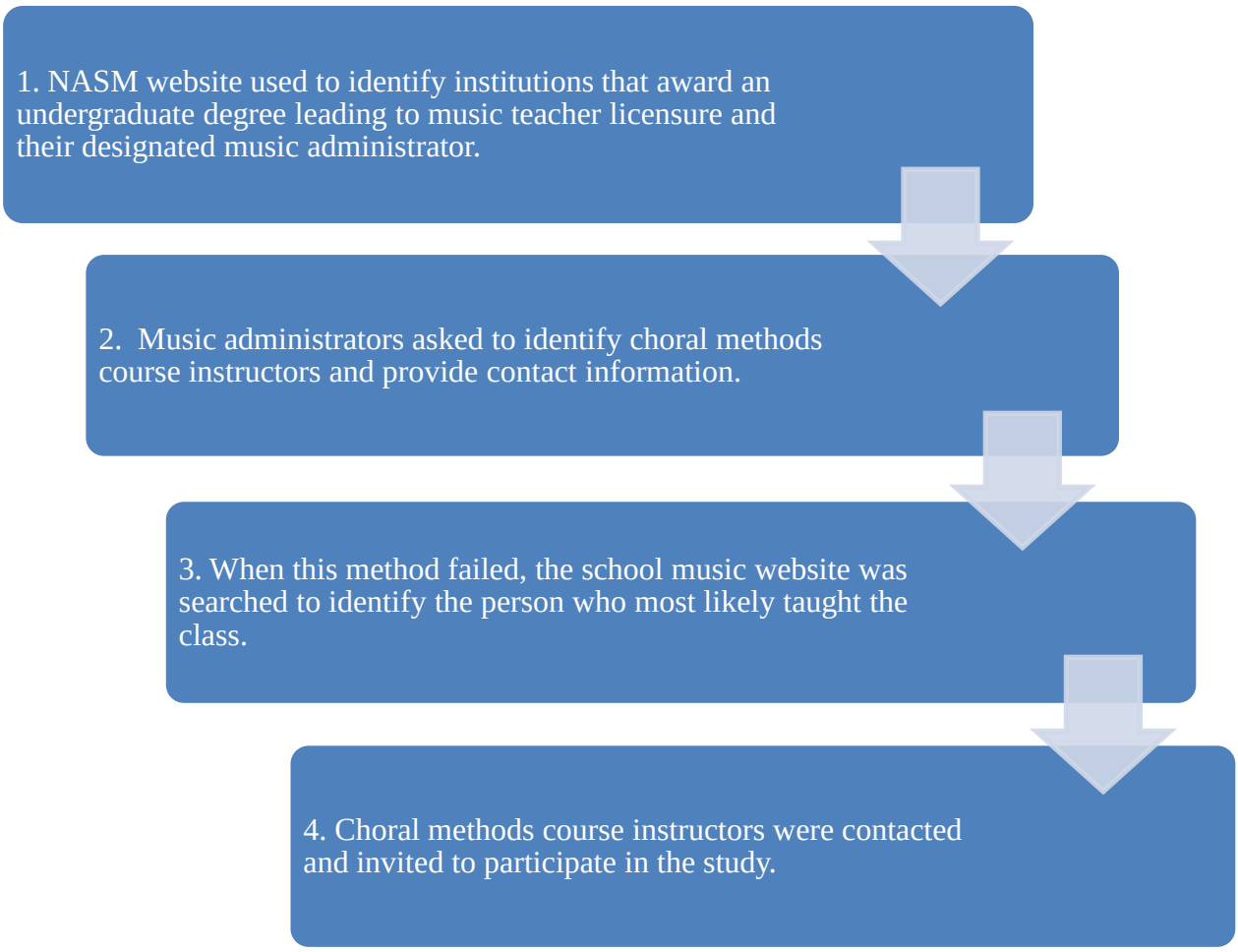

Figure 3.1. The Flowchart Representing the Multi-Step Sampling Process Employed.

Survey Procedures

A four-step contact process, as recommended by web survey experts (Kennedy, *et al.*, 2000; Schaefer & Dillman, 1998; Schmidt, *et al.*, 2006), was used to launch the survey and maximize response rates, though this process was modified after step four by extending the data collection window. First, an email (see Appendix E) was sent one day prior (May 15, 2012) to

the survey launch date notifying potential participants that they would be receiving a request to complete an on-line questionnaire. Brief information was highlighted regarding the dissertation topic, the estimated time required for their responses, how individuals would benefit from completing the instrument, the response deadline, and study details to be addressed in the forthcoming cover letter.

Step two involved dissemination of the cover letter (which addressed informed consent provisions) and questionnaire via *SurveyMonkey.com* on May 16, 2012. The cover letter (see Appendix F) contained statements that addressed the following: the nature and importance of the study, contact information, expected benefits to participants and the professional community, and directions for accessing the questionnaire. The option to complete the questionnaire via standard mail using a paper-and-pencil format was extended, but no participants used this method. To motivate potential participants to respond, a $20 gift certificate to amazon.com was randomly awarded to five individuals who completed the questionnaire at the conclusion of the study. Email recipients were prompted to provide the name and contact information of the person who taught the choral methods class at their institution in case they had erroneously received the invitation to participate. Additionally, invitees were notified that consent to participate began upon entering the on-line survey, but they could opt out without penalty.

Third, a reminder to complete the questionnaire was sent six days later on May 22, 2012. A unique *SurveyMonkey.com* feature invited only those individuals who had not yet responded to the first request, thereby omitting any invitation duplication for those individuals who had already replied. The final invitation to participate was sent on May 29, 2012, 48 hours before the closing date - May 31, 2012. As part of these follow-up emails, which comprised the third and fourth stages of the contact process, potential participants were reminded of the opportunity to

receive study results and the chance to win one of five $20 amazon.com gift certificates. Those participants requesting study results and consideration for a gift certificate were asked to provide their contact information after they had completed the questionnaire.

At the conclusion of the fourth stage and in consultation with my advisor, it was determined that additional responses (beyond the 188 responses already received) would strengthen the statistical analysis, enhance generalizability, and reduce sampling error. As such, an extended window for data collection was opened. A modified cover letter was sent on June 2nd urging participants to complete the on-line questionnaire by the new deadline of June 8th. During this extended response window, personal emails were also sent to groups of individuals who had started but failed to complete the questionnaire in hopes of reducing the amount of missing data. Two days prior (June 6th, 2012) to the extended deadline, participants were reminded of the closing date and again urged to complete the on-line questionnaire (see Table 3.1 for Timeline).

It was anticipated that not all invitees would have been accurately identified as belonging to the target population (i.e., choral methods course instructors). To help control for potentially biased or inaccurate responses from individuals who did not teach the course, or from individuals whose institutions did not offer the course, prompts or *filtering* questions were built into the invitation and questionnaire design. First, the cover letter contained a prompt for the person receiving the invitation to supply the name and contact information of the person who did teach the course. Second, the fifth questionnaire item provided the participant the opportunity to identify whether or not their institution taught a secondary stand-alone choral methods class, and if the person indicated *no*, they were funneled to the completion page and thanked for their responses to the institutional demographic items. Third, if the person answered *yes* to item five,

item six required them to indicate whether they taught the secondary stand-alone choral methods course. Those who answered *yes* continued the survey, but those who answered *no* were prompted to provide the name and contact information of the person who did. To further improve the response rate, short and creative/descriptive email subject-line headings were used, the URL link was embedded into the invitation, and a progress indicator was incorporated.

Data Collection and Analysis

Data collected through *SurveyMonkey.com* were downloaded and converted to a Statistical Package for the Social Sciences (SPSS) data file. The SPSS version 17.0 and the *SurveyMonkey* Gold version, which allowed for SPSS data integration, were utilized to analyze the data. Basic statistics (frequencies such as cross-tabulation, percentages, means, and standard deviations) and graphics (tables and figures), chi-square tests, simple correlation analyses, factor analysis and univariate analyses of variance (ANOVA) were employed to address the research questions. Open-ended items, which provided additional insight regarding participant responses to instructional emphasis items, were reviewed and common themes identified.

Timeline

The dissertation proposal was submitted on January 20, 2012 and defended on January 30th. Between January 30 and May 16, 2012 substantive changes to the research methodology and questionnaire design were made, IRB exempt approval was obtained (Appendix G), and pilot testing was completed. An introductory email was sent on May 15, 2012 to 502 individuals. The 24 day survey window ran from May 16th to June 8th; and follow-up invitations were e-delivered on May 22nd, and 29th. A survey extension notice was e-mailed on June 2nd with a final invitation reminder sent on June 6th with a June 8, 2012 data collection ending date.

Once the responses were collected, data were downloaded and converted into SPSS. Data analyses were conducted from June 8th to 15th. Table 3.1 presents a summary of the timeline.

Table 3.1 Dissertation Timeline

	Actual Dates
Submission of Proposed Study, Chapters 1-3	Jan. 20, 2012
Defense and Changes to Proposed Study	Jan. 30 – May 15, 2012
IRB Approval/Pilot Testing	May 7-11, 2012
Preliminary Email sent	May 15, 2012
CMII Questionnaire Distributions	May 16-June 8, 2012
Survey Invitation #1	May 16
Survey Invitation #2	May 22
Survey Invitation #3 (48 hours left)	May 29
Survey Extended Invitation	June 2
Survey Extended Invitation #2 (48 hours left)	June 6
Data Collection Window of 24 days Closes	June 8
Data Analysis	June 8-June 15, 2012

CHAPTER IV

RESULTS

After pilot testing, refining items and establishing content validity for the Choral Methods Instructor Inventory (CMII), instructors at NASM-accredited institutions were surveyed to determine how choral methods courses are structured and situated within the undergraduate choral music education curriculum, and which facets of teacher knowledge (CK, PK, PCK) are emphasized in the choral methods course. Relationships among course, instructor, and teacher knowledge variables also were explored. A total of 242 music faculty responded to five questions pertaining to institutional demographic information and 161 completed the CMII for purposes of statistical analysis. Additionally, 79 respondents indicated they would be willing to participate in a follow-up interview study.

Sample and Institutional Demographics

For the 2011-2012 academic year, there were 504 NASM-accredited institutions identified that offered an undergraduate degree leading to a music teaching license and that formed the potential pool from which choral methods instructors were to be surveyed. Two schools, associated with my dissertation institution and employer, were eliminated from the population. It was anticipated that not all of the remaining 502 NASM-accredited schools offered a stand-alone secondary choral methods course or had a course instructor available to complete the questionnaire. Nonetheless, the person most likely to teach the course, or the music administrator (when the instructor could not be identified), received an invitation to participate. After sending out 502 invitations, twelve institutions were not accessible due to position vacancy, sabbatical, undeliverable email, and inability to receive a *surveymonkey.com* invitation. This left an accessible population of 490 potential secondary choral methods instructors.

Of the 490 individuals successfully invited to participate in the study, 242 (49%) responded to Section I items that address institutional demographics. Of the 242 respondents, 60 (25%) indicated that a stand-alone secondary choral methods course was not offered at their institution and an additional thirteen reported that while such a course did exist, they were not the instructor of record. Eight methods course instructors started the questionnaire but did not complete it – they dropped out before responding to the critical items that measured their emphasis of various types of choral music teacher knowledge/skill. That resulted in a total of 161 study participants. Given the proportion (75%) of respondents who reported that a choral methods course was actually offered at their institution, it was estimated that the rate of participation for choral methods course instructors was roughly 43% (161 instructors out of 376, assuming that the respondent proportions would hold true for the accessible population) with a sampling error of approximately +/- 6% (see Table 4.1).

Table 4.1

Population-to-Participants Progression

NASM Schools Eligible for the Study	502
Accessible Population	490
Study Respondents (Demographic Responses only)	242
Demographic Responses & Choral Methods Class Offered	182
Study Participants (CM Instructors Completing the CMII)	**161**

Note. Bolded information reflects the total number of completed questionnaires.

State/District/Territory Representation

NASM-accredited institutions that offered an undergraduate degree leading to a music teaching license during the 2011-12 academic year were situated in the District of Columbia (n = 2) and Puerto Rico (n = 1), and all but two states (Hawaii and Vermont). With the exception of

Delaware, Montana and Wyoming, institutions from every state/district/territory that offered a music degree leading to a teaching license were represented by the 242 respondents.

Institution Type – Private/Public

Of the 502 NASM-accredited schools in the study population that offer an undergraduate degree leading to a music teaching license, 215 (43%) are within private institutions and 287 (57%) reside in public institutions. Of the 242 respondents, 87 (36%) worked at private schools and 155 (64%) at public schools. A 2x2 chi-square test was used to determine if the respondent sample was representative of the study population with respect to institution type. The proportion of private and public institutions in the population and respondent sample were not significantly different ($\chi^2 = 2.93$, $p = .09$).

Music Degrees Offered

The 242 respondents were asked to indicate the level(s) at which music degrees are offered at their institution. Collectively, 107 (44%) institutions offer only baccalaureate degrees in music, 95 (39%) offer both bachelor's and master's degrees, and 40 (17%) offer music degrees through the doctoral level.

Student Enrollments

Respondents were also asked to report the number of music majors (all levels) at their institution. A total of 36 (15%) institutions enroll 401 or more music majors; 49 institutions (20%) have 201-400 music majors enrolled; 66 (27%) have 101-200 music majors; and 91 (38%) reported an enrollment of 100 or fewer music majors. Additionally, respondents were asked to provide information as to the number of undergraduate music education majors (see Table 4.2), and the number of choral music education majors (see Table 4.3). Music education major

enrollments at private institutions are noticeably smaller than at public institutions, and a similar (though less pronounced) pattern is evident for the choral music education major subgroup.

Table 4.2

Undergraduate Music Education Major Enrollment

	1-50	51-100	101-200	201+	Total
Private	63 (72%)	16 (18%)	5 (6%)	3 (4%)	87
Public	50 (32%)	59 (38%)	34 (22%)	12 (8%)	155
Total	**113 (47%)**	**75 (31%)**	**39 (16%)**	**15 (6%)**	**242**

Note. Bolded information reflects aggregate responses.

Table 4.3

Undergraduate Choral Music Education Major Enrollment

	1-25	26-50	51-100	101+	Total
Private	72 (83%)	11 (13%)	2 (2%)	2 (2%)	87
Public	88 (57%)	48 (31%)	16 (10%)	3 (2%)	155
Total	**160 (66%)**	**59 (24%)**	**18 (7%)**	**5 (2%)**	**242**

Note. Bolded information reflects aggregate responses.

Credit Hours for Degree Completion

For respondents working at institutions on the semester system providing an estimate (N = 141), the average number of credit hours required to complete a music degree leading to a teaching license is 133 (SD = 9), and this figure was the same (rounded to the nearest integer) for both public and private institutions. Interpretable credit hour estimates were not provided by the five participants who indicated being on the quarter system, or the three instructors reporting that teacher licensure at their institution was linked to the completion of a 5-year degree program.

Choral Methods Class Information

Study participants, who are the instructors of record (N = 161), were asked whether the choral methods class is taught in a single term (semester/quarter/trimester) or multi-term

configuration. In the vast majority of cases (n = 128, 80%), the choral methods course is taught as a one semester course, and the next most common configuration is two semesters (n = 25, 15%). Only three participants (2%) reported that choral methods is taught over three semesters, and in just five cases (3%) was the course configured in quarters or trimesters.

Instructors also reported the number of semester/quarter credit hours students earn after completing the class. The most common response was three (3) semester credits (n = 67 or 42%), followed by two (2) semester credits (n = 51 or 32%), and then four (4) semester credits (n = 18 or 11 %). Other credit categories (1, 5 or 6 semester credits, or the quarter system) totaled 25 or 16% of the responses. The mean number of semester credit hours for all schools is 2.91.

Concurrent Field Experience

A total of 98 (61%) participants indicated that students are required to complete a field experience concurrent with the choral methods class. Among private institutions the number is 23 (50%) and among public institutions it is 75 (65%). On average, students assigned to field experiences complete 24.66 hours (SD = 27.53) in one or more school settings. Participants from private institutions reported a mean of 29.91 hours (SD = 39.06); whereas participants from public institutions reported a mean of 22.91 hours (SD = 22.54). Though choral methods course instructors from public institutions are more likely to require the concurrent field experience, private school instructors require more clock hours for their field experiences.

Several participants (n = 46) provided an explanation regarding the concurrent field experience requirement. One participant stated that "Freshmen and Sophomores complete 90 hours of field experience prior to the methods classes. Juniors and Seniors complete another 95 hours for a total of 185 hours of field experience prior to student-teaching." Another indicated that "Students are placed in a field experience, but because Instrumental and Choral Music

Methods are taught in the same semester, and because we certify teachers K-12 Music, students are placed in an opposite area field experience during that semester. In other words, students whose applied area is voice teach in an instrumental setting." At five institutions, music education students' field experiences are managed by faculty within an education department/school.

Choral Methods Instructor Background

Of the 160 instructors who responded to the item asking them to specify their gender, 89 (56%) self-identified as male and 71 (44%) as female. At private institutions, almost two-thirds (65%) of the instructors were male, while at public institutions the proportion of male choral methods class instructors (52%) was just slightly more than the proportion of female instructors.

Degrees Earned and Primary Area(s) of Study

While a vast majority (*n* =129, 80%) of instructors earned an undergraduate degree in music education, graduate level degree concentrations were varied. Most (*n* = 66, 41%) individuals earned their master's degree in choral conducting, with music education (*n* = 58, 36%) being the second most common area of study followed by vocal performance (*n* = 14, 9%). Only four choral methods instructors (2%) had not yet earned a master's degree (see Table 4.4).

Table 4.4

Master's Degree Area for Choral Music Education Faculty

	Music Education	Choral Conducting	Vocal Performance	Other(s)	None - Not Yet	Total
Private	8 (17%)	24 (52%)	5 (11%)	8 (17%)	1 (2%)	46
Public	50 (44%)	42 (37%)	9 (8%)	11 (10%)	3 2%)	115
Total	**58 (36%)**	**66 (41%)**	**14 (9%)**	**19 (12%)**	**4 (3%)**	**161**

Note. Bolded information reflects aggregate responses.

Twenty (12%) instructors had not yet earned a doctorate degree. Of those who had, the primary areas of study tended to be either music education (*n* = 70, 44%) or choral conducting (*n* = 61, 38%). Other reported (*n* = 10, 6%) doctoral study areas included music education and choral conducting combined, vocal performance, church/sacred music, music composition, comparative studies and curriculum & instruction. While just over one-half (51%) of instructors at public institutions had earned a doctorate in music education, the largest proportion (48%) of private institution instructors held a doctorate in choral conducting (see Table 4.5).

Table 4.5

Doctoral Degree Area for Choral Music Education Faculty

	Music Education	Choral Conducting	Vocal Performance	Other	None - Not Yet	Total
Private	11 (24%)	22 (48%)	0 (0%)	4 (9%)	9 (20%)	46
Public	59 (51%)	39 (34%)	2 (2%)	4 (3%)	11 (10%)	115
Total	**70 (44%)**	**61 (38%)**	**2 (1%)**	**8 (5%)**	**20 (12%)**	**161**

Note. Bolded information reflects aggregate responses.

