
The two purposes of this study were to: (a) define music teacher identity and its underlying constructs based on a critical examination of the extant research, and (b) develop an instrument to measure selected constructs from among a sample of music teachers across years of teaching. The Music Teacher Identity Scale (MTIS), a researcher-constructed data gathering instrument, was developed to measure two constructs of music teacher identity: Music Teacher Self-Efficacy and Music Teacher Commitment. Participants in the study were selected using a stratified sampling technique, based on music teaching level, and MENC Division membership, producing a total of 2,500 possible participants.

Descriptive statistics, Cronbach’s coefficient alpha, item-total corrected correlation, and inter-item correlation were used to evaluate the degree of reliability of the survey instrument. A factor analysis was calculated to provide evidence of the construct validity for the measurement instrument. Factorial Analysis of Variance was used to find differences among the constructs of Music Teacher Efficacy and Music Teacher Commitment by year of teaching, gender, school location, teaching area, and by teaching level. The MTIS had an overall reliability of $\alpha = .81$, with the individual constructs of Music Teacher Self-Efficacy reliability of $\alpha = .87$, and Music Teacher Commitment of $\alpha = .67$. The two constructs were found to contribute 42.17 percent of the variance through the exploratory factor analysis. Statistically significant differences were found among all years of teaching experience for Music Teacher Self-Efficacy. Statistically significant
differences were found between Music Teacher Self-Efficacy and Music Teacher Commitment at each experience level examined. Music Teacher Commitment was found to be a statistically significant different between men and women. A significant three way interaction effect was found in Music Teacher Commitment at the 6 - 10 years of teaching experience between Middle /Junior High School and High School, and again at the 31 + years of teaching experience between Middle /Junior High School and High School. Recommendations were suggested for future research regarding music teacher identity construction.
DEFINING AND MEASURING MUSIC TEACHER IDENTITY:
A STUDY OF SELF-EFFICACY AND COMMITMENT
AMONG MUSIC TEACHERS

by

Cynthia L. Wagoner

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro
2011

Approved by

_________________________________
Committee Chair
In memory of my Grandparents, Milton and Elizabeth Rowe and Lester and Margaret Swank, whose strength and love of learning flows through me today.

Grandma Margaret Leopold Swank, I carry your dreams within my own.
This dissertation has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair

David J. Teachout

Committee Members

Donald A. Hodges

Patricia E. Sink

John R. Locke

Date of Acceptance by Committee

Date of Final Oral Examination
ACKNOWLEDGEMENTS

There are so many people to thank for their help on the journey I have taken. First and foremost, I owe the deepest gratitude to my committee members. Not only will I will carry your words with me and treasure them, but I will continue to cherish your friendships.

For Dr. Teachout, my chair, thank you for such patient and encouraging guidance - I simply do not have the words to thank you enough. Your time and unflagging energy was always appreciated. Thank you for allowing me to share in the joys of your family during this process! It certainly made for some delightful memories.

Dr. Hodges, your wisdom on academia and life has sustained me in the darkest hours of self-doubt, as I struggled to adapt to the challenges of the degree. Thank you for reminding me this process is a marathon, not a sprint!

Dr. Locke, your faith in me as a musician, teacher, academic, and person, have humbled me many times. Your ability to speak directly to the heart of things always delights me!

Dr. Sink, my advisor and source of strength so many times, you are a very special lady! You guided me into academia and helped me leave many bad habits behind. Your early lessons, I am convinced, have given me the foundation for success.

I would be remiss if I didn’t mention others along the way that profoundly changed my thinking. These people firmed up a foundation of scholarship for me.
Dr. Gavin Douglas, whose ability to turn my world of thought upside down, also caused some sleepless nights, as I tried to make sense of the new things I was encountering! I sincerely thank you for that, and for all the extra time you spent helping me think outside of the box.

Dr. Ric Luecht, as the first statistics professor to teach in a way that I not only understood, but could apply, I am eternally grateful. You have served as an unofficial advisor throughout my dissertation process, and I will never forget your kindness and willingness to help.

The entire music education faculty provided so many kind words and encouragement, all while treating me like a colleague along the way. I have learned much from all of you and respect and will continue to admire your work.

My doctoral cohorts have each given me strength and your own journeys in the degree program are now woven into my story with laughter and tears. It is an honor to be a part of your lives. I hope all the students I have had the honor to share the joys of music with in the past thirty years know that I have lived as I always asked of them – giving it my best, with no regrets.

This journey would not be possible without my family. For my parents, Richard and JoAnne Rowe, whose daily encouragement and unconditional love has always been a source of strength for me. Thank you for instilling the joy of learning and curiosity about the world in your children. For my beautiful children, Paige and Ty, for inspiring me to begin this journey with their lively intelligence and courage in pursuing their own
passions in life, and Lander for joining this crazy clan and taking my side occasionally when I regress to band stories!

Last, but not least, if it were not for my husband, Mark, I would not be at this point today. He is my rock, my joy, and the love of my life. His complete support of my dreams is evident in selling our home, moving a thousand miles away, and making sure I was free to do whatever necessary to reach my goals. This surely makes him my angel on earth. He will never receive a grand award for the sacrifices he has made for me on a daily basis, but he should. I am honored to be married to my best friend, who has made all things possible for me.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>vi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST OF FIGURES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>xii</td>
</tr>
</tbody>
</table>

## CHAPTER

### I. INTRODUCTION

- Background of the Problem ................................................................. 1
- Need for the Study ..................................................................................... 4
- Purposes of the Study ................................................................................. 5
- Definition of Terms .................................................................................. 7

### II. RELATED LITERATURE

- Theoretical Framework of Music Teacher Identity
  - Associated With Sociological Theory ...................................................... 11
  - Social Constructivism ........................................................................... 11
  - Symbolic Interactionism ........................................................................ 12
  - Dramaturgical Theory ............................................................................ 15
  - Role Theory .......................................................................................... 16
  - Summary of Sociological Theories ......................................................... 18
- Occupational Identity Research .............................................................. 19
  - Occupational Identity ........................................................................... 20
  - Summary of Occupational Identity Research ........................................ 26
- Pre-service Teacher Identity Research .................................................... 26
  - Recruitment to the Occupation of Teaching ........................................... 27
  - Specific Pedagogical Methods ............................................................... 28
  - Student Teaching Experiences ............................................................... 30
  - Summary of Pre-service Teacher Identity Research .............................. 33
- Pre-service Music Teacher Identity Research ............................................ 34
  - Pre-service Music Teacher Socialization ................................................. 35
  - Pre-service Music Teacher Pedagogy ...................................................... 41
  - Summary of Pre-service Music Teacher Identity Research ...................... 44
- In-service Teacher Identity Research ....................................................... 46
  - Induction and the Novice Teacher ......................................................... 48
  - Induction and Mentoring ...................................................................... 52
  - Summary of In-service Teacher Identity Research ................................ 59
Research Question Three ................................................................. 131
Research Question Four ................................................................. 131
Research Question Five ................................................................. 132
Research Question Six ................................................................. 132
Research Question Seven .............................................................. 133
Research Conclusions ........................................................................ 133
Definition of Music Teacher Identity .............................................. 134
Music Teacher Identity Survey ......................................................... 134
Music Teacher Self-Efficacy and Commitment
   Across Years of Teaching Experience ......................................... 135
Future MTIS Constructs ..................................................................... 138
Demographic Variables ..................................................................... 139
Limitations .......................................................................................... 143
Future Research Suggestions ............................................................ 147

REFERENCES ................................................................................. 154

APPENDIX A: MTIS SURVEY ............................................................... 183

APPENDIX B: CONSTRUCT MAP: MUSIC TEACHER
   SELF-EFFICACY AND MUSIC TEACHER
   COMMITMENT .............................................................................. 192

APPENDIX C: ORIGINAL LIST OF ITEMS CONSIDERED
   FOR MTIS .................................................................................... 196

APPENDIX D: MTIS PILOT SURVEY ITEMS ....................................... 198
LIST OF TABLES

Table 1. MTIS Pilot Survey Items .................................................................84
Table 2. Distribution of Participants by Years of Teaching .............................93
Table 3. Distribution of Participants by School Location ...............................93
Table 4. Distribution of Participants by Teaching Area .................................94
Table 5. Distribution of Participants by Primary Teaching Level ....................94
Table 6. Distribution of Participants by Gender ...........................................95
Table 7. MTIS Survey Items .......................................................................96
Table 8. Music Teacher Self-Efficacy Scale Inter-Item Correlation Matrix ........98
Table 9. Music Teacher Commitment Scale Inter-Item Correlation Matrix .........100
Table 10. Music Teacher Self-Efficacy and Music Teacher Commitment Inter-Item Correlation Matrix ...............................................................102
Table 11. Total Variance Explained for MTIS: 23 Items .................................105
Table 12. Structure Matrix: Principal Componenet Extraction with Oblimin Rotation Matrix ..............................................................107
Table 13. Factor Loadings and Solution Variance Contributions for Music Teacher Identity Survey Items .........................................................109
Table 14. Repeated Measures ANOVA for Identity by Levels of Teaching Experience ..............................................................112
Table 15. Pairwise Comparisons of Self-efficacy and Commitment across Teaching Experience ..........................................................113
Table 16. Pairwise Comparisons of Self-efficacy across Levels of Teaching Experience ..............................................................115
Table 17. Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Gender .................................................................................116

Table 18. Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Location.................................................................118

Table 19. Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Teaching Area .........................................................119

Table 20. Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Teaching Level........................................................120
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.</td>
<td>Bouij Dimensional Model of Musical and Music Teaching Comprehensiveness</td>
<td>39</td>
</tr>
<tr>
<td>Figure 2.</td>
<td>Scree Plot of Eigenvalues Used to Identify Two Factors within MTIS</td>
<td>106</td>
</tr>
<tr>
<td>Figure 3.</td>
<td>Profile Plot of Self-efficacy and Commitment Means across Levels of Teaching Experience</td>
<td>114</td>
</tr>
<tr>
<td>Figure 4.</td>
<td>Profile Plot of Male and Female Means across Identity Constructs</td>
<td>117</td>
</tr>
<tr>
<td>Figure 5.</td>
<td>Profile Plot of Teaching Level Means for Music Teacher Commitment across Years Teaching</td>
<td>121</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Background of the Problem

Ask music educators what they do for a living and you will likely garner a multitude of responses. These may range from naming a specific type of performance group, to identification with an age group being taught. For example, “I am a band/orchestra/choir director,” or “I teach elementary music.” Some might respond with general subject identification, such as, “I am a music teacher.” All of these responses signify identity, and indicate how an individual thinks of himself or herself, and/or how an individual would like to be perceived. Constructing an occupational identity is a powerful part of a person's identity, affecting how she thinks and what she chooses to do.

The choice of occupation “informs much of a person’s life” (Kadushin, 1969, p. 390). Occupational identity represents an important part of an individual but is not synonymous with personality or self-identity. One might think of the occupational identity as something one does, rather than something one is (Meijers, 1998; Watson, 2006). Unique to each occupation is a socially constructed template, complete with specific expectations for interactions and incentives, a body of knowledge, ethics, and authority (Chreim et al., 2003).
Teacher identity is a specific subset of occupational identity, affected readily by the dynamics between the personal attributes of a teacher and the context of his or her classroom, altered and renegotiated within the school, school district, and further affected by students, other teachers, staff, and administrators. Music teacher identity is further differentiated from teacher identity, primarily because to become a music teacher, one must first claim identity as a musician, and then, as a music teacher. Additionally, the very act of music-making is socially contingent (Hargreaves, MacDonald & Miell., 2002). Regelski (2007) states, “Music is a social art and ignoring or denying that dimension is as limiting as a strictly social conception of musical identity can be” (p. 11).

Teacher identity and music teacher identity are examined in the literature, but common terminology remains vague and undefined. Theoretical and epistemological positions may be undefined or absent so that various studies attempting to investigate similar concepts leave much to be inferred by a reader. For example, sociologists use the phrase ‘constructing identity’ while psychologists use the term ‘developing identity.’ While these two phrases may mean approximately the same thing, they evolve from different ontological perspectives. Identity construction implies that one plays an active role in determining how identity is formed, while identity development implies a predetermined process.

Extending the divide between definitions of teacher identity is the lack of focus on in-service teacher development spanning the critical years of induction. The path from pre-service to in-service teaching is wrought with difficulties, as beginning teachers negotiate specific contextual roles within a school, curricular issues, and instructional problems; all
confronted in isolation from colleagues (Bouij, 2004; DeLorenzo, 1992; Odell, 1986). Furthermore, music teachers face a lack of academic prestige within the school culture, are often isolated as the only music specialist in a school, and are confronted with difficult working conditions and diminished community perceptions of school music programs (Bouij, 2004; Scheib, 2004). Music teachers fresh from university studies must negotiate the music-making they enjoyed as students with their new lives as full-time teachers and may find balancing their own musical lives much different than expected (Bernard, 2005; Roberts, 2004; Scheib, 2003).

The needs of beginning and experienced in-service teachers are very different (Battey & Franke, 2008; Ryan, 1990). The first years of teaching serve to socialize new teachers in the occupation of teaching. Examination of the process through which a music teacher constructs an identity during this time may provide rich information affecting a multitude of teacher education practices, from mentoring and in-service workshops to best practices for music education. High attrition in the first years of teaching has been a long-standing problem associated with education. A growing body of evidence supports the premise that retaining qualified teachers is dependent on working conditions, effective teacher preparation, and support for new teachers (Darling-Hammond, 2003; Madsen & Hancock, 2002). Although research results are varied, approximately 33% of beginning public school teachers in the United States leave the occupation before completing their first year in the classroom and nearly 50% of new teachers leave the occupation after only five years (Hamilton, 2007).
To examine the path from pre-service to career in-service music teacher, a definition of *music teacher identity* and the development of a measurement instrument may contribute to an increased understanding of the ways in which construction of identity affects effective teaching and retention of those teachers. The primary concern of the current study is to define music teacher identity for the purposes of creating a measurement instrument to assist in pre-service music teacher education and in-service music teacher retention and effectiveness.

**Need for the Study**

Understanding music teacher identity is important as it addresses both retention of music teachers and music teacher effectiveness. “The concept of identity thus provides an analytical link between the personal and the social, between action and structure” (Holmes & Robinson 1999, p. 8). Extant research does not articulate clearly a definition of music teacher identity. Identity research terminology is also imprecise, dependent upon epistemology, and, as such, provides an unstable foundation upon which to build the music education research literature regarding identity. Moreover, the lack of an identity measurement instrument hinders the study of in-service music teacher identity. A stable definition for music teacher identity may be used to guide the development of a measurement instrument. The instrument then may serve to provide a structural overview to understanding the construction of in-service music teacher identity in the first five years of induction as compared to career music teachers. The first five years of teaching are crucial, as this time has been implicated as the most unstable years of
teaching and more specifically, the music teaching occupation (Conway et al., 2002; Darling-Hammond, 2003; Madsen & Hancock, 2002; Marso & Pigge, 1994; Marx & Winne, 1980; Scheib, 2004, 2006; Strunk & Robinson, 2006).

**Purposes of the Study**

The two purposes of this study are to: (a) define music teacher identity and its underlying constructs based on a critical examination of the extant research, and (b) develop an instrument to measure selected constructs from among a sample of music teachers across years of teaching. Research questions associated with the present study include:

1. What constructs, supported by extant research and theoretical positions, effectively define in-service music teacher identity?

   Based on the critical examination of the extant research, two constructs were selected for further study.

2. What is the reliability and validity of an instrument developed to measure Music Teacher Self-Efficacy and Music Teacher Commitment across a sample of music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience?
3. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience ($p \leq .05$)?

4. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by gender ($p \leq .05$)?

5. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by school location (i.e., urban, suburban, rural) ($p \leq .05$)?

6. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by teaching area (i.e., general music education, choral music education, instrumental music education) ($p \leq .05$)?

7. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by teaching level (i.e., elementary, middle school/junior high, high school) ($p \leq .05$)?
Definition of Terms

Community of Practice (CoP) is a term coined by Lave and Wenger (1991) and is defined as a group of individuals sharing a common interest and developing a set of skills through working together. The three foundation tenets of CoP are: (a) the domain: a shared competence that distinguishes group members from other people and is not necessarily recognized as “expertise” outside the group; (b) the community: members who engage in joint activities and discussion, interacting and learning together; and (c) the practice: a shared repertoire comprised of experiences, stories, tools, and ways of addressing recurring problems (Wenger, 2002).

Dramaturgy is a theory of Goffman’s (1959) rooted in symbolic interactionism and role theory, which interprets social interactions and identity as an individual and group performance of roles. The performance of a given role is accompanied by rights and responsibilities of both the individual and the group.

Music Teacher Agency is defined as a personal dimension of active participation and exercising control. It is related closely in this study to empowerment, where an individual has a sense of her power to take charge of a particular situation and produce change (Short, Greer, & Melvin, 1994). From a contemporary perspective, agency extends to issues of justice, feminism and critical theory.

Music Teacher Collectivity is a group efficacy in that it is a sense of belonging to an organization. More specifically for this study, it is one’s belief in the ability of the team
of teachers or administrators within a specific context to execute courses of action required to produce desired results.

*Music Teacher Commitment* is defined as one’s willingness to expend personal time, money, and energy to teach, and to be involved in professional activities.

*MUSIC-Teacher Comprehensiveness* refers to two subsets: (a) comprehensiveness of teacher roles, using a continuum from student-centered or broad comprehensiveness to subject centered or narrow comprehensiveness, and (b) comprehensiveness of musician roles on a continuum from all-around musician or broad comprehensiveness to performer or narrow comprehensiveness.

*Music Teacher Self-Efficacy* is defined as one’s sense of his or her ability to affect students in the classroom setting, influence parents, administration, and community, and be resilient in the face of adversity.

*Occupational identity* refers to the way in which one views identity through the lens of occupational choice.

*Role theory* investigates how individuals perform roles in everyday life through the values and norms within social contexts. Expectations surrounding a particular role may be one way to examine how social behaviors are constructed (Stryker, 1995). Dewey, Cooley, Goffman, and Mead contributed to modern understandings of role theory.
Social constructivism is a social theory positing that knowledge is constructed through social interaction, interpretation and understanding by the individual. Identity is considered fluid and contextually situated. (Bandura, 1977; Vygotsky, 1962)

Symbolic interactionism focuses on the symbols and meanings of the symbols ascribed by human beings as they interact, interpret and define each others’ actions. (Blumer, 1969; Cooley, 1902)
CHAPTER II
RELATED LITERATURE

The first purpose of the present study was to examine critically the extant research to establish a definition of music teacher identity. The definition is comprised of several discrete constructs, as discussed in the related literature. The first section of the literature review provides an overview of literature based on sociological theories. The second section of the chapter proceeds with an examination of occupational identity research. The third section of the literature review examines research on identity of the pre-service teacher and pre-service music teacher. The fourth section emphasizes research on in-service teachers and in-service music teachers. The fifth and final section of the literature review includes constructs specific to teacher and music teacher identity formation, whereby a culminating definition of in-service music teacher identity is offered as a springboard for the second purpose of the present study. The second purpose of the present study was to examine quantitatively selected constructs of in-service music teacher identity. Data was gathered from a sample of music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience to determine the degree to which predictable patterns of construct strength emerge.
Grounding the term “music teacher identity” in the theoretical literature provides a firm epistemological foundation from which occupational identity might be understood best and, consequently, from which music teacher identity might be defined specifically. The particular theories to be reviewed have been garnered from the literature. These include social constructivism, symbolic interactionism, and role theory. The constructs and resultant definition developed in the present study were based on these theories.

**Social Constructivism**

Social constructivists posit that learner construction of knowledge is the product of social interaction, interpretation, and understanding (Vygotsky, 1962). Vygotsky’s theoretical work is grounded in the importance of language and social interaction in the development of cognition. In particular, Vygotsky asserted that the source for cognitive growth is social interaction and that communication occurring in a social setting with more capable others (i.e., parents, teacher, peers, etc.) facilitates children’s construction of conceptual understanding (Bransford, Brown, and Cocking, 2000). His model representing such interaction, the zone of proximal development (ZPD), formed the foundation through which he explained teaching and learning (Harris, 2010; Mahn, 1999; Palinscar, 2005; Langford, 2005; Tudge & Hogan, 1997). The ZPD describes social learning as a progression from what one is able to do now, to what one may do with assistance of someone more knowledgeable, progressing into what one will be able to do without assistance in the future (Daniels, 2005, 2008; Hedegaard, 2005; Palinscar, 2005;
Tudge & Hogan, 1997). For example, a student might be able to estimate placement of fingers for a note on the violin, but is dependent on the teacher to check and correct finger placement, until after repeated attempts, the student places the finger correctly on the strings without assistance. Similar to Vygotsky, Bandura (1977) later presented his own social learning theory positing that people learn from each other via observation, imitation and modeling. As a social cognitive constructivist, Bandura’s social learning theory bridged the behavioral and cognitive theories of the time, and branched into theories on motivation and efficacy, complimenting Vygotsky’s social constructivist claims about the roots of teaching and learning (Bandura & Walters, 1963; Bankston, 2000).