Primary Applied Area

Not surprisingly, voice (*n* = 122, 76%) was the most commonly reported primary applied area followed by piano (*n* = 24, 15%). Additionally, three choral methods instructors indicated that their major applied area was voice in conjunction with either conducting (*n* = 1), piano (*n* = 1) or horn (*n* = 1). Other primary applied areas included conducting (*n* = 4), organ (*n* = 2), strings (*n* = 2), trumpet (*n* = 1), and percussion (*n* = 1).

Choral Methods Instructor Job Status and Work Experience

Overall, there were relatively equal proportions of choral methods course instructors at the academic ranks of professor (*n* = 43, 27%), associate professor (*n* = 50, 31%), and assistant professor (*n* = 56, 35%). Only a few participants reported their rank as lecturer/instructor (*n* = 7,

4%) or other (*n* = 4, 3%), which included an adjunct professor, a professor emeritus, a visiting professor, and one individual without an academic rank.

Music Education was cited by 75 (47%) choral methods course instructors as the department/area in which the greatest proportion of their teaching load resided. Choral Conducting also was a department/area in which many (*n* = 62, 39%) choral methods course instructors experienced their heaviest teaching load. A small number (*n* = 8, 5%) of instructors indicated that their teaching load was split evenly between music education and choral conducting, and the other cases (*n* = 6, 4%) reported that their teaching load was primarily in applied voice or theory and aural skills.

Experience Teaching Choral Music

Choral methods instructors reported choral music teaching experience at various instructional levels – elementary, middle school/junior high, high school, and college/university – with increasing involvement with older students (see Table 4.6).

Table 4.6

Choral Music Teaching Experience at Each Level (N = 161)

	M	*SD*
Elementary	2.67	4.59
MS/Jr High	4.27	5.10
High School	6.29	6.86
College	12.84	9.13

On average, choral methods instructors' teaching careers span 26 years, with roughly equal amounts of experience in K-12 and higher education settings. The amount of teaching experience at each instructional level, however, varies extensively. Choral music teaching experience ranged from 0 to 30 years at the elementary level, 0 to 31 years at the middle school/junior high level, 0 to 40 years at the high school level, and 1 to 41 years at the

college/university level. At the low end of the experience spectrum, six individuals reported being in their first year of college teaching; 82 (51%) instructors had never taught elementary school music; 44 (27%) had never taught middle school/junior high school; 26 (16%) had never taught high school; and 11 (7%) had no K-12 music teaching experience.

Experience Teaching Choral Methods

Participants also were asked to report the number of years they had taught undergraduate choral methods. Responses ranged from one semester to thirty years, with the median amount of experience being 8 years. Overall, 40% (n = 67) reported having taught the secondary choral methods course 10 or more years.

Music Teacher Knowledge and Skill: Instructional Emphasis Ratings

Of all of the items included in the Choral Methods Instructor Inventory (CMII), those designed to measure the degree to which choral methods instructors emphasize various types of music teacher knowledge and skill (see Sections V, VI and VII in Appendix B) provide the greatest insights as to how future choral music educators are being prepared. While referencing knowledge/skill examples within each of the three main categories (CK, PK, PCK), study participants reported the amount of emphasis (*no, little, some, moderate, considerable, heavy*) given to each knowledge/skill facet as reflected in instructional time and assessment weight. In the sections that follow, response option frequencies for *Content Knowledge/Skill* (CK) items, *Pedagogical Knowledge/Skill* (PK) items and *Pedagogical Content Knowledge/Skill* (PCK) items will be summarized separately. Then, means and standard deviations for all items, and reliability estimates for the three subscales (corresponding to CK, PK and PCK) will be reported. Finally, factor analysis results for instructional emphasis ratings are presented.

Content Knowledge/Skill (CK)

Of the various facets of content knowledge/skill presented to participants, those for which the greatest proportion of methods instructors reported *moderate*, *considerable* or *heavy emphasis* included Conducting Skills (69%), Aural Perception Skills (65%), and Performance Skills (60%). By contrast, musical creativity and music composition were emphasized to a *moderate* degree or more by only 22% and 21% of instructors respectively (see Table 4.7).

Table 4.7

Emphasis Ratings for Specific Facets of Content Knowledge/Skills (N = 161)

	No	Little	Some	Moderate	Considerable	Heavy
Performance	11 (7%)	28 (17%)	26 (16%)	**45 (28%)**	33 (21%)	18 (11%)
Creativity	28 (17%)	**66 (41%)**	32 (20%)	21 (13%)	11 (7%)	3 (2%)
Conducting	10 (6%)	15 (9%)	25 (16%)	41 (26%)	**49 (30%)**	21 (13%)
Aural Perception	3 (2%)	20 (12%)	32 (20%)	**44 (27%)**	**44 (27%)**	18 (11%)
Composition	39 (24%)	**56 (35%)**	33 (21%)	22 (14%)	8 (5%)	3 (2%)
Music History	5 (3%)	26 (16%)	38 (24%)	**51 (32%)**	33 (21%)	8 (5%)
Music Theory	11 (7%)	32 (20%)	**51 (32%)**	42 (26%)	19 (12%)	6 (4%)
Piano Acc.	15 (9%)	34 (21%)	32 (20%)	**39 (24%)**	33 (21%)	8 (5%)

Note. Bolded information reflects the emphasis rating selected most often.

Pedagogical Knowledge/Skill (PK)

Every facet of pedagogical knowledge/skill was rated as being given at least a *moderate* degree of emphasis by 80% of course instructors (see Table 4.8). In order of emphasis (proportion of instructors reporting *moderate, considerable* or *heavy* emphasis), the PK facets are: Skill in Utilizing Varied Instructional Strategies (94%), Skill in Planning for Effective Learning (91%), Knowledge of Learner Characteristics (88%), Skill in Responding to Student

Needs and Nonverbal Communication Skills (84% each), and Knowledge of Educational Purpose and Skill in Organizing and Managing the Learning Environment (83% each).

Table 4.8

Emphasis Ratings for Specific Facets of Pedagogical Knowledge/Skills (N = 161)

	No	Little	Some	Moderate	Considerable	Heavy
Learner Characteristics	0 (0%)	4 (3%)	15 (9%)	39 (24%)	**71 (44%)**	32 (20%)
Education Purpose	0 (0%)	4 (3%)	22 (14%)	41 (25%)	**58 (36%)**	36 (22%)
Respond to Students' Needs	0 (0%)	5 (3%)	20 (12%)	49 (30%)	**66 (41%)**	21 (13%)
Plan for Effective Learning	0 (0%)	2 (1%)	13 (8%)	29 (18%)	**66 (41%)**	51 (32%)
Manage Learning Environment	0 (0%)	1 (1%)	28 (17%)	51 (32%)	**54 (34%)**	27 (17%)
Varied Instr. Strategies	0 (0%)	1 (1%)	8 (5%)	29 (18%)	**63 (39%)**	60 (37%)
Nonverbal Communication	0 (0%)	6 (4%)	18 (11%)	35 (21%)	**70 (43%)**	32 (20%)

Note. Bolded information reflects the emphasis rating selected most often.

Pedagogical Content Knowledge/Skill (PCK)

Over 90% of choral methods instructors indicated that four of the seven facets of PCK were emphasized to a *moderate* extent or more. These facets include: Music Teaching Techniques Knowledge (95%); Music Concept Explanation/Demonstration Skill (92%); Knowledge of the Voice (92%); and Choral Ensemble Diagnostic Skill (92%) (see Table 4.9).

Table 4.9

Emphasis Ratings for Specific Facets of Pedagogical Content Knowledge/Skills (N = 161)

	No	Little	Some	Moderate	Considerable	Heavy
Music Teaching Techniques	0 (0%)	1 (1%)	6 (4%)	21 (13%)	**70 (43%)**	63 (39%)
Student Music Engagement	3 (2%)	11 (7%)	27(17%)	49 (30%)	**55 (34%)**	16 (10%)
Music Curriculum Implementation	4 (2%)	24 (15%)	38 (24%)	39 (24%)	**41 (26%)**	15 (9%)
Music Learning Assessment	2 (1%)	10 (6%)	28 (17%)	46 (29%)	**55 (34%)**	20 (12%)
Music Concept Explanation	1 (1%)	1 (1%)	10 (6%)	48 (30%)	**67 (41%)**	34 (21%)
Voice Knowledge	0 (0%)	1 (1%)	11 (7%)	26 (16%)	**70 (43%)**	53 (33%)
Choral Ensemble Diagnostic Skill	0 (0%)	3 (2%)	10 (6%)	28 (18%)	**60 (37%)**	**60 (37%)**

Note. Bolded information reflects the emphasis rating(s) selected most often.

Descriptive Statistics and Reliability Estimates for Teacher Knowledge/Skill Emphasis Ratings

Means and standard deviations for individual teacher knowledge/skill items, reflecting all responses (and not just emphasis ratings, as summarized in the three previous sections) are presented in Table 4.10. Specific facets of music teacher knowledge/skill that, on average, were considered to be most emphasized ($M > 5.0$) within the choral methods class include Music Teaching Techniques Knowledge (PCK), Skill in Utilizing Varied Instructional Strategies (PK), Choral Ensemble Diagnostic Skills (PCK), and Knowledge of the Voice (PCK). By contrast, several CK examples (composition/arrangement skills, musical creativity, music theory knowledge and piano accompaniment skills) were among the least emphasized ($M < 3.5$).

Overall, choral methods course instructors were more oriented toward developing their students' PK (grand mean = 4.71) and PCK (grand mean = 4.62) than their music CK (grand mean = 3.38). Reliability (internal consistency) estimates for subscales representing the three main categories of music teacher knowledge/skill were adequate (.76 for PCK) to strong (.81 for PK, .84 for CK).

Table 4.10

Means, Standard Deviations and Reliability Coefficients for Instructional Emphasis Ratings Assigned to Choral Music Teacher Knowledge/Skill Items (N = 161)

SUBSCALE/ITEM	MEAN	SD	ALPHA
Content Knowledge (8 items)	**3.38**	**1.30**	**.84**
Conducting Skills	4.04	1.39	
Aural Perception Skills	3.99	1.26	
Performance Skills	3.71	1.43	
Music History Knowledge	3.65	1.21	
Piano Accompaniment Skills	3.40	1.39	
Music Theory Knowledge	3.27	1.21	
Musical Creativity	2.57	1.22	
Composition/Arranging Skills	2.46	1.24	
Pedagogical Knowledge (7 items)	**4.71**	**0.98**	**.81**
Utilizing Varied Instructional Strategies	5.07	0.90	
Planning for Effective Learning	4.94	0.97	
Knowledge of Learner Characteristics	4.70	0.97	
Nonverbal Communication	4.67	1.04	
Knowledge of Education Purpose/Values	4.62	1.05	
Organizing/Managing the Learning Environment	4.48	0.98	
Responding to Student Needs	4.48	0.99	
Pedagogical Content Knowledge (7 items)	**4.62**	**1.05**	**.76**
Music Teaching Techniques Knowledge	5.17	0.84	
Choral Ensemble Diagnostic Skills	5.02	0.98	
Knowledge of the Voice	5.01	0.91	
Music Concept Explanation/Demonstration Skill	4.75	0.92	
Music Learning Assessment Knowledge	4.25	1.15	
Student-Music Engagement Skill	4.18	1.15	
Music Curriculum Implementation Skill	3.83	1.29	

Note. 1 = None, 2 = Little, 3 = Some, 4 = Moderate, 5 = Considerable, 6 = Heavy and bolded items denote CK, PK, PCK category emphasis ratings.

Factor Analysis for Teacher Knowledge/Skill Items (Emphasis Ratings)

To explore the construct validity of music teacher knowledge/skill as represented by instructional emphasis ratings, an exploratory factor analysis was conducted. Principal axis factoring with promax rotation resulted in a three-factor solution that accounted for 50% of the variance in instructional emphasis (Factor 1 – 29%, Factor 2 – 14%, Factor 3 – 7%). Factor 1 included all PK items as well as three PCK items (curriculum implementation, learning assessment, student engagement) that cross-loaded on Factor 1 and Factor 3. All CK items loaded on Factor 2. Factor 3 represented four of the seven PCK items. The factor structure may not-correspond perfectly to the *a priori* classification of music teacher knowledge/skill items because of sample size constraints - normally, when factor analyzing responses for 22 variables, 200-250 cases are needed to yield a clean and stable factor structure. Correlations among the three factors were positive and of modest to moderate magnitude (.52 for PCK and PK, .41 for PCK and CK, and .19 for PK and CK). These results provide some empirical evidence that PCK represents an amalgam of CK and PK; while CK and PK are more conceptually distinct (see Table 4.11).

Table 4.11

Factor Analysis Pattern Matrix for Choral Music Teacher Knowledge/Skill Items (N = 161)

Item	Factor 1	Factor 2	Factor 3
Responding to Student Needs (PK)	.705		
Knowledge of Learner Characteristics (PK)	.687		
Music Curriculum Implementation Skill (PCK)	.664		.453
Music Learning Assessment Knowledge (PCK)	.625		.356
Organizing/Managing the Learning Environment (PK)	.616		
Knowledge of Education Purpose/Values (PK)	.485		
Utilizing Varied Instructional Strategies (PK)	.452		
Planning for Effective Learning (PK)	.447		
Student-Music Engagement Skill (PCK)	.408		.320
Non-Verbal Communication (PK)	.392		.361
Performance Skills (CK)		. 711	
Music Theory Knowledge (CK)		.690	
Composition/Arrangement Skills (CK)		.632	
Music History Knowledge (CK)		.624	
Conducting Skills (CK)		.603	.328
Piano Accompaniment Skills (CK)		.590	
Aural Perception Skills (CK)		.534	.364
Musical Creativity (CK)		.502	
Music Concept Explanation/Demonstration Skill (PCK)			.822
Choral Ensemble Diagnostic Skill (PCK)			.623
Knowledge of the Voice (PCK)			.560
Music Teaching Techniques Knowledge (PCK)	.385		.466

Teacher Knowledge/Skill Importance Ratings

Using single item, 5-point scales, choral methods course instructors rated how important it is (*Not at all Important, Somewhat Important, Important, Very Important, Critically Important*) to develop each of the three main types of teacher knowledge and skill (CK, PK, PCK) so as to ensure that their students become successful choral music educators. Overall, instructors indicated that *Content Knowledge/Skills* (*M* = 4.47, *SD* = 0.59), *Pedagogical Knowledge/Skills* (*M* = 4.58, *SD* = 0.63) and *Pedagogical Content Knowledge/Skills* (*M* = 4.66, *SD* = 0.54) were all *very*-to-*critically important* elements of choral music teacher education (see Figure 4.1).

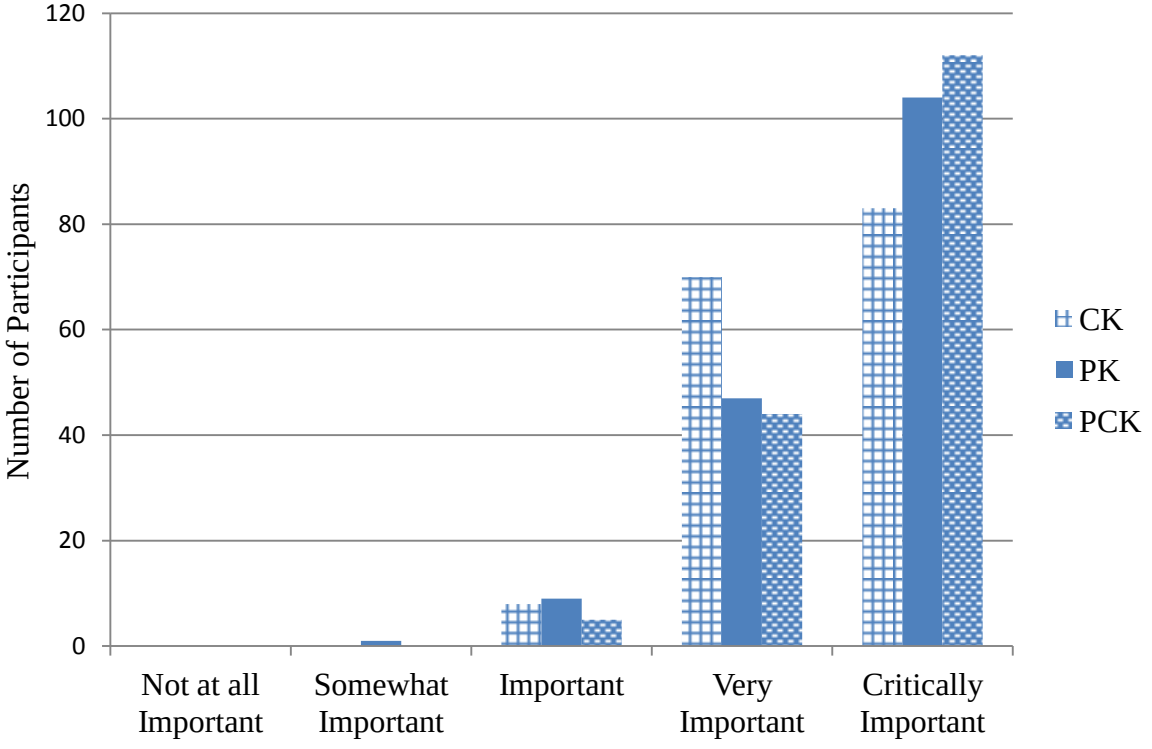

Figure 4.1. CK, PK & PCK Importance Ratings.

Correlational analysis was used to explore relationships between single-item importance ratings and composite emphasis ratings for the various facets of music teacher knowledge/skill (see Table 4.12). In general, the pattern of correlations shows that importance ratings are most strongly correlated with emphasis ratings within the same choral music teacher knowledge/skill area, which provides some evidence of convergent-divergent validity for the emphasis ratings. Moreover, instructors who view PCK development as being important also are inclined to emphasize the development of PK (r = .322) and CK (r = .236).

Table 4.12

Correlational Analysis for Importance Ratings and Instructional Emphasis Ratings (N = 161)

	CK Emphasis	PK Emphasis	PCK Emphasis
CK Importance	.384**	.132	.154
PK Importance	.012	.474**	.228*
PCK Importance	.236*	.322**	.430**

Teacher Knowledge/Skill Priorities

Near the end of the questionnaire, participants were asked to rank the three broad knowledge and skill categories (CK, PK, PCK) based upon the degree of priority given in their choral methods class. This ranking approach was intended to complement the rating scale approach used to elicit information about instructional emphasis and importance. Ninety-eight respondents (61%) indicated that *Pedagogical Content Knowledge/Skill* (PCK) received the highest priority. At the middle priority level, *Pedagogical Knowledge/Skill* (PK) received the most responses (*n* = 62, 39%). Finally, *Content Knowledge/Skill* (CK) was rated the lowest priority by 77 (48%) choral methods instructors (see Table 4.13).

Table 4.13

CK, PK & PCK Prioritization (N = 160)

	Content Knowledge		Pedagogical Knowledge		Pedagogical Content Knowledge	
	n	%	n	%	n	%
Lowest	**77**	**48**	70	44	13	8
Middle	49	31	**62**	**39**	49	31
Highest	34	21	28	18	**98**	**61**

Note. Bolded information reflects the CK, PK, PCK item with the most frequent number of responses at that priority level.

Variables Associated with Pedagogical Content Knowledge/Skill Emphasis

To identify course- and instructor-level variables that might be associated with *Pedagogical Content Knowledge* (PCK) emphasis, correlational analyses (Pearson *r*) were conducted for continuous variables and univariate analyses of variance (ANOVA) were run for categorical variables. The results, which are summarized in Table 4.14, indicate that there is a modest but significantly positive relationship between the number of credit hours assigned to the choral methods course and the degree to which PCK is emphasized. More specifically, with a greater number of credit hours and contact hours, the amount of emphasis on PCK development will likely increase. Other course characteristics – whether choral methods was offered in a single semester or multi-semester format, and whether or not a concurrent field experience was required, had no significant effect on PCK emphasis.

Significant group differences in PCK emphasis emerged for instructor gender, the major areas in which graduate degrees were earned, and the faculty department in which the instructor's greatest proportion of teaching load resides. It is important to note that the effect sizes (partial eta squared) associated with these significant group differences are rather small (less than .10) in terms of standard deviation units. So, when interpreting these outcomes, it is important to not overstate the magnitude or practical importance of any statistically significant differences, as they may be linked with sample size.

Female instructors (M = 33.07) tended to give greater emphasis to PCK development than male instructors (M = 31.45). With respect to graduate degree areas, instructors who earned a master's in music education (M = 33.40) emphasized PCK development to a greater extent than those earning a master's in vocal performance (M = 28.79). However, the amount of PCK emphasis associated with instructors earning a master's degree in choral conducting (M = 31.95)

or other music fields (M = 32.47) was not significantly different from that of instructors with a master's in music education. A marginally significant (p = .045) difference in PCK emphasis was evident for doctoral degree status. Instructors with a doctorate in music education (M = 33.58) emphasized PCK development more so than those with an earned doctorate in choral conducting (M = 31.46) or those with no doctorate (M = 30.50).

Table 4.14

Summary of Correlational Analysis and Analysis of Variance for Pedagogical Content Knowledge Emphasis and Major Course and Instructor Variables

Variables	Correlation		ANOVA	
	r	*p*	*F*	*p*
Course Characteristics				
Single/Multi Semesters			0.809	.370
Number Credit Hours	.20	.012*		
Field Experience Required			2.223	.138
Instructor Background				
Gender			5.069	.026*
Doctoral Degree Area			2.834	.045*
Master's Degree Area			4.277	.006**
Primary Applied Area			0.184	.832
Instructor Position				
Academic Rank			0.881	.452
Teaching Load Dept./Area			4.917	.008**
Instructor Choral Teaching Experience				
Elementary Years	.10	.206		
Middle School Years	-.08	.337		
High School Years	.01	.869		
College Years	-.10	.208		
Methods Course Years	-.07	.410		

Differences in PCK emphasis based on departmental affiliation separated instructors working primarily in music education (M = 33.37) from those working primarily in choral conducting (M = 31.00) or other music departments (M = 31.71). There were no group differences in PCK emphasis based on the instructor's primary applied area or academic rank. Moreover, the number of years of choral music teaching experience at various instructional levels, and the number of years of experience teaching a choral methods class had no relationship to PCK emphasis (median correlation = |.075|).

Developing CK, PK and PCK in the Choral Methods Class: Instructional Activities

Content Knowledge – Narrative Responses

Instructors were asked to describe an instructional activity or assignment implemented in the choral methods class designed specifically to develop music CK. While the 146 (91%) Choral Methods Instructors (CMI) responses provided a variety of answers, several activities mentioned were similar. The most common instructional activity cited was music *score study* (*n* = 39, 28%). One CMI shared that "I have the students prepare scores for rehearsal and identify what within that score they are teaching." Another conveyed that "students analyze a piece according to form, style, melody, harmony, rhythm, tempo, text, and tone (aural image/interpretation). This assignment requires them to apply their knowledge of music content and skills in preparation to teach a piece of music."

Several (*n* = 18 or 12%) reported that *leading vocal warm-ups* and *lesson planning* (*n* = 14 or 10%) were examples of instructional activities and assignments. One instructor who emphasizes both of these items said "Students create a custom warm-up linked to a piece of repertoire, write a lesson plan, and teach it to the class as if they were the choir…"

A final theme that emerged from the responses (*n* = 10 or 7%) was that CMIs did not stress CK in their choral methods class indicating that these knowledge and skill sets were developed elsewhere within the degree program. One respondent indicated:

> Much of my choral methods class is designed around classroom management, theory behind educational processes in the choral classroom, philosophies of education. Most music content knowledge and skills happen in other classes; i.e. advanced choral conducting, basic conducting, theory, sight singing, etc. I build upon those foundations…

Pedagogical Knowledge – Narrative Responses

Participants described an instructional activity or assignment implemented in the choral methods class designed specifically to develop *Pedagogical Knowledge/Skills* (PK). Again, a strong number (*n* = 137, 85%) of CMIs responded. The most common response theme was for students to develop lesson plans (*n* = 31 or 23%). One CMI said that the: "Lesson plan project…must demonstrate knowledge of NSAE, Kodaly, Bloom's Taxonomy, CMP, Theory of Multiple Intelligences, and learning styles." Another shared that "Students find articles on varied learning styles which they then summarize and share with their classmates. From these article summaries, they develop lesson plans that address varied learning styles and modes." One respondent provided an example of lesson planning with varied strategies to reach students. "As they progress through the curriculum, I require the students to utilize different teaching strategies each time they conduct in class. For example, one time they are required to teach via modeling. Another time, they are required to [teach] via guided practice, etc."

Writing a philosophy (*n* = 15 or 11%) was another prevalent response. This participant conveyed that: "Students submit a philosophy of choral teaching on the elementary level (first semester) and the secondary level (second semester). Prior to each class, discussion is held on

appropriate elements and the necessity of clarity and efficiency of expression (professional writing)." A final theme identified among PK answers, and also among CK responses above, dealt with teaching warm-ups (*n* =10, 7%). A CMI wrote: "I do an entire unit on the teaching, usage, and understanding of vocal warm-ups. In my opinion, one can teach a great deal about music and singing during the warm-up session. We talk about selecting vocalizes and then what to do with them to teach singing and musical skill."

Pedagogical Content Knowledge – Narrative Responses

Again, per open response, CMIs were asked to provide examples of PCK development through instructional activities or assignments. A total of 126 (78%) individuals provided textual answers describing how they emphasize PCK within their class. The most common theme, which was also previously cited under the CK and PK categories, was leading warm-ups (n = 38 or 30%). One CMI stated that: "I require each student to warm the class up several times throughout the year. At least one of the warm ups they employee has to be related to the piece they will be conducting that day. In other words, that warm up must help teach the piece." One participant shared the following:

> Members of the class are encouraged to develop piece-related warmups to lead in the ensembles which they sing. During four lab choir experiences, each student is expected to identify problems and implement at least one strategy to address them. Second semester culminates in the opportunity to select, prepare for performance, and conduct as part of a public concert of one of the existing collegiate choral ensembles.

Though not a specifically singular event, the previous examples portrays how this CMI attempts to stretch music teaching knowledge and skills over a period of time through connected assignments and activities.

The second most common activity identified was *practice teaching in choral settings* (*n* = 17 or 14%). One CMI shared that "Students are expected to implement their pedagogical knowledge in the lessons they teach both in the classroom and in the field experience." Another respondent explained that students:

> must take a piece and teach it in a lab setting from a) raw beginning, layering and varying activities to learn it; to b) a moderately learned piece, correcting errors and conducting expressively, diagnosing vocal problems of blend, balance, intonation, and syllabic stress, to c) polishing and performance level.

The above two categories represented 55 or 44% of responses, and while not the majority, represent a nexus of PCK instructional activity examples. The fact that choral methods instructors shared a wide variety of challenges, and that many of them could not be easily categorized, potentially reflects the unique and complex challenges these professionals face.

Developing CK, PK and PCK in the Choral Methods Class: Challenges

Content Knowledge – Narrative Responses

A robust number (*n* = 140, 87%) of participants provided textual descriptions explaining certain types of challenges faced in developing CK within their choral methods students. The two most common challenges were *lack of time* to cover all class topics and materials (*n* = 46, 33%) and students who had *insufficient piano skills* (*n*= 20, 15%). A CMI reported "Only having one semester and calling this course methods is difficult. I feel that we should offer a course where rehearsal is all that is done with a lab choir to practice on." Specific to student piano skills another CMI mentioned that "The students struggle with playing open score confidently while listening for incorrect pitches within parts." Another piano comment shared was that "Piano is the most challenging for students and me. I play well, but lack pedagogical

understanding with regards to how I can facilitate skill development." Finally, one respondent provided a unique response not aligned with those above and said that "Due to the mediocre state of secondary choral music in our area, most of our students have not seen high-powered programs. My challenge is raising their visions." This may reflect a belief that the choral director of highly respected programs is viewed as a content expert, and in absence of such programs, the methods instructor may feel the challenge of raising the vision of choral education excellence in students.

Pedagogical Knowledge – Narrative Responses

A strong number (n = 128, 80%) of CMIs shared their thoughts regarding the challenges of developing PK within their choral methods class. The most prevalent challenge cited, as in the CK category, was *lack of time* (n = 36 or 26%). Simply put, one responder said "Never, ever enough time" while another shared "Again, not enough time…We have so many other requirements that, in my opinion, crowd out this critically important area." Another challenge cited was the *lack of experience* in various areas such as writing lesson plans (n = 15, or 9%). One CMI expressed that:

> Students enter the class with little experience in writing detailed lesson plans for music classes. Many of their prior practicum experiences were not completed in music classes, but were rather in other classes (such as Spanish, Math, or even Shop classes)."

The challenges cited above, which were the two most common, represented only a little over one-third of participant responses, reflecting a large variety of comments that are not easy to categorize. While perhaps not directly related to PK, some of the other most common challenges cited were: student preparation, aural skills, error detection, and field experiences, which collectively make up another third of cited challenges.

Pedagogical Content Knowledge – Narrative Responses

Fewer (*n* = 106 or 66%) participants provided descriptions explaining certain types of challenges faced in developing PCK within their choral methods class. Like CK and PCK, *lack of time* was listed as the number one concern (*n* = 32 or 32%) for developing PCK. One CMI astutely typed in capitalized letters "THE BIGGEST CHALLENGE IS TIME. THE QUESTION IS NOT WHAT I SHOULD TEACH, THE BIGGER QUESTION IS WHAT MUST I LEAVE OUT. TEACHING INSTRUCTION METHODS FOR GRADES 6-12 IN A ONE SEMESTER CLASS IS THE CHALLENGE." Another said "Time. Both in terms of class time and amount of students needing to rotate through assignment cycles."

Lack of experience, again similar to the most CK and PK responses, was the second (*n* = 11 or 10%) most cited challenge for developing PCK. One CMI offered the following:

> Many choral music ed students in our program simply do not have enough experience with ensembles outside of their own high school or college experience. Consequently, they arrive with only one approach (or they are introduced in college to one approach) to the performance of choral music, often assuming that the one way with which they are familiar is the best/only way.

While not expressly citing the word experience in their text, two CMIs shared that real world or authentic teaching/learning situations were an integral part of developing PCK, but were not always available for students. One CMI provided an insightful description:

> All these activities are worthwhile, but have only limited value since they are prepared in a class setting with other college students. Much of this information only becomes valid to my students when they begin student teaching and actually need/use the information.

Finding authentic teaching-learning situations is a concern for choral methods faculty.

CHAPTER V

DISCUSSION

Music instructors representing 490 NASM-accredited schools that offered a music education degree leading to teacher licensure in the 2011-2012 school year were invited to complete the Choral Methods Instructor Inventory (CMII) in an online format. A total of 242 individuals responded to the invitation and completed the institutional demographics section of the questionnaire, but 25% indicated their school did not offer the choral methods class. This left a pool of 376 eligible participants of which161 choral methods instructors from nearly all 50 states and the District of Columbia and Territory of Puerto Rico completed the CMII, and 79 indicated they would be willing to participate in a follow-up study. The 43% (161 instructors out of 376) CMII completion rate exceeds typical rates associated with web-based survey formats, and study participants represent a sizable population whose responses provide significant contributions for the choral teacher education profession. In this chapter I will summarize the primary findings, discuss major themes, highlight implications for choral teacher educators, and provide suggestions for further research.

Summary of Primary Findings

Research Question #1 - How are choral methods courses configured with respect to number of semesters of study, credit hours awarded, and concurrent field experience requirements?

The choral methods class is taught in three out of four (75%) NASM-accredited schools offering an undergraduate degree leading to teacher licensure. Within the 133 semester credit hour degree average, it is typically taught as a one semester course for two or three credits. A concurrent field experience is required at six of every ten (61%) institutions, with the proportion being higher at public institutions (65%) as compared to private institutions (50%), and for those requiring a field experience, 25 contact hours is the norm.

Research Question #2 - Who are the instructors responsible for teaching choral methods courses, in terms of their gender, applied music specialty, major areas and levels of prior education, prior choral music teaching experience, current academic rank, departmental affiliation, and experience teaching a choral methods course?

The typical choral methods instructor has specialized applied training in voice (76%), an undergraduate degree in music education (80%), and graduate degrees in either choral conducting or music education. With respect to teaching loads, they work primarily in either music education (47%) or choral conducting (39%) and occupy the academic ranks of professor (27%), associate professor (31%) and assistant professor (35%). Most of their choral music teaching experience is at the college level (13 years) and to a lesser extent at the high school (6 years), middle school/junior high (4 years), and elementary school (3 years) levels. On average, they have taught the choral methods course for eight years.

Research Question #3 - Is it possible to measure choral methods instructors' teacher knowledge orientation in a reliable and valid manner, and if so, to what extent do instructors emphasize specific facets of choral music teacher knowledge and skill (CK, PK, PCK)?

The content validity of the questionnaire items used to measure teacher knowledge orientation was established by an expert panel of three music teacher educators, who independently classified specific knowledge and skill items with 91% agreement. The construct validity of teacher knowledge/skill items was explored through factor analytic techniques, and the pattern of items loading on separate factors suggests that CK, PK, and PCK represent three related but conceptually distinct forms of music teacher knowledge and skill. Evidence of convergent-divergent validity was obtained by correlating emphasis ratings with importance ratings; emphasis ratings were most strongly correlated with corresponding importance ratings within the same teacher knowledge/skill category. Finally, internal consistency estimates for the three music teacher knowledge/skill areas provide evidence of adequate-to-strong levels of reliability. Overall, the empirical evidence suggests that specific facets of music teacher

knowledge and skill can be measured in a valid and reliable manner, though validity and reliability for PCK items was not as strong as for CK or PK items.

On average, choral methods instructors reported giving considerable emphasis to the development of PK and PCK, but only moderate emphasis to CK. Specific knowledge/skill components given greatest emphasis included music teaching techniques knowledge (PCK), skill in utilizing varied instructional strategies (PK), choral ensemble diagnostic skills (PCK), knowledge of the voice (PCK) and skill in planning for effective learning (PK). Those given least emphasis include music history knowledge (CK), piano accompaniment skills (CK), music theory knowledge (CK), musical creativity (CK) and composition/arranging skills (CK).

Research Question 4 - Which choral methods course and course instructor variables are most strongly associated with an emphasis on developing Pedagogical Content Knowledge (PCK)?

PCK emphasis is significantly correlated with the number of credit hours attached to the choral methods class, with course instructors emphasizing PCK development to a greater extent when there is a greater number of course contact hours and credits earned. Other course characteristics such as single- versus multi-semester formats, and whether or not a concurrent field experience is required, were not associated with different degrees of PCK emphasis. While instructor rank and amount of choral music teaching experience had no obvious connection to PCK emphasis, female instructors, those with a doctoral degree in music education, and those with primary teaching responsibilities in music education were more inclined to emphasize PCK development in the choral methods class.

Building upon Shulman's simplified teacher knowledge framework, I presented a conceptual model in Chapter One. This hypothetical model depicts a causal path by which choral methods instructors' beliefs and values regarding the purpose and process of teacher education are largely a reflection of their own educational background and work experience.

The influence of these beliefs and values on practical decisions pertaining to which types of teacher knowledge/skill to emphasize in the choral methods class are then moderated by curricular structures or logistical realities endemic to the institution. Interpretive themes that link to primary findings reported in Chapter 4 and summarized at the beginning of this chapter are placed within this model, and will frame the discussion that follows (see Figure 5.1).

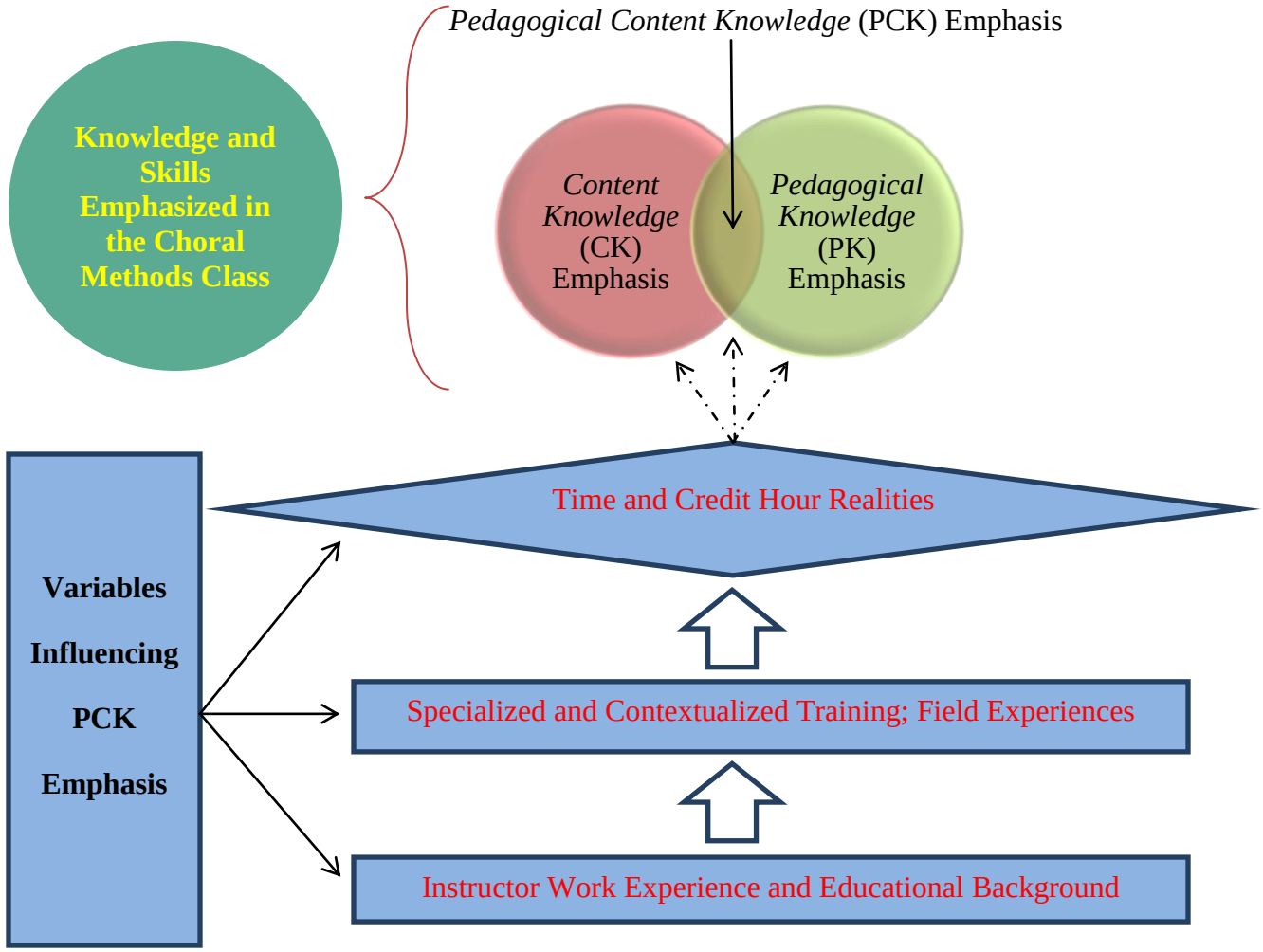

Figure 5.1. Conceptual Model of Specific Influences on Teacher Knowledge/Skill Emphases in the Choral Methods Class.