There are central assumptions embedded in social constructivism regarding the ways in which humans interact with each other and the world to construct knowledge and meaning. First, there is no knowledge in the world to be learned, as all knowledge is created. The knowledge created has no meaning without social interactions to assign it meaning. Human construction of meaning and knowledge take on significance through our social interactions. Humanity is dependent on the ways in which we reflect on the construction of meaning, through our past, present and future (Gergen, 2009).

**Symbolic Interactionism**

Symbolic interactionism (SI) further delineates constructivism through a focus on symbols and the meanings human beings ascribe to the symbols. Symbolic interactionism originated with the work of G. H. Mead (1934), however Blumer, one of Mead’s students, coined the term in 1969 (Buechler, 2008). According to Blumer (1969):
The term "symbolic interaction" refers, of course, to the peculiar and distinctive character of interaction as it takes place between human beings. The peculiarity consists in the fact that human beings interpret or "define" each other's actions instead of merely reacting to each other's actions. Their "response" is not made directly to the actions of one another but instead is based on the meaning which they attach to such actions. Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the meaning of one another's actions. This mediation is equivalent to inserting a process of interpretation between stimulus and response in the case of human behavior. (p. 180)

Through Blumer’s work, SI may be summarized in three premises: (a) the object itself only has meaning when humans attach meaning to it, (b) all meaning is derived from social interaction, and (c) meanings are altered within different social contexts and interactions (Buechler, 2008; Delamater, 2003; McCall, 2006; Stryker & Vryan, 2003).

Identities, then, arise from social, situational, and personal symbolic constructions of meaning (Buechler, 2008). Symbolic constructions are powerful because they are used by individuals within a community to identify who is a member of that community and who is not. Such constructions are determined through relationships between the individual and the collective group, all of which are formed through social interactions and the meanings they are ascribed (Jenkins, 2008).

The ability to examine oneself as a member of a community leads to a shared meaning among members of who one is within this community and helps the individual construct his or her identity (Burke, 2006). Individual reflexivity, the ability to internalize and think about oneself critically, works to stabilize the social construct of community, reinforcing patterned behaviors of individuals within the group (Burke, 2006).
Cooley (1902), a contemporary of Mead, developed a concept of the ‘looking glass self’: how we see ourselves, how we think others see us, and how we then filter our understanding of both (Buechler, 2008). The first intimate interactions for human beings occurs with a primary social group, that is, the family unit, and through primary social groups, individuals define themselves as primary social group members (Buechler, 2008, Jenkins, 2008). We are known as complete individuals through our primary group relationships (Buechler, 2008). Through maturation processes and expansion of social experiences, the importance of other relationships begins to play a greater role in identity construction (Burke, 2006; Mahn, 1999). These experiences take place with secondary social groups, which refer to groups outside the family unit.

Occupational identity is mediated through experiences, being engaged in knowledge creation, and interaction with all kinds of situations and people (Wenger, 1998). A community of practice (CoP), a term coined by Lave and Wenger (1991), is defined as a group of individuals that meets to share a common interest and develops skill through working together. The three foundation tenets of CoP are: (a) the domain: a shared competence that distinguishes group members from other people and is not necessarily recognized as “expertise” outside the group; (b) the community: members who engage in joint activities and discussion, interacting and learning together; and (c) the practice: a shared repertoire comprised of experiences, stories, tools, and ways of addressing recurring problems (Wenger, 2002). The relationships that occur as a result of individuals sharing with the group are of utmost importance to developing a community of practice.
For example, in music education, occupational identity is mediated through experiences in the university setting first as a musician, interacting with performing ensembles and studio teachers who in turn reinforce the shared skills of the principal instrument performance or vocal performance. Second, the community of musicians is further delineated into those choosing to teach, through specific classes aimed at constructing shared experiences needed for identification as teachers. Social interactions during pre-service training are fundamental to the beginning construction of music teacher identity, which continue through student teaching and induction into the profession and beyond.

**Dramaturgical Theory**

Dramaturgical theory is an offshoot of symbolic interactionism and compliments role theory development. Dramaturgical theory focuses on the roles undertaken by one choosing an occupational identity. Identity is not a fixed trait but a fluid state that is altered through social interactions (Harvey, 1987). Goffman (1959) is credited with the theoretical tradition of dramaturgy, which was developed from his prior work in symbolic interactionism (Preves & Stepheson, 2009). Social interactions and identity are interpreted as performance (Hibberd, 2005; Lock & Strong, 2010). Occupation performance of identity requires construction of meaning and labels according to specific status and roles. The performance of the role is accompanied by rights and responsibilities, both individual and group. Theatrical metaphors, such as teachers as actors on a stage with students as the audience, are most commonly associated with dramaturgy. The dramaturgy metaphors are particularly useful in explaining social
organizations such as professions, “where individuals come together to establish meaning through performing values, beliefs and ethics for the collective” (Lock & Strong, 2010, p. 205).

Goffman used the language of frames and reframing which “require a combination of shared definition and purpose” (Lock & Strong, 2010, p. 207). Each frame, for example one of doctor and patient or teacher and student, requires a range of boundaries and shared meaning to function. Frames provide a way of organizing and adapting social behaviors to the context. The rituals of everyday life provide the stage and contexts through which we perform our identities. Music teacher identity, as such, provides a specific frame from which to examine identity construction, with emphasis on the context in which this identity is performed and constructed.

**Role Theory**

Role theory may be summarized as the investigation of how individuals perform roles in everyday life through the values and norms within social contexts. According to role theory, an identity is performed, as an actor taking on a role, such as a teacher performing his or her identity vis-à-vis the identity of the student (Biddle, 1986; Bruce & Yearley, 2006; Delamater, 2003; Merton, 1996; Stryker, 1995; Stryker & Statham, 1986). Furthermore, role identity may be defined as a hierarchy, dependent on how the individual is supported by others in the identity, committed to the identity, and receiving extrinsic and intrinsic reward for the identity (Stets, 2006; Owens, 2003).

Precursors to role theory offered many perspectives that contributed to the development of role theory. Dewey contributed perspective of the relationship of teacher
to student; Cooley, theories of the self; Mead, the term ‘role-taking’; Goffman’s work with dramaturgy and theatrical references, and finally Piaget, with early research on rules and compliance (Biddle & Thomas, 1966). Within the past forty years, Biddle (1966, 1986, 1979) contributed to concepts of role performance, which focuses on the way in which social actors present their social role. More recently, Stryker (1995) has approached role theory as a way of explaining how expectations of a role are used in the construction of social behavior.

Social expectations are attached to social positions. Multiple layers of social expectations are present within those social roles, such as the relationships constructed between teacher and student, teacher and colleagues, teacher and administrators, and teachers and professional organizations (Bruce & Yearley, 2006; Merton, 1996; Scott & Marshall, 2005). Within these relationships of self to others, there is a shared set of meanings, for example, norms, beliefs and values, which serve as a reference for the individual and link individuals to a particular social group (Delamater, 2003; Owens, 2003; Stryker, 1995).

Building on the fluidity of identity relationships, when an individual locates himself within a group and strives to construct an identity to be a part of a group, he is not only demarcating who he is but who he is not (Buechler, 2008 Stets, 2006). Applying this idea to occupational role identity, one may be a doctor, not a nurse; an engineer, not a scientist. Defining teacher identity may also require demarcating what one is not, as one is a mathematics teacher, not a history teacher; or one is a music teacher, not an English teacher. Demarcation between musician and music teacher are more problematic, as the
identity of musician and the identity of teacher are socially constructed as distinct, but in turn, may be simultaneously necessary to construct the music teacher identity (Roberts, 1991).

Summary of Sociological Theories

For the purposes of this research study, defining music teacher identity requires that the definition be situated within a social constructivist theoretical framework, recognizing that identity is fluid and contextually-situated (Aldridge, 1989; Beck & Young, 2005; Schneider, 2006). The broad framework of social constructivism presents knowledge as the product of social interaction, interpretation, and understanding (Vygotsky, 1962). Bandura’s social learning theory compliments Vygotsky’s zone of proximal development and provides the framework for symbolic interactionism through a focus on the symbols and the meanings we ascribe to those symbols (Bandura & Walters, 1963, Bankston, 2000).

Symbolic interactionism theory defines identities as arising from social, situational, and personal symbolic constructions of meaning (Bankston, 2000; Buechler, 2008). Symbols themselves have no meaning until humans ascribe meaning to them. When meaning is ascribed to symbols, for example, through a shared repertoire of experiences, stories, tools, and ways of addressing recurring problems, Wenger (1998) posits a community of practice has been constructed. Dramaturgical theory emphasizes the performance of roles using frames and reframing in examining how roles are constructed and performed. Within the teaching profession, frames are useful in probing how boundaries are established through subject areas and experiences in the classroom.
Role theory examines how an identity is performed by the individual or group of individuals performing their interpretations of contextual roles, such as a teacher (Biddle, 1986; Bruce & Yearley, 2006; Delamater, 2003; Merton, 1996; Owens, 2003; Stryker, 1995; Stryker & Statham, 1986). Roles are constructed as an individual locates himself within a group and demarcates who he is and who he is not (Buechler, 2000; Stets, 2006). The present study seeks to uncover the broad scope of music teacher identity construction within the teaching profession and specifically within the music teaching profession. Having presented the theoretical foundations upon which a definition of music teacher identity is to be predicated, research on occupational identity will be explored in the next section of this chapter and related back to the theoretical foundations.

**Occupational Identity Research**

*Occupational identity* refers to the way in which one views identity through the lens of occupational choice. Deeper understanding of occupational identity requires determining what constitutes the collective identity of the occupation (e.g., a sense of belonging to a group) and what constitutes the personal identity (Jenkins, 2008). Personal identity (e.g., a sense of one’s self) and collective occupational identity merge with each other, and amalgamate as a holistic view of one’s self as a person (Jenkins, 2008; Meijers, 1998; Sundin, 2001).

Each occupation has its own template, complete with structures, interactions, and incentives, which are yet filtered through individual experiences (Chreim et al., 2003; Wenger, 1998). Individual experiences include engagement in knowledge creation and
interactions with different kinds of situations and different people (Wenger, 1998). The following section examines occupational identity research situated in symbolic interactionism.

**Occupational Identity**

Groundbreaking research in the late 1950’s provided a foundation upon which to build arguments about occupational training and occupational identity (Becker & Carper 1956, Carper & Becker, 1957). Becker and Carper (1956) gathered data from interviews with 51 students ranging from their first year of graduate school to those about to receive a PhD in the areas of philosophy, physiology, and mechanical engineering. The researchers sought to “discover, by comparing three groups of persons about to enter the work world, some of the threads from which the fabric of occupational identification is woven” (p. 341). Interview data were analyzed and four themes were identified: (a) occupational title and the associated ideology, (b) commitment to task, (c) commitment to particular organizations or institutional positions, and (d) significance of one’s own position within the larger society. The relationship between one’s self and the occupational title is imbued with meaning and implies certain characteristics, qualities, interests, and capabilities of those who identify with the occupational title (Becker & Carper, 1956). The individual is also situated within the larger society and through various levels of commitment to tasks, organization or position, one is able to claim who one is and who one is not vis-à-vis the occupation.

Carper and Becker’s 1957 study extended the data from their previous study, and used interviews with male graduate students at a large university enrolled in mechanical
engineering, philosophy, and physiology departments. Group expectation sets for
occupational choice were identified as general and current cultural expectations, family
expectations, and occupational expectations. Social identifiers and cultural expectations
were found to affect occupational choice. Family expectations dictated success more
specifically than social-class mobility. Occupations requiring early commitments tended
to be chosen by family and individuals together. Conflict in occupational identity
occurred around inconsistencies in parental and occupational expectations. Elements
identified as important in the process were specific family wishes and authority to
express those wishes, character of commitment and time required for the occupation, the
nature and social support of occupational ideology, and timing of incompatibilities
between family and occupational expectations. Adjustment and conflict of occupational
identity was found to be based on the interaction of these elements.

The studies produced by Becker and Carper remain crucial links in understanding the
social influences of occupational identity construction. Though only men at a large
university were interviewed for these studies, the researchers qualified the sample by
stating that participants might be influenced by class structure. The researchers took care
to indicate there could be important differences not uncovered through this particular
research (Becker & Carper, 1956), particularly because the participants were still students
and had not yet entered the workforce.

Important concepts in Becker and Carper’s work (Becker & Caper, 1956; Carper &
Becker, 1957) are applicable to the present study. Commitment to the occupation
through task, values, and position have been pulled into many occupational studies in a
variety of fields, such as human resources management, health care, and education (Bordin et al., 1963; Calley & Hawley, 2008; Chreim, et al., 2003, Cheung, 2008; Gill et al, 2009; Firestone & Rosenblum., 1987; Sundin, 2001; Tucker, 1967). For example, Calley and Hawley (2008) surveyed counselor educators, examining factors identified as contributing to construction of occupational identity in counselor educators. Counselor educators on faculty in forty different counseling degree programs at 1,888 accredited institutions were randomly selected to participate. The data gathering instrument was developed from a review of occupational identity literature, guided by eight major themes: (a) training and credentials, (b) professional affiliations, (c) scope of professional activities, (d) focus of scholarship, (e) theoretical orientation, (f) pedagogical tools, (g) service, and (h) self-proclaimed identity. The construct of occupational identity was broad, so as to examine the interaction of collective identity and the transmission of identity to their counseling students.

The researchers found professional affiliations were strong, but leadership within these affiliations was not, indicating a lack of involvement in legislative advocacy for counseling occupation. Early occupational identity was indicated through doctoral degrees. Participants were more likely to use counseling textbooks within their courses if counseling was their first career choice. The two most common theoretical orientations were humanistic and constructivist. Furthermore, the researchers found that values carried over from ideological foundations merged with occupational identity. Calley and Hawley (2008), whose work was framed in constructivist theory, indicated the individual
sense of belonging based on occupational affiliations superseded advocacy of collectivity for the next generation of counselor educators.

Commitment to task, organization, and institution may manifest differently for music teachers, as the identity of musician requires an early commitment. This idea is echoed in studies examining recruitment to music occupations, where early musical experiences in families and school influence occupational choices (McClellan, 2007; Schmidt et al., 2006).

Bergee (2002) used a survey to gather information on the attitudes of music education majors about aspects of the profession that cause ambivalence, negative messages, and the tendency to elevate the self over others. The participants were 96 undergraduates from three midwestern universities in the following concentrations: (a) elementary, (b) secondary choral, (c) instrumental string, (d) instrumental band, (e) general, and (f) piano pedagogy.

There were no statistically significant differences in student response among universities or concentrations ($p > .05$). From the total number of participants, 78% chose to be music majors while still in high school, influenced most often by family and second most often by their music teacher. Sixty percent felt teachers in rural areas were the most respected. Music majors believed they enjoyed their concentration more than students in other concentration areas (i.e., 68%). Primary sources of negativity were found to come from the same areas as those sources of greatest support, that of family, friends, and peers. Statistical significance was found in all areas of self over others for variables of enthusiasm, newspaper publicity, competency testing, primary group
acceptance, relationship with administrators, relationship with fellow teachers, economic status of recent graduate, starting salary, peak of career salary, and anticipation of additional employment. No statistically significant differences were found among areas of self and secondary group acceptance ($p > .01$). Bergee (2002) concluded that music majors retained a self-perception as being intelligent, talented, and occupationally focused with little evidence of perceived inferiority. Music major participants appeared to be keenly aware of the rewards and problems of the profession, but tended to look for personal solutions to professional problems.

Since Becker and Carper completed their 1950’s works, many researchers have continued to examine occupational identity as a holistic expression of personality, social structures, and work environments (Bordin et al., 1963; Holland, 1992; Marcia, 1966; Vondracek, 1992). Wenger (1998) perhaps states the case of identity construction best:

The work of identity is always going on. Identity is not some primordial core of personality that already exists. Nor is it something we acquire at some point in the same way that, at a certain age, we grow a set of permanent teeth. Even though the issues of identity as a focus of overt concern may become more salient at certain times than at others, our identity is something we constantly renegotiate during the course of our lives. (p. 154).

Contemporary occupational identity research may attempt to give voice to the oppressed or under-represented portions of society (Crossley, 2005). Feminist issues (Gill et al, 2009; Dillabough, 1999; Ibarra, 1999; Nias, 1981), sexuality (Endo et al, 2010), socio-economics (Maclean & White, 2007), and cultural or political concerns (Flores, 2006; Olesen, 2001; Russell, 2008; Troman, 2008) are often addressed as
elements of personal experiences interacting with occupational identity. Case studies attempt to document the kinds of experiences affecting occupational identity on an individual basis and illuminate socially created boundaries such as culture, race, gender, sexuality, and socioeconomics.

Endo, Reece-Miller, and Santavicca (2010) used constructivist narrative inquiry as a lens to examine the life experiences and identity formation of six lesbian and gay teachers working in primary and secondary schools in the midwest region of the United States. Survey questions and personal interviews were used to collect data. These individuals kept their sexual identity separate from their teaching identity, motivated somewhat by the political policy of ‘don’t ask, don’t tell.’ Gay and lesbian teachers were found to live with bifurcated identities, unable to reveal the nature of their sexuality to their school community, which caused difficult internal personal struggles with occupational identity.

Political policies and the effect of teacher identity, commitment, and career in school cultures were examined through ethnographic data (Troman, 2008). Troman (2008) recorded informal conversations and observations over one school year using an intermittent time model. The subjects were five head teachers and 37 teachers (i.e., 85% female) from varied socio-economic status from schools across England. Symbolic interactionist theory defined culture, identity, commitment, and career, as developed by the researchers in previous work. Five attractors of teaching were identified along with three aspects of professional life. Troman found that teacher identity is becoming more complex within the context of overt national performance standards and the need to deal with rapid social, cultural, and economic changes in teaching roles. Occupational
identity was found to be strongest in older teachers, with younger female teachers focused on mothering, family, or service themes. Troman suggested that work might no longer be the central force in building a personal or occupational identity.

**Summary of Occupational Identity Research**

Beginning with early work examining vocational behaviors (Becker & Carper, 1956; Carper & Becker, 1957; Holland, 1992), extending to examinations of the self and personality as interfaced with occupational identity (Bordin et al., 1963; Holland, 1992; Marcia, 1966; Vondraceck, 1992), contemporary research pushes the boundaries of how occupational identity is understood. Becker and Carper’s work defined occupational identity as a personal commitment to title, tasks, ideology, and social status. A sense of belonging, or collectivity, is created when individuals attend to the values, expectations, norms, structures, and incentives of a particular organization (Becker & Carper, 1956; Bordin, et al., 1963; Jenkins, 2008). Occupational identity research presented in this section is situated in symbolic interactionism, focusing on the personal symbolic constructions of meaning and the relationship of personal meaning to the larger frame of occupational collectivity. The next section will examine research specific to the occupation of teaching, particularly at the pre-service level.

**Pre-service Teacher Identity Research**

Teacher identity may be examined as a subset of occupational identity. Though experiences previous to college entrance have helped shape an individual’s concept of the
occupation of teaching, the construction of teacher identity is greatly impacted by the experience of university teacher training. Examination of identity construction with the pre-service teacher is not new to the field (Malderez et al., 2007). Concern with how and when pre-service teachers construct their occupational teaching identity has been readily examined in research literature of the last several years. Areas studied include recruitment to teaching (Biddle, et al., 1962), specific pedagogical methods during pre-service classes (Atkinson, 2003; Cole & Knowles, 1993; Egan, 2009; Garli, 2008; Haniford, 2010), and student teaching experiences (Gaudelli & Ousley, 2009; Sexton, 2008; Malderez et al, 2007; tenDam & Blom, 2006) as ways in which to understand the construction of one’s pre-service teacher identity.

**Recruitment to the Occupation of Teaching**

How one chooses a profession is a complex venture (Holland, 1992; Vondracek, 1992; Marcia, 1966; Bordin et al, 1963; Biddle et al, 1962). Occupational research has identified the role of family, characteristics of commitment to an occupation, and the role early commitment plays in choosing an occupation (Becker & Carper, 1956; Carper & Becker, 1957). Recruitment to teaching is a consideration in understanding later socialization processes in the construction of teacher identity, as identity issues do not occur in a vacuum.

Biddle, Twyman, and Rankin, (1962) investigated the relationship between perceptions of the role of the public school teacher and recruitment into the occupation of teaching. Three hundred total participants consisting of 100 public school teachers from a major metropolitan area, 100 education students, and 100 non-education students from
an urban university, completed a survey. Role theory was utilized as the theoretical
frame of the study, primarily based on the researchers’ early work and Parson’s (1951)
work on social theory. Self norms and expectations, and group norms and expectations
were included in eight varieties of items grouped in tens. Participants were asked to rank
each set of ten items.

Role norms and expectations held by respondents and those attributed to others did
not vary greatly. Significant differences were found in a number of content areas of
specific role element norms and expectations between teachers and education students
and between education students and non-education students. There were fewer
differences, however, between education and non-education students than between
teachers and both groups. Differences involved expectation of teacher activities, such as
community participation (e.g., PTA meetings), with the student groups expecting more
participation from teachers. Teachers expected to gain more cooperation from authority
figures than did the student groups. Norms and expectations ranked by the education
students more closely matched those ranked by the teachers than by non-education
students. This result may imply that socialization of norms and expectations of
educational practices were already taking place for the education students. Role elements
seem to operate, according to the researchers in “significant and subtle ways” (Biddle et
al., 1962, p. 203).