Discussion of Themes

In the following sections I will discuss the viability of Shulman's teacher knowledge framework for understanding how choral music teachers develop expertise; the need for

specialized and contextualized training in choral music; the influence of work experience and instructor background on choral methods course content; the role that field experiences may play in the acquisition and development of PCK; and finally, the realities facing the instructor as s/he determines which facets of CK, PK and PCK to emphasize in the choral methods class.

Viability of Shulman's Framework for Choral Music Teacher Education Research

There are numerous choral music teacher knowledge and skill sets that need to be learned by students throughout their program of study, and determining when or how these are best acquired in different classes, including the choral methods course, can be difficult. Shulman's teacher knowledge framework would appear to provide one systematic way of viewing how certain types of knowledge and skills are developed in choral music teacher training. In this dissertation, Shulman's framework was employed to determine which types of knowledge and skill are considered most important and given greatest emphasis by choral methods course instructors. Other music education researchers have found this framework a viable structure for studying how teacher knowledge and skill is acquired and developed through the lens of preservice and in-service music teachers (Duling, 1992; Gohlke, 1994; Haston & Leon-Guerrero, 2008; Snow, 1998; and Venesile, 2010). Shulman's teacher knowledge framework may be particularly useful in music teacher education research because of how effectively it meets the challenge of studying complex teaching-learning processes germane to music education (e.g., multi-sensory information processing when conducting and rehearsing a choral ensemble), and its versatility in accommodating qualitative, quantitative and mixed methodology approaches.

I have suggested that knowledge/skill emphases are influenced by a large variety of variables, and utilizing this framework allows researchers to explore these variables and their relationship to PCK development at different instructional levels (e.g., K-12, higher education or

community education), within varied disciplines and subdisciplines (e.g., general, choral or instrumental music), and with different teacher populations (e.g., preservice, in-service or teacher educator). On a large scale, this framework provides a common structure through which teacher education researchers can study knowledge/skill acquisition and development, and interpret how different teacher expertise orientations may impact student learning. Evidence from the factor analysis conducted within this study, where CK and PK emerged as conceptually distinct teacher knowledge/skill areas correlated/fused with PCK, suggests that using this framework is one way by which these domains can be studied collectively, yet independently.

In this study, all three types of music teacher knowledge and skill were considered important and worth emphasizing to a certain extent, but there were notable differences in the pattern of responses. In agreement with Ballantyne and Packer (2004) and Millican (2008, 2009), PCK to a greater degree and PK to a lesser extent, were considered more important for music teaching success than CK in this study. Also, PCK and PK were emphasized to a greater extent (in terms of amount of instructional time or assessment weight) than CK in the choral methods course. The importance and emphasis on pedagogical knowledge/skills corroborates what Wolverton (1993) found, where these knowledge/skill items were rated as being more important than musical knowledge/skills, or personality characteristics as reported by college music professors (Rohwer and Henry, 2004). Davis (2006) employed virtually the same teacher knowledge/skill areas as Rohwer and Henry, and reported that undergraduate music students rated personal skills as most important, followed by pedagogical skills. However, none of these three studies explored how music teacher knowledge/skill areas may complement each other as suggested in Shulman's teacher knowledge framework. Had this framework been utilized, they may have found that PCK was emphasized and rated most important.

Alternatively, Conway (2002) found that PK was least valued among her respondents, which contradicts the present study results where choral methods instructors indicated that PK was *critically important* or *very important.* Reasons that may have contributed to the difference in findings could be due to the study populations and methodology. Conway examined perceptions of early-career instrumental music teachers, while I surveyed choral teacher educators with substantial teaching experience. Conway observed, interviewed, and reviewed the journal entries of fourteen study participants, but I employed a large-scale survey methodology and obtained data from over ten times as many respondents.

Influence of Work Experience and Instructor Background

Given the pivotal position of the choral methods instructor within the program of study and the influence they exert, the types of educational training and professional work experiences they have can directly impact curricular decisions in the choral methods class and potentially within the future classes their choral methods students will teach. In light of this, Brophy (2002a) and Conway (2002) suggested that methods classes should be taught by instructors who have extensive and/or current experience teaching music in K-12 contexts. Dahlman (1992) surveyed high school choral directors and found that graduate degree work and teaching experience influenced curricular decisions. One might expect that those with more teaching experience would emphasize PCK to a greater degree because of the pragmatic orientation that often comes with experience. I did not find any connection, however, between experience teaching K-12 music and PCK emphasis. The difference in findings could be due to the fact that Dahlman investigated one specific factor (choral literature selection) in relation to K-12 (high school secondary) choral teaching experience, whereas I explored choral teaching experience at all instructional levels in relation to broad teacher knowledge/skill areas. It is also plausible that

the amount of teaching experience is not as central to questions of teacher knowledge and skill orientation as are the types of experiences in which one engages while teaching music at the K-12 or college levels. Perhaps those who teach choral methods may not be regularly engaged in "typical" secondary choral teaching duties, and as such, may have difficulty in relating pedagogic and content expertise to real-world settings. Regardless, given the important implications for music teacher knowledge development as reflected in the research literature (Ballantyne & Packer, 2004; Brophy, 2002a, 2002b; Canaan, 1986; Frego, 2003; Grant, 1984; Hamann & Ebie, 2009; Haston & Leon-Guerrero, 2008; Kotora, 2005; Leman, 1974; Reames, 1995), identifying why teaching experience influences curricular decisions in some instances but not others is warranted, and determining ways to ensure that all choral music educators are adequately prepared for future professional success despite the varied amount of experience that choral methods instructors possess is important.

In addition to teaching experience, the role of educational background in determining PCK emphasis was explored. Evidence from this study indicates that those who teach choral methods typically earn an undergraduate degree in music education with voice training, but that graduate work tends to separate either into choral conducting or music education concentrations. I found that those who had earned a doctoral degree in music education typically emphasized PCK instructional activities and assignments more so than those who had not earned this degree. A likely reason for this may be that doctoral music education coursework more broadly explores conceptions of teacher knowledge and skills (e.g. music learning theories, advanced study of best teaching practices based upon evidence-based research), whereas those earning doctoral degrees in other areas, such as choral conducting, experience a curriculum rooted more specifically in content expertise (e.g., detailed choral literature study, advanced conducting techniques, music

history and theory). As a result, methods instructors without coursework examining how knowledge/skill areas are acquired and developed may not have the educational background needed to effectively emphasize these concepts when teaching the choral methods class. Beyond the kinds of formal course work associated with different doctoral degree paths are the informal socialization processes that influence a professor's values and priorities. One's degree concentration area and the types of professional associations cultivated after completing the degree likely form one's professional identity. Differences in identity, in turn, might drive the types of knowledge/skills valued and the degree to which they are emphasized in a class.

Clearly, efforts to understand what shapes choral methods instructors' decision-making processes, including the role educational background and work experience play when emphasizing certain types of teacher knowledge/skill in the choral methods class, is a critically important line of thinking and research to explore. Based upon this premise, how can choral methods instructors with proclivities towards certain types of knowledge/skill emphases best structure learning opportunities for preservice choral educators? Instructors with full teaching/conducting schedules may not have significant time to reflect upon their teaching practices, or in some instances may not be aware of the types of knowledge/skills they emphasize in the choral methods class. Some form of professional development for choral methods instructors, perhaps informed by responses to the questionnaire developed for this study, could be a useful first step in bringing greater awareness and coherence to questions regarding what future choral music teachers most need to know and be able to do.

Beyond graduate degree area, I found evidence that PCK emphasis is also a function of the faculty area in which one's greatest concentration of teaching load resides. Individuals with work responsibilities primarily rooted in music education emphasize PCK acquisition and

development within their choral methods course more so than participants indicating primary workload obligations outside of music education, such as choral conducting. This difference could simply be that those who had earned a degree in music education obtained a job with primary tasks in music education, and that those earning a degree in other areas have a professional charge more directly related to their degree concentration. Higher education funding realities and institution size, however, often dictate that one person be hired to handle some combination of teaching, conducting and supervisory responsibilities in music education, choral conducting, and applied voice. Dolloff (1994) cited the dual professional needs of developing knowledge and skills in performance and teaching in recognition of the fact that work responsibilities are often blurred across departments or other faculty divisions within music schools. Again, it is important that curricular decisions regarding what to emphasize in the choral methods class are driven by future choral music teachers' professional needs and not simply by the instructor's educational background or faculty affiliations.

Need for Specialized and Contextualized Training

Choral methods instructors indicated in their narrative responses that *leading vocal warm-ups* is an instructional activity prominently emphasized in their choral methods class. This item is mentioned as the top knowledge/skill activity in the PCK category, second most common in PK narratives and third most common in the CK responses. It would appear that many instructors view this activity as important, but associate warm-ups with different forms of teacher knowledge/skill. One reason for this may be that instructors perceive this particular activity as representative of the kind of authentic experience preservice choral educators need. Alternatively, it is possible that study participants do not clearly delineate between instructional activities and the specific types of knowledge and skills associated with a task such as *leading*

vocal warm-ups. It is also plausible that respondents are unclear regarding how CK, PK and PCK are operationalized for this study.

That said, this idea of the need for authentic teaching experiences is not unique to this study. Leman (1974) and Grant (1984) both reported that music faculty and choral methods students indicated a need to have more practical teaching experiences prior to the student internship. More recently, Frego (2003) and Teachout (2004) found that practical teaching experiences are an important component of general and instrumental methods students' preservice training. In choral methods preservice training, *leading vocal warm-ups* is an example of a practical or contextualized activity representative of choral teacher knowledge and skills, and calls for the need to incorporate assignments that more closely mirror real-life teaching settings.

One way to help choral methods students learn how to think contextually about applying what they have learned towards teaching future students is to have them write lesson or rehearsal plans. Developing a *lesson plan* was noted as the top PK instructional activity mentioned by participants and third most often among CK responses. Gohlke (1994) found that teacher knowledge and skill development emerges not only from observing others teach, but also through reflecting upon what one plans to teach and what one has taught. Writing and developing a lesson plan is a highly specialized exercise that helps preservice choral educators think about what and how they will deliver information in a meaningful way.

In addition to providing contextualized learning opportunities, specialized training is also needed for developing choral educators. Dolloff (1994) studied how specific choral teaching skills are cultivated through immersion in observing master choral teachers in a type of cognitive apprenticeship (i.e., Doreen Rao's *performance-based music education philosophy*). This claim

is supported to some degree by the evidence in this study. *Score study* was the top CK instructional item cited by participants, but did not factor as a common response into the PK or PCK categories. It is clear that respondents believe this activity is a form of CK, and for instructors who emphasize this learning task, it represents a way through which preservice choral educators can acquire and develop highly specialized knowledge and skills.

This CK *score study* narrative response finding, in combination with the *leading vocal warm-ups* (CK, PK, PCK) instructional activity and the *lesson plan* (PK) assignment cited above, convey perhaps two main ideas: (a) that some forms of choral teacher knowledge/skill instructional activities, such as *leading vocal warm-ups*, is viewed primarily as a blended knowledge/skill category (PCK); but (b) other instructional activities, such as *score study* or *lesson planning*, are examples of specific knowledge/skill domains (CK or PK). This is an important delineation that speaks to knowledge of context, which I did not explore directly. However, it is included in the broad form of PCK where the instructor must employ *knowledge of content and students* (KCS), *knowledge of content and teaching* (KCT), and *knowledge of content and curriculum* (KCC) as sub-domains of PCK (Ball, Thames & Phelps, 2008; Wassong & Biehler, 2010).

In the present study, I measured CK, PK and PCK through examples of each knowledge/skill domain, but further investigations into the types of potential sub-domains in choral music similar to those found in other subject areas (Ball, et al., 2008; Wassong & Biehler, 2010) are certainly warranted. Ultimately, choral methods instructors who provide specialized and contextualized learning opportunities may be in the best position to support choral teacher knowledge/skill acquisition and development for their students.

Role of Field Experiences

Field Experiences can be a specific type of specialized and contextualized training. Several researchers (Brophy, 2002a; Conway, 2002; Frego, 2003; Grant, 1984; Leman, 1974; Teachout, 2004) have reported that both faculty and students express a need for additional field experiences, which has more recently been supported by the NCATE (now CAEP) Blue Ribbon Commission report (2010). Despite these calls for additional field experiences, I found that only one-half of private institutions and two-thirds of public institutions require a field experience concurrent with enrollment in the choral methods class. Why is it that such a substantial proportion of schools *do not* require a concurrent field experience? While this finding might suggest that these schools have chosen to not follow the research and report recommendations, it could be that field experiences are handled through the education department and not in conjunction with the choral methods class, though this was reported in only five instances in this study. It may be more likely that finding adequate quantity and quality field experience placements, or supervising students in these settings such that the acquisition and development of choral teacher knowledge/skill competencies are sufficiently learned, loom as larger challenges. Perhaps it is due to conflicting teaching-learning philosophies or pedagogical beliefs held by college faculty as compared to K-12 teachers. If any of these are the case, then it begs the question as to the quality of field experience. How are the acquisition and development of preservice choral teacher knowledge and skills supported by those overseeing field experiences? Does an instructor in an education department evaluate students in these field experiences, and if so, do they have enough choral music content background to mesh with their pedagogical expertise to help preservice choral educators gain needed professional competencies?

Alternatively, what about those schools that do not require a field experience? How do they address helping students develop professional knowledge/skills in authentic settings?

Beyond discussing a few ramifications regarding those schools that do not require a concurrent field experience, it is important to reflect on those schools that do. The field experience most closely reflects the environment in which preservice choral educators will soon find themselves as student teachers and later as music educators, yet I found that only 25 contact hours, on average, was required. Is this an optimum number of contact hours, and if not, what amount would be sufficient for most preservice choral music teachers to gain knowledge/skills sets needed for the profession? Furthermore, what role can the mentor K-12 choral educator and college faculty supervisor play in further nurturing these knowledge/skill sets for preservice music teachers in authentic settings rather than through mere observations? While the role of field experience was not a major thrust of this investigation, it is an important appendage to study with respect to how teacher knowledge/skills are acquired and developed. One way to better understand this important knowledge/skill acquisition dynamic is to explore why schools require a concurrent field experience and their rationale for the number of contact hours.

As mentioned above, public schools are more likely to require the concurrent field experience as compared to private schools, but private schools require more contact hours versus public schools. Why is that? One explanation might be that private institutions typically have smaller enrollments, and are committed to requiring the concurrent field experience because of the flexibility and resources to support this aim. Public schools on the other hand are typically larger and may face scheduling challenges both within their music department and with required professional and general education coursework in coordinating efforts. Perhaps another reason is that private schools only offer one field experience that is affixed to the choral methods class,

whereas public schools provide multiple field experiences throughout the degree program - the one attached to the choral methods class being one of several.

It is also important to note that beyond determining which institutions require the concurrent field experience and how many contact hours are required, how and what types of knowledge and skills are emphasized may differ from one institution to another (Cochran-Smith, 2008; Frego, 2003; Grant, 1984; Leman, 1974). For example, several instructors provided an explanation regarding the concurrent field experience requirement. One participant stated: "Freshmen and Sophomores complete 90 hours of field experience prior to the methods classes. Juniors and Seniors complete another 95 hours for a total of 185 hours of field experience prior to student-teaching." This represents a large number of contact hours as compared to the reported mean (25). It would appear at this institution that field experiences are an integral part of the entire program of study, and not just an isolated experience occurring only with the choral methods class. Does this configuration allow for more opportunities to develop PCK? For those schools with less contact hours or no field experience, do they lack the program structure to nurture PCK acquisition and improvement, and if so, how do choral methods instructors at those institutions look to other venues to foster PCK development?

Another instructor indicated: "Students are placed in a field experience, but because Instrumental and Choral Music Methods are taught in the same semester, and because we certify teachers K-12 Music, students are placed in an opposite area field experience during that semester. In other words, students whose applied area is voice teach in an instrumental setting." This example sheds light on one complexity of how field experiences can occur. There could be great value for preservice choral educators to obtain field experience in an instrumental music setting; however, I would submit that if this does happen, it should be done so in sequence with

field experiences specific to teaching in the choral setting so that appropriate PCK acquisition and development can occur.

Specialized and contextualized educator training, of which field experiences are one part, appear to play a key role in the acquisition and development of the types of knowledge and skills preservice choral teachers likely need. Yet, many schools do not require a concurrent field experience with the choral methods class, or if they do, the number of contact hours required or the types of field experiences students have may not be conducive to acquiring and developing needed knowledge/skills such as PCK. The data gathered in this report suggests these are significant questions that need answering and are fruitful lines for further choral teacher education research.

Time and Credit Hour Realities

In addition to the choral methods instructor and professional associations potential impact on field experiences and adjoining coursework, governance bodies such as state legislators may also influence how courses are delivered. Kennedy and Archambault (2012) reported that four states now require students to complete at least one on-line course before graduation, and the authors believe that on-line instruction will comprise 50% of the K-12 education delivery system by 2020. While this is at the K-12 level, what if this was to occur at the college level? How would this impact the number of credit hours needed for degree completion, or the number of credit hours allotted for the choral methods class? Could this reduction of contact hours require methods instructors to choose which knowledge/skill areas to emphasize, and in some cases, eliminate covering a specific knowledge/skill competency all together even though they felt it was important? How these realities play out, and the pinch on time resources instructors feel when making curriculum decisions, is a potential significant variable in determining what

teacher knowledge and skill areas may or may not be emphasized. Participants reported that 133 semester credit hours were typically needed for degree completion. If a state legislative mandate required only 120 hours, would the reduction of 13 hours impact the degree to which PCK could be emphasized in the choral methods course or other related classes, or would choral methods instructors or other faculty find ways to mediate this reduction?

In this study, there was a modest positive relationship between the larger number of credits allotted for the choral methods course and instructor PCK emphasis within the class. The additional time instructors have likely allows increased instructional focus and emphasis on specific knowledge/skills. This finding is further supported by the participants who expressed through their narrative responses that the number one concern in helping students acquire and develop CK, PK and PCK knowledge/skills was *lack of time*. It is logical to conclude that having more time in the choral methods class to help students acquire and develop teacher knowledge/skills, such a PCK, would be an advantage. Haston and Leon-Guerrero (2008) interviewed instrumental methods students and concluded that PCK development was seldom linked to the methods course, which supports the claim that the methods course has been partially ineffective in preparing music educators (Brophy, 2002a; Conway, 2002; Hamann & Ebie, 2009; Reames, 1995; Teachout, 2004). Though the methods course is positioned within the program of study to draw upon the various types of knowledge and skills learned in other coursework, it may not be the most productive place for PCK acquisition and development due to the lack of individual instructor attention in planning appropriate learning activities and/or connecting knowledge/skill emphasis to what is learned in other coursework. To take advantage of this strategic position within the degree, members of the music unit could discuss and plan ways to better relate knowledge/skills learned in related coursework. Additionally, the choral

methods instructor might spend extra time planning the class in a way that knowledge/skill items emphasized in other coursework are enhanced. Collectively, this could be one solution to improving choral teacher training and reducing preservice teacher concerns regarding career preparation (Campbell & Thompson, 2007; Hamann & Ebie, 2009).

Mentioned above, *lack of time* to develop all of the necessary knowledge/skill items needed for choral music teaching is foremost among choral methods instructors' concerns as reflected by CK, PK and PCK narrative responses. Frego (2003), Grant (1984), Leman (1974), and Teachout (2004) found that more time for developing knowledge and skills in authentic music teaching settings was desired, and this study confirms those earlier results. Effective course planning by the instructor, when strategic decisions are made with respect to the types of learning activities that emphasize certain facets of choral teacher knowledge/skills, could do much to allay these concerns.

Lack of time to help develop choral teacher knowledge/skill competencies could also be attributed to the expanding knowledge-base and skill-sets choral teachers are expected to possess. In addition to rehearsing choirs and teaching related music courses, secondary choral instructors might be obligated to assist with the general education aims at the school in which they teach, and may likely be expected to have rudimentary knowledge in various non-music disciplines. Additionally, the rampant rise of technological innovations used in teaching call for skills beyond those traditionally taught in music teacher education programs. Because these skills are now expected in the workforce they must be learned as well. These additional professional skills will necessarily take time from traditional course topics if the total degree credits are to remain manageable. The reality is that the resource of time will likely never be enough to accomplish all the tasks instructors would like to cover in the choral methods class,

but decisions regarding what content to retain, how to use time more effectively, and what types of knowledge and skills to emphasize, will continue to become more important. Learning activities that incorporate the development of PCK, where students have the opportunity to approximate real-life teaching scenarios, may be one of the most effective strategies to combat the *lack of time* challenge.

Implications for Choral Music Teacher Educators

Choral educators are directly influenced by their methods instructors, and the results of this study have led me to conclude that the ways in which students acquire and develop PCK is of prime importance. Instructors need to take into consideration the role they play in the learning process, and how their educational training and professional responsibilities shape the degree to which PCK is emphasized within the courses they teach. Prior researchers have found that preservice music educators have not felt confident that their current coursework was adequately training them for the profession, and in-service music educators have expressed that their undergraduate training did not sufficiently prepare them for their occupation (Canaan, 1986; Conway, 2002; Dahlman, 1992; Dauner, 1987; Grant, 1984; Leman, 1974). As teacher educators continue to evaluate their program weaknesses and work towards improvement, central in that discussion should be how to best help students acquire and develop the knowledge/skill sets specific to their future teaching roles. One way to reflect upon how well this can be accomplished is to use Shulman's teacher knowledge framework, where PCK functions as the core component.

If the acquisition and development of PCK is important, then on a broader spectrum we need to look at the curricular structure of the degree program in determining the types of courses, and the sequencing of them, that will allow this to optimally occur. Program administrators and

faculty can increase the chance for knowledge/skill connections, and especially potential PCK acquisition and development, by advising students to take content specific and pedagogical oriented classes concurrently throughout the degree program. One approach to developing effective programs of study is to: (a) determine which knowledge/skill sets are needed for choral educators in the geographic regions in which preservice teachers typically become employed; (b) determine how and in what coursework these knowledge/skill sets are being taught and assessed; and (c) of those knowledge/skill sets not covered in present classes, determine how they will become integrated into the methods class and/or other related coursework.

Music teacher competencies are instilled by teachers in many classes, the choral methods class being one, and which knowledge/skills are emphasized and how they are taught likely differ from one program to another. Probably, the types of music teaching knowledge/skills emphasized at the programmatic-level are not sufficiently scrutinized, and choral methods instructor reflection pertaining to how and what they teach may be lacking. I found that instructors with a doctoral degree in music education and those whose primary work responsibilities reside in music education tend to emphasize PCK development to a greater degree. It is natural to presume that instructors will become oriented towards the types of knowledge/skills they experienced in their own education training and which may have become a focus of past and present work obligations. Nevertheless, if PCK acquisition and development is accepted as an important ideal in training preservice teachers, then choral methods instructors will need to regularly reflect upon and self-evaluate what types of knowledge/skills they emphasize, and how any potential shortcomings they may have can be mitigated such that students receive the type of training that will best help them to become successful choral educators. The importance of self-reflection, invaluable in most if not all teaching situations and

disciplines, was illustrated in a comment written by a study participant: "Your questions got me thinking about how I organize my class." One approach to instructor self-regulation pertaining to the preparation of teaching the choral methods class would be to first identify one's knowledge/skill orientation. Second, evaluate the types of knowledge/skills emphasized in choral methods classes previously taught. Third, consult with colleagues within the music department, faculty outside the department (i.e. education), K-12 music and education partners, and choral education students in identifying the types of knowledge/skills individuals need for success within the profession, and discuss ways through which instructional activities and assignments might be planned and/or adjusted to meet those demands.

Choral methods instructors, however, do not need to be alone when figuring out how to best help students acquire and develop PCK. Professional dialogue is an avenue choral teacher educators can explore. Since many methods instructors have either not had significant secondary choral music teaching experience or have not recently, fostering collaboration with K-12 choral teachers takes advantage of a valuable resource. By building strong partnerships in discussing the realities of the types of knowledge and skills needed for professional success with those actively teaching in the secondary choral education field, strategies can be planned to incorporate PCK learning activities into specialized and contextualized settings. Choral methods instructors will need to be cognizant of the types of knowledge/skills emphasized in these collaborations as well as their own individual dispositions that may favor certain types of knowledge/skills. Utilizing both higher education and K-12 music faculty as resources when addressing individual class and/or degree structure shortcomings in developing PCK learning opportunities will need to involve on-going professional conversations. Personal reflection upon, and discussions about the results of this study, should help nudge those conversations along.

Study Limitations

It is important to note that *Pedagogical Content Knowledge* (PCK) has not been used as a basis to study the choral methods class, and though this study utilized this teacher knowledge framework, the study itself is primarily exploratory. The sample size is healthy, but it must be noted that only choral methods instructors of NASM-accredited institutions were invited to participate, and that choral methods instructors of non-accredited institutions may have responded differently to the survey questions. Additionally, only the general knowledge/skill areas of CK, PK and PCK were measured through select choral music teaching-learning activities as reported by instructors completing the CMII.

It is also important to note that *Knowledge of Context*, a broad element to consider in Shulman's teacher knowledge framework, was not explored in totality but only in a few examples (e.g., instructor characteristics & experiences; teacher education beliefs & values; and institution level curricular structures). It would be impossible in one study to examine all the variables in all contexts that may potentially influence the emphasis of PCK within the choral methods course, yet I believe this study begins to map these influences in choral teacher education, and more specifically in the choral methods class.

Finally, few within the research field have utilized Shulman's teacher knowledge framework when investigating music teacher education and none have examined how choral teacher educators emphasize PCK in preservice secondary choral teacher education. While this teacher knowledge framework appears to be a healthy foundation upon which to build future research, and though I believe utilizing this framework can yield significant insight into better comprehending our field, it is clear that this is but one approach.

Recommendations for Future Research

This exploratory research has opened a vast array of future research possibilities, a few of which are highlighted below. It is gratifying to know that at least 79 (about half of CMII respondents) choral teacher educators are willing to participate in future research, and as their expertise is uncovered, these perspectives will undoubtedly add much to understanding the music teacher educator profession and in better preparing future choral educators.

The Choral Methods Class

Why is it that 25% of those responding to the questionnaire indicated that their institution does not offer a choral methods class? While it can be argued that this class is optimally positioned within the degree program to link content expertise and pedagogical know-how, it appears that many schools attempt to inculcate choral teacher knowledge/skills without offering this course. There are likely many reasons – some philosophical, others pragmatic – but the rationale behind not offering a choral methods class needs examination, and the results of this study may have significant impact on choral teacher training.

Mapping Choral Teacher Education via PCK

Both Ball, *et al*., (2008) and Wassong & Biehler, (2010) have sought to further define and more precisely measure PCK, and this investigation has only taken the first steps with respect to choral teacher education in general, and the choral methods class in particular. I recommend that Shulman's teacher knowledge framework and the adaptation employed herein be utilized in further research to determine if it is a valid and reliable framework to assess the degree to which certain types of knowledge/skills are acquired and developed in music teacher education courses, including methods classes. However, it is important to not simply accept this framework as a viable way of determining the types of knowledge/skill taught and the degree to

which these are emphasized in teacher education research. The results of this study need to be corroborated, refuted, or modified in future research, and a key component in determining the veracity of these findings is to determine the validity and reliability of utilizing PCK as a framework - it must be tested. How can instructor PCK emphasis and preservice choral educator PCK acquisition and development best be measured, and how do students connect PCK learning within all coursework? While Shulman's teacher knowledge framework has been widely accepted in the education community, it remains largely untested in the research medium and needs further exploration. Applying this framework to future research will provide a map with increasing levels of rich detail for the choral teacher education landscape.

Choral Teacher Educator Research

Also important to study is the role of the choral methods instructor. How does this individual attach and extend PCK learning in the choral methods class with previous, present, and future coursework? Beyond what has been revealed in the present study, how do prior work experiences and educational backgrounds influence the way methods instructors go about teaching their courses? Knowing instructors' teaching strengths and weaknesses in relation to their work experience and educational preparation might help music administrators better allocate resources in utilizing faculty expertise. Narrative responses by study participants showed a blending of knowledge/skill emphases, which calls for further research through multiple lenses from individuals and teams of researchers interested in advancing choral teacher educator research. This study can serve as one basis in better understanding what teacher educator variables influence knowledge/skill emphases specifically in the choral methods class. Further research exploring the types of variables influencing choral music teacher education in general, as well as additional studies investigating the choral methods class, is much needed.

Knowledge/Skill Acquisition and Development via Fieldwork Experience

A major part of this study explored the emphasis of PCK knowledge/skills in the choral methods class, and an important component is the role field experiences play in helping students learn specialized knowledge/skills in contextualized settings. The focal point of this study was to gain a broad view of PCK emphasis in the choral methods class rather than the ways in which PCK emphasis might occur in concurrent field experiences. That said, research needs to be conducted into the role field experiences play in reinforcing and/or extending the types of PCK knowledge/skills emphasized in the choral methods class as well as in the degree program. An additional way to study the types of knowledge and skills emphasized in preservice choral education would be through measuring the types of declarative knowledge (factual knowledge), procedural knowledge (skills needed for specific learning activities), and metacognitive knowledge (an awareness of the teaching-learning context) stressed by the instructor in fieldwork experiences. This would not employ Shulman's teacher knowledge framework, but could be a valuable alternative to understanding the complex dynamics involved in understanding the acquisition and development of choral teacher knowledge and skills.

Conclusion

Professional literature is full of expert opinions regarding how to best educate preservice choral teachers. It is somewhat amazing to think that in a time when evidence-based research is heavily emphasized, the choral teacher education profession has not grasped this notion as firmly as it could. Some research is well-designed, but may not clearly take into consideration what *has* occurred and what *is* happening within choral teacher training due to a lack of status studies. Because of the lack of status studies, it may be more difficult to situate individual research findings within the field of choral music education. One way to combat these shortcomings is to

conduct choral music education and choral teacher training status studies to help connect past and current practices with specific research topics. This study bridges these foci by describing some details about degree and class structure on the programmatic-level, and explores specific knowledge/skills emphasized within the choral methods class. Also, this study sought to examine the work experience and educational background of choral methods course instructors and to describe relationships between those pre-existing variables and CK, PK and PCK emphases. This systematic inquiry provides a part of the foundation the choral music education profession can utilize to plot our status, plan for action, and marks potential research avenues we might consider pursuing based upon empirical evidence rather than relying primarily upon well-intentioned expert opinions.

BIBLIOGRAPHY

Abeles, H. F. (2010). The historical contexts of music education. In H. F. Abeles & L. A. Custodero (Eds.), *Critical issues in music education: Contemporary theory and practice* (pp. 1-22). New York: Oxford University Press.

Adderley, C. L. (2000). Preparation of future directors relative to The National Standards - Goals 2000. *Choral Journal, 40*(10), 17-25.

Adler, S. (2008). The education of social studies teachers. In. L. S. Levstick & C. A. Tyson (Eds.), *Handbook of research in social studies education* (pp. 329-351). New York: Routledge.

Asmus, E. (2000). Commentary: The need for research in music teacher preparation. *Journal of Music Teacher Education, 10*(1), 5.

Ballantyne, J., & Packer, J. (2004). Effectiveness of preservice music teacher education programs: Perceptions of early-career music teachers. *Music Education Research*, *6*(3), 299–312.

Baron, H. (1996). Strengths and limitations of ipsative measurement. *Journal of Occupational and Organizational Psychology, 69*(1), 49-56. doi: 10.1111/j.2044-8325.1996.tb00599.x

Berliner, D. (1986). In pursuit of the expert pedagogue. *Educational Researcher, 15*(7) 5-13.

Bidner, S. (2000). From the chair: Exercising leadership. *Journal of Music Teacher Education, 10*(1), 3-4.

Boardman, E. (1990). Music teacher education. In W. R. Houston (Ed.), *Handbook of research on teacher training* (pp. 730–745). New York: Macmillan.

Borko, H., & Putnam, R. (1996). Learning to teach. In D. Berliner & R. Calfee (Eds.), *Handbook of educational psychology* (pp.673–708). New York: Macmillan.

Bronfenbrenner, U. (1979). Towards an experimental ecology of human development. *American Psychologist, 32*, 513-530.

Brophy, J. J., & Good, T. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.), (pp. 328-375). New York: Macmillan.

Brophy, T. S. (2002a). Teacher reflections on undergraduate music education. *Journal of Music Teacher Education, 12*(1), 10-16.

Brophy, T. S. (2002b). Toward improving music teacher education. *Arts Education Policy Review, 104*(2), 3-8.

Campbell, M. R., & Thompson, L. K. (2007). Perceived concerns of preservice music education teachers: A cross-sectional study. *Journal of Research in Music Education, 55*(2), 162-176.

Canaan, C. W. (1986). The choral music education curriculum in selected liberal arts colleges of the Christian College Coalition. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 47*(4), 1104.

Carnegie Task Force on Teaching as a Profession. (1986). A nation prepared: Teachers for the 21st Century. Washington, DC: Author.

Cochran-Smith, M. (2001). Constructing outcomes in teacher education: Policy, practice and pitfalls. *Education Policy Analysis Archives, 9*(11), 1-56.

Cochran-Smith, M., & Fries, K. (2005). Researching teacher education in changing times: Politics and paradigms. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the American Education Research Association panel on research and teacher education* (pp. 69-110). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Cochran-Smith, M. & Fries, K. (2008). Research on teacher education: Changing times, changing paradigms. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp.1050-1093). New York: Routledge.

Cochran-Smith, M., & Zeichner, K. M. (Eds.). (2005). *Studying teacher education: The report of the AERA panel on research and teacher education.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Collins, D. L. (1997). Factors influencing choral music education. *Journal of Music Teacher Education, 6*(2), 29-31.

Colwell, R. (1985). Program evaluation in music teacher education. *Bulletin of the Council for Research in Music Education, 81,* 18-62.

Colwell, R. (1987). Music education and philosophy. *Bulletin of the Council for Research in Music Education, 90,* 41-52.

Colwell, R. (Ed.). (1992). *Handbook of research on music teaching and learning*. New York: Oxford University Press.

Colwell, R. & Richardson, C. (Eds.). (2002). *The new handbook of research on music teaching and learning*. New York: Oxford University Press.

Conway, C. (2002). Perceptions of beginning teachers, their mentors, and administrators regarding preservice music teacher preparation. *Journal of Research in Music Education, 50*(1), 20-36.

Conway, C. (2010). Issues facing music teacher education in the 21st century: Developing leaders in the field. In H.F. Abeles & L. A. Custodero (Eds.), *Critical issues in music education: Contemporary theory and practice,* (pp. 259-275). New York: Oxford University Press.

Corrigan, D., & Haberman, M. (1990). The context of teacher education. In R. Houston, M. Haberman & J. Sikula (Eds.), *Handbook of research on teacher education* (pp. 195–211). New York: Macmillan.

Dahlman, H. N. (1991). The effect of choral program size, teacher experience, and teacher education level on the selection of high school choral music literature. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 52*(10), 3551.

Darling-Hammond, L. (1999). The case for university-based teacher education. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), (2008). *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp. 333-346). New York: Routledge.

Darrough, G. (2004). Practical applications of ChoralNet in the choral methods class. *Choral Journal, 44*(8), 13-17.

Dauner, D. J. (1987). The secondary choral methods course of the 1990s: A Delphi study. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 49*(1), 55.

Davis, V. W. (2006). Beginning music education students' and student teachers' opinions of skills and behaviors important to successful music teaching. *Contributions to Music Education, 33*(1), 27-40.

Dillman, D. A., Tortora, R. D., & Bowker, D. (1998). *Principles for constructing web surveys: An initial statement*. (Technical Report No. 98-50). Pullman, WA: Washington State University Social and Economic Sciences Research Center.

Doerksen, P., & Ritcher, G. (2007, September). The 2007 National survey of music teacher certification programs. Presentation at the 2007 Symposium on Music Teacher Education: Collaborative Action for Change: Greensboro, NC.

Dolloff, L. A. (1994). Expertise in choral music education: Implications for teacher education. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 56*(1), 2600.

Drafall L., & Grant, J. (1997). The 1996 retreat for choral music education. *Journal of Music Teacher Education, 6*(2), 3-4. doi: 10.1177/105708379700600201

Duling, E. B. (1992). The development of pedagogical-content knowledge: Two case studies of exemplary general music teachers. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 53*(6), 1835.

Duncan, A. (2009). *Teacher preparation: Reforming the uncertain profession*. Speech given at Teachers College: Columbia University. http://www2.ed.gov/news/speeches/2009/10/10222009.html

Eaton, J. (2011). *An overview of U.S. Accreditation.* Council for Higher Education Accreditation. http://www.chea.org/pdf/Overview%20of%20US%20Accreditation%2003.2011.pdf

Ester, D. P. (1997). Choral methods and the CMP model. *Journal of Music Teacher Education, 6*(2), 26-28.