Specific Pedagogical Methods

Pedagogical research often focuses on ways to promote teacher role construction in
the university setting. Using a social constructivist viewpoint, the relationship between
teacher-educator and student helps to shape teacher identity (Stillwagon, 2008). Reflexive relationships among the teacher-educator, pedagogical methods or texts, and pre-service teacher identity are the focus of such research.

Richardson (1996) surveyed the beliefs and attitudes of pre-service teachers in learning how to teach and how these beliefs and attitudes in turn affect the way pre-service and in-service teachers process information, react to possibilities of change, and create knowledge about teaching. The researcher concluded that pre-service teaching is sandwiched between powerful forces of individual life history of the teacher and classroom experiences as a student teacher. Richardson determined there may be a lag time between beginning to teach and understanding the concepts that have been acquired during the pre-service education period, which is consistent with a social constructivist paradigm.

Fuller and Brown (1975) theorized that teachers experience concerns along a continuum beginning with concerns for one’s self (survival concerns), progressing to concerns for the task at hand (task concerns), and maturing to being concerned for impact on student learning (impact concerns). Veenman (1984) used Fuller and Brown’s teacher concerns model to examine perceived problems in pre-service, early, middle, and late career teachers. Approximately 300 teachers completed a Teacher Concerns Questionnaire. Pre-service teachers indicated high concern with survival and low levels of task and impact concerns, supporting Fuller and Brown’s (1975) teaching concerns model. Veenman did not find differences among early, middle, and late career teachers’ concern levels. Task concerns remained moderately high consistently across all career
stages beyond the induction period. Impact concerns were high at all career points, even though there was an increase between pre-service to early career teachers. Developmental stages were not evident for in-service teachers in early, middle, or late career within this study using the Fuller and Brown model.

Evans and Tribble (1986) confirmed similar results in their study, indicating that the Fuller and Brown model did not seem to move in developmental stages throughout in-service teaching. Differences were uncovered, as beginning teachers placed a higher priority on relationships with parents and assessment of student work than did pre-service teachers. Different rankings of concerns based on teaching levels between elementary and secondary teachers were also uncovered, with higher levels of teacher efficacy and commitment uncovered between elementary female teachers and pre-service teacher and male and secondary teachers. The results of both the Veenman (1984) and Evans and Tribble (1986) studies illustrate a complex interaction of teaching level, gender, and experience in teacher efficacy and commitment levels for teachers.

**Student Teaching Experiences**

Dramaturgical theory provided a frame for Ronfeldt and Grossman’s (2008) examination of role-playing pedagogy as a way to assist in construction of teacher identity. The researchers focused on a specific method as a way to prepare pre-service teachers for the internal conflict between an idealized and actual teaching self once in-service teaching begins. The researchers concluded that approximations of practice with feedback were most successful in encouraging teacher identity construction for the students.
A pre-service teacher identity is put to the test first during student teaching. It is possible that during this time, an expectation of who one wants to be as a teacher collides with experiences of who one actually is as a beginning teacher. These discrepancies cause stress for the student teachers (Cole & Knowles, 1993). Using discourse analysis, an examination of the written work of the pre-service teachers, within a social constructivist framework, Cole and Knowles identified images and expectations of pre-service teacher identity construction. Because pre-service teachers form their initial teacher identity based on prior experiences and interactions with people, texts, and participation in formal training programs, the researchers surmised that conceptualization of teaching is multifarious. The process of identity construction for teachers is on-going and is most transparent as they move between initial education experiences into in-service development programs.

Examining pre-service teacher identity through discourse has been prevalent in the research literature in the past few years (Egan, 2009; Gaudelli & Ousley, 2008; Horn et al., 2008; Maclean & White, 2007; Ronfeldt & Grossman, 2008). Communication is not complete without a listening component. Egan (2009) used conversation and listening pedagogy with student teachers to assist them in teacher identity construction. Forty-four students, who were enrolled in their third year of a four-year degree program from two consecutive cohort groups specializing in early childhood education, participated in the study. Pre-service teachers were assigned to use listening pedagogy with students after receiving training at the university level in their methods course. Written responses were collected from reflections on three open-ended writing frames. Responses from the
student teachers related to issues of legitimate peripheral participation (Lave & Wenger, 1991), that indicated initial participation as student teachers in the classroom generally occurs through low-risk or peripheral tasks. Both symbolic interactionism and role theory were framed within this research study, as a Communities of Practice perspective (Lave & Wenger, 1991) was utilized to examine student teacher responses. Egan (2009) charged teacher-educators to support student teacher participation in active development of professional knowledge through active listening and “sustained shared thinking” (p. 55) with children as a way to construct teacher identity.

Gaudelli & Ousley (2008) examined student teacher identity construction during the student teaching experience. Using symbolic interactionism, ten student teachers participated in the narrative study. A summary analysis drawn from the data included three primary points: (a) the teaching seminar served as a sounding board for student teachers to share experiences, (b) negotiation of identity was individual and contextual, and (c) student teachers drew support from one another during their seminar meetings. The researchers advocated providing space for student teachers to create their own identity work in teacher education, rather than supplementing methods courses with role-focused activities.

Haniford (2010), echoing the work of Cole and Knowles (1993), Gaudelli and Ousley (2008), and Egan (2009), asserted the need to focus on identity construction with pre-service teachers during student teaching. Haniford investigated the identity of one secondary education pre-service teacher through examination of her written plans and portfolios over one academic year that included her student teaching semester. The
student teacher’s position as classroom teacher changed over time. The change was in relationship to the discourses of the teacher education program and her experience with her students, particularly toward retaining greater control of her classroom.

Horn et al. (2008) used a longitudinal ethnography to follow eight secondary teachers from university training into student teaching. Shifts in identity and understanding typically take place through identification and negotiation of the classroom environments. Identity construction for these eight teachers appeared to be shaped and reshaped through experiences within teacher education and friction within different classroom environment experiences. Symbolic interactionism framed the analysis of the data. The researchers concluded that this friction is productive for the student teacher and assists in honing their abilities to adapt to different pedagogical practices and classroom environments.

Summary of Pre-service Teacher Identity Research

Pre-service teacher identity construction research has been examined primarily through the broad framework of social constructivism, but more specifically through symbolic interactionism, with modern perspectives of dramaturgy and role theory presented via the work of Lave and Wenger (1991). Pedagogical methods and student teacher experiences are most frequently examined through discourse analysis, which allows researchers to pursue investigations by analyzing written and spoken language (Egan, 2009; Gaudelli & Ousley, 2008; Horn et al., 2008; Maclean & White, 2007; Ronfeldt & Grossman, 2008). Identity construction for the pre-service teacher has been found to be an ongoing, fluid process, subject to contextual influences and not dependent upon developmental stages, but instead on experiences and autobiography. Friction
between idealized and actual identity and contextualized experiences outside of the university classroom perhaps begin to direct attention to the need to examine teacher identity construction during in-service induction (Cole & Knowles, 1993; Haniford, 2010; Horn et al., 2008; Ross, 1987). Having explored pre-service teacher identity research, the next section will examine research specific to music teacher identity, particularly at the pre-service level.

**Pre-service Music Teacher Identity Research**

Music teacher identity is a subset of general teacher identity, yet the specific differences between general teacher identity and music teacher identity are important to illuminate. The differences begin very early, as pre-service music teachers enter the university after having passed music auditions emphasizing musician-performer skills (Bernard, 2009; Bladh, 2004; Bouij, 2004; Dolloff, 1999, 2008; Hargreaves et al., 2003, 2007; Roberts, 1991, 1994). The emphasis on performance in music seems to affect the ways in which anticipatory socialization takes place (Bouij, 2004; Conway, 2002; Mark, 1998) and in turn, how pre-service music teacher identity is initially constructed. Pre-service music teacher construction has been examined to better understand the socialization process and effective pedagogy concerning the pre-service teacher (Bernard, 2009; Campbell & Thompson, 2007; Conkling, 2004; Conway, 2002; Dolloff, 1999, 2008; Isbell, 2008; L’Roy, 1983; Roberts, 1991). Such studies are valuable in establishing constructs for music teacher identity; however, needs of pre-service and in-service teachers are distinct, both in context and experiences (Avalos & Aylwin, 2007;
Braga, 1972; Frierson-Campbell, 2004; Frost, 2010; LeMaistre & Pare, 2010; Nir, 2002; Richardson, 1996). Often the pre-service teacher is idealistic and disconnected from the reality of the teaching context, while the in-service teacher is mired in reality to the point of risking the loss of all idealism to conformity (Braga, 1972; Richardson, 1996; Roberts & Graham, 2008).

**Pre-service Music Teacher Socialization**

A music student at the beginning of music education training frequently wants to become most like his or her own band, choir, or orchestra director (Conway, 2002). Music education students construct a musician identity much earlier than their teacher identity, making the musician identity, particularly that of performer, a pivotal and primary component of the music teacher identity (Hargreaves, 1976; Mark, 1998; Roberts, 1991, 2004). The identity of musician/performer has been implicated as being more important to music teachers than that of teacher, particularly in the pre-service and early induction stages (Dolloff, 1999; Mark, 1998; Roberts, 1991). Though subject matter may influence all teacher identity construction, it is an anomaly that music teachers may be more attuned to the identity of musician than science or history teachers are concerned with being a scientist or historian (Roberts, 1991; Mark, 1998). As music teaching is a function of being a musician (Roberts, 1991), the construction of the music teacher identity is somewhat unique in the duality of identity as musician/teacher among other teacher identities.

L’Roy (1983) investigated occupational identity construction in undergraduate music education majors. A survey was administered to 165 undergraduate music education majors.
majors at North Texas State University. Personal interviews were conducted with 38 of the participants. Guided by a symbolic interactionist theoretical framework, three research questions were investigated: (a) with what values and occupational norms do music education majors identify?, (b) what level of commitment do undergraduate music education majors have to specific music education knowledge and skills, and (c) what career commitment do undergraduate music education majors have to music education?

L’Roy found students had little commitment to occupational norms and values or to work-related skills and the body of knowledge. Students who had prior teaching experiences reported higher commitment to becoming a music educator than those who had not. A significant difference was found in responses between music specialization of band, choral, and string students. Anticipatory socialization did not seem to alter commitment levels to the occupational choice of music teaching.

Utilizing role theory (Becker & Carper, 1956; Carper & Becker, 1957), Paul (1998) investigated the effects of a two-year peer teaching laboratory experience on the occupational role construction of three undergraduate instrumental music pre-service teachers. Three students who had completed the four-semester laboratory experience were interviewed during or shortly after completing their student teaching practicum. Interviews were based on Becker & Carper (1956) definition of occupational identity as: (a) ownership of occupational title and identity, (b) commitment to occupational tasks and knowledge, (c) institutional position and reference group, and (d) recognition of social position. Subjects connected a sense of commitment most strongly to peer teaching as they reflected on their experiences.
Roberts (1991) studied musician-teacher identity construction in pre-service teacher socialization by examining how music education students construct a musician identity. With participants from five Canadian Universities, Roberts interviewed 108 music education students over 36 months. He found music education students not only constructed their musician identity as synonymous with the role of performer but encountered subject-specific conflict when claiming identity as a music teacher, in part due to the primary development as a musician/performer. Roberts proposed that music teacher preparation is distinct from other educational teaching preparation. Admission to the music school is based on musical ability and status is awarded according to performing ability and thus, students identify themselves not only as ‘musician’ but also quite specifically by their instrument or voice before they begin to construct a teacher identity. The interviews suggested that music teaching may often be viewed primarily as a function of being a musician, by both university professors and the pre-service music teachers.

The framework of role theory in the Roberts (1991) study may then be supported by previous work of Becker and Carper (1957). Early socialization in the role construction of musicians also affects the occupational choice and anticipatory socialization primary for all music education students. Socialization within the university and contextual factors are entwined with early musician socialization for music teacher identity construction.

In contrast to the dichotomy of musician-teacher presented so far, Bouij provides a context that enriches the musician-teacher argument through introducing a range of
comprehensiveness in both musicianship and in teaching. Bouij (2004) observed music teachers over a four year period of university music teacher training. Using role identity theory and Habermas’ theory of symbolic interactionism (Reiner, 2005), Bouij developed a framework for the analysis of students from the time they entered university studies through the completion of the degree program.

Using this framework of music teacher role development, Bouij asserted that musical role identities were constructed first through individual private music lesson socialization of music performance. At the end of the music teacher training period, pre-service music teachers suffered from ‘practice shock,’ as the difficulty of a music teacher’s working life revealed disinterested students, weak social status, and low position among teaching colleagues within the school community. These hard realities were in contrast to the musical role identity expectations acquired during training. Bouij (2004) suggested that pre-service teachers may approach identity construction within a two-dimensional model, with the roles of musician and teacher anchoring one dimension and musical comprehensiveness of narrowly-defined aspects, that of a highly specialized musical expertise, and broadly-defined aspects, that of a much less specialized musical expertise (i.e., ability to perform or teach more than one genre of music), anchoring the other dimension (see Figure 1).
Bouij suggested that beginning music teachers must deal with the new experience of teacher collectivity within the teaching assignment upon entering the profession. Occupational socialization is not complete upon gaining employment and induction, but remains fluid throughout a teaching career. Thus, role-identity construction includes the culture, occupational reference groups, collectivity, and individual negotiations of occupational identity within new contexts for beginning teachers.

Occupational choice to teach music was the focus of a survey of 152 pre-service music teachers (Hellman, 2008). Items were designed to investigate whether or not participants were planning to enter and remain in K-12 music teaching. The majority of participants indicated intent to start their career as music educators (86.8%) and teach
until retirement (63.4%). Of those who did not intend to teach, open-ended responses indicated a desire to work in other areas of music, a lack of confidence in teaching skills, issues of low pay, job instability, anticipation of a large workload or stress, and a preference to pursue other careers. Having a passion for sharing music and a desire to share that with others, including children, topped the reasons students desired a career in music education. Hellman suggested that constructing strong pre-service music teaching identities during teacher preparation is necessary to counteract the stress pervasive in the beginning years of music teaching.

Isbell (2008) also investigated the social and occupational identities of 578 undergraduates. Utilizing the framework of symbolic interactionism, Isbell compared primary and secondary socialization influences and music teacher identity. Primary socialization questions covered career decision, people and experiences. The school music teacher was identified as the greatest influence on continuing a career in music education by 63% of the students. Rounding out the top three influences were parents and private music teachers. Secondary socialization influences in college included family members, music education faculty, and ensemble directors. The most positive influence for continuing with a career in music education was association with a performing ensemble, followed by interactions with the music education peer group. Isbell found a positive correlation between secondary socialization and occupational identity variables, with previous experiences serving as significant predictors of occupational identity. Influential persons were not significant predictors of occupational identity. Though the research was focused on those who had already chosen music education careers, there
was not an indication of participant identity conflicts between music performance and music teaching in the analysis.

**Pre-service Music Teacher Pedagogy**

Researchers have explored music teacher role-identity construction through examination of classroom work involving the use of metaphors, pictorial images, narratives, narrative inquiries, and storying in supporting construction of the musician-teacher role (Bernard, 2004; Dolloff, 1999, 2008). Dolloff (1999) used personal images music education students created for themselves as a way of exploring identity construction. Prior experiences were highlighted as they related to teaching and teacher knowledge creation. Written narratives, creation of metaphors, and pictorial images of teaching and teachers were collected as data from both undergraduate and graduate music education students. The goal of the classroom work was to allow pre-service teachers a vehicle through which they might begin to understand their assumptions of teaching and learning.

Dolloff’s (1999) research draws from dramaturgical influences, role and symbolic interactionism theory. She employed the definition of occupational identity from McCall and Simmons’ (1966):

Identity may be defined as the character and the role that an individual devises for himself as an occupant of a particular social position. More intuitively, such role-identity is his imaginative view of himself as he likes to think of himself being and acting as an occupant of that position. (p. 65)
The images documented through Dolloff’s work are those of memory, imagination, role, and conflict, all highlighting the multidimensionality of the musician-teacher identity. Many pre-service music teachers constructed a view of themselves in relationship to an instrument. Conflict occurred between memories of the studio teacher, as a primary influence for the construction of musician identity, and public school music classroom settings. “This means that their image of the music teacher, and the teaching-learning interaction, is based on a model that will not necessarily work in the multi-student classroom” (1999, p. 205). According to Dolloff, the data reaffirms the need for placing the pre-service music teacher as the center of education research in exploring music teacher identity.

Using an autobiographical storyline built on a social-constructivist framework, Bernard (2000) proposed a framework from which music teacher identity might be studied. Through Bernard’s case study, the use of occupational discourse for encouraging music teacher identity construction was advanced. She suggested through her own experiences that pre-service music teachers must uncover personal relevance from music-making experiences to understand their own music teacher identity. Bernard concluded that music making and teaching are not necessarily in conflict, but are fluid and dependent on the negotiations of individual, social, and cultural contexts.

Conkling (2004) examined how pre-service music teachers develop practices and identity through professional development partnerships. Approximately 100 pre-service music teacher narratives were collected over eight years. Three were selected as representations from these partnership experiences for the published study. Examined
from a social constructivist perspective, narratives provided insight into how pre-service music teachers negotiated their practice and identity via teaching opportunities and cohort groups. The narratives explored prior values and assumptions about music teaching. Conkling suggested that occupational identity development is shaped and reshaped through negotiation of new music teaching experiences.

Draves (2010) examined music teacher identity drawing from narratives of developing relationships between music student teachers and their cooperating music teachers. Using a total of ten participants from the same midwestern university, themes of cooperating music teacher and student music teacher identities were identified. Cooperating music teachers’ themes of mutual learning, professional development, professional responsibility, and role model and mentor were contrasted with the cooperating teachers’ evaluation of student music teachers through persona and style, thinking, relationships with students, and extras (evidence of commitment).

The relationship between student teachers and cooperating teachers influenced music teacher identity in positive ways. Music student teachers identity construction was most evident in the relationships developed with their students. Cooperating music teachers added new roles of mentor, role model, and lifelong learner to their identity descriptions.

Hargreaves, Purves, Welch, and Marshall (2007) investigated self-efficacy, occupational identification, and general attitudes of pre-service specialist secondary music teachers through a symbolic interactionist framework. They used a nine-month longitudinal study design. Two groups of participants were selected from three conservatories, one university music department, and one university education
department in London, Mid-land, Northwest, and East England. The first participant group was comprised of twenty-nine pre-service music teachers in the last term of university study. The second participant group was comprised of twenty undergraduate music majors in the first and last terms of their final year of study.

Researchers designed a Musical Careers Questionnaire to measure self-efficacy, occupational identification, and attitudes toward skills between pre-service music teachers and music majors. From a series of ANOVAs, the researchers found no significant difference between groups in self-efficacy over the nine month period. Self-efficacy did not significantly change for either group among the repeated measures. Attitudes toward music teaching and perception of music skills did change for the pre-service music teachers. Significant differences were found in three individual items (musical aims, personal aims and social aims) relating to the aims of music education. Pre-service music teachers did not score differently than the music students in attitudes toward music specialty.

**Summary of Pre-service Music Teacher Identity Research**

The research outlined here covers the gamut of social theory from social constructivism (Bernard, 2000; Conkling, 2004; Hellman, 2008), symbolic interactionism (Hargreaves et al., 2007; Isbell, 2008; L’Roy, 1983), role theory (Paul, 1998; Roberts, 1991) to dramaturgy (Dolloff, 1999). Extant pre-service music teacher identity research has highlighted the importance experiences have on the construction of occupational identity from early socialization to norms and expectations through the beginning stage of
induction to the profession (Paul, 1998). Music teaching is a function of being a musician, and as such, has a different set of anticipatory social expectations than those anticipatory social expectations associated with teacher preparation in non-music content areas (Bladh, 2004; Bouij, 2004; Conway, 2002; Isbell, 2008; Mark, 1998). Conflicts between the musician-performer identity and the music teacher identity are suggested in many studies (Bouij, 2004; Dolloff, 1999; Hargreaves, 1976; Isbell, 2008; Mark, 1998; Roberts, 1991, 2004). The structure of university training may be implicated as part of the difficulty in construction of pre-service music teacher identity (Dolloff, 1999; Hellman, 2008). For Bernard (2008), music teacher identity is not a conflict, but a fluid state dependent on individual, social and cultural contexts.

Experiences seem to be significant predictors of commitment to occupational identification in music teaching (Conkling, 2004; Isbell, 2008), but not necessarily before students enter the workforce (L’Roy, 1983). Experience early in one’s teaching semester may not initially affect music teacher self-efficacy, but does begin to alter attitudes toward music teaching and the skills needed for such (Hargreaves et al., 2007). Socialization within the university, experiences, and contextual factors are entwined with prior musician socialization for music teacher identity construction, which continues to impact music teachers as they begin their first teaching jobs. Bouij (2004) suggested that pre-service teachers identity construction may be examined using a two-dimensional model. The roles of musician and teacher anchor one dimension while musical comprehensiveness dimension is anchored by a narrow to broad range. A construct of musician-teacher comprehensiveness based on Bouij’s (2004) model is necessary to
examine early musician socialization, university socialization, and contextual factors that continue to impact music teachers as they begin their first teaching jobs. Having explored the pre-service teacher research of non-music and music teachers, the next section will explore identity research, specifically regarding in-service teachers.

In-service Teacher Identity Research

There are powerful forces at work between the individual life history of a teacher and classroom experiences as a student teacher that lead up to the beginning of a teaching career (Richardson, 1996). A novice teacher enters the profession with limited classroom experiences, armed with a general base of knowledge, and an identity which is tenuous at best and generally rooted in the recently completed student teaching experience (Beijaard et al., 2004; Horn et al., 2008; Malderez et al, 2007; Ronfeldt & Grossman, 2008). Moving beyond the student teaching experience into induction has frequently uncovered dissonance for novices among their understanding of teacher identity, the collective identity of the profession, and the realities of such in the workplace (Ritter, 2007; Sundin, 2001; Worthy, 2005). The novice teacher “appears to be intensely concerned with the image of self as teacher” (Malderez et al., 2007, p. 239), and this is perhaps linked with the necessary transition which leads to concern for student learning (Fuller & Brown, 1975; Kagan, 1992; Malderez et al., 2007).

Many qualitative studies on in-service teacher identity have focused on perceptions of professionalism for beginning teachers (Cherubini, 2007; Worthy, 2005), the blending of the self with occupational identity (Endo et al., 2010; Maclure, 1993; Mok, 2005; Tsui,
2007), contextual issues of the workplace (Avalos & Aylwin, 2007; Frost, 2010; LeMaistre & Pare, 2010; Nir, 2002), impact of early experiences (Avalos & Aylwin, 2007; Flores, 2006; Harrison, 2001), implications of teacher training (Beijaard et al., 2000; Feiman-Nemser, 2001; Worthy, 2005), and mentoring needs of new teachers (Feiman-Nemser, 2001; Odell, 1996; Worthy, 2005). Such studies have not regarded teacher identity as either fixed or stable, but as a complex dynamic among roles a teacher assumes, personal dimensions of the teaching act, and the context within which the teacher is working (Beijaard et al., 2004). Due to underlying assumptions about the dynamic quality of teacher identity, these studies are clearly situated within social constructivist or symbolic interactionist theory.

The concept of teacher identity has been represented in the research through the use of broad definitions of social theory, focused on social constructivism and symbolic interactionism. Though occupational identity is indeed complex, attempts to bridge personal biography with occupational identity that links identity directly to broad definitions of commitment, job satisfaction, or even teacher effectiveness further obscures a clear definition of teacher identity (VanHuizen et al., 2005). Teacher identity has aligned closely with self-efficacy and fulfillment, merging the personal and occupational self, which in turn can render a teacher’s identity vulnerable (Nias, 1996). More recently, teacher identity has been examined through discursive practices, focusing on teacher identity as constantly changing within a context that is “embedded in power relations, ideology, and culture” (Zembylas, 2003, p. 105).
Beijaard, Meijer, and Verloop (2004) conducted a review of teacher identity research, highlighting the difficulty found in defining the conceptual issues of identity. Initial evaluation of nine studies found each of the investigations rooted in symbolic interactionist theory. Beijaard et al. asserted that research prior to 2004 on teacher identity fell into three categories: (a) studies that focused on teachers’ occupational development formation, (b) studies that focused on identification of teachers’ occupational identity characteristics, and (c) studies that focused on occupational identity through stories of teachers. Four features of teachers’ identity were derived from the studies as essential to the definition of teacher identity. First, teacher identity is an ongoing process of interpretation and re-interpretation of experiences. Second, teacher identity implies both the person and the context. Third, sub-identities exist within teacher identity that may be in conflict or harmony with one another at any given time. Fourth, agency, a personal dimension of teaching through which a teacher is actively participating and exercising control, is important to the construction of a teacher identity.

Induction and the Novice Teacher

Researchers have implicated a struggle between teacher identity on one hand and (a) roles demanded of the new job, (b) negotiation of theoretical knowledge and practical application of knowledge, and (c) negotiation of the workplace experiences on the other hand (Cook, 2009; Ritter, 2007; Valli, 1992; Worthy, 2005). In a longitudinal study grounded in symbolic interactionism, Worthy (2005) gathered perceptions, observations, field notes, and interviews during one teacher's first five years of teaching to develop perspectives on improving teacher preparation and early support. Themes emergent from
the research were (a) becoming a teacher, (b) finding a support system, and (c) developing perspectives on teacher preparation. The participant found himself unprepared for the demands of the classroom (e.g., student behavior issues) and lacking in what he described as 'essential knowledge' such as setting up the classroom and non-instructional activities, which hold the school day together. His support system included a mentor assigned by the school corporation, with whom he felt mismatched in classroom disciplinary style and philosophy. Developing his own network of professionals filled the gaps his mentor left unfilled. The chasm between theory and practice in his undergraduate training made him critical of teacher-educators who had little public school experience, describing them as needing to be as capable of K-12 teaching and coaching as their student teachers.

Congruent with Worthy’s work, there is an implicated struggle between the occupational identity of a novice teacher and the roles he or she first experiences on the job (Fishburn, 1964; Olesen, 2001; Ritter, 2007). Based on his social constructivist research, Ritter (2007) gleaned three broad categories from an autobiographical narrative inquiry of a novice teacher educator (i.e., a newly hired professor in higher education), which included: (a) establishing an identity as teacher educator, (b) navigating the role of teacher educator, and (c) coping with external sources of resistance. Ritter suggested that contextual influences on the novice teacher educator interacted with personal experiences, further impacting teacher identity construction for the novice teacher. Though the teacher-educator may well have classroom experience, the new role as teacher educator must be constructed in much the same way a novice teacher constructs
the new role as teacher. Olesen (2001) suggested through a symbolic interactionist case study investigation that synthesis must occur between the ideal teacher identity, the reality of the workplace, and one’s personal life history. The experiences brought to the classroom help to give meaning to teaching and create tensions from which potential learning could be achieved.

Teacher identity affects workplace relationships and collective identity as well. Robinson, Anning, and Frost (2005) examined ways in which multi-disciplinary teacher teams work together, create knowledge, and through the experiences of the professionals, explore the impact of the team concept on professional learning. Grounded in symbolic interactionism, specifically Wenger’s (1991) Communities of Practice, the three phases of the project included (a) gathering documentary evidence from the teams through observation of their meetings, (b) interviews with team members to explore the issues rising out of the observations, and (c) focus groups with team members responding to incidents arising from decision making and knowledge sharing. Data were analyzed for the structural systems underpinning the team functions, team members’ experiences in learning communities of knowledge exchange, and the impact of changes in practice on participants' teacher identities, status, and feelings. The researchers concluded that enhancing individual teacher identity increased positive professional attitudes among all members in the multi-agency teams.

Many pre-service teacher research studies implicate the role of previous personal experience when reporting on identity construction. In-service teacher research does not depart from this perspective. Utilizing a case study investigation framed in critical social
constructivist theory, Agee (2004) examined an African American teacher's experiences during her induction into the teaching profession. Agee focused on the tensions that emerged as her teacher identity and teaching goals intersected with mandated testing. Data were collected over a three year period, beginning with pre-service teaching and continuing through the participant’s first and second years of teaching. Interview questions focused on her teacher identity construction and understanding of the contexts affecting her role as a teacher. The interview revealed conflict between her idealized role and actual role, complicated by issues of diversity, context, and experiences with mandated testing stresses.

Mandated testing is but one challenge facing novices; and support systems designed for novices often miss the mark. Fantilli and McDougall (2009) examined pre-service teachers moving from pre-service into in-service status in an effort to determine the challenges and supports that were most needed during such a transition. Guided by social constructivism, the researchers employed a mixed method approach, using an online survey containing both Likert-scale questions and open-ended responses. The researchers also conducted follow-up interviews. Participants were 86 prospective teachers and 54 graduates from Ontario in their first three years of teaching. Administrative leadership, refined mentorship processes, hiring practices, and district-sponsored support systems were deemed as the best ways to ensure new teacher success.

In a similar social constructivist study, Ulvik, Smith, & Helleve (2009) gathered data on the experiences of novice teachers in the first year of teaching in upper secondary schools in Norway. The researchers found novice teachers’ desired acceptance as fully
qualified teachers. Further, the researchers found novice teachers to be insecure in their new jobs. The dissonance between desiring acceptance and feeling insecure as a teacher was further reflected in the descriptions by novice teachers of their first year of teaching. Participants described their experiences as being enjoyable and meaningful, but also exhausting and filled with ambivalence. First year teachers cited heavy workload and lack of time as the greatest problems. The researchers reported that school culture often was not one of inclusion, indicating support and induction programs were missing from the professional development of novice in-service teachers; this echoed the findings of Fantilli and MacDougall (2009).

**Induction and Mentoring**

Mentoring, both for the novice and for the in-service mentor teacher, provides another layer of support for identity construction process for novice teachers within the workplace. Not only does the novice gain needed support, but the in-service teacher adds the role of mentor to his or her teacher identity and may begin to reflect differently on his or her own teaching (Draves, 2010). Exemplary induction programs have been found to enhance socialization of beginning teachers significantly, connecting them to communities of learning, empowering them as teachers, and in turn enhancing teacher identity construction (Cherubini, 2007; Martin & Rippon, 2005).

For the novice teacher to continue to reflect upon his or her own teacher identity, assistance with the realities of the workplace must be considered. Cherubini (2007) examined perceptions of 178 beginning teachers from two school boards in Ontario, Canada who participated in selected exemplary induction programs. Two groups of
novices from School Board ‘A’ \((n = 75)\) and School Board ‘B’ \((n = 98)\) participated over two school years. The programs provided by each School Board were equal in terms of budgets and guidelines provided by the Ministry of Education for teacher induction, with administrators from each School Board free to designate how their programs were designed. Qualitative triangulation design, framed in symbolic interactionism, was used to identify themes representing the ways in which these teachers understood their professional induction. Themes included “exceeding beginning teachers’ expectations, their appreciation of meaningful support, their recognition of teacher leadership, and the disconnect between in-services and practice” (Cherubini, 2007, p. 1).

School board ‘A’ novice teachers were aware of the ways in which the induction programs met their needs as beginners and filled the gap between their training and beginning practice in the profession. The influence of teacher-mentors in helping the novice teachers sort through the issues gave these novice teachers the opportunity to look beyond the day-to-day workings of the classroom to teaching as a career. The novice teachers demonstrated an increased sense of self-efficacy.

School board ‘B’ novices expressed the feeling that induction programs were not helpful if they were not individualized for each teacher. These novice teachers felt the time pressures to participate in the program were more hurtful than helpful to their developing sense of professionalism. Overall, school board ‘A’ novices sensed their professional skills developing over a continuum of learning while school board ‘B’ novices expressed induction experiences as one of professional survival. The differences
between the two programs appeared to be in the ways in which the support for the novice was offered – one of individualized collegiality or one of large group participation.

Similar emergent themes of struggling to establish occupational identity and reconstructing identity through reinterpretation of beliefs and values through new contexts were highlighted in Flores’ (2006) study. Fourteen first year Portuguese teachers with a four year degree, practicum experience, but no in-service teaching experience participated over a two year period. Participant interviews, data from their classroom students, and principal interviews were included for the triangulation, and were analyzed using grounded theory. For the novice teachers, issues of self-motivation and self-efficacy were distinctive between committed and enthusiastic teachers and those whose attitudes reflected defeated compliance.

Teacher identity is not always implicated in understanding novice teacher experiences. Case studies may instead draw attention to the need for mentorship and to contextualize teacher dispositions such as empathy, sensitivity, and adaptability through reflective practices (Tsui, 2007). Glickman and Tamashiro (1982) examined first-year, fifth-year, and former teachers using self-efficacy, ego development, and problem-solving measures to assess difference between groups. All participants received degrees from the same university (N = 129). There were no statistically significant differences among the groups on problem-solving (p > .05), but first- and fifth-year teachers scored significantly higher on self-efficacy and ego development measures than did former teachers, raising the possibility that self-efficacy is tied to retention.
Swackhamer (2009) used mixed methods to investigate influences on levels of mathematic teacher self-efficacy among elementary teachers to inform both teacher preparation and professional development programs. Eighty-six in-service elementary teachers completed surveys in mathematic-specific teacher efficacy, mentor support, and mathematics anxiety. Upon completion of the surveys, four teachers with high self-efficacy in mathematics and four teachers with low self-efficacy in mathematics were chosen for qualitative interviews. Mathematics-specific teacher self-efficacy was influenced by mathematic content knowledge, years of teaching, and teaching support. Teacher innovation, differentiation of instruction, and using curriculum resources were found to be associated with high levels of mathematic-specific teacher efficacy. Low levels of mathematic-specific teacher efficacy were found to produce teacher-centered classrooms and a dependence on scripted mathematics materials. High levels of teacher self-efficacy were associated with high levels of mathematical knowledge.

Skaalvik and Skaalvik (2010) tested the factors of a recently developed Norwegian instrument for measuring self-efficacy. Using a social constructivist framework, several relationships were investigated, including relationships among individual teacher self-efficacy, collective teacher efficacy, and external control (i.e., teacher beliefs about external factors which affect their ability to teach). The researchers also explored how teacher self-efficacy and teacher burnout are related to teacher perception of school context and job satisfaction.

Participants (N = 2249) included Norwegian teachers from 113 elementary and middle schools. Six separate sub-scales were used for the instrument: Norwegian
Teacher Self-Efficacy Scale, Collective Teacher Efficacy Scale, External Control Scale, Teacher Burnout Scale, Teacher Job Satisfaction Scale, and Perceived School Context Scale. A confirmatory factor analysis and structural equation modeling were used to interpret the data. Results support teacher self-efficacy as a multi-dimensional construct and the use of the six subscales as latent self-efficacy indicators. Teacher self-efficacy and collective teacher efficacy were found to be different but positively correlated constructs. School context was found to have different relationships with individual and collective teacher efficacy, with teacher self-efficacy most strongly related to teacher relations with parents and collective teacher self-efficacy more strongly related to supervisory support. Burnout was negatively correlated with teacher self-efficacy.

Along with teacher self-efficacy, commitment related to teacher identity has been well-documented, particularly as it relates to retention of teachers (Day et al., 2006a; Handley, 2008; Madsen & Hancock, 2002; McNeil et al., 2006; Rots et al., 2007; Strunk & Robinson, 2006), teacher effectiveness (Day et al., 2006b; Ebmeier, 2003; Harrison, Nir, 2002;) and agency (Beauchamp & Thomas, 2009; Beijaard et al., 2004; Lasky, 2005; Maclain & White, 2007; Maclure, 1993; Moore, 2008; Roberts & Graham, 2008; Robinson et al., 2005; Sexton, 2006; Skaalvik & Skaalvik, 2010; Sloan, 2000; Vahasanen & Etelanen, 2009). Teachers themselves use the term commitment in different ways to evoke different meanings (Nias, 1981). Nias (1981) determined there were four ways in which teachers use the word “commitment”: (a) in pursuit of personal ideals, (b) as involvement, (c) as a sense of identity as a teacher, and (d) in pursuit of high standards of competence within the teaching profession. The first two ways indicate the
investment of personal resources of time and money and the last two suggest an intention to remain in the teaching profession. The term was also used to distinguish between individuals in teaching or groups of teachers. Nias suggested that these differing meanings may take on singular meanings the longer a teacher remains in the profession.

Day, Elliott, and Kington (2005) also examined the perceptions of experienced teachers regarding the term commitment. Teachers were interviewed from two countries (i.e., Australia and Great Britain), and from different schools, with different age levels of students. Emergent themes were used to organize the data around the character of commitment, changes across time, and factors diminishing or sustaining commitment. The practice of commitment fell into several categories of perception: (a) a clear set of values and ideology informing practice regardless of context, (b) a clear sense of standards, (c) a willingness to reflect on experience and context of the experience for adaptability, and (d) intellectual/emotional engagement. The researchers concluded commitment may be understood as a nested phenomenon that is related to a set of more permanent values based on self identity and personal beliefs.

The complex dynamics of teacher identity further obscure the relationship of commitment, often connecting commitment with another related construct, particularly linked with self-efficacy (Ebmeier, 2003; Ross & Gray, 2006) or effectiveness (Louis, 1998). Bogler and Somech (2004) listed three different kinds of teacher commitment: organizational, professional, and citizenship as related to teacher empowerment. Empowerment is described as follows:
Empowerment, can be defined as a process whereby school participants develop the competence to take charge of their own growth and resolve their own problems. Empowered individuals believe they have the skills and knowledge to act on a situation and improve it. (Short, Greer, and Melvin, 1994, p. 38)

Teachers ($N = 983$) from middle and high schools in Israel participated in a survey designed to test sub-scales of commitment. Sub-scales were: (a) teacher empowerment, (b) organizational commitment, (c) professional commitment, and (d) organizational citizenship behavior. Organizational commitment is defined as the strength with which one identifies and is involved with a particular organization. Professional commitment references the ways in which an individual merges his or her professional and personal life, indicating that self-esteem is tied into the work one does. Organizational citizenship commitment involves complex behaviors connected with effectiveness and job performance but are not necessarily tied into traditional rewards. Complex behaviors are difficult to enumerate on a job description, but are essential to whether or not an organization may thrive.

Using Pearson product moment correlation and multiple regression analyses, the researchers found teachers' perceptions of empowerment to be significantly related to their organizational commitment, professional commitment, and organizational citizenship behavior. Six subscales of empowerment were identified as decision-making, professional growth, status, self-efficacy, autonomy, and impact. Professional growth, status, and self-efficacy were found to be significant predictors of organizational and professional commitment. Decision-making, status, and self-efficacy were found to be significant predictors of organizational citizenship behavior. Only autonomy and impact
were found to be predictors of all three outcomes of teacher empowerment (i.e., organizational commitment, professional commitment, and organizational citizenship behavior) and they were low positive correlations. Bogler and Somach concluded commitment is complex and plays an interrelated role in construction of teacher identity.

Several researchers have examined job satisfaction as a precursor to teacher commitment (Firestone, 1996; Reyes, 1992; Shann, 1990; Shin & Reyes, 1991) while others have tied commitment to teacher attrition (Rots et al., 2007), school organizational health (Tsui & Cheng, 1999), and teacher effectiveness (Kushman, 1992; Nir, 2002; Shann, 1990). Billingsly and Cross (1992) found that work variables of leadership support, stress, and ambiguous roles are strong predictors of job satisfaction and teacher commitment when compared to demographic predictors. More recently, researchers have focused on issues of teacher commitment as defined through the loss of autonomy due to school reform (Day, 2002), highlighting commitment as a complex construct in teacher identity construction.

**Summary of In-service Teacher Identity Research**

A novice teacher must move beyond the student teaching experience into induction with limited classroom experiences, a general base of knowledge, and an identity constructed solely from university training, personal experiences and student teaching practicum (Beijaard et al., 2004; Horn et al., 2008; Malderez et al., 2007; Ronfeldt & Grossman, 2008; Ulvik et al., 2009). Understanding teacher identity and the collective identity of the workplace may create dissonance between the idealized image of teacher he or she desires to be and the realities of the workplace (Sundin, 2001; Ritter, 2007;

Aspects of expertise and knowledge have been used to explore self-perceptions of in-service teachers (Beijaard et al., 2000). Novices must establish themselves as teachers and find their way from the periphery into the teaching collective as an accepted member (Bouij., 2004; Maclean & White, 2007; Olesen, 2001; Ritter, 2007; Skaalvik & Skaalvik, 2010; Worthy, 2005). A fusion of the ideal teacher identity, the reality of the workplace, and personal life history takes place as the novice teacher navigates submersion in new teaching roles (Beauchamp & Thomas, 2009; Braga, 1972; Richardson, 1996). It is through the resolution of these tensions from which potential teacher identity construction takes place (Olesen, 2001).

Enhancing teacher identity increases positive attitudes across teacher collective identity (Robinson, Anning, & Frost, 2010). Mentoring processes, administrative leadership, and district support systems have been implicated as important to novice teacher success in the first year of teaching (Cherubini, 2007; Fantilli and McDougall, 2009), indicating a transition period exists between university training and the reality of the workplace.

Teacher self-efficacy and commitment have been implicated in retention (Rots et al., 2007; Strage et al., 2002) and classroom effectiveness (Glickman and Tamashiro, 1982; Kushman, 1992; Nir, 2002; Shann, 1990; Skaalvik and Skaalvik, 2010; Swackhamer, 2009). Teachers with high self-efficacy and motivation were more committed and
enthusiastic in attitude (Flores, 2006). Commitment is complex and plays an interrelated role in construction of teacher identity (Firestone, 1996; Reyes, 1992; Shann, 1990; Shin & Reyes, 1991), correlating with teacher empowerment (Day, Elliott, & Kington, 2005).

The resulting review of extant research on teacher identity supports the hypothesis that the profession could benefit from considering specific constructs related to teacher identity construction. Teacher identity constructs of self-efficacy, commitment, agency, and collectivity are implicated in identity construction. Clarifying terminology for the music teacher identity construction through theoretical underpinnings will be examined in the subsequent section of in-service music teacher identity research.