Feiman-Nemser, S. (1990). Teacher preparation: Structural and conceptual alternatives. In W. R. Houston, M. Haberman & J. Sikula (Eds.), *Handbook of research on teacher education* (pp. 212-232). New York: Macmillan.

Ferguson, D. A. (2007). Program evaluations in music education: A review of the literature. *Update: Applications of Research in Music Education, 25*(2), 4-15.

Fowler, F. J. (1984). *Survey research methods.* Beverly Hills, CA: Sage Publications.

Fraenkel, J. R., & Wallen, N. E. (2006). *How to design and evaluate research in education* (6th ed.). New York: McGraw Hill.

Frego, R. D. (2003). The examination of curriculum content in undergraduate elementary methods courses. *Contributions to Music Education, 30*(1), 9-22.

Froehlich, H. (2009). Music education and community: Reflections on 'Webs of Interaction' in school music. *Action, Criticism, and Theory for Music Education, 8*(1), 85-107. http://act.maydaygroup.org/articles/Froehlich8_1.pdf

Gohlke, L. (1994). The music methods class: Acquisition of pedagogical content knowledge by preservice music teachers. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 55*(9), 2757.

Goldhaber, D. D. (2004). Why do we license teachers? In F. M. Hess, A. J. Rotherham & K. Walsh (Eds.), *A qualified teacher in every classroom? Appraising old answers and new ideas* (pp. 81-100) Cambridge, MA: Harvard Education Press.

Goodlad, J. I. (1990). *Teachers for our Nation's schools.* San Francisco, CA: Jossey-Bass, Inc.

Goodlad, J. I. (1994). *Educational renewal: Better teachers, better schools.* San Francisco, CA: Jossey-Bass, Inc.

Grant, J. W., & Norris, C. (1998).Choral music education: A survey of research 1982-1995. *Bulletin of the Council for Research in Music Education, 135*, 21-59.

Grant, J. W. Jr. (1984). Choral music education programs in five Midwestern collegiate institutions. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 45*(1), 111.

Graziano, A. M., & Raulin, M. L. (2004). *Research methods: A process of inquiry.* Boston, MA: Pearson Education Group.

Grossman, P. L. (1990). *The making of a teacher: Teacher knowledge and teacher education.* New York: Teachers College Press.

Grossman, P. L., & Gudmundsdottir, S. (1987, April). *Teachers and texts: An expert-novice comparison in English.* Paper presented at the annual meeting of the American Educational Research Association, Washington D. C.

Hamann, D., & Ebie, B. (2009). Students' perceptions of university method class preparation for teaching across music disciplines. *Update: Applications of Research in Music Education, 27*(2), 44-51.

Haston, W., & Leon-Guerrero, A. (2008). Sources of pedagogical content knowledge: Reports by preservice instrumental music teachers. *Journal of Music Teacher Education, 17*(2), 48-59.

Henry, M. (2005). An analysis of certification practices of music education in the fifty states. *Journal of Music Teacher Education, 14*(2), 47-61.

Henry, W. (2004). University teachers' perceptions of requisite skills and characteristics of effective music teachers. *Journal of Music Teacher Education, 13*(2), 18-27.

Hess, F. M., Rotherham, A. J., & Walsh, K. (Eds.). (2004). *A qualified teacher in every classroom? Appraising old answers and new ideas.* Cambridge, MA: Harvard Education Press.

Hewitt, M., & Koner, K. (2011, September). *A comparison of instrumental music methods course content at NASM-accredited institutions.* Presentation at the 2011 Symposium on Music Teacher Education: Intersections of Practice, Research, and Policy: Greensboro, NC.

Holmes Group. (1986). *Tomorrow's teachers*. East Lansing, MI: The Holmes Group.

Imig, D. G., & Imig, S. R. (2008). From traditional certification to competitive certification: A twenty-five year retrospective. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp.886-907). New York: Routledge.

James, R. L. (1968). *A survey of teacher training programs in music from the early musical convention to the introduction of four-year degree curricula.* (Unpublished doctoral dissertation). University of Maryland, College Park, MD.

Jansen, K. J., Corley, K. G., & Jansen, B. J. (2007). *E-Survey methodology*. [E-book]. http://ist.psu.edu/faculty_pages/jjansen/academic/pubs/esurvey_chapter_ jansen.pdf.

Jørgensen, H. (2010). Higher Music Education Institutions: A Neglected Arena for Research? *Bulletin of the Council for Research in Music Education, 186,* 67-80.

Kaplowitz, M. D., Hadlock, T. D., Levine, R. (2004). A comparison of Web and mail survey response rates. *Public Opinion Quarterly, 68*(1), 94– 101. doi: 10.1093/poq/nfh006

Keene, J. A. (1982). *A history of music education in the United States.* Hanover, NH: University Press of New England.

Kennedy, J. M., Kuh, G. D., & Carini, R. (2000, May). *Web and mail surveys: Preliminary results of comparisons based on a large scale project.* Paper presented at The Annual Meeting of the American Association for Public Opinion Research, Portland, OR.

Kennedy, K., & Archambault, L. (2012). Offering preservice teachers field experiences in K-12 online learning: A national survey of teacher education programs. *Journal of Teacher Education, 63*(3), 185-200.

Kimpton, J. (2005). What to do about music teacher education: Our profession at a crossroads. *Journal of Music Teacher Education, 14*(2), 8-21.

Kos, R. P. (2010). Developing capacity for change: A policy analysis. *Arts Education Policy Review, 111*, 97–104.

Kotora, E. J. (2005). Assessment practices in the choral music classroom: A survey of Ohio high school choral music teachers and college choral methods professors. *Contributions to Music Education, 32*(2), 65-80.

Kratus, J. (2007). Music education at the tipping point. *Music Educators Journal, 94*(2), 42-48.

Kratus, J. (2009, September). *Subverting the permanent curriculum in music education*. Presentation at the 2009 Symposium on Music Teacher Education: Enacting Shared Visions: Greensboro, NC.

Labaree, D. F. (2004). *The problem with ed schools.* New Haven, CT: Yale University Press.

Labaree, D. F. (2008). An uneasy relationship: The history of teacher education in the university. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp. 290-306). New York: Routledge.

Lamb, R. (2010). Music as sociocultural phenomenon: Interactions with music education. In H. F. Abeles & L. A. Custodero (Eds.), *Critical issues in music education: Contemporary theory and practice,* (pp. 23-38). New York: Oxford University Press.

Leal, D. L. (2004). Assessing traditional teacher preparation: Evidence from a survey of graduate and undergraduate programs. In F. M. Hess, A. J. Rotherham & K. Walsh (Eds.), *A qualified teacher in every classroom? Appraising old answers and new ideas* (pp. 101-118) Cambridge, MA: Harvard Education Press.

Leglar, M., & Collay, M. (2002). Research by teachers on teacher education. In R. Colwell & C. P. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp.855–873). New York: Oxford University Press.

Lehman, P. R. (1992). Curriculum and program evaluation. In R. Colwell (Ed.), *Handbook of research on music teaching and learning* (pp. 281-294). New York: Oxford University Press.

Leman, J. W. (1974). A descriptive study of the undergraduate music education program for the preparation of choral directors at five Midwestern universities during the 1972-73 school year. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 35*(7), 4591.

Leonhard, C. (1985). Towards reform in music teacher education. *Bulletin of the Council for Research in Music Education, 81,* 10-17.

Lewis, B. (Ed.). (2002). *Syllabi for music methods courses* (2nd ed.). Reston, VA: MENC: The National Association for Music Education.

Lin, W., & Ryzin, G. G. (2011). Web and mail surveys: An experimental comparison of methods for nonprofit research. *Nonprofit and Voluntary Sector Quarterly, 40*(6), 1-15.

Madsen, C. K., & Yarbrough, C. (1985). *Competency-based music education*. Raleigh, NC: Contemporary Publishing, Inc.

Mark, M. L., & Gary, C. L. (2007). *A history of American music education* (3rd ed.). Lanham, MD: Rowman & Littlefield Education.

McCarthy, M. (2002). Introduction: Social and cultural contexts of music teaching and learning. In R. Colwell & C. P. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp.563-565). New York: Oxford University Press.

McCaslin, M., & Good, T. (1996). The informal curriculum. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 622–672). New York: Macmillan.

McClung, A. (2006). Wonders of choral music in the middle-level grades: A bit of nature and a whole lot of nurture. *Choral Journal, 47*(5), 38-47.

Millican, J. S. (2008). A new framework for music education knowledge and skill. *Journal of Music Teacher Education, 18*(1), 67-78.

Millican, J. S. (2009). Band and orchestra teachers' ranking of general pedagogical knowledge and skill. *Journal of Music Teacher Education, 19*(1), 68-79.

Murray, F. B. (2008). The role of teacher education courses in teaching by second nature. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp. 1228-1246). New York: Routledge.

National Association of Schools of Music. (2011). *Higher Education Arts Data Services (HEADS).* [Online] https://secure3.verisconsulting.com/HEADS/

National Association of Schools of Music. (2011). *Resources for local considerations of music and music education degrees.* Retrieved from http://nasm.arts-accredit.org/index.jsp?page=Resources:_Music_and_Music_Ed_Degrees

National Association of Schools of Music. (2012). *2011-2012 Handbook*. [Online] http://nasm.arts-accredit.org/site/docs/Handbook/NASM_HANDBOOK_2011-12_T.pdf

National Association of Schools of Music. (2012). *Higher Education Arts Data Services (HEADS).* [Online] https://secure3.verisconsulting.com/HEADS

National Council for Accreditation of Teacher Education. (2010). *Blue ribbon panel report on clinical preparation calls for 'transformation' of teacher education.* Washington D. C.: Author. http://www.ncate.org/.

Nierman, G. E., Zeichner, K., & Hobbel, N. (2002). Changing concepts of teacher education. In R. Colwell & C. P. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp. 818-839). New York: Oxford University Press.

O'Toole, P. (1998). A missing chapter from choral methods books: How choirs neglect girls. *Choral Journal, 39*(5), 9-32.

Paul, S. J., & Ballantine, J. H. (2002). The sociology of education and connections to music education research. In R. Colwell & C. P. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp. 566-583). New York: Oxford University Press.

Perry, P. (2012). Choral Methods Survey. *Unpublished Research in Progress.*

Peterson, P. L., Fennema, T. P., & Loef, M. (1989). Teachers' pedagogical content beliefs in Mathematics. *Cognition and Instructions, 6*(1), 1-40.

Pulliam, J. D., & Van Patten, J., (2002). *History of Education in America.* Upper Saddle River, NJ: Prentice Hall.

Rath, J. (2002). Introduction: Fuzzy teacher education. In R. Colwell & C. P. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp.757-758). New York: Oxford University Press.

Reames, R. M. (1995). Literature, music education, and characteristics of selected Virginia beginning high school choirs. *Dissertation Abstracts International: Section A. Humanities and Social Sciences*, 56(8), 3046.

Rees, F., & Hickey, M. (2002). Developing a model for change in music teacher education. *Journal of Music Teacher Education, 12*(1), 24-28.

Reynolds, R. A., Woods, R., & Baker, J. D. (Eds.). (2007). *Handbook of research on electronic surveys and measurements.* Hershey, PA: Idea Group Reference.

Rohwer, D., & Henry, W. (2004). University teachers' perceptions of requisite skills and characteristics of effective music teachers. *Journal of Music Teacher Education, 13*(2), 18-27.

Rotherham, A. J., & Mead, S. (2004). Back to the future: The history and politics of state teacher licensure and certification. In F. M. Hess, A. J. Rotherham & K. Walsh (Eds.), *A qualified teacher in every classroom* (pp. 11-47). Cambridge, MA: Harvard Education Press.

Schaefer, D. R., & Dillman, D. A. (1998). Development of a standard e-mail methodology. *Public Opinion Quarterly, 62*, 378-397. http://poq.oxfordjournals.org/

Schmidt, S., Strachota, E., Conceição, S. (2006). *The use of online survey to measure satisfaction in job training and workforce development.* Columbus, OH: Academy of Human Resource Development Conference.

Sedlak, M. W. (2008). Competing visions of purpose, practice, and policy: The history of teacher certification in the United States. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp. 855-885). New York: Routledge.

Shannon, D. M., Johnson, T. E., Searcy, S., & Lott, A. (2002). Using electronic surveys: Advice from survey professionals. *Practical Assessment, Research & Evaluation*, *8*(1). [Online] http://PAREonline.net/getvn.asp?v=8&n=1

Sheehan, K. B. (2001). E-mail survey response rates: A review. *Journal of Computer Mediated Communication, 6*(2). http://jcmc.indiana.edu/vol6/issue2/sheehan.html

Shih, T., & Fan, X. (2008). Comparing response rates from Web and mail surveys: A meta-analysis. *Field Methods, 20*(3), 249-271.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4-14.

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1-22.

Shulman, L. S. (2009). Assessment of teaching or assessment for teaching: Reflections on the invitational conference. In D. H. Gitomer (Ed.), *Measurement issues and assessment for teaching quality* (pp. 234-244). Los Angeles: Sage Publications.

Sills, S. J., & Song, C. (2002). Innovations in survey research: An application of web surveys. *Social Science Computer Review, 20*, 22-30.

Smith, H. L. (2008). A double sample to minimize bias due to non-response in a mail survey. In A. Ruiz-Gazen, P. Guilbert, D. Haziza & Y. Tille' (Eds.), *Survey methods: Applications to longitudinal studies, to health, to electoral studies and to studies in developing countries* (pp. *334*–339*).* Paris: Dunod. [in French].

Snow, S. L. (1998). Rehearsing in the choral context: A qualitative examination of undergraduate conductor/teacher planning processes and relationships to emergent pedagogical knowledge evidenced in teaching. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 60*(3), 684.

Spurgeon, D. (2004). Vocal pedagogy skills for the undergraduate choral conductor. *Journal of Music Teacher Education, 13*(2), 28-33.

Steiner, D., & Rozen, S. (2004). Preparing tomorrow's teachers: An analysis of syllabi from a sample of America's schools of education. In F. M. Hess, A. J. Rotherham & K. Walsh (Eds.), *A qualified teacher in every classroom? Appraising old answers and new ideas* (pp. 119-148). Cambridge, MA: Harvard Education Press.

Strachota, E., Schmidt, S., & Conceição, S. (2005, August). *Using online surveys to evaluation distance education programs.* Paper Presented at the 21st Annual Conference on Distance Teaching and Learning: Madison, WI.

Sykes, G., & Burian-Fitzgerald, M. (2004). Cultivating quality in teaching. In F. M. Hess, A. J. Rotherham & K. Walsh (Eds.), (2004). *A qualified teacher in every classroom? Appraising old answers and new ideas* (pp. 177-199). Cambridge, MA: Harvard Education Press.

Taebel, D. K. (1980). Public school music teachers' perceptions of the effect of certain competencies on pupil learning. *Journal of Research in Music Education, 28*(3), 185-197.

Taylor, B. P. (1980). *The relative importance of various competencies needed by choral-general music teachers in elementary and secondary schools as rated by college supervisors, music supervisors, and choral general music teachers.* (Unpublished doctoral dissertation). Indiana University, Bloomington.

Teachout, D. J. (1997). Preservice and experienced teachers' opinions of skills and behaviors important to successful music teaching**.** *Journal of Research in Music Education, 45*(1), 41-50.

Teachout, D. J. (2004). Preservice teachers' opinions of music education methods course content**.** *Contributions to Music Education, 31*(1), 71-88.

Timmerman, A. (2002). *Introduction to the application of web-based surveys*: *A descriptive report*. Retrieved from ERIC database. (ED 474097)

Tom, A. R. (1997). *Redesigning teacher education.* Albany, NY: State University of New York Press.

Trollinger, V. L. (2006). A reconception of performance study in the philosophy of music education**.** *Philosophy of Music Education Review, 14*(2), 193-208.

Turcott, A. (2003). *Choral music education: A survey of research 1996-2002.* (Master's Thesis). Retrieved from http://etd.fcla.edu/SF/SFE0000056/turcottthesis.pdf

U.S. Department of Education. (2011). The database of accredited postsecondary institutions and programs. http://ope.ed.gov/accreditation/

U.S. Department of Education (2011). National Center for Educational Statistics, National Assessment of Educational Progress (NAEP), Reading and Mathematics Teacher Questionnaire, Grade 4. [Retrieved from http://nces.ed.gov/nationsreportcard/pdf/bgq/teacher/BQ11_Teacher_RM_G04.pdf]

Veal, W. R., & MaKinster, J. G. (1999). Pedagogical content knowledge taxonomies. *Electronic Journal of Science Education, 3*(4). http://unr.edu/homepage/crowther/ejse/vealmak.html

Venesile, C. J. (2010). The acquisition of pedagogical content knowledge by vocal jazz educators. *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 72*(4).

Walsh, (2004). Model 3. A candidate centered model for teacher preparation and licensure. . In F. M. Hess, A. J. Rotherham & K. Walsh (Eds.), *A qualified teacher in every classroom? Appraising old answers and new ideas* (pp. 223-254) Cambridge, MA: Harvard Education Press.

Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach. *Review of Educational Research, 68*(2), 130-178.

Wiggins, J. (2007). Authentic practice and process in music teacher education. *Music Educators Journal, 93*(3), 36-42.

Wilcox, S., & Upitis, R. (2002). Strengthening the teaching of music education in higher education. In R. Colwell & C. P. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp. 840-854). New York: Oxford University Press.

Williams, D. A. (2009, September). *Blood, sweat, and tears of music education curriculum revision.* Presentation at the 2009 Symposium on Music Teacher Education: Enacting Shared Visions: Greensboro, NC.

Wilson, S. M. (2008). The emperor's new clothes: Do we really need professional education and certification for teachers. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp. 851-854). New York: Routledge.

Wilson, S. M., & Tamir, E. (2008). The evolving field of teacher education: How understanding the challenge(r)s might improve the preparation of teachers. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.), (pp.908-936). New York: Routledge.

Wilson, S. M., & Youngs, P. (2005). Accountability processes in teacher education. In M. Cochran-Smith & K. Zeichner. (Eds.), *Studying teacher education: The report of the American Education Research Association panel on research and teacher education* (pp. 591-644). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Wineburg, S. S., & Wilson, S. M. (1988). Models of wisdom in the teaching of history. *Phi Delta Kappan, 70*, 50-58.

Wing, L. B. (1992). Curriculum and its study. In R. Colwell, (Ed.), *Handbook of research on music teaching and learning* (pp. 196-217). New York: Oxford University Press.

Wing, L., & Barrett, J. R. (Eds.). (2002). Music teacher education. In R. Colwell & C. P. Richardson (Eds.), *The new handbook of research on music teaching and learning* (pp.757-904). New York: Oxford University Press.

Wolverton, V. D. (1993). Identifying relevant competencies for choral music teachers. *Southeastern Journal of Music Education, 5*, 50-61.