**In-service Music Teacher Identity Research**

**In-service Music Teacher Socialization**

Beginning music teachers have been socialized as musicians in the university setting, drawing on strong technical performing skills entering the teaching profession (Barnes, 1972; Bladh & Bouij, 1996; Bouij, 1998; 2002; Dolloff, 1999; Roberts, 1991; White, 1996; Wolfgang, 1990; Woodford, 2002). Problems experienced by beginning teachers may be related to the dissonance between perceived roles and actual roles in the context of the teaching job. Those focused on the performing identity may indeed be disappointed with their low-status roles as music teachers (Mark, 1998). These tensions and disappointments may be related to teacher role construction during pre-service training (DeLorenzo, 1992).
DeLorenzo (1992) used a survey questionnaire to identify perceived problems of beginning music teachers and their perceptions of professional assistance offered during the first year of teaching. He surveyed beginning first and second year music teachers in Pennsylvania \((n = 288)\) and New Jersey \((n = 219)\). Results from the 44% return rate indicated that first and second year music teachers are more comfortable with teaching skills and responsibilities than with the budgets and continued musical growth. Concerns differed by grade level with teachers at the secondary level concerned with recruitment and general music teachers concerned with content and curricular issues. The teachers found assistance through experienced colleagues for disciplinary concerns. Mentor teachers were found to offer the greatest support in fighting feelings of isolation.

Conway (2002) evaluated music teacher preparation programs through interviews and observations of novice teachers during their first year of teaching. Coded data revealed the most valuable experiences from preparation programs to be student teaching, fieldwork, ensembles, and applied lessons. Least valuable experiences from the preparation programs were early observations without context, some instrumental methods courses, and courses in the College of Education. Novice music teachers were found to have difficulty connecting theory and practice, mirrored by Isbell’s (2008) results on pre-service music teachers who demonstrated similar problems making connections between theory and practice.

In an examination of Arkansas music teachers, Cox (1994) examined occupational socialization as musicians and educators from childhood through post-college years. Using a survey, 500 music educators participated in the study. Similar to Conway (2002)
and Hargreaves (1976), Cox found that participants indicated family and ensemble directors as providing the most encouragement to pursue an occupation in music. Cox concluded that occupational socialization for music teachers is not complete until post-college.

Following up on her 1994 study, Cox (2008) completed three in-depth interviews with three Arkansas music teachers to further illuminate the primary and secondary socialization influences on perception of music educator roles as musician and teacher. Her most current findings supported the 1994 findings showing the musician role as the most encouraged during the pre-college years. Those found to be influencing the teacher role during post-college years were administrators, colleagues, and other teachers. Teacher role influences were more pronounced during induction than at any other time. By contrast, the primary role focus of pre-service music teachers was that of being a musician. Social constructivist theory appears to provide a foundation for both of Cox’s studies, with results implying different socialization to roles and occupational identity between pre-service and in-service music teachers.

Using role theory, Sheib (2003) examined six role stressors of conflict, ambiguity, overload, underutilization of skills, inadequate resources, and nonparticipation with four music teacher participants. Field notes from observations, interviews, and document analysis provided data for the study. Scheib found the most significant stressors were role underutilization of skills caused by tedious administrative tasks, role overload from constant music advocacy needs, role conflict between personal and professional roles, and inadequate resources specific to tensions with student scheduling conflicts and lack
of staffing. The role stressors were deemed to be related to teaching responsibilities in a school setting, indicating that in-service music teachers have a distinct set of teaching roles they must construct and integrate into the occupational identity of music teacher.

There is some research disputing the source of music teacher identity conflict as one between musician-performer and teacher. Bernard (2004) investigated six elementary general music teachers as they related how they constructed their music teacher identities. Interviews, observations of teaching, and post-observation interviews provided data for the analysis. Using a social constructivist framework, Bernard concluded that music teacher identity is ever-changing, undergoing construction in contextual, social and cultural discourse on a daily basis. Bernard also concluded that music teacher identity is not in conflict but in constant negotiation with roles within a context.

In a multiple-case study using social constructivist theory, Abramo (2009) examined how music teacher identity is constructed in the classroom. Three instrumental music teachers participated in the study and data were collected using interviews, field notes, and participant journal entries. Abramo concluded that music teacher identity construction is influenced by problems, solutions, and successes within and surrounding instrumental classroom experiences. Participants were concerned with blending their memories of mentors from past experiences in ensembles with a student-centered philosophy of music learning. Abramo concluded that the focus for participants was on the complexities of teaching practices rather than on performer identity. Her conclusions seem to support Bernard’s (2004) work.
Perceived stress in music teaching may move beyond the identity issues of musician or teacher and into larger issues of isolation and marginalization within the teaching world. In a social constructivist collective case study, Rich (2004) examined the lives of several music teachers to determine the critical influences on their professional lives as teachers. Interviews, field notes, and observations were used to uncover three spheres of influences at work: (a) mentors, (b) current colleagues and professional growth opportunities, and (c) context. The individual career paths, past experiences, and significant mentors were met with complications of music teaching, of marginalization, of the music curriculum, of intensification (i.e., acceptance of responsibilities of time-consuming tasks which may symbolize professionalism), and of isolation. These were found to be confluent in guiding the practice of music teaching for the participants.

Pellegrino (2009) developed a music teacher identity literature overview by examining extant research to discuss the connections between performer and teacher selves as they relate to the formation of music teacher identity in both the pre-service and in-service music teacher. The summaries focused on research themes of pre-service music teacher identities, privileging the performer identity, and in-service music teacher identities, balancing and negotiating music performer and music teacher identities. Research on music teacher identity has focused on tensions identified between performer and teacher identity for music teachers. Pellegrino suggested five themes based on the analysis of the literature: (a) conflict of teacher versus performer identity, (b) personal and professional benefits of continued music-making activities, (c) view of musical
identities as holistic, (d) situated identities and roles, and (e) definitions of music teacher identity.

Pellegrino (2009) suggested the agenda for future research on music teacher identity be rooted in a sociocultural theoretical framework, such as Wenger’s Communities of Practice model (1998). The methodology suggested should represent the complexity of teaching for meaningful research. Future research suggestions included: (a) integration and tensions in the music teachers’ life as the teacher balances teaching, music making, and personal aspects; and (b) investigation of career stages in a longitudinal study focused on music-making.

**Summary of In-service Music Teacher Identity Research**

The research on novice music teacher identity is sparse, with most extant research focused on identity construction with pre-service music teachers. Novice music teachers experience tensions in roles which may be exacerbated by their pre-service university training (Scheib, 2003). Tensions may be much more dissonant for the novice, as limited classroom experiences fail to inform how one negotiates both theory and practice (Conway, 2002; DeLorenzo, 1992). Music teacher identity may be rooted in relationships with a ‘significant other,’ that is, one whose professional opinion is granted the highest esteem. Further, mentors may serve in this capacity to enhance the construction of a strong music teacher identity (Abramo, 2009; Shieh & Conway, 2004; Woodford, 2002). However, music teacher identity must be negotiated as both musician and teacher as one moves into occupational induction, regardless of whether that is a source of tension or realignment.
A working definition of music teacher identity rooted in an examination of theoretical and research literature should assist with the investigation of novice music teachers, particularly during the first five years, when music teachers are most likely to leave the profession (Marso & Pigge, 1994; Scheib, 2004). Further, such a working definition should include constructs specific to general teacher and music teacher identity construction to facilitate a global understanding of the term.

** Constructs Specific to Music Teacher Identity**

Steeped in social constructivism, symbolic interactionism, and role theory, several constructs appear consistently throughout the research on teacher identity and on music teacher identity. Commitment and teacher self-efficacy have been examined extensively in connection with retention, teacher preparation and identity (Bogler & Somech, 2004; Cheung, 2008; Corbell et al., 2010; Day & Qing, 2009; Firestone, 1996; Nias, 1981; Reyes, 1992; Rosenholtz & Simpson, 1990; Rots et al., 2007; Shin & Reyes, 1991; Tschannen-Moran & Hoy, 2001).

Agency may be defined as an individual’s sense of power to take charge of a particular situation and produce change. As such, agency has been implicated in affecting identity construction as early in one’s career as pre-service teacher socialization (Bogler & Somech, 2004; (Day, 2002; Flores, & Viana, 2007; Lasky, 2005; Maclur, 1993; Sannino, 2010) and in relationship to novice teachers’ identity construction (Day, 2002; Kelchtermans, 1993; Lasky, 2005; Sannino, 2010). Collectivity is a sense of belonging to the profession, which has been found to play an important role in early
novice teacher socialization (Bouij et al., 2004; Maclean & White, 2007; Olesen, 2001; Skaalvik & Skaalvik, 2010; Ritter, 2007; Worthy, 2005). As such, collectivity may play an increasingly important role in construction of music teacher identity throughout a career. Role identity for the music teacher includes taking on both the expectations of musician and teacher (Bouij, 2004; Roberts, 1991, 2004). Based on the extant literature, a music teacher identity definition should include constructs of teacher self-efficacy, commitment, agency, collectivity, and musician-teacher comprehensiveness.

**Music Teacher Self-Efficacy**

Teacher self-efficacy has been examined to inform issues regarding teacher preparation (Swackhamer, 2009), retention and job satisfaction (Glickman & Tamashiro, 1982; Skaalvik & Skaalvik, 2010; Strage et al., 2002; Rots et al., 2007), and how self-efficacy affects educational reform (Labone, 2004). Labone’s (2004) asserted self-efficacy research needs to expand into alternative paradigms, particularly in how teacher self-efficacy beliefs are constructed. Few studies have examined pre-service music teacher self-efficacy (Bergee, 2002; Hargreaves et al., 2007; Hennessy, 2000) or in-service music teacher self-efficacy (Bergee & Grashel, 2002; Matthews & Kitsantes, 2007; Quesada, 1972) and these studies are not often connected with music teacher identity.

Social constructivist theory supports Bandura’s (1997) work on self efficacy in which he differentiated an “outcome efficacy” from an “efficacy expectation.” An outcome efficacy is the belief that one can achieve a particular goal. “An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the
outcomes” (Bandura, 1977, p. 193). Hargreaves et al. (2007) defined measureable behaviors relating to the construct of teacher self-efficacy as: (a) management of time, (b) perseverance through adversity, (c) security in one’s own abilities, (d) problem-solving abilities, and (e) setting goals and priorities in achievable ways. The present study uses the term teacher self-efficacy to focus on the behaviors that demonstrate a teacher’s self-appraisal of his or her ability to affect students in the classroom setting, influence parents, administration and community, and be resilient in the face of adversity.

**Music Teacher Commitment**

Social constructivism, symbolic interactionism and role theory have been used to support examinations of commitment in teachers in the research presented. Researchers have examined job satisfaction as a precursor to teacher commitment (Firestone, 1987; Reyes, 1992; Shann, 1998; Shin & Reyes, 1991) while others have tied commitment to teacher attrition (Rots et al., 2007) and teacher effectiveness (Kushman, 1992; Nir, 2002; Shann, 1998). Commitment, as a construct of teacher identity, has also been well-documented, particularly as it relates to retention of teachers (Strage et al., 2002; Strunk & Robinson, 2006), teacher effectiveness (Ebmeier, 2003; Nir, 2002) and agency (Ebmeier, 2003; Nir, 2002). Definitions of commitment to teaching are somewhat similar. “Commitment is a high level of attachment to someone or something in a social endeavor. It is simultaneously psychological and social and describes an intrinsic attachment to that endeavor” (Tyree, 2001, p. 235). Commitment in teaching is defined by Lortie (1975) as the intention to use personal resources of time, money, and energy in
one’s work, where a sense of involvement is developed and persists over time. Lacey (1977) defined commitment as an intention to make teaching a career.

Teachers themselves use the term commitment in different ways to evoke different meanings (Nias, 1981). Nias (1981) determined there were four ways in which teachers use the word “commitment”: (a) as caring, (b) as concern for occupational competence, (c) as a sense of identity as a teacher, and (d) as a signal for continuing in one’s career. Nias suggests these different meanings may merge the longer a teacher remains in the profession or is tied into the career structure of teaching. The practice of commitment falls into several categories of perception: (a) a clear set of values and ideology informing practice regardless of context, (b) a clear sense of standards, (c) a willingness to reflect on experience and context of the experience for adaptability, and (d) intellectual/emotional engagement.

Commitment may be understood as a nested phenomenon that is related to a set of more permanent values based on self identity and personal beliefs. Studies have indicated that commitment may be obscured with related construct of self-efficacy (Ebmeier, 2003; Ross & Gray, 2006), effectiveness (Louis, 1998) or teacher empowerment (Bogler & Somach, 2004). It is influenced by differing organizational conditions of the school (Rosenholtz & Simpson, 1990) and by work variables of leadership support, stress, and ambiguous roles (Billingsly & Cross, 1992). More recently, researchers have focused on issues of teacher commitment as defined through the loss of autonomy due to school reform (Day, 2002), highlighting commitment as a complex construct.
For the present study, music teacher commitment is defined through the dimensions of willingness to expend personal time, money, and energy to teach (Nias, 1981; Tyree, 2001), demonstration of involvement in professional activities (Mowday et al, 1979), demonstration of involvement in teaching activities (Tyree, 2001), and attitude toward the profession (Mowday et al., 1979).

**Music Teacher Agency**

Agency may be defined as the condition of being in action, where the individual has a sense of his or her power to take charge of a particular situation and produce change (Bogler & Somach, 2004). Agency may be closely related to empowerment, defined by Short, Greer, and Melvin (1994) as “a process whereby school participants develop the competence to take charge of their own growth and resolve their own problems” (p. 38). Within the performance of the music teaching role, it is the belief that one has the prerequisite skills and depth of knowledge to make positive change within a given situation (Bogler & Somach, 2004).

In contemporary philosophical viewpoints, agency is extended to the issues of justice and critical theory and is vital within the given context of rapid educational change (Bogler & Somach, 2004). Issues of school reform, policy, and teacher identity have been linked with agency. Imposed change, with “external definitions of quality, progress and achievement” (Day, 2002, p.677) creates greater pressure on the novice teacher than it does on experienced teachers, and serves to shape perception of teacher agency, strongly influencing the sense of teacher identity (Day, 2002).
The construction of a personal teaching self is closely bound to the interaction of environment and personal experiences (Day, 2002; Kelchtermans, 1993; Lasky, 2005; Sannino, 2010) and also to “professional and personal values and aspirations” (Kelchtermans, 1993, p. 683). Links among identity, agency, and practice are currently suggested through the research of the past ten years, most often in qualitative studies (Day, 2002; Day, Flores, & Viana, 2007; Lasky, 2005; Maclure, 1993; Sannino, 2010). In a literature review, Beauchamp and Thomas (2009) illuminated connections between identity, agency, and contextual factors shaping teacher identity.

Though teacher education programs are the ideal starting point for anticipatory occupational identity, in-service teachers must be aware of the process of identity construction and agency in order to shape the profession in new and positive ways (Beauchamp & Thomas, 2009; Braxton et al., 1995; Moore, 2008; Roberts & Graham, 2008; Sexton, 2008). Moore (2008) found pre-service teachers’ sense of agency was affected through ways in which they interacted within the teacher education program. Early professional training and political and social context serve to mediate occupational teacher identity (Sloan, 2000). External reforms and teacher orientations were found to be influenced by the traditions and practices of the subject area taught (Vahasantanen & Etelpelto, 2009). As agency itself draws upon feminist research, gender politics may play a role in the political and social context in shaping teacher occupational identity (Dillabough, 1999).

Few researchers have examined agency for the pre-service music teacher (Bogler & Somech, 2004; Richardson, 2006; Russell, 2006) and no research was uncovered for in-
service music teachers. For the present study, music teacher agency is defined as the condition of being in action, where the individual is convinced of his or her power to take charge of a particular situation and produce change (Bogler & Somech, 2004).

**Music Teacher Collectivity**

Music teachers must establish themselves as teachers and move from the periphery of the teaching community into the teaching collective as a member, not simply as a music teacher, but that of the educational school community (Beijaard et al., 1999; Bouij et al., 2004; Maclean & White, 2007; Olesen, 2001; Ritter, 2007; Skaalvik & Skaalvik, 2010; Worthy, 2005). Novice teachers must negotiate their understanding of their own teacher identity while negotiating the collective identity of the profession and the realities of the classroom (Ritter, 2007; Sundin, 2001; Worthy, 2005).

It is the sense of collectivity, a group efficacy that is positively correlated with teacher self-efficacy, yet still stands as a separate construct (Skaalvik & Skaalvik, 2010). Bouij (2004) specifically identified culture, and collective and individual negotiations of identity as the contexts for identity construction in pre-service music teachers.

Professional growth in pre-service teachers may be strongly influenced by the processes of a community of learning (Maclean & White, 2007).

Dramaturgical perspectives, as a part of symbolic interactionism, helped to define the performance of the collective as a way individuals come together to establish meaning (Lock & Strong, 2010). This sense of collective, emphasized by Lave and Wenger’s (1991) work defining Communities of Practice, serves to solidify the group and define the individual participation within the group. Enhanced teacher identity increases
positive attitudes across teacher collective identity (Robinson, Anning & Frost, 2010). Variables such as mentoring, administrative leadership, and local support systems have been implicated in successful novice teacher’s negotiation of the first year of teaching (Cherubini, 2007; Fantilli & McDougall, 2009). However, Calley and Hawley (2008) found that collectivity framed in constructivist theory, does not supersede the personal occupational identity.

Perceptions of music teacher collectivity and music teacher self-efficacy have not been explored in the literature, nor has the relationship between teacher collectivity and music teacher identity construction. Music teacher collectivity, defined for the purposes of this study, is the belief in the ability of the team of teachers and administrators within the school “to execute courses of action required to produce given attainments” (Skaalvik & Skaalvik, 2010, p. 1060).

**Musician-Teacher Comprehensiveness**

Occupational identity for a music teacher includes accepting first the musician performer role upon entering the university setting (Barnes, 1972; Bladh & Bouij, 1996; Bouij, 1998, 2004; Clinton, 1997; Dolloff, 1999; Harris, 1991; Roberts, 1991; White, 1996; Wolfgang, 1990; Woodford, 2002). Bouij (2004) posited that musical role identities are constructed first through individual private music lesson socialization of music performance. During university training, becoming a music teacher is secondary to the experience of becoming a musician performer. Student teaching experiences do not prevent ‘practice shock’ when the reality of a music teacher’s work life collides with musical role identity previously acquired. For all novice teachers, there exists a transition
period between university training and the reality of the workplace. Beginning music
teachers must deal with occupational socialization in the first few years that are vastly
different from experiences in music schools prior to induction (Bouij, 2004; Roberts,

Practical adjustment problems for the novice teacher abound. The novice music
teacher may be comfortable with specific musical skills and teaching techniques, but
connecting theory to practice proves difficult (Conway, 2002; DeLorenzo, 1992; Isbell,
2008). Constructing a role-identity includes the many influences such as culture,
occupational reference groups, and individual identity negotiations within new contexts
for beginning teachers. Beyond the social constructivist and symbolic interactionist
frameworks, role theory helps to uncover issues for the in-service music teacher. Scheib
(2003) found in-service music teachers have a distinct set of teaching roles which they
must construct and integrate into the occupational identity of music teacher. Many of
these roles include stressors such as conflict, ambiguity, overload, underutilization of
skills, inadequate resources, and nonparticipation from students, which are exacerbated
for the novice teacher as they enter the workforce.

Occupational socialization is never complete upon gaining employment nor does it
simply develop over time, but remains fluid throughout a teaching career (Conway, 2002;
DeLorenzo, 1992). Beginning teachers face issues of identity development within a
plethora of new experiences. Future examinations of music teacher identity should seek
to uncover the ways in which novice music teachers construct their performer/musician identity and music teacher identity within the context of the workplace.

The importance of Bouij’s (1998, 2004) work is in the addition of comprehensiveness as applied to both the musician and teacher roles for music teacher identity. Though the work was based on the identity construction of pre-service music teachers, in-service teacher identity research may also benefit from his model. Cox’s (2008) results implicated a unique socialization process taking place during in-service teaching. Bernard (2004) and Abramo (2009) also studied identity construction as a negotiation of roles within the context of in-service teaching. Pellegrino (2010) found themes of role identity construction surrounding the teacher versus performer identity in a music teacher research review. These studies substantiate the concern of the musician–teacher identity and confirm the relevance of Bouij’s (2004) model to in-service music teacher identity.

For the purposes of this study, the construct of Musician-Teacher Comprehensiveness is defined through two subsets: (a) comprehensiveness of the teacher role, using a continuum of student-centered (i.e. broad comprehensiveness) to subject-centered (i.e., narrow comprehensiveness) teacher roles, and (b) comprehensiveness of the musician role, using a continuum of all-around musician (i.e. broad comprehensiveness) to performer (i.e. narrow comprehensiveness) roles.

**Summary of Constructs Specific to Musician-Performer-Teacher Identity**

The first purpose of the present study was to examine critically the extant research to establish a definition of music teacher identity comprised of several discrete constructs.
The task of devising a working definition of music teacher identity rooted in an examination of theoretical and research literature has led to the identification of specific constructs, utilizing social constructivism, symbolic interactionism, and role theory. Therefore, the definition of music teacher identity to be explored in the present study is as follows.

Music teacher identity is one’s conception of himself or herself as a music teacher, as affected by five facets: (a) music teacher self-efficacy (i.e., one’s sense of his or her ability to affect students in the classroom setting, influence parents, administration and community, and be resilient in the face of adversity); (b) music teacher commitment (i.e., one’s willingness to expend personal time, money, and energy to teach; and to be involved in professional activities); (c) music teacher agency (i.e., one’s power to take charge of a particular situation and produce change); (d) music teacher collectivity (i.e., one’s belief in the ability of the team of teachers and administrators within the school to execute courses of action required to produce desired results); and (e) musician-teacher comprehensiveness (i.e., the broadness or narrowness with which one sees one’s self as a musician and as a teacher).

The second purpose of the present study is to examine selected constructs from the definition. Two constructs, Music Teacher Self-Efficacy and Music Teacher Commitment, have been examined thoroughly in teacher education and occupational identity literature through both quantitative and qualitative means. The richness of the literature assisted in developing a measurement instrument to measure music teacher identity facets of self-efficacy (Bandura, 1977, 1997; Bandura & Walters, 1963; Hattie, 1992; Shavelson et al, 1976; Sherer, 1982; Sherer & Adams, 1983) and commitment (Becker & Carper, 1956; Carper & Becker, 1957; Maddux et al., 1982; Nias, 1981; Nir, 2002; Reyes, 1992; Reyes & Shin, 1995; Rosenholtz & Simpson, 1990; Shin & Reyes,
1991; Troman, 2008; Tsui & Cheng, 1999; Tyree, 2001). Music Teacher Agency, Music Teacher Collectivity and Music-Teacher Comprehensiveness were not examined for this study, as confirming more than two constructs at a time would prove difficult for the scope of one study. Research for these constructs is also relatively new in comparison to the depth of research available for the constructs of teacher self-efficacy and teacher commitment. These two constructs were utilized as the starting point in investigating the proposed definition by analyzing data gathered from music teachers grouped in 1-5, 6-10, 11-20, 21-30, and 31+ years of experience to determine the degree to which predictable patterns of construct strength might emerge.
CHAPTER III
PROCEDURES

Restatement of the Purpose

The two purposes of this study were to: (a) define music teacher identity and its underlying constructs based on a critical examination of the extant research, and (b) develop an instrument to measure selected constructs from among a sample of music teachers across years of teaching. Music Teacher Self-Efficacy and Music Teacher Commitment were selected as the constructs to be examined across a sample of music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience. Because the first purpose of the present study was fulfilled via a critical examination of extant literature and a definition of in-service music teacher identity was presented at the end of Chapter II, the remainder of this chapter pertains to the second purpose of the present study.

Participants

The sample for the study was selected from the MENC: The National Association for Music Education member-email list and stratified by the percentage of membership belonging to each of MENC’s six geographic Divisions, including Eastern, North Central, Northwest, Southeastern, Southwestern, and Western Divisions. Because MENC restricts the sample size for their web surveys to no more than 2,500 members,
the parameter of the number of potential participants was restricted. Based on MENC Division percentages, 2,500 potential participants were selected from among all the six divisions. Only members who listed their teaching responsibilities as K-12 were included in the sample selection. The potential participant sample for the study was based on music teaching level and MENC Division membership stratification in MENC.

Data Collection Instrument

I developed the *Music Teacher Identity Scale* (MTIS), as an instrument to measure two constructs of music teacher identity; that is, Music Teacher Self-Efficacy and Music Teacher Commitment (Appendix A). The MTIS was created as an online survey using Survey Monkey© (Finley, 2009).

The instrument included a demographic component that requested responses regarding the following areas: (a) number of teaching years including current school year (i.e., 1, 2, 3, 4, 5, 6-10, 11-20, 21-30, 30+); (b) gender, (c) current school location (i.e., urban, suburban, rural); (d) primary teaching area (i.e., general music education, choral music education, instrumental music education); and (e) primary teaching level (i.e., elementary school, middle school/junior high, high school). The remainder of the instrument contained 23 statements to which participants were asked to indicate their degree of agreement using a Likert-type scale for each statement. Of the 23 statements, 12 statements were intended to measure Music Teacher Self-Efficacy and 11 statements were intended to measure Music Teacher Commitment.
The instrument development process began by devising a construct map (see Appendix B) listing dimensions drawn from literature related to self-efficacy (Avalos & Aylwin, 2007; Bandura, 2006; Dolloff, 1999; Hancock, 2008; Hargreaves et al., 2007; Lacey, 1977; Sherer, 1982) and commitment (Coladarci, 1992; Day, Elliott & Kingston, 2005, Ebmeier, 2003; Firestone and Pennell, 1993, Firestone and Rosenblum, 1988; Fresko, Kfir & Nasser, 1997; Merseth, Sommer, & Dickstein, 2008, Mowday, Steers, & Porter, 1979; Nias, 1981; Nir, 2002; Rosenholtz, 1985; Tyree, 2001). Five dimensions were gleaned from extant literature for Music Teacher Self-Efficacy (i.e., management of time, perseverance through adversity, security in one’s abilities, problem-solving abilities in complicated issues, and setting goals and priorities in achievable ways). Seven dimensions were gleaned from extant literature for Music Teacher Commitment (i.e., expending personal resources of money, expending personal resource of energy, involvement in professional activities, involvement in teaching activities, attitude toward professional music teaching goals, and attitude toward investment in professional music teaching goals).

From the construct map, 43 items were developed (Appendix C). Four experts in the field of music education and one in the field of educational research methods reviewed those items. Based on the feedback from the five experts, many items were rewritten or removed. The resultant items were included in a pilot study to ensure understandability of the items, determine an initial degree of reliability within constructs, and determine the
degree to which the items were adequately measuring two different constructs (Appendix D).

**Pilot Study of Data Collection Instrument**

**Participants and Procedures.** Participants for the pilot were graduate students enrolled in music education classes at The University of North Carolina Greensboro in Fall 2010. The preliminary Likert-type scale (i.e., strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree) included 31 items, divided into 19 items for Music Teacher Self-Efficacy, and 12 items for Music Teacher Commitment. I provided a link to the online survey was provided to graduate students through their professors. The survey was open for a period of 14 days on Survey Monkey© (Finley, 2009).

**Results.** To complete the statistical analysis of the survey data, I used Statistical Package for the Social Sciences (SPSS) 17.0. Descriptive statistics, Cronbach’s coefficient alpha, item-total corrected correlation, and inter-item correlation were used to evaluate the survey instrument. Content validity for each of the construct items was checked against the created construct map to ensure they remained connected with the extant research. Cronbach’s coefficient alpha was used to establish the reliability of the pilot survey; the reliability was .485 for the total pilot survey.

A Pearson Product Moment correlation analysis was computed between the two constructs of Music Teacher Self-Efficacy and Music Teacher Commitment. The constructs were correlated at a low level ($\alpha = .18$), indicating the constructs were
operating independently from one another. Establishing that the two constructs were independent was essential to defining music teacher identify and to completing the data analyses of the study. Items used for the pilot survey are listed in Table 1.
Table 1

*MTIS Pilot Survey Items*

<table>
<thead>
<tr>
<th>Music Teacher Self-Efficacy Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1. My plans for behavior management make me successful with student behavior in my classroom.</td>
</tr>
<tr>
<td>E2. I am confident I can get music students to work well together in my classroom.</td>
</tr>
<tr>
<td>E3. I set musical goals for my students that they are able to achieve.</td>
</tr>
<tr>
<td>E4. I can develop lesson plans in a timely manner when I am tired.</td>
</tr>
<tr>
<td>E5. I can continue to learn new musical techniques even when there are other time commitments.</td>
</tr>
<tr>
<td>E6. My students view music as valuable.</td>
</tr>
<tr>
<td>E7. I can influence my students to become musically literate.</td>
</tr>
<tr>
<td>E8. I can assist my administration in understanding the value of school music.</td>
</tr>
<tr>
<td>E9. I can work with parents to promote music in the schools.</td>
</tr>
<tr>
<td>E10. I promote parent involvement in music productions.</td>
</tr>
<tr>
<td>E11. I find ways of being musical even if I am busy with teaching.</td>
</tr>
<tr>
<td>E12. I keep trying, even when teaching is difficult.</td>
</tr>
<tr>
<td>E13. I influence how music is perceived in the community.</td>
</tr>
<tr>
<td>E14. Making our school more musical is achievable for me.</td>
</tr>
<tr>
<td>E15. I can influence how music is funded in my community.</td>
</tr>
<tr>
<td>E16. I enjoy the challenges of teaching music in the schools.</td>
</tr>
<tr>
<td>E17. I am discouraged when musical activities seem difficult for some of my students (reverse scoring).</td>
</tr>
<tr>
<td>E18. I am discouraged when I encounter student attitude problems (reverse scoring).</td>
</tr>
<tr>
<td>E19. I keep a positive attitude when I suffer setbacks in the classroom.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Teacher Commitment Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1. It is a priority to organize my classroom, even if it takes extra time.</td>
</tr>
<tr>
<td>C2. I spend as little time as possible outside of the school day to prepare lesson plans.</td>
</tr>
<tr>
<td>C3. I find the musical experiences I have with my students energizing.</td>
</tr>
<tr>
<td>C4. Becoming a music teacher requires time for music-pedagogical study.</td>
</tr>
<tr>
<td>C5. Music education should allow us to celebrate musical traditions.</td>
</tr>
<tr>
<td>C6. Having my students’ master their instrument or voice is my primary objective as a music teacher.</td>
</tr>
<tr>
<td>C8. Teaching musicianship though individual performance on an instrument or voice is an important aspect of my job.</td>
</tr>
<tr>
<td>C7. I find ways to become more involved in professional activities.</td>
</tr>
<tr>
<td>C9. I intend to make teaching my career.</td>
</tr>
<tr>
<td>C10. I spend my own money for musical supplies for my classroom.</td>
</tr>
<tr>
<td>C11. I resent spending my own money for teaching (reverse score).</td>
</tr>
<tr>
<td>C12. Finding new ways to fund my program is a priority to me.</td>
</tr>
</tbody>
</table>
Music Teacher Self-efficacy Construct. There were 19 questions in the Music Teacher Self-efficacy construct (see Table 1). The means for this construct varied from 1.61 points (Item E12) to a high of 4.45 points (item E18) on the six point Likert-type scale. There was a range of 2.00 points for items E2, E3, E5, E6, E7, E8, E9, and E12. Item E18 had a range of 5.00 points. All other items had a range of 4.00 points.

Cronbach’s coefficient alpha reliability statistic was .62 for the entire construct of Music Teacher Self-Efficacy. Examining inter-item correlations, specific items were flagged as problematic. Several runs were made using different combinations of items to test the reliability and check correlations and none seemed to tighten up the relationship among the items, indicating careful rewriting of the items was needed. Seven top items (E3, E4, E5, E8, E9, E11) had a Cronbach’s alpha of .68.

Using the top seven items, and selecting the next five best items for Music Teacher Self-Efficacy provided a starting point for the next survey. The items were carefully analyzed and rewritten, using experts from the fields of music education and educational research methodology for review of the final survey.

Music Teacher Commitment Construct. There were 12 questions in the Music Teacher Commitment construct (see Table 1). The means for this construct varied from 1.35 (item C9) to a high of 4.39 (item C2) on a six point Likert-type scale. There was a range of 2.00 points for items C3 & C5. Item C12 had a range of 3.00 points. Two items (C6, C8) had a range of 5.00 points. All other items had a range of 4.00 points.
Cronbach’s alpha reliability statistic was .47 for the entire construct of music teacher commitment. The best four items (C1, C4, C6, C8, C12) produced a reliability of .73.

Examining inter-item correlations for the music teacher commitment construct, items were correlated at a low level, with some negative correlations. Items were flagged for reevaluation, rewriting, and construct validity. The best four items were selected for retention and seven were rewritten. The items were carefully analyzed by individuals from the fields of music education and educational research methodology before inclusion in the final survey.

Instrument analysis. Subjects tended to select the top two responses on the Likert-type scale throughout the survey. In order to differentiate between levels of agreement, the scale was adapted to the more positive responses, by moving from strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly agree, to responses of extremely strong, very strong, strong, somewhat strong, and not strong. Items that functioned well were kept, and those items deemed as important to the construct, were rewritten. The final items used in the MTIS are listed in Appendix A.

Data Collection Procedures

For the current study, a research contract was entered with MENC. MENC was then responsible for the survey distribution to membership. A short cover email containing a URL link to the survey was distributed on November 29, 2010 to 2,500 potential participants. In the cover email, potential participants were informed that the survey link
would be available for four weeks. On December 22, 2010, it was determined the link would need to remain open and a reminder email was sent on January 4, 2011, to all participants to encourage participation. The ending date for the survey was January 11, 2011. To ensure maximum participation, all potential participants were informed that if they completed the survey in its entirety prior to January 11, 2011, their names would be entered into a drawing with a chance to win one of five IPod Shuffles.

**Data Analysis Procedures**

The first research question was “What constructs, supported by extant research and theoretical positions, define in-service music teacher identity?” The question was answered through a review of extant research literature at the end of chapter two.

Music teacher identity is one’s conception of himself or herself as a music teacher, as affected by five facets: (a) music teacher self-efficacy (i.e., one’s sense of his or her ability to affect students in the classroom setting, influence parents, administration and community, and be resilient in the face of adversity); (b) music teacher commitment (i.e., one’s willingness to expend personal time, money, and energy to teach; and to be involved in professional activities); (c) music teacher agency (i.e., one’s power to take charge of a particular situation and produce change); (d) music teacher collectivity (i.e., one’s belief in the ability of the team of teachers and administrators within the school to execute courses of action required to produce desired results); and (e) musician-teacher comprehensiveness (i.e., the broadness or narrowness with which one see’s one’s self as a musician and as a teacher).

The second research question was as follows. ‘What is the reliability and validity of an instrument developed to measure Music Teacher Self-Efficacy and Music Teacher Commitment across a sample of music teachers with 1-5, 6-10, 11-20, 21-30, and 31+
years of experience? To answer this research question, descriptive statistics, Cronbach’s coefficient alpha, item-total corrected correlation, and inter-item correlation were used to evaluate the survey instrument’s degree of reliability. An exploratory factor analysis was calculated to determine the degree of construct validity of the measurement instrument and to verify the inclusion of the constructs in the definition of music teacher identity. Both forms of verification were used to make recommendations regarding the instrument’s use in future research.

In the third research question, differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience were examined. A 2 x 5 repeated measures Analysis of Variance (ANOVA) was used to answer the third research question. The fourth research question examined differences found between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by gender. A 2 x 2 x 5 repeated measures ANOVA was calculated to answer the fourth research question.

The fifth research question examined differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by school location (i.e., urban, suburban, rural). A 2 x 3 x 5 repeated measures ANOVA was used to answer the fifth research question. The sixth research question examined differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and
31+ years of experience by teaching area (i.e., general music, choral music, instrumental music). A 2 x 3 x 5 repeated measures ANOVA was used to answer the sixth research question.

The seventh research question examined differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by teaching level (i.e., elementary, junior high, high school). A 2 x 3 x 5 factorial ANOVA was used to answer the seventh research question.
CHAPTER IV

RESULTS

The two purposes of the present study were to examine the following research questions.

1. What constructs, supported by extant research and theoretical positions, effectively define in-service music teacher identity?

Based on the critical examination of the extant research, two constructs of Music Teacher Self-Efficacy and Music Teacher Commitment were selected for further study.

2. What is the reliability and validity of an instrument developed to measure Music Teacher Self-Efficacy and Music Teacher Commitment?

3. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience?

4. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by gender?

5. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from one 1-5, 6-10, 11-
20, 21-30, and 31+ years of experience by school location (i.e., urban, suburban, rural)?

6. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by teaching area (i.e., general music, choral music, instrumental music)?

7. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers from 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by teaching level (i.e., elementary, junior high, high school)?

This chapter is organized by research question. A descriptive analysis of the demographic data will precede the statistical analyses of research questions two through seven. Regarding research question one, the definition for music teacher identity established in chapter two is as follows:

Music teacher identity is one’s conception of himself or herself as a music teacher, as affected by five facets: (a) music teacher self-efficacy (i.e., one’s sense of his or her ability to affect students in the classroom setting and resilience in the face of adversity); (b) music teacher commitment (i.e., one’s willingness to expend personal time, money, and energy to teach and to be involved in professional activities); (c) music teacher agency (i.e., one’s power to take charge of a particular situation and produce change, influencing parents, administration, and community contexts); (d) music teacher collectivity (i.e., one’s belief in the ability of the team of teachers and administrators within the school to execute courses of action required to produce desired results); and (e) musician-teacher comprehensiveness (i.e., the broadness or narrowness with which one see’s one’s self as a musician and as a teacher).
Descriptive Analysis of Demographic Data

The survey was sent to 2,500 potential participants by MENC: The National Association for Music Education. Selection of members to receive the survey was limited to those who indicated they taught music in grades K-12 on the MENC membership form, with equal percentages taken from each of the six divisions based on total membership. Because MENC selects participant samples based on limited criteria, no other specified means of sample selection were available. Of the 2,500 survey invitations sent out through email on November 29, 2010, 139 came back to MENC as undeliverable. Two more members notified MENC that they were no longer teaching in the public schools. A reminder survey was sent out through email to the entire sample on January 4, 2011. A total number of 392 responses were collected, for a return rate of 16.6%. Of the total number of responders, 357 completed the survey (91%). Of those who completed the survey, 24 did not complete all questions. Participants with large amounts of incomplete data were dropped from the analysis of all responses, leaving 333 total completed surveys. Approximately three-fourths of participants had been teaching more than 5 years, with only one-fourth of participants teaching 5 years or less. Distribution of the participant sample by years of teaching experience is found in Table 2
Table 2

*Distribution of Participants by Years of Teaching*

<table>
<thead>
<tr>
<th>Years of Teaching Experience</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 5 years</td>
<td>78</td>
<td>78</td>
<td>23.4%</td>
<td>23.4%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>38</td>
<td>116</td>
<td>11.4%</td>
<td>34.8%</td>
</tr>
<tr>
<td>11 to 20 years</td>
<td>70</td>
<td>186</td>
<td>21.1%</td>
<td>55.9%</td>
</tr>
<tr>
<td>21 to 30 years</td>
<td>79</td>
<td>265</td>
<td>23.7%</td>
<td>79.6%</td>
</tr>
<tr>
<td>31+ years</td>
<td>68</td>
<td>333</td>
<td>20.4%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Participation by location was primarily suburban (48.1%), followed by an almost equal distribution between urban (25.8%) and rural (26.1%). The distribution of participants by location is presented in Table 3.

Table 3

*Distribution of Participants by School Location*

<table>
<thead>
<tr>
<th>School Location</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>86</td>
<td>86</td>
<td>25.8%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Suburban</td>
<td>160</td>
<td>246</td>
<td>48.1%</td>
<td>73.9%</td>
</tr>
<tr>
<td>Rural</td>
<td>87</td>
<td>333</td>
<td>26.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>333</td>
<td></td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Most participants selected their primary teaching area as instrumental music education (58.9%) with fewer participants identifying choral music education (23.4%) and general music education (17.7%). The distribution of participants by primary teaching area is presented in Table 4.
Table 4

*Distribution of Participants by Teaching Area.*

<table>
<thead>
<tr>
<th>Teaching Area</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Music</td>
<td>59</td>
<td>59</td>
<td>17.7</td>
<td>17.7</td>
</tr>
<tr>
<td>Choral Music</td>
<td>78</td>
<td>137</td>
<td>23.4</td>
<td>41.1</td>
</tr>
<tr>
<td>Instrumental Music</td>
<td>196</td>
<td>333</td>
<td>58.9</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>333</strong></td>
<td><strong>333</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

The primary teaching levels were 55.3% high school, 27.3% middle school/junior high and 17.4% elementary school. Male participants (53.2%) slightly outnumbered female participants (46.8%). The distribution of participants by primary teaching level and gender are presented in Table 5 and Table 6 respectively.

Table 5

*Distribution of Participants by Primary Teaching Level*

<table>
<thead>
<tr>
<th>Teaching Level</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>58</td>
<td>58</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Middle/Junior High School</td>
<td>91</td>
<td>149</td>
<td>27.3</td>
<td>44.7</td>
</tr>
<tr>
<td>High School</td>
<td>184</td>
<td>333</td>
<td>55.3</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>333</strong></td>
<td><strong>333</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Table 6

Distribution of Participants by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>177</td>
<td>177</td>
<td>53.2</td>
<td>53.2</td>
</tr>
<tr>
<td>Female</td>
<td>156</td>
<td>333</td>
<td>46.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>333</td>
<td></td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Research Question Two

The second research question is as follows. ‘What is the reliability and validity of an instrument developed to measure Music Teacher Self-Efficacy and Music Teacher Commitment?’ Based on the definition provided for research question one, two constructs, that is, Music Teacher Self-Efficacy and Music Teacher Commitment, were selected to be a part of the survey instrument (see Appendix B).

The reliability of the survey was evaluated using Cronbach’s coefficient alpha, descriptive statistics, and inter-item correlations. Statistical Package for the Social Sciences (SPSS) 17.0 was used for all statistical analyses. Based on Cronbach’s coefficient alpha calculations, the overall reliability of 23 items included for the final form of the MTIS was .86. Reliability of the final 12 items used to measure music teacher efficacy was .87. Reliability of the final 11 items used to measure music teacher commitment reliability was .71. Items on the survey were connected to various dimensions of each construct of Music Teacher Self-Efficacy and Music Teacher
Commitment, based on an analysis of the dimensions within the research literature (see Appendix B). The MTIS items are listed in Table 7.