Zeichner K, (2005). A research agenda for teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the American Education Research Association panel on research and teacher education* (pp. 737-760). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Zeichner, K., & Conklin, H. (2005). Research on teacher education programs. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the American Education Research Association panel on research and teacher education* (pp. 645-735). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

APPENDIX A

Choral Methods Instructor Inventory (CMII) – Pilot Questionnaire

(The survey formatting will appear differently on-line for participants)

Pilot Choral MuEd Methods PCK

Study Purpose and Informed Consent Statements

The purpose of this dissertation study is to survey instructors at NASM-accredited music schools to determine how choral methods courses are structured as part of the undergraduate choral music education curriculum and which types of music teaching knowledge and skill are emphasized in these courses. Choral methods course instructors also will provide information about their educational background, choral music teaching experience, and current job description. Completion of the online questionnaire will take no more than 10-15 minutes.

Benefits provided directly to interested participants upon completing the questionnaire include (a) access to a final summary report and (b) the chance to win one of five $20 gift certificates to amazon.com. There are no known risks.

Study participation is voluntary and participants have the right to leave the survey without completing the questionnaire. Every effort will be made to protect the anonymity of study participants and the confidentiality of their responses through the use of password protection protocols developed by the online survey provider and installed on the researcher's laptop computer. Only the researcher and project supervisor will have access to the data files. After the data have been analyzed and the dissertation has been published, all files will be deleted and wiped from the researcher's laptop. No individuals or institutions will be identified in any published reports.

If you have questions, concerns, or complaints please contact the investigator (Kyle Chandler, Arkansas State University Department of Music; 870-972-3793; KChandler@ASTATE.EDU) or the project supervisor (Dr. James Austin, University of Colorado-Boulder College of Music; 303-492-6353; james.austin@colorado.edu).

This research has been reviewed according to the University of Colorado-Boulder IRB procedures for research involving human subjects. If you have questions about your rights as a research participant, please contact the University of Colorado-Boulder Institutional Review Board Office (303-735-3702; irbadmin@colorado.edu).

Clicking the box below indicates that you are at least 18 years of age; you have read this consent form; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study.

SECTION I - Institutional Demographic Information

The questions in Section I focus on basic institutional demographic information.

***1. In which state is your institution located?**

State:

***2. Is your institution public or private?**

- ◯ Public
- ◯ Private

Pilot Choral MuEd Methods PCK

***3. What level of music degree(s) is/are offered by your music unit?**

- ◯ Bachelor's only
- ◯ Bachelor's and Master's
- ◯ Bachelor's, Master's, and Doctorate
- ◯ Other (please specify)

***4. Approximately how many students at your institution are currently classified in the following categories?**

	Music Majors (all levels)	Undergraduate MUSIC EDUCATION Majors	Undergraduate CHORAL Music Education Majors
Your Institution			

***5. Does your institution offer a stand-alone course in secondary choral methods (NOT a "generic" education methods, elementary music methods, or secondary music methods course)?**

- ◯ No
- ◯ Yes

***6. Do YOU teach the stand-alone course in secondary choral methods (NOT a "generic" education methods, elementary music methods, or secondary music methods course) referred to in the previous question?**

- ◯ No
- ◯ Yes

7. Please provide the NAME and EMAIL ADDRESS of the individual who teaches the stand-alone choral methods course? You are now finished with the questionnaire. Thank you.

Name:

Email Address:

Pilot Choral MuEd Methods PCK

SECTION II - Choral Methods Class Information

The following questions focus on your Choral Methods class.

***8. Is the Choral Methods class you teach a single-semester or multi-semester course?**

- ◯ Single semester
- ◯ Two semesters
- ◯ Three semesters
- ◯ Quarter system or other (please specify)

***9. How many total SEMESTER credit hours do students earn for completing the Choral Methods Course?**

- ◯ 1 Semester Credit
- ◯ 2 Semester Credits
- ◯ 3 Semester Credits
- ◯ 4 Semeser Credits
- ◯ 5 Semester Credits
- ◯ 6 Semester Credits
- ◯ Quarter hours or Other (please specify)

***10. How many total SEMESTER credit hours must students at your institution complete to earn an undergraduate degree in choral music education leading to a teaching license? (Please list the number of credit hours in the text box)**

Pilot Choral MuEd Methods PCK

***11. For a TRADITIONAL undergraduate student at your institution, during which year of study is the Choral Methods Course typically completed?**

- ◯ Sophomore year
- ◯ Junior year
- ◯ Senior year
- ◯ Either the Junior and/or Senior year
- ◯ Other (please specify)

***12. Do other music, music education, and/or professional education courses serve as PREREQUISITES to the Choral Methods Course?**

- ◯ No
- ◯ Yes

***13. Please specify which courses serve as prerequisites to the Choral Methods Course.**

Course #1

Course #2

Course #3

***14. Do students complete a concurrent field experience requirement when enrolled in the Choral Methods Course?**

- ◯ Yes
- ◯ No

Explanation, if needed

***15. How many total clock hours are completed for the concurrent field experience? (Please list the number of clock hours in the text box)**

SECTION III - Choral Methods Instructor Background

Pilot Choral MuEd Methods PCK

The following questions focus on your gender and your schooling in preparation to becoming a choral methods instructor.

***16. Are you female or male?**

- ◯ Female
- ◯ Male

***17. Please indicate the primary area of study for each degree you earned as applicable.**

	Music Education	Choral Conducting	Vocal Performance	Other(s) - please specify below	None - Not Yet
Doctoral Degree	◯	◯	◯	◯	◯
Master's Degree	◯	◯	◯	◯	◯
Bachelor's Degree	◯	◯	◯	◯	◯

If you chose "Other" for any of the above 3 categories, please specify the emphasis area for each degree(s) earned.

***18. What is your PRIMARY applied specialty (select only one)?**

- ◯ Brass
- ◯ Percussion
- ◯ Piano
- ◯ Strings
- ◯ Voice
- ◯ Woodwind
- ◯ Other (please specify)

SECTION IV - Choral Methods Instructor Work Experience

The following questions focus on your current job status and prior work experience pertaining to teaching the choral methods class.

Pilot Choral MuEd Methods PCK

***19. What is your current academic rank?**

- ◯ Professor
- ◯ Associate Professor
- ◯ Assistant Professor
- ◯ Clinical Professor
- ◯ Lecturer/Instructor
- ◯ Graduate Teaching Assistant
- ◯ Other (please specify)

***20. In which faculty department/area does the greatest proportion of your teaching load reside?**

- ◯ Music Education
- ◯ Choral Conducting
- ◯ Vocal Performance
- ◯ Other (please specify - this would include teaching loads split 50/50)

***21. How many years of CHORAL music teaching experience (including the present academic year) do you have for each of the following instructional levels? [Please enter the correct number in each blank. Enter a zero (0) if you have no choral music teaching experience at a specific level.]**

Elementary	
Middle School/Jr High	
Senior High	
College/University	

***22. How many years of experience do you have teaching an undergraduate choral methods course including this current academic year? (A two-semester, fall/spring course should be counted as one year)**

SECTION V - Content Knowledge/Skills

Pilot Choral MuEd Methods PCK

The following questions focus on Content Knowledge and Skills associated with Choral Music Teaching.

***23. Please indicate how much EMPHASIS is given to each of the following Content Knowledge and Skill areas in your choral methods class.**

Emphasis may be defined by a) the amount of class time or b) the quantity and weight of assignments devoted to helping students develop the knowledge/skill area.

	0 - Not Addressed in Class	1 - Very Little Emphasis	2 - Little Emphasis	3 - Some Emphasis	4 - Moderate Emphasis	5 - Considerable Emphasis	6 - Heavy Emphasis	7 - Very Heavy Emphasis
Performance Skills/Singing - For example, modeling correct singing	◯	◯	◯	◯	◯	◯	◯	◯
Conducting Skills - For example, conducting basic beat patterns	◯	◯	◯	◯	◯	◯	◯	◯
Composition Skills - For example, writing or arranging vocal parts	◯	◯	◯	◯	◯	◯	◯	◯
Music Theory Knowledge - For example, analyzing the compositional elements found in a piece of choral repertoire	◯	◯	◯	◯	◯	◯	◯	◯
Music History Knowledge - For example, identifying stylistic choral differences between historical periods	◯	◯	◯	◯	◯	◯	◯	◯
Musical Creativity - For example, improvising on a known melody	◯	◯	◯	◯	◯	◯	◯	◯
Aural Perception Skills - For example, detecting errors within vocal parts	◯	◯	◯	◯	◯	◯	◯	◯
Piano Accompaniment - For example, playing open score vocal parts in supporting vocalists	◯	◯	◯	◯	◯	◯	◯	◯

***24. Overall, how IMPORTANT is the development of Music Content Knowledge and Skills in preparing your students to become successful K-12 choral music educators?**

- ◯ Critically Important
- ◯ Very Important
- ◯ Important
- ◯ Somewhat Important
- ◯ Not at all Important

Pilot Choral MuEd Methods PCK

***25. How EFFECTIVE are you in developing Music Content Knowledge and Skills as part of your Choral Methods Course?**

- ◯ Extremely Effective
- ◯ Very Effective
- ◯ Effective
- ◯ Somewhat Effective
- ◯ Not at all Effective

26. Which instructional activity or assignment included in your choral methods class is best suited to developing various types of Music Content Knowledge and Skills?

27. What single factor most clearly limits your ability to fully develop the Content Knowledge and Skills of choral music education majors before they begin student teaching?

SECTION VI - General Pedagogical Knowledge/Skills

The following questions focus on General Pedagogical Knowledge and Skills associated with Choral Music Teaching.

Pilot Choral MuEd Methods PCK

***28. Please indicate how much EMPHASIS is given to each of the following General Pedagogical Knowledge and Skill areas in your choral methods class.**

Emphasis may be defined by a) the amount of class time or b) the quantity and weight of assignments devoted to helping students develop the knowledge/skill area.

	0 - Not Addressed In Class	1 - Very Little Emphasis	2 - Little Emphasis	3 - Some Emphasis	4 - Moderate Emphasis	5 - Considerable Emphasis	6 - Heavy Emphasis	7 - Very Heavy Emphasis
Knowledge of learners and their characteristics - For example, understanding how students with different experience levels might need to be taught	◯	◯	◯	◯	◯	◯	◯	◯
Ability to respond to student needs - For example, differentiating instruction to engage all learners	◯	◯	◯	◯	◯	◯	◯	◯
Ability to plan for effective learning - For example, writing a cohesive lesson plan	◯	◯	◯	◯	◯	◯	◯	◯
Ability to utilize various instructional strategies - For example, teaching a particular concept or skill through a combination of verbal instruction, directed questioning, demonstration and guided practice.	◯	◯	◯	◯	◯	◯	◯	◯
Ability to organize and manage the learning environment - For example, knowing where to place students in relation to the piano, chairs/risers, or other equipment so as to optimize learning	◯	◯	◯	◯	◯	◯	◯	◯
Knowledge of education purposes and values - For example, articulating and implementing a personal teaching philosophy	◯	◯	◯	◯	◯	◯	◯	◯
Nonverbal communication - For example, demonstrating effective use of eye contact, facial expression, and physical gestures.	◯	◯	◯	◯	◯	◯	◯	◯

***29. Overall, how IMPORTANT is the development of General Pedagogical Knowledge and Skills in preparing your students to become successful K-12 choral music educators?**

- ◯ Critically Important
- ◯ Very Important
- ◯ Important
- ◯ Somewhat Import
- ◯ Not at all Important

Pilot Choral MuEd Methods PCK

***30. How EFFECTIVE are you in developing General Pedagogical Knowledge and Skills as part of your Choral Methods Course?**

- ◯ Extremely Effective
- ◯ Very Effective
- ◯ Effective
- ◯ Somewhat Effective
- ◯ Not at all Effective

31. What instructional activity or assignment included in your choral methods class is best suited to developing various types of General Pedagogical Knowledge and Skills?

32. What single factor most clearly limits your ability to fully develop the General Pedagogical Knowledge and Skills of choral music education majors before they begin student teaching?

SECTION VII - Pedagogical Content Knowledge/Skills

The following questions focus on Pedagogical Content Knowledge and Skills associated with Choral Music Teaching.

Pilot Choral MuEd Methods PCK

***33. Please indicate how much EMPHASIS is given to each of the following Pedagogical Content Knowledge and Skill areas in your choral methods class.**

Emphasis may be defined by a) the amount of class time or b) the quantity and weight of assignments devoted to helping students develop the knowledge/skill area.

	0 - Not Addressed in Class	1 - Very Little Emphasis	2 - Little Emphasis	3 - Some Emphasis	4 - Moderate Emphasis	5 - Considerable Emphasis	6 - Heavy Emphasis	7 - Very Heavy Emphasis
Knowledge of music teaching techniques - For example, demonstrating different ways to assist choral students in singing correct intervals	◯	◯	◯	◯	◯	◯	◯	◯
Engaging students with music in a meaningful way - For example, demonstrating how to involve choral students in shared decision making as they determine how to shape a musical phrase	◯	◯	◯	◯	◯	◯	◯	◯
Implementing the music curriculum effectively - For example, choosing appropriate literature based upon student skill level and experience	◯	◯	◯	◯	◯	◯	◯	◯
Assessing students' abilities in the various aspects of music - For example, creating a performance rubric to measure sight singing skills at the beginning and end of the school year	◯	◯	◯	◯	◯	◯	◯	◯
Explaining and demonstrating musical concepts - For example, clarifying how even eighth notes in classical choral music and swung eighth notes in vocal jazz should be sung	◯	◯	◯	◯	◯	◯	◯	◯

***34. Overall, how IMPORTANT is the development of Pedagogical Content Knowledge and Skills in preparing your students to become successful K-12 choral music educators?**

- ◯ Critically Important
- ◯ Very Important
- ◯ Important
- ◯ Somewhat Important
- ◯ Not at all Important

***35. How EFFECTIVE are you in developing Pedagogical Content Knowledge and Skills as part of your choral methods class?**

- ◯ Extremely Effective
- ◯ Very Effective
- ◯ Effective
- ◯ Somewhat Effective
- ◯ Not at all Effective

Pilot Choral MuEd Methods PCK

36. What instructional activity or assignment included in your choral methods class is best suited to developing various types of Pedagogical Content Knowledge and Skills?

37. What single factor most clearly limits your ability to develop the Pedagogical Content Knowledge and Skills of choral music education majors before they begin student teaching?

SECTION VIII - Knowledge/Skill Priorities in the Choral Methods Class

RANK ORDER the three major categories of choral music teaching knowledge and skill in terms of prioritization in your choral methods class.

Please use the following definitions when considering your response:

A. General Pedagogical Knowledge/Skills - knowledge of learners and their characteristics, knowledge of education purposes and values, ability to respond to student needs, ability to plan for effective learning, ability to organize the learning environment, ability to utilize various instructional strategies.

B. Music Content Knowledge/Skills - performance skills, musical creativity, conducting skills, aural perception skills, composition skills, music theory knowledge and music history knowledge.

C. Pedagogical Content Knowledge/Skills - knowledge of music teaching techniques, engaging students with music in a meaningful way, implementing the music curriculum effectively, assessing students' abilities in the various aspects of music, explaining and demonstrating musical concepts.

Pilot Choral MuEd Methods PCK

***38. Overall, to what extent do you prioritize the three broad categories of choral music teaching knowledge/skill in your Choral Methods class?**

	Highest Priority	Middle Priority	Lowest Priority
Pedagogical Content Knowledge and Skills	◯	◯	◯
Music Content Knowledge and Skills	◯	◯	◯
General Pedagogical Knowledge and Skills	◯	◯	◯

SECTION IX - Thank you and Gift Certificate sign-up

Thank you for participating in this survey.

39. Please provide your contact information below if you wish to be considered for one of five randomly drawn $20 gift certificates to Amazon.com!

Name:

Email Address:

40. If you are willing to participate in a follow-up interview related to this survey, please provide the following contact information.

Name:

Institution:

Address:

Address 2:

City/Town:

State:

ZIP:

Country:

Email Address:

Phone Number:

THANK YOU for supplying contact information

Thank you for taking the time to answer some preliminary questions and to supply important contact information for your colleague who teaches choral methods at your institution. Because you answered that you DO NOT teach the stand-alone secondary choral methods class at your instituion, your participation is no longer needed.

Again, thank you for providing contact information. If you wish to discuss this study with the investigator, please send an email to kchandler@astate.edu

Pilot Choral MuEd Methods PCK

THANK YOU

Thank you for taking the time to answer some preliminary questions. Because you answered that your institution DOES NOT offer a stand-alone secondary choral methods class, your participation is no longer needed.

Again, thank you for taking a few moments to participate. If you wish to discuss this study with the investigator, please send an email to kchandler@astate.edu

End of Survey

You have completed the survey. If you have questions, please email kchandler@astate.edu. THANK YOU!

APPENDIX B

Choral Methods Instructor Inventory (CMII) – Final Questionnaire

(The survey formatting will appear differently on-line for participants)

Choral Methods Survey

Study Purpose and Informed Consent Statements

The purpose of this dissertation study is to survey instructors at NASM-accredited music schools to determine how choral methods courses are structured as part of the undergraduate choral music education curriculum and which types of music teaching knowledge and skill are emphasized in these courses. Choral methods course instructors also will provide information about their educational background, choral music teaching experience, and current job description. Completion of the online questionnaire should take 10 minutes or so of your time, depending on your responses.

Benefits provided directly to interested participants upon completing the questionnaire include (a) access to a final summary report and (b) the chance to win one of five $20 gift certificates to amazon.com. There are no known risks.

Study participation is voluntary and participants have the right to leave the survey without completing the questionnaire. Every effort will be made to protect the anonymity of study participants and the confidentiality of their responses through the use of password protection protocols developed by the online survey provider and installed on the researcher's laptop computer. Only the researcher and project supervisor will have access to the data files. After the data have been analyzed and the dissertation has been published, all files will be deleted and wiped from the researcher's laptop. No individuals or institutions will be identified in any published reports.

If you have questions, concerns, or complaints please contact the investigator (Kyle Chandler, Arkansas State University Department of Music; 870-972-3793; KChandler@ASTATE.EDU) or the project supervisor (Dr. James Austin, University of Colorado-Boulder College of Music; 303-492-6353; james.austin@colorado.edu).

This research has been reviewed according to the University of Colorado-Boulder IRB procedures for research involving human subjects. If you have questions about your rights as a research participant, please contact the University of Colorado-Boulder Institutional Review Board Office (303-735-3702; irbadmin@colorado.edu).

Clicking the box below indicates that you are at least 18 years of age; you have read this consent form; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study.

SECTION I - Institutional Demographic Information

The questions in Section I focus on basic institutional demographic information.

***1. In which state is your institution located?**

State:

***2. Is your institution public or private?**

- ◯ Private
- ◯ Public

Choral Methods Survey

***3. What level of music degree(s) is/are offered by your music unit?**

- ◯ Bachelor's only
- ◯ Bachelor's and Master's
- ◯ Bachelor's, Master's, and Doctorate
- ◯ Other (please specify)

***4. Approximately how many students at your institution are currently classified in the following categories?**

	Music Majors (all levels)	Undergraduate MUSIC EDUCATION Majors	Undergraduate CHORAL Music Education Majors
Your Institution			

***5. Does your institution offer a stand-alone course in secondary choral methods (NOT a "generic" education methods, elementary music methods, or secondary music methods course)?**

- ◯ No
- ◯ Yes

***6. Do YOU teach the stand-alone course in secondary choral methods (NOT a "generic" education methods, elementary music methods, or secondary music methods course) referred to in the previous question?**

- ◯ Yes
- ◯ No

7. Please provide the NAME and EMAIL ADDRESS of the individual who teaches the stand-alone choral methods course? You are now finished with the questionnaire. Thank you.