Table 7

*MTIS Survey Items*

<table>
<thead>
<tr>
<th>Music Teacher Self Efficacy Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1. I can be successful in keeping students engaged and with music in my classroom.</td>
</tr>
<tr>
<td>E2. I can help my students view music as valuable in their lives.</td>
</tr>
<tr>
<td>E3. I can influence my students to become musically literate.</td>
</tr>
<tr>
<td>E4. I can work with parents to promote music in the schools.</td>
</tr>
<tr>
<td>E5. Most days, I am secure in my music teaching abilities.</td>
</tr>
<tr>
<td>E6. I can model strong musical behaviors for my students.</td>
</tr>
<tr>
<td>E7. I can set musical goals for my students that they are able to achieve.</td>
</tr>
<tr>
<td>E8. I can develop lesson plans in a timely manner even when I am tired.</td>
</tr>
<tr>
<td>E9. I continue to learn new musical techniques even when I have other time commitments.</td>
</tr>
<tr>
<td>E10. I find ways of being musical even if I am busy with teaching.</td>
</tr>
<tr>
<td>E11. I can find new ways to teach musical concepts.</td>
</tr>
<tr>
<td>E12. I can help my students succeed, even when musical activities seem difficult for some of my students.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Teacher Commitment Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1. Most of the time, my priority is to have an organized lesson plan for each day I teach.</td>
</tr>
<tr>
<td>C2. It is a priority to organize my classroom, even if it takes extra time.</td>
</tr>
<tr>
<td>C3. Becoming a music teacher requires time for music-pedagogical study.</td>
</tr>
<tr>
<td>C4. Most days, I feel I want to continue to teach music.</td>
</tr>
<tr>
<td>C5. Having my students’ master their instrument or voice is my primary objective as a music teacher.</td>
</tr>
<tr>
<td>C6. Most days, I believe music teaching is a great profession.</td>
</tr>
<tr>
<td>C7. Teaching musicianship through individual performance on an instrument or voice is an important aspect of my job.</td>
</tr>
<tr>
<td>C8. When I spend money on musical supplies, such as books, I feel I am investing in my profession.</td>
</tr>
<tr>
<td>C9. Finding new ways to fund my music program is a priority for me.</td>
</tr>
<tr>
<td>C10. When I am able, I spend my own money for musical supplies for my classroom.</td>
</tr>
<tr>
<td>C11. I make the time to become more involved in professional activities.</td>
</tr>
</tbody>
</table>
Music Teacher Self-Efficacy Construct

What follows is a report of descriptive statistics and inter-item correlation results to establish reliability of Music Teacher Self-Efficacy construct as part of the MTIS. There were 12 items in the Music Teacher Self-Efficacy (E) construct. Participants responded to each item on a one to five point scale, in which five = ‘extremely strong,’ four = ‘very strong,’ three = ‘strong,’ two = ‘somewhat strong,’ and one = ‘not strong.’ From the highest strength of 4.64 (item E6), the means varied to the lowest strength of 3.92 (item E8) on the five point scale. A range of 3.00 points was found in items 1, 2, 3, 6, and 7. The other seven items had a range of 4.00 points. All items had a ceiling effect toward the most positive responses of extremely strong or very strong.

According to an inter-item correlation matrix, correlations ranged from .23 (low positive correlation) between item E4 and E10, to a high of .61 between item E5 and E7. In general, the lowest correlations indicate the items may not be measuring the same dimensions, and the more moderate correlations indicate the items are measuring similar dimensions. Inter-item correlations above .80 would suggest that the items are measuring the same dimension. In studies examining social psychological attitudes, inter-item correlation averages above .30 are considered exemplary (Robinson et al., 1991). The inter-item average for Music Teacher Self-Efficacy is .37. The inter-item correlation matrix for Music Teacher Self-Efficacy (E) is displayed in Table 8.

97
Music Teacher Self-Efficacy Scale Inter-Item Correlation Matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>E1</th>
<th>E2</th>
<th>E3</th>
<th>E4</th>
<th>E5</th>
<th>E6</th>
<th>E7</th>
<th>E8</th>
<th>E9</th>
<th>E10</th>
<th>E11</th>
<th>E12</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>1.00</td>
<td>.55</td>
<td>.53</td>
<td>.35</td>
<td>.55</td>
<td>.47</td>
<td>.56</td>
<td>.30</td>
<td>.26</td>
<td>.24</td>
<td>.47</td>
<td>.54</td>
</tr>
<tr>
<td>E2</td>
<td>1.00</td>
<td>.54</td>
<td>.41</td>
<td>.38</td>
<td>.40</td>
<td>.50</td>
<td>.24</td>
<td>.29</td>
<td>.26</td>
<td>.44</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>E3</td>
<td>1.00</td>
<td>.36</td>
<td>.40</td>
<td>.45</td>
<td>.54</td>
<td>.26</td>
<td>.27</td>
<td>.25</td>
<td>.35</td>
<td>.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E4</td>
<td>1.00</td>
<td>.37</td>
<td>.28</td>
<td>.32</td>
<td>.36</td>
<td>.27</td>
<td>.23</td>
<td>.28</td>
<td>.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E5</td>
<td>1.00</td>
<td>.61</td>
<td>.52</td>
<td>.38</td>
<td>.39</td>
<td>.34</td>
<td>.41</td>
<td>.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E6</td>
<td>1.00</td>
<td>.38</td>
<td>.32</td>
<td>.37</td>
<td>.36</td>
<td>.46</td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E7</td>
<td>1.00</td>
<td>.33</td>
<td>.35</td>
<td>.25</td>
<td>.46</td>
<td>.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E8</td>
<td>1.00</td>
<td>.44</td>
<td>.29</td>
<td>.39</td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E9</td>
<td>1.00</td>
<td>.59</td>
<td>.47</td>
<td>.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E10</td>
<td>1.00</td>
<td>.41</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E11</td>
<td>1.00</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E12</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Music Teacher Self-Efficacy was organized around four dimensions: (a) security in one’s abilities; (b) setting goals and priorities in achievable ways; (c) problem solving, and (d) perseverance through adversity. The dimension of security in one’s abilities was represented through E items 1, 2, 3, 4, 5, and 6. E1 correlated with E2, 3, and 5 above .50. Item E4 correlations ranged from .28 (E6) to .41 (E2). E6 correlated most highly with E5 (.61). The dimensions of setting goals and priorities in achievable ways were represented by items E7, 8, 9, and 10. E8, 9, and 10 were correlated below .30 with E1, 2, and 3. E7 was correlated above .50 with E1, 3, and 5 (security in one’s abilities). E7 (setting goals and priorities in achievable ways) appears to be aligning with the first dimension of security in one’s abilities. E8 was most highly correlated with E9 (.44). E10 was most highly correlated with E9 (.59). E8, 9, and 10 were not highly correlated across all E items. The dimension of problem solving was represented by E11 and the
dimension of perseverance through adversity was represented by E12. E11 was correlated above .35 with every item except E4 (.28). E12 (perseverance through adversity) had the highest correlations (.51 – .57) with E 1, 2, 7, and 11. Only E 12 and E 8 had less than a .32 correlation (.25). The first two dimensions of security in one’s abilities and setting goals and priorities in achievable ways are best represented through the item analysis, with the items representing problems solving and perseverance crossing into the first two dimensions.

**Music Teacher Commitment Construct**

What follows is a report of descriptive statistics and inter-item correlation results used to establish reliability of the Music Teacher Commitment construct as a part of the MTIS. There were 11 questions in the Music Teacher Commitment construct. Participants responded to each item on a one to five point scale, where one was ‘extremely strong’ and five was ‘not strong.’ The means for the Music Teacher Commitment Construct varied from a high of 4.57 (item C3) to 3.39 (item C9) on the five point scale. All items had a range of four except for item C1 with a range of five. Items C5 and C9 were the only two items without a ceiling effect toward the ‘extremely strong’ and ‘very strong’ responses.

According to an inter-item correlation matrix, correlations ranged from .04 (extremely low positive correlation) between item C7 and C10, and a high of .69 (moderate positive correlation) between item C4 and C6. As was the case with the inter-item correlation matrix for Music Teacher Self-Efficacy, the lowest correlations indicate...
the items may not be measuring the same dimensions, and the more moderate correlations indicate the items are measuring similar dimensions. In studies examining social psychological attitudes, inter-item correlation averages above .20 are considered extensive (Robinson et al., 1991). The inter-item average for Music Teacher Self-Efficacy is .22. The inter item correlation matrix for C is displayed in Table 9.

Table 9

*Music Teacher Commitment Scale Inter-Item Correlation Matrix*

<table>
<thead>
<tr>
<th>Item</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C7</th>
<th>C8</th>
<th>C9</th>
<th>C10</th>
<th>C11</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>1.00</td>
<td>.44</td>
<td>.35</td>
<td>.13</td>
<td>.26</td>
<td>.21</td>
<td>.16</td>
<td>.25</td>
<td>.08</td>
<td>.19</td>
<td>.16</td>
</tr>
<tr>
<td>C2</td>
<td>1.00</td>
<td>.29</td>
<td>.21</td>
<td>.29</td>
<td>.24</td>
<td>.19</td>
<td>.15</td>
<td>.17</td>
<td>.11</td>
<td>.22</td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>1.00</td>
<td>.23</td>
<td>.20</td>
<td>.28</td>
<td>.18</td>
<td>.35</td>
<td>.20</td>
<td>.17</td>
<td>.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4</td>
<td>1.00</td>
<td>.23</td>
<td>.69</td>
<td>.18</td>
<td>.29</td>
<td>.07</td>
<td>.12</td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C5</td>
<td>1.00</td>
<td>.25</td>
<td>.38</td>
<td>.21</td>
<td>.23</td>
<td>.18</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C6</td>
<td>1.00</td>
<td>.20</td>
<td>.38</td>
<td>.08</td>
<td>.13</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C7</td>
<td>1.00</td>
<td>.18</td>
<td>.08</td>
<td>.04</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C8</td>
<td>1.00</td>
<td>.13</td>
<td>.28</td>
<td>.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C9</td>
<td>1.00</td>
<td>.32</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C10</td>
<td>1.00</td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

The dimensions identified for use in music teacher commitment construct were: (a) involvement in teaching activities (item C1), (b) personal resources of time and energy (items C2, C3, C4), (c) attitude/investment toward professional music teaching goals (items C5, C6, C7, C8), (d) personal resources of money (items C9, C10), and (d) involvement in professional activities (item C11). Items C1, C2, C3, C6, C8, C9, and C10 appeared to behave loosely as a group, after examining means, range, and inter item correlations. There were positive moderate correlations between item C1 (involvement in
teaching activities) and C2 (personal resources of time and energy; .44). Positive low moderate correlations exist between C1 and C3 (.35), C3 and C8 (attitude toward professional music teaching goals; .35), C6 and C8 (.38), and C9 and C10 (.32). Item C1 and C2 seemed to be measuring parts of the same dimension of commitment, as did items C3 and C8, though they represent different dimensions of the construct.

Correlation between items C1 and C9 (.08), C4 and C9 (.07), C6 and C9 (.08), and C7 and C9 (.08) were extremely low, pulling the dimension of personal resources of money away from the rest of the construct of commitment. However, as indicated with items C7 and C10 (.04), many of the correlations in the matrix for music teacher commitment are very low, indicating the dimensions identified may not be operating through the construct of commitment.

Comparison of the Two Constructs

A Pearson’s Product Moment Correlation was computed to assess the relationship between the construct of Music Teacher Self-Efficacy and Music Teacher Commitment. A moderate positive correlation between the two construct total scores was found (N = 377, r = 0.53, p = 0.00). Examining the inter-item correlation matrix (Table 8), the two constructs appear to be measuring different qualities within the constructs. Item C4 (personal resources of time and energy) is correlating at a low moderate positive level (.31 - .33) with many of the Music Teacher Self-Efficacy items (E1, 2, 5, 9, 12). Item C6 (attitude/investment toward professional music teaching goals) is correlating at a low moderate positive level with E1 (security in one’s abilities; .33) as is C11 (personal
resources of money) with items E6 (security in one’s abilities; .33) and E9 (setting goals and priorities in achievable ways; .32). All other correlations are below .30. Examining the music teacher commitment dimensions, it appears that personal resources of time and energy as identified with item C4 is more highly correlated with Music Teacher Efficacy in the dimensions of security in one’s abilities, setting goals and priorities, and problem-solving than the perseverance through adversity. Item C6, attitude toward teaching goals has a low positive correlation with item E1, security in one’s abilities. Item C11, involvement in professional activities also has a low-moderate positive correlation with E6, security in one’s abilities, and E9, setting goals and priorities. The inter-item correlation matrix for two constructs is shown in Table 10.

Table 10

*Music Teacher Self-Efficacy and Music Teacher Commitment Inter-Item Correlation Matrix*

<table>
<thead>
<tr>
<th>Item</th>
<th>E1</th>
<th>E2</th>
<th>E3</th>
<th>E4</th>
<th>E5</th>
<th>E6</th>
<th>E7</th>
<th>E8</th>
<th>E9</th>
<th>E10</th>
<th>E11</th>
<th>E12</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>.16</td>
<td>.09</td>
<td>.21</td>
<td>.17</td>
<td>.13</td>
<td>.10</td>
<td>.20</td>
<td>.40</td>
<td>.14</td>
<td>.10</td>
<td>.17</td>
<td>.07</td>
</tr>
<tr>
<td>C2</td>
<td>.17</td>
<td>.06</td>
<td>.21</td>
<td>.07</td>
<td>.11</td>
<td>.13</td>
<td>.16</td>
<td>.25</td>
<td>.24</td>
<td>.18</td>
<td>.22</td>
<td>.16</td>
</tr>
<tr>
<td>C3</td>
<td>.21</td>
<td>.12</td>
<td>.26</td>
<td>.20</td>
<td>.11</td>
<td>.19</td>
<td>.17</td>
<td>.24</td>
<td>.27</td>
<td>.23</td>
<td>.19</td>
<td>.09</td>
</tr>
<tr>
<td>C4</td>
<td>.33</td>
<td>.31</td>
<td>.27</td>
<td>.21</td>
<td>.33</td>
<td>.26</td>
<td>.29</td>
<td>.15</td>
<td>.31</td>
<td>.26</td>
<td>.26</td>
<td>.32</td>
</tr>
<tr>
<td>C5</td>
<td>.15</td>
<td>.10</td>
<td>.24</td>
<td>.18</td>
<td>.17</td>
<td>.17</td>
<td>.19</td>
<td>.18</td>
<td>.23</td>
<td>.25</td>
<td>.11</td>
<td>.11</td>
</tr>
<tr>
<td>C6</td>
<td>.34</td>
<td>.37</td>
<td>.30</td>
<td>.23</td>
<td>.34</td>
<td>.33</td>
<td>.30</td>
<td>.15</td>
<td>.29</td>
<td>.27</td>
<td>.27</td>
<td>.24</td>
</tr>
<tr>
<td>C8</td>
<td>.16</td>
<td>.16</td>
<td>.24</td>
<td>.16</td>
<td>.23</td>
<td>.28</td>
<td>.26</td>
<td>.22</td>
<td>.27</td>
<td>.32</td>
<td>.26</td>
<td>.21</td>
</tr>
<tr>
<td>C9</td>
<td>.06</td>
<td>.07</td>
<td>.08</td>
<td>.27</td>
<td>.06</td>
<td>.10</td>
<td>.10</td>
<td>.10</td>
<td>.13</td>
<td>.14</td>
<td>.19</td>
<td>.12</td>
</tr>
<tr>
<td>C10</td>
<td>.00</td>
<td>.04</td>
<td>.11</td>
<td>.01</td>
<td>.10</td>
<td>.08</td>
<td>.10</td>
<td>.12</td>
<td>.05</td>
<td>.09</td>
<td>.04</td>
<td>.11</td>
</tr>
</tbody>
</table>
Content validity for each of the constructs is well-established through connection with the research literature. Items written for Music Teacher Self-Efficacy were constructed after identification of the dimensions of perseverance through adversity, security in one’s abilities, problem-solving abilities, and setting goals and priorities in achievable ways (Avalos & Aylwin, 2007; Bandura, 2006; Dolloff, 1999; Hancock, 2008; Hargreaves et al., 2007; Lacey, 1977; Shere, 1982). Items written for Music teacher commitment were constructed after identification of the dimensions of personal resources of time and energy, personal resource of money, involvement in professional activities, involvement in teaching activities, and attitude toward professional music teaching goals (Coladarci, 1992; Day, Elliott & Kingston, 2005, Ebmeier, 2003; Firestone and Pennell, 1993, Firestone and Rosenblum, 1988; Fresko, Kfir & Nasser, 1997; Merseth, Sommer, & Dickstein, 2008, Mowday, Steers, & Porter, 1979; Nias, 1981; Nir, 2002; Rosenholtz, 1985; Tyree, 2001).

An exploratory factor analysis (FA) was employed to test the construct validity, and assess the latent constructs underlying the participants’ scores. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .864 and Bartlett's Test of Sphericity was found to be significant. These results indicated the sample was appropriate for an FA procedure. All items from the survey were included in the exploratory FA. The initial components solution was rotated using Direct Oblimin rotation, an oblique method, allowing for correlated factors to be considered as sub-dimensions within a common theme, in this case to check for construct validity of two constructs (i.e., music teacher self-efficacy and
music teacher commitment) under the common theme of music teacher identity. When used to uncover latent factors, Fabrigar, Wegener, MacCallum, and Strahan (1999) found that an oblique rotation often produced a slightly better simple structure than did a varimax rotation.

In the present study, the scree plot of derived eigenvalues, a recommended procedure by Cattell (1978), was used to identify two factors within the survey (see Figure 2). The two factors contributed 37.79 percentage of variance to the solution. To name the factors, the criterion-referenced chart (Appendix B) used to create initial survey items was consulted. Factor one aligned with the construct of Music Teacher Self-Efficacy. Factor two aligned with the construct of Music Teacher Commitment. Music Teacher Self-Efficacy (factor one), contributed 29.23 percent of the variance and Music Teacher Commitment (factor two), contributed 8.56 percent (see Table 11).
Table 11

**Total Variance Explained for MTIS: 23 Items**

<table>
<thead>
<tr>
<th>Component</th>
<th>Total Variance</th>
<th>% of Total Variance</th>
<th>Cumulative % of Total Variance</th>
<th>Extraction Sums of Squared Loadings</th>
<th>% of Extraction Sums of Squared Loadings</th>
<th>Cumulative % of Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1.968</td>
<td>8.556</td>
<td>37.791</td>
<td>1.968</td>
<td>8.556</td>
<td>37.791</td>
<td>3.892</td>
</tr>
<tr>
<td>3</td>
<td>1.312</td>
<td>5.706</td>
<td>43.497</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1.285</td>
<td>5.585</td>
<td>49.082</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.220</td>
<td>5.305</td>
<td>54.387</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1.135</td>
<td>4.936</td>
<td>59.322</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.967</td>
<td>4.206</td>
<td>59.528</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.930</td>
<td>4.045</td>
<td>63.528</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.867</td>
<td>3.769</td>
<td>67.573</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.779</td>
<td>3.387</td>
<td>74.729</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.716</td>
<td>3.114</td>
<td>77.842</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.675</td>
<td>2.934</td>
<td>80.777</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.582</td>
<td>2.529</td>
<td>83.306</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>.512</td>
<td>2.226</td>
<td>85.532</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>.498</td>
<td>2.164</td>
<td>87.696</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>.453</td>
<td>1.970</td>
<td>89.666</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>.435</td>
<td>1.890</td>
<td>91.556</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>.410</td>
<td>1.782</td>
<td>93.338</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>.381</td>
<td>1.656</td>
<td>94.994</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>.336</td>
<td>1.459</td>
<td>96.453</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>.287</td>
<td>1.247</td>
<td>97.700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>.283</td>
<td>1.229</td>
<td>98.929</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>.246</td>
<td>1.071</td>
<td>100.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In consulting the FA matrix, six iterations led to the factor matrix shown in Table 10. Items C4 and C6 loaded on the Music Teacher Efficacy Scale, indicating that they are not measuring commitment as they were designed. E8, E9, and E10 loaded almost equally between Music Teacher Efficacy and Music Teacher Commitment. C7 also loaded equally onto both constructs. Consulting the inter-item correlation matrix in Table 10, E items 8, 9, and 10 did not correlate above .44 (E8 and E9) with the exception of E9 and E10, which correlated at .59. Items C4 and C6 were correlated at .69 on the inter-item correlation matrix, but were not correlated with any other items above .38 (C5 and C7).
Table 12

Structure Matrix: Principal Component Extraction with Oblimin Rotation Matrix

<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
<th>Efficacy</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy 1</td>
<td>.760</td>
<td>.172</td>
<td></td>
</tr>
<tr>
<td>Efficacy 2</td>
<td>.720</td>
<td>.115</td>
<td></td>
</tr>
<tr>
<td>Efficacy 3</td>
<td>.684</td>
<td>.296</td>
<td></td>
</tr>
<tr>
<td>Efficacy 4</td>
<td>.528</td>
<td>.298</td>
<td></td>
</tr>
<tr>
<td>Efficacy 5</td>
<td>.723</td>
<td>.229</td>
<td></td>
</tr>
<tr>
<td>Efficacy 6</td>
<td>.712</td>
<td>.260</td>
<td></td>
</tr>
<tr>
<td>Efficacy 7</td>
<td>.745</td>
<td>.234</td>
<td></td>
</tr>
<tr>
<td>Efficacy 8</td>
<td>.462</td>
<td>.486</td>
<td></td>
</tr>
<tr>
<td>Efficacy 9</td>
<td>.556</td>
<td>.466</td>
<td></td>
</tr>
<tr>
<td>Efficacy 10</td>
<td>.503</td>
<td>.440</td>
<td></td>
</tr>
<tr>
<td>Efficacy 11</td>
<td>.663</td>
<td>.312</td>
<td></td>
</tr>
<tr>
<td>Efficacy 12</td>
<td>.707</td>
<td>.178</td>
<td></td>
</tr>
<tr>
<td>Commitment 1</td>
<td>.193</td>
<td>.632</td>
<td></td>
</tr>
<tr>
<td>Commitment 2</td>
<td>.215</td>
<td>.593</td>
<td></td>
</tr>
<tr>
<td>Commitment 3</td>
<td>.263</td>
<td>.597</td>
<td></td>
</tr>
<tr>
<td>Commitment 4</td>
<td>.515</td>
<td>.337</td>
<td></td>
</tr>
<tr>
<td>Commitment 5</td>
<td>.245</td>
<td>.546</td>
<td></td>
</tr>
<tr>
<td>Commitment 6</td>
<td>.531</td>
<td>.402</td>
<td></td>
</tr>
<tr>
<td>Commitment 7</td>
<td>.318</td>
<td>.327</td>
<td></td>
</tr>
<tr>
<td>Commitment 8</td>
<td>.366</td>
<td>.558</td>
<td></td>
</tr>
<tr>
<td>Commitment 9</td>
<td>.129</td>
<td>.443</td>
<td></td>
</tr>
<tr>
<td>Commitment 10</td>
<td>.075</td>
<td>.462</td>
<td></td>
</tr>
<tr>
<td>Commitment 11</td>
<td>.398</td>
<td>.461</td>
<td></td>
</tr>
</tbody>
</table>

Boldfaced figures indicate best item construct loadings

Examining the structure matrix in Table 12, items E8, E9, and E10 seemed to measure both constructs of music teacher efficacy and music teacher commitment at the same time. The underlying dimension of attitude toward professional music teaching goals as constructed in item C4 and item C6 seemed to be more related to music teacher efficacy than to music teacher commitment. Item C7 was constructed as a part of the dimension of attitude toward professional music teaching goals, but as with E 8, 9, and
10, loaded equally between Music Teacher Self-Efficacy and Music Teacher Commitment. Based on the results of the initial exploratory FA, the items E 8, 9, and 10 and items C4, 6, and 7 were dropped from the survey.