Name:

Email Address:

SECTION II - Choral Methods Class Information

The following questions focus on your Choral Methods class.

Choral Methods Survey

***8. Is the Choral Methods class you teach a single-semester or multi-semester course?**

- ◯ Single semester
- ◯ Two semesters
- ◯ Three semesters
- ◯ Quarter system or other (please specify)

***9. How many total SEMESTER credit hours do students earn for completing the Choral Methods Course?**

- ◯ 1 Semester Credit
- ◯ 2 Semester Credits
- ◯ 3 Semester Credits
- ◯ 4 Semester Credits
- ◯ 5 Semester Credits
- ◯ 6 Semester Credits
- ◯ Quarter hours or Other (please specify)

***10. Please estimate how many total SEMESTER credit hours choral music students at your institution must complete to earn an undergraduate degree leading to a music teaching license? (Please list the number of credit hours in the text box)**

***11. Do students complete a concurrent field experience requirement when enrolled in the Choral Methods Course?**

- ◯ Yes
- ◯ No

Explanation, if needed

Choral Methods Survey

***12. How many total clock hours are completed for the concurrent field experience?**
(Please list the number of clock hours in the text box)

SECTION III - Choral Methods Instructor Background

The following questions focus on your gender and your schooling in preparation to becoming a choral methods instructor.

13. Are you female or male?

- ◯ Male
- ◯ Female

***14. Please indicate the primary area of study for each degree you earned as applicable.**

	Music Education	Choral Conducting	Vocal Performance	Other(s) - please specify below	None - Not Yet
Doctoral Degree	◯	◯	◯	◯	◯
Master's Degree	◯	◯	◯	◯	◯
Bachelor's Degree	◯	◯	◯	◯	◯

If you chose "Other" for any of the above 3 categories, please specify the emphasis area for each degree(s) earned.

***15. What is your primary applied specialty (select only one)?**

- ◯ Brass
- ◯ Percussion
- ◯ Piano
- ◯ Strings
- ◯ Voice
- ◯ Woodwind
- ◯ Other (please specify)

SECTION IV - Choral Methods Instructor Work Experience

The following questions focus on your current job status and prior work experience pertaining to teaching the choral methods class.

Choral Methods Survey

***16. What is your current academic rank?**

- ◯ Professor
- ◯ Associate Professor
- ◯ Assistant Professor
- ◯ Clinical Professor
- ◯ Lecturer/Instructor
- ◯ Graduate Teaching Assistant
- ◯ Other (please specify)

***17. In which faculty department/area does the greatest proportion of your teaching load reside?**

- ◯ Choral Conducting
- ◯ Music Education
- ◯ Vocal Performance
- ◯ Other (please specify - this would include teaching loads split 50/50)

***18. How many years of CHORAL music teaching experience (including the present academic year) do you have for each of the following instructional levels? [Please enter the correct number in each blank. Enter a zero (0) if you have no choral music teaching experience at a specific level.]**

Elementary	
Middle School/Jr High	
Senior High	
College/University	

***19. How many years of experience do you have teaching an undergraduate choral methods course including this current academic year? (A two-semester, fall/spring course should be counted as one year)**

SECTION V - CONTENT KNOWLEDGE/SKILLS

Choral Methods Survey

The following questions focus on Content Knowledge and Skills associated with Choral Music Teaching.

***20. Please indicate how much EMPHASIS is given to each of the following CONTENT KNOWLEDGE and SKILL areas in your choral methods class.**

EMPHASIS may be defined by a) the amount of class time and/or b) the quantity and weight of assignments devoted to helping students develop the knowledge/skill area.

	NO	LITTLE	SOME	MODERATE	CONSIDERABLE	HEAVY
Performance Skills (e.g., Singing a solo or choral part)	◯	◯	◯	◯	◯	◯
Music History Knowledge (e.g., Identifying choral style differences between historical periods)	◯	◯	◯	◯	◯	◯
Musical Creativity (e.g., Improvising vocally on a known melody)	◯	◯	◯	◯	◯	◯
Composition/Arrangement Skills (e.g., Writing or arranging vocal parts)	◯	◯	◯	◯	◯	◯
Music Theory Knowledge (e.g., Analyzing chord structures within a choral piece)	◯	◯	◯	◯	◯	◯
Conducting Skills (e.g., Conducting beat patterns while shaping dynamics)	◯	◯	◯	◯	◯	◯
Aural Perception Skills (e.g., Detecting errors within vocal parts)	◯	◯	◯	◯	◯	◯
Piano Accompaniment (e.g., Playing open score vocal parts on the piano)	◯	◯	◯	◯	◯	◯

***21. Overall, how IMPORTANT is the development of Music Content Knowledge and Skills in preparing your students to become successful choral music educators?**

- ◯ Critically Important
- ◯ Very Important
- ◯ Important
- ◯ Somewhat Important
- ◯ Not at all Important

22. Please describe an instructional activity or assignment that you implement in the choral methods class specifically to develop Music Content Knowledge and Skills.

Choral Methods Survey

23. Please describe any challenges you face in developing students' Music Content Knowledge and Skills within the choral methods class.

SECTION VI - GENERAL PEDAGOGICAL KNOWLEDGE/SKILLS

The following questions focus on General Pedagogical Knowledge and Skills associated with Choral Music Teaching.

***24. Please indicate how much EMPHASIS is given to each of the following GENERAL PEDAGOGICAL KNOWLEDGE and SKILL areas in your choral methods class.**

EMPHASIS may be defined by a) the amount of class time and/or b) the quantity and weight of assignments devoted to helping students develop the knowledge/skill area.

	NO	LITTLE	SOME	MODERATE	CONSIDERABLE	HEAVY
Utilizing Varied Instructional Strategies (e.g., Teaching a concept/skill through verbal instruction, demonstration, and/or guided practice)	◯	◯	◯	◯	◯	◯
Organizing/Managing the Learning Environment (e.g., Using seating arrangements that keep students on task)	◯	◯	◯	◯	◯	◯
Knowledge of Education Purposes/Values (e.g., Articulating a personal teaching philosophy)	◯	◯	◯	◯	◯	◯
Responding to Student Needs (e.g., Differentiating instruction to engage all learners)	◯	◯	◯	◯	◯	◯
Knowledge of Learner Characteristics (e.g., Adopting developmentally appropriate teaching methods)	◯	◯	◯	◯	◯	◯
Planning for Effective Learning (e.g., Writing a cohesive lesson plan)	◯	◯	◯	◯	◯	◯
Nonverbal Communication (e.g., Using eye contact and facial expression to provide feedback)	◯	◯	◯	◯	◯	◯

Choral Methods Survey

***25. Overall, how IMPORTANT is the development of General Pedagogical Knowledge and Skills in preparing your students to become successful choral music educators?**

- ◯ Critically Important
- ◯ Very Important
- ◯ Important
- ◯ Somewhat Import
- ◯ Not at all Important

26. Please describe an instructional activity or assignment that you implement in the choral methods class specifically to develop General Pedagogical Knowledge and Skills.

27. Please describe any challenges you face in developing students' General Pedagogical Knowledge and Skills within the choral methods class.

SECTION VII - PEDAGOGICAL CONTENT KNOWLEDGE/SKILLS

The following questions focus on Pedagogical Content Knowledge and Skills associated with Choral Music Teaching.

Choral Methods Survey

***28. Please indicate how much EMPHASIS is given to each of the following PEDAGOGICAL CONTENT KNOWLEDGE and SKILL areas in your choral methods class.**

EMPHASIS may be defined by a) the amount of class time and/or b) the quantity and weight of assignments devoted to helping students develop the knowledge/skill area.

	NO	LITTLE	SOME	MODERATE	CONSIDERABLE	HEAVY
Music Teaching Techniques Knowledge (e.g., Using warm-ups to introduce new repertoire concepts)	◯	◯	◯	◯	◯	◯
Music Curriculum Implementation Skill (e.g., Creating a multi-year plan for introducing choral music from various cultures)	◯	◯	◯	◯	◯	◯
Knowledge of the Voice (e.g, Promoting healthy singing habits such as posture/breathing)	◯	◯	◯	◯	◯	◯
Student-Music Engagement Skill (e.g., Helping choir members compare two phrasing approaches)	◯	◯	◯	◯	◯	◯
Music Learning Assessment Knowledge (e.g., Developing reliable and valid rubrics for assessing vocal performance)	◯	◯	◯	◯	◯	◯
Music Concept Explanation/Demonstration Skill (e.g., Modeling appropriate diction and pronunciation)	◯	◯	◯	◯	◯	◯
Choral Ensemble Diagnostic Skill (e.g., Identifying and then fixing common performance problems during rehearsal)	◯	◯	◯	◯	◯	◯

***29. Overall, how IMPORTANT is the development of Pedagogical Content Knowledge and Skills in preparing your students to become successful choral music educators?**

- ◯ Critically Important
- ◯ Very Important
- ◯ Important
- ◯ Somewhat Important
- ◯ Not at all Important

30. Please describe an instructional activity or assignment that you implement in the choral methods class specifically to develop Pedagogical Content Knowledge and Skills.

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Choral Methods Survey

31. Please describe any challenges you face in developing students' Pedagogical Content Knowledge and Skills within the choral methods class.

SECTION VIII - Knowledge/Skill Priorities in the Choral Methods Class

RANK ORDER the three major categories of choral music teaching knowledge and skill in terms of prioritization in your choral methods class. Please use the following phrases, utilized in the previous questions, when considering your response:

A. **MUSIC CONTENT KNOWLEDGE/SKILLS:** Performance Skills, Musical Creativity, Conducting Skills, Aural Perception Skills, Composition/Arrangement Skills, Music History Knowledge, Music Theory Knowledge, Piano Accompaniment

B. **GENERAL PEDAGOGICAL KNOWLEDGE/SKILLS:** Knowledge of Learner Characteristics, Knowledge of Education Purposes/Values, Responding to Student Needs, Planning for Effective Learning, Organizing/Managing the Learning Environment, Utilizing Varied Instructional Strategies, Nonverbal Communication

C. **PEDAGOGICAL CONTENT KNOWLEDGE/SKILLS:** Music Teaching Techniques Knowledge, Student-Music Engagement Skill, Music Curriculum Implementation Skill, Music Learning Assessment Knowledge, Music Concept Explanation/Demonstration Skill, Knowledge of the Voice, Choral Ensemble Diagnostic Skills

***32. Overall, to what extent do you prioritize the three broad categories of choral music teaching knowledge/skill in your Choral Methods class?**

	Highest Priority	Middle Priority	Lowest Priority
Music Content Knowledge and Skills	◯	◯	◯
General Pedagogical Knowledge and Skills	◯	◯	◯
Pedagogical Content Knowledge and Skills	◯	◯	◯

SECTION IX - Gift Certificate Sign-Up and THANK YOU!

Thank you for participating in this survey.

Choral Methods Survey

33. Please provide your contact information below if you wish to be considered for one of five randomly drawn $20 gift certificates to Amazon.com!

Name:

Email Address:

34. ***If you are willing to participate in a follow-up interview*** **related to this survey, please provide the following contact information.**

Name:

Institution:

Address:

Address 2:

City/Town:

State:

ZIP:

Country:

Email Address:

Phone Number:

THANK YOU for supplying contact information

Thank you for taking the time to answer some preliminary questions and to supply important contact information for your colleague who teaches choral methods at your institution.

Because you answered that you DO NOT teach the stand-alone secondary choral methods class at your institution, your participation is no longer needed.

Again, **THANK YOU** for providing contact information. If you wish to discuss this study with the investigator, please send an email to kchandler@astate.edu

THANK YOU

Thank you for taking the time to answer some preliminary questions. Because you answered that your institution DOES NOT offer a stand-alone secondary choral methods class, your participation is no longer needed.

Again, **THANK YOU** for taking a few moments to participate. If you wish to discuss this study with the investigator, please send an email to kchandler@astate.edu

End of Survey

You have completed the survey. If you have questions, please email kchandler@astate.edu. **THANK YOU!!**

APPENDIX C

Cover Letter to Music Unit Head at NASM-Accredited Institutions

Dear Dr _____:

I am the coordinator of music education at Arkansas State University and in conjunction with Dr. Lori Gray from the University of Montana and under the research arm of The Society for Music Teacher Education (SMTE - http://smte.us/); we are **building a database** and are in the **planning stages** of conducting research into undergraduate music education degree requirements which lead to music teaching licensure at the 600+ NASM accredited institutions.

The first part of that research entails **retrieving an electronic copy of undergraduate music education degree requirements for content analysis**. This document should include specific course area and credit breakdown (i.e. general education, professional education, music core, music performance, music education, etc…).

A second part involves **obtaining the name(s) and email address(es) of each person who teaches the choral, general, and instrumental methods course(s)** to build our database for future research. A methods course, as defined for this database, is(are) the class(es) that typically occurs immediately prior to the student teaching internship and **does not include techniques courses** (i.e. vocal pedagogy, Orff training, brass instruments, conducting, etc…).

If you could provide the Internet link and/or an electronic copy of your current undergraduate music education degree requirements and the name(s) and email address(es) of each person who teaches the choral, general, and instrumental methods course(s) that would be fantastic.

Summary

Again, thank you in advance for replying to this email with:

> **1)** an electronic link and/or an attachment of undergraduate music education degree requirements;
>
> **2)** the name and email address of the choral, general, and instrumental methods instructor (not techniques).

We will gladly make the study results available to your music department.

Sincerely, Kyle Chandler

Kyle Chandler
Coordinator of Undergraduate and Graduate Music Education
Research Chair, ArkMEA Board of Directors
Director of Chamber Singers & Vocal Jazz
Arkansas State University - Jonesboro
870-972-3793 kchandler@astate.edu

APPENDIX D

Sample of CMII Data Collection Form

	State	Type	Choral Methods Instructor	Email
University of Louisiana at Monroe	LA	Public		
University of Maryland	MA	Public		
University of Michigan, Flint	MI	Public		
University of Missouri, Kansas City	MO	Public		
University of Montana, The	MT	Public		
University of Montevallo	AL	Public		
University of Mount Union	OH	Private		
University of Nebraska-Lincoln	NE	Public		
University of New Mexico	NM	Public		
University of Northern Colorado	CO	Public		
University of Oklahoma	OK	Public		
University of Southern Mississippi	MS	Public		
University of Tulsa	OK	Private		
University of West Florida	FL	Public		
University of Wisconsin - Eau Claire	WI	Public		
University of Wisconsin - River Falls	WI	Public		
University of Wisconsin - Superior	WI	Public		
University of Wisconsin Oshkosh	WI	Public		
University of Wyoming	WY	Public		
Valparaiso University	IN	Private		
VanderCook College of Music	IL	Private		

APPENDIX E

Notification Email to Potential Participants

Dear Choral Music Education Colleague:

You are receiving this notification to participate in an upcoming dissertation study pertaining to choral music education. To motivate potential participants to respond to the online questionnaire, I will provide five **$20 amazon.com gift certificates,** randomly awarded to five individuals who complete the questionnaire.

The online questionnaire should take approximately 10 minutes or so to complete, depending on your individual responses. **I hope you choose** to participate in the study **beginning in one day**.

The deadline to respond will be Thursday, May 31st, 2012. Further study information can be found on the participant consent page when first opening the online questionnaire.

If you have questions or concerns please contact the investigator, Kyle Chandler. Thank you, in advance, for your consideration and participation!

Sincerely, Kyle Chandler
Coordinator of Music Education
Arkansas State University
kchandler@astate.edu
870-972-3793

APPENDIX F

Cover Letter to Potential Participants

Dear Choral Music Education Colleague:

Under the direction of Dr. James Austin – University of Colorado advisor, I am conducting a **nation-wide survey** for my dissertation. I would very much appreciate you sharing **10 minutes or so** of your time, depending on your responses, to complete an online questionnaire.

To help motivate participants to respond, I will provide **$20 amazon.com gift certificates,** randomly awarded to **five** individuals who complete the questionnaire.

Few researchers **have explored** how **Choral Methods Courses** are structured or the types of choral music teaching knowledge and skills that are emphasized within these courses. The results of this project will be shared with members of the choral music education and choral conducting communities through presentations at **NA*f*ME** and **ACDA** conferences as well as publications in major journals such as the *Choral Journal, the Journal of Research in Music Education, and the Music Educators Journal*.

As a participant, you are welcome to request a summary report and eligible to enter the drawing for the **$20 amazon.com gift certificates.**

If you do not teach the choral methods class at your institution please forward this to your colleague who does.

The **DEADLINE** for completing the online questionnaire is **Thursday, May 31st!** To access the questionnaire, please **copy/paste** the Survey Monkey link below into your browser:

http://www.surveymonkey.com/s.aspx?sm=vf2VN55OKzYOPncPFzOQ9g_3d_3d

Thank you again for taking the time to provide your valuable input and ideas related to preparing successful choral music educators!

Sincerely, Kyle Chandler
Coordinator of Music Education
Arkansas State University
kchandler@astate.edu
870-972-3793

If you feel you have received this message in error, or to unsubscribe, please copy/paste the link below into your browser
http://www.surveymonkey.com/optout.aspx?sm=vf2VN55OKzYOPncPFzOQ9g_3d_3d

APPENDIX G

IRB Exemption Certification

University of Colorado Boulder

Institutional Review Board
563 UCB
Boulder, CO 80309
Phone: 303.735.3702
Fax: 303.735.5185
FWA: 00003492

11-May-2012

Exempt Certification

Chandler, Kyle
Protocol #: 12-0237
Title: Pedagogical Content Knowledge and Choral Methods Class Survey

Dear Kyle Chandler,

The Institutional Review Board (IRB) has reviewed this protocol and determined it to be of exempt status in accordance with Federal Regulations 45 CFR 46.101(b). Principal Investigators are responsible for informing the IRB of any changes or unexpected events regarding the project that could impact the exemption status. Upon completion of the study, you must submit a Study Closure via eRA. It is your responsibility to notify the IRB **prior** to implementing any changes.

Certification Date: 11-May-2012
Exempt Category: 2
Associated Documents:* Study Invitation; Questionnaire; Consent Form; Protocol; Initial Application - eForm;
Number of subjects approved: 506

*** To find the approved documents log into eRA, open this protocol, expand the Management folder, and click on the Versions subfolder.**

The IRB has reviewed this protocol in accordance with federal regulations, university policies and ethical standards for the protection of human subjects. In accordance with federal regulation at 45 CFR 46.112, research that has been approved by the IRB may be subject to further appropriate review and approval or disapproval by officials of the institution. The investigator is responsible for knowing and complying with all applicable research regulations and policies including, but not limited to, Environmental Health and Safety, Scientific Advisory and Review Committee, Clinical and Translational Research Center, and Wardenburg Health Center and Pharmacy policies.

Please contact the IRB office at 303-735-3702 if you have any questions about this letter or about IRB procedures.

Vena Dunne, Ph.D.
IRB Manager
Institutional Review Board