The reliability of the survey was re-evaluated with only 17 items; nine items in Music Teacher Self-Efficacy and eight items in Music Teacher Commitment. Based on Cronbach’s coefficient alpha calculations using these items, the overall reliability of the instrument was .81 (where the original was .86). Music Teacher Self-Efficacy reliability was .87 (unchanged from the original .87). Music Teacher Commitment reliability was .67 (where the original was .71). An exploratory FA was run a second time with the selected 17 items, which converged in four iterations, using principal component analysis extraction method and the Oblimin with Kaiser normalization (see Table 13).
Table 13

**Factor Loadings and Solution Variance Contributions for Music Teacher Identity Survey Items**

<table>
<thead>
<tr>
<th></th>
<th>Factor</th>
<th>Solution Variance Contribution</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Music Teacher Self-efficacy</td>
<td>30.91%</td>
<td>.739</td>
<td>-.210</td>
</tr>
<tr>
<td>E 7</td>
<td>I can set musical goals for my students that they are able to achieve.</td>
<td>.737</td>
<td>-.281</td>
<td></td>
</tr>
<tr>
<td>E 1</td>
<td>I can be successful in keeping students engaged with music in my classroom.</td>
<td>.716</td>
<td>-.090</td>
<td></td>
</tr>
<tr>
<td>E 3</td>
<td>I can influence my students to become musically literate.</td>
<td>.697</td>
<td>-.181</td>
<td></td>
</tr>
<tr>
<td>E 6</td>
<td>I can model strong musical behaviors for my students.</td>
<td>.697</td>
<td>-.234</td>
<td></td>
</tr>
<tr>
<td>E 5</td>
<td>Most days, I am secure in my music teaching abilities.</td>
<td>.677</td>
<td>-.250</td>
<td></td>
</tr>
<tr>
<td>E 12</td>
<td>I can help my students succeed, even when musical activities seem difficult for some of my students</td>
<td>.677</td>
<td>-.313</td>
<td></td>
</tr>
<tr>
<td>E 2</td>
<td>I can help my students view music as valuable in their lives.</td>
<td>.649</td>
<td>-.110</td>
<td></td>
</tr>
<tr>
<td>E 11</td>
<td>I can find new ways to teach musical concepts.</td>
<td>.547</td>
<td>-.026</td>
<td></td>
</tr>
<tr>
<td>E 4</td>
<td>I can work with parents to promote music in the schools</td>
<td>.476</td>
<td>.249</td>
<td></td>
</tr>
<tr>
<td>C 11</td>
<td>I make the time to become more involved in professional activities.</td>
<td>.454</td>
<td>.360</td>
<td></td>
</tr>
<tr>
<td>C 8</td>
<td>When I spend money on musical supplies, such as books, I feel I am investing in my profession.</td>
<td>.421</td>
<td>.490</td>
<td></td>
</tr>
</tbody>
</table>

2. Music Teacher Commitment 11.26%

<table>
<thead>
<tr>
<th></th>
<th>Factor</th>
<th>Solution Variance Contribution</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 1</td>
<td>Most of the time, my priority is to have an organized lesson plan for each day teach</td>
<td>.352</td>
<td>.540</td>
<td></td>
</tr>
<tr>
<td>C 10</td>
<td>I spend my own money for musical supplies for my classroom.</td>
<td>.221</td>
<td>.490</td>
<td></td>
</tr>
<tr>
<td>C 2</td>
<td>It is a priority to organize my classroom, even if it takes extra time.</td>
<td>.344</td>
<td>.487</td>
<td></td>
</tr>
<tr>
<td>C 3</td>
<td>Becoming a music teacher requires time for music pedagogical study.</td>
<td>.389</td>
<td>.468</td>
<td></td>
</tr>
<tr>
<td>C 9</td>
<td>Finding new ways to fund my music program is a priority for me.</td>
<td>.265</td>
<td>.424</td>
<td></td>
</tr>
<tr>
<td>C 5</td>
<td>Having my students’ master their instrument or voice is my primary objective as a music teacher.</td>
<td>.342</td>
<td>.404</td>
<td></td>
</tr>
</tbody>
</table>

**Total solution variance contributed by two factors = 42.17%**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .847 and Bartlett's Test of Sphericity was found to be significant. Again, a scree plot of derived eigenvalues was used to identify the two factors within the survey that was nearly identical to Figure 1. The two factors contributed 42.17 percentage of variance to the solution (compared to 37.79% previously), with Music Teacher Self-Efficacy (factor one), contributing 30.91
percent of the variance (up from 29.23%) and Music Teacher Commitment (factor two), contributed 11.26 percent of the variance (up from 8.56%; see Table 11).

Research Question Two Conclusions

The scale reliability for the MTIS was initially confirmed with Cronbach’s coefficient alpha. Using all 23 items, the reliability of the MTIS was .86. Construct reliability for Music Teacher Self-Efficacy was .87 and Music Teacher Commitment was .71. All three reliability levels represent acceptable levels of internal consistency, often determined by values greater than .70 (Nunnally, 1978; Thorndike & Hodges, 1977). Generally speaking, the higher the coefficient alpha, the more internally consistent and reliable the instrument (Yu, 2001). Deleting any items from either construct scale would have lowered the construct reliability and the overall reliability of the MTIS scale, justifying the initial retention of all items for the initial exploratory FA.

Construct validity was demonstrated through two exploratory FAs to assess the underlying dimensions. A two-factor matrix was successful in gleaning both Music Teacher Self-Efficacy and Music Teacher Commitment in the MTIS. After dropping problematic items and using the remaining 17 items, reliability of the overall MTIS remained high at .81. Reliability of the nine Music Teacher Self-Efficacy items remained at .87 and the eight Music Teacher Commitment items dropped to .67. These two factors account for 42.17 percent of the variance, leaving room to explore relationships of the other three constructs of Music Teacher Agency, Music Teacher Collectivity, and Musician-Teacher Comprehensiveness using future iterations of the MTIS proposed
within this study. Although the elimination of the selected items lowered the overall reliability and the Music Teacher Commitment reliability, it did increase the total variance accounted for within the factor analysis and strengthened the relationship of the items within each construct.

Validity of the scale was also assessed. Content validity was demonstrated through identifying dimensions within each construct of Music Teacher Self-Efficacy and Music Teacher Commitment. Music Teacher Self-Efficacy dimensions of perseverance through adversity, security in one’s abilities, problem-solving abilities, and setting goals and priorities in achievable ways were included (Avalos, 2007; Bandura, 1986; Dolloff, 1999; Hancock, 2008; Hargreaves et al., 2007; Lacey, 1977; Sherer, 1982). Music Teacher Commitment dimensions of personal resources of time and energy, personal resources of money, involvement in professional activities, involvement in teaching activities, and attitude and investment toward professional music teaching goals were included (Mowday et al., 1979; Nias, 1981; Tyree, 2001). For the purposes of the present study, the MTIS was found to be a reliable and valid instrument for measuring Music Teacher Self-Efficacy and Music Teacher Commitment.

Research Question Three

For research questions three through six, an alpha level of .05 was established to control for Type I error. A mean score was calculated for each participant for Music Teacher Self-Efficacy (9 items) and Music Teacher Commitment (8 items) to control for
uneven item numbers. The purpose of the third research question was to uncover differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6–10, 11–20, 21–30, and 31+ years of experience. A 2 (music teacher identity) by 5 (years of teaching experience) ANOVA was used to analyze the data. Teacher identity (Music Teacher Self-Efficacy and Music Teacher Commitment) served as repeated measure. Statistically significant main effects were found between the identity constructs \((p = .000)\), and among levels of years of experience \((p = .001)\). There was also statistically significant interaction effect between teaching experience and identity \((p = .000; \text{see Table 14});\)

Table 14

*Repeated Measures ANOVA for Identity by Levels of Teaching Experience*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
<th>(\eta^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity (A)</td>
<td>44.32</td>
<td>1</td>
<td>44.32</td>
<td>232.00</td>
<td>.000</td>
<td>.414</td>
</tr>
<tr>
<td>Years Teaching (B)</td>
<td>4.18</td>
<td>4</td>
<td>1.05</td>
<td>4.83</td>
<td>.001</td>
<td>.056</td>
</tr>
<tr>
<td>A x B</td>
<td>4.32</td>
<td>4</td>
<td>1.08</td>
<td>5.66</td>
<td>.000</td>
<td>.065</td>
</tr>
<tr>
<td>Error (Within)</td>
<td>62.66</td>
<td>328</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (Between)</td>
<td>70.92</td>
<td>328</td>
<td>.22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Differences between the construct of Music Teacher Self-Efficacy and the construct of Music Teacher Commitment were examined across years of teaching experience using pairwise comparisons and the Bonferroni adjustment for multiple comparisons. Statistically significant differences were found between the two constructs in all levels of teaching experience with teachers at all levels reporting self-efficacy being stronger than
commitment (see Table 15 and Figure 2). The profile plot for the two constructs of the MTIS across levels of teaching experience is shown in Figure 2.

Table 15

*Pairwise Comparisons of Self-efficacy and Commitment across Teaching Experience*

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Self-Efficacy Mean (SD)</th>
<th>Commitment Mean (SD)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 Years</td>
<td>4.10 (.547)</td>
<td>3.85 (.571)</td>
<td>.001</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>4.31 (.503)</td>
<td>3.74 (.692)</td>
<td>.000</td>
</tr>
<tr>
<td>11-20 Years</td>
<td>4.42 (.530)</td>
<td>3.82 (.567)</td>
<td>.000</td>
</tr>
<tr>
<td>21-30 Years</td>
<td>4.47 (.545)</td>
<td>3.89 (.615)</td>
<td>.000</td>
</tr>
<tr>
<td>30+ Years</td>
<td>4.64 (.318)</td>
<td>3.87 (.610)</td>
<td>.000</td>
</tr>
</tbody>
</table>
Music Teacher Commitment means remained relatively constant across all years of teaching experience, dropping slightly in the six through ten years of teaching experience before rising slightly. Music Teacher Self-Efficacy started at the lowest point in the one through five years of teaching experience before rising to the highest point at thirty-one plus years of teaching experience.
Differences within each of the constructs (i.e., Music Teacher Self-Efficacy and Music Teacher Commitment) were examined across years of teaching experience using pairwise comparisons of the means and the Bonferroni adjustment for multiple comparisons (Table 16). For Music Teacher Self-Efficacy, significant differences were found among several levels of experience with a general trend toward increased self-efficacy with increased experience (see Figure 2 and Table 16). For Music Teacher Commitment, no significant differences were found across years of teaching experience.

Table 16

<table>
<thead>
<tr>
<th>Mean Difference</th>
<th>(A) 1-5 Years (4.10)</th>
<th>(B) 6-10 Years (4.31)</th>
<th>(C) 11-20 Years (4.42)</th>
<th>(D) 21-30 Years (4.47)</th>
<th>(E) 30+ Years (4.64)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>--</td>
<td>.214</td>
<td>.327*</td>
<td>.370**</td>
<td>.537**</td>
</tr>
<tr>
<td>(B)</td>
<td>--</td>
<td>--</td>
<td>.112</td>
<td>.156</td>
<td>.322*</td>
</tr>
<tr>
<td>(C)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.043</td>
<td>.210</td>
</tr>
<tr>
<td>(D)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.167</td>
</tr>
<tr>
<td>(E)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

Note. *SE Means = Self Efficacy Means. *p < .01, **p < .001

Research Question Four

The purpose of the fourth research question was to examine whether significant differences regarding Music Teacher Self-Efficacy and Music Teacher Commitment and years of teaching were due to gender. A three-way repeated-measures ANOVA was performed, with years taught and gender serving as a between subjects variable and two levels of music teacher identity (i.e., Music Teacher Self-Efficacy and Music Teacher
Commitment) serving as the repeated measure or within-subjects variables. (see Table 17).

Table 17

*Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Gender*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity (A)</td>
<td>42.49</td>
<td>1</td>
<td>42.49</td>
<td>225.00</td>
<td>.000</td>
<td>.411</td>
</tr>
<tr>
<td>Years Teaching (B)</td>
<td>7.22</td>
<td>4</td>
<td>1.81</td>
<td>4.24</td>
<td>.002</td>
<td>.050</td>
</tr>
<tr>
<td>Gender (C)</td>
<td>.99</td>
<td>1</td>
<td>.99</td>
<td>2.33</td>
<td>.128</td>
<td>.007</td>
</tr>
<tr>
<td>A x B</td>
<td>4.33</td>
<td>4</td>
<td>1.08</td>
<td>5.74</td>
<td>.000</td>
<td>.066</td>
</tr>
<tr>
<td>A x C</td>
<td>.85</td>
<td>1</td>
<td>.85</td>
<td>4.48</td>
<td>.035</td>
<td>.014</td>
</tr>
<tr>
<td>B x C</td>
<td>2.56</td>
<td>4</td>
<td>.64</td>
<td>1.50</td>
<td>.201</td>
<td>.018</td>
</tr>
<tr>
<td>A x B x C</td>
<td>.50</td>
<td>4</td>
<td>.12</td>
<td>.66</td>
<td>.622</td>
<td>.008</td>
</tr>
<tr>
<td>Error (Within)</td>
<td>60.99</td>
<td>323</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (Between)</td>
<td>137.65</td>
<td>323</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The between subjects main effect of gender was found to be non-significant ($p = .128$), however, a significant two way interaction effect was found for gender by identity ($p = .035$). No significant two way interaction was found for gender by years of teaching experience ($p = .201$) or three way interaction for gender by identity by years of teaching experience ($p = .622$).

Univariate post hoc analyses revealed no statistically significant difference in Music Teacher Self-Efficacy but a significant difference in Music Teacher Commitment was found between males ($M = 3.78, SD = .57$) and females ($M = 3.95, SD = .57$) (see Figure 4).
Research Question Five

The purpose of the fifth research question was to examine whether significant differences regarding Music Teacher Self-Efficacy and Music Teacher Commitment and years of teaching were due to location (i.e., urban, suburban, or rural). A three-way repeated-measures ANOVA was performed, with years taught and school location
serving as between subject variables and two levels of music teacher identity (i.e., Music Teacher Self-Efficacy and Music Teacher Commitment) serving as repeated measure or within-subjects variables (see Table 16).

Table 18

Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Location

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
<th>( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity (A)</td>
<td>36.61</td>
<td>1</td>
<td>36.61</td>
<td>190.86</td>
<td>.000</td>
<td>.375</td>
</tr>
<tr>
<td>Years Teaching (B)</td>
<td>3.51</td>
<td>4</td>
<td>.88</td>
<td>3.97</td>
<td>.004</td>
<td>.048</td>
</tr>
<tr>
<td>Location (C)</td>
<td>.22</td>
<td>2</td>
<td>.11</td>
<td>.49</td>
<td>.615</td>
<td>.007</td>
</tr>
<tr>
<td>A x B</td>
<td>4.02</td>
<td>4</td>
<td>1.01</td>
<td>5.25</td>
<td>.000</td>
<td>.062</td>
</tr>
<tr>
<td>A x C</td>
<td>.50</td>
<td>2</td>
<td>.25</td>
<td>1.30</td>
<td>.273</td>
<td>.008</td>
</tr>
<tr>
<td>B x C</td>
<td>.52</td>
<td>8</td>
<td>.07</td>
<td>.29</td>
<td>.968</td>
<td>.007</td>
</tr>
<tr>
<td>A x B x C</td>
<td>.78</td>
<td>8</td>
<td>.10</td>
<td>.51</td>
<td>.848</td>
<td>.013</td>
</tr>
<tr>
<td>Error (Within)</td>
<td>61.00</td>
<td>318</td>
<td></td>
<td></td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td>Error (Between)</td>
<td>70.25</td>
<td>318</td>
<td></td>
<td></td>
<td>.22</td>
<td></td>
</tr>
</tbody>
</table>

The between subjects main effect of location was found to be non-significant \( (p = .615) \). No significant two way interactions were found for location by identity \( (p = .273) \) or location by year of teaching experience \( (p = .968) \). No significant three way interaction was found for location by identity by years of teaching experience \( (p = .848) \).

Research Question Six

The purpose of the sixth research question was to examine whether significant differences regarding Music Teacher Self-Efficacy and Music Teacher Commitment and years of teaching were due to teaching area (i.e., general music, choral music, or
instrumental music). A three-way repeated-measures ANOVA was performed, with years taught and music teaching levels serving as between subject variables and two levels of music teacher identity (i.e., Music Teacher Self-Efficacy and Music Teacher Commitment) serving as repeated measure or within-subjects variables (see Table 17).

Table 19

Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Teaching Area

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity (A)</td>
<td>28.50</td>
<td>1</td>
<td>28.50</td>
<td>149.55</td>
<td>.000</td>
<td>.320</td>
</tr>
<tr>
<td>Years Teaching (B)</td>
<td>2.97</td>
<td>4</td>
<td>.74</td>
<td>3.40</td>
<td>.010</td>
<td>.041</td>
</tr>
<tr>
<td>Teaching Level (C)</td>
<td>.19</td>
<td>2</td>
<td>.10</td>
<td>.44</td>
<td>.645</td>
<td>.003</td>
</tr>
<tr>
<td>A x B</td>
<td>3.52</td>
<td>4</td>
<td>.88</td>
<td>4.62</td>
<td>.001</td>
<td>.055</td>
</tr>
<tr>
<td>A x C</td>
<td>1.04</td>
<td>2</td>
<td>.52</td>
<td>2.72</td>
<td>.067</td>
<td>.017</td>
</tr>
<tr>
<td>B x C</td>
<td>.92</td>
<td>8</td>
<td>.12</td>
<td>.52</td>
<td>.839</td>
<td>.013</td>
</tr>
<tr>
<td>A x B x C</td>
<td>.70</td>
<td>8</td>
<td>.09</td>
<td>.46</td>
<td>.883</td>
<td>.011</td>
</tr>
<tr>
<td>Error (Within)</td>
<td>60.60</td>
<td>318</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (Between)</td>
<td>69.59</td>
<td>318</td>
<td>.22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The between subjects main effect of teaching area was found to be non-significant ($p = .645$). The two-way interaction for identity by teaching was found to be non-significant ($p = .067$), as was the two-way interaction for years teaching by teaching area ($p = .839$). There was a no three-way interaction effect found for identity by years teaching by teaching area ($p = .883$).

**Research Question Seven**

The purpose of the seventh research question was to examine whether significant differences regarding music teacher identity and years of teaching were due to teaching
level (i.e., elementary, middle/junior high school, high school). A three-way repeated-measures ANOVA was performed, with years taught and teaching level serving as between subjects variables and two levels of music teacher identity (i.e, Music Teacher Self-Efficacy and Music Teacher Commitment) serving as repeated measure or within-subjects variables (see Table 20).

Table 20

Repeated Measures ANOVA for Identity by Levels of Teaching Experience and Teaching Level

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity (A)</td>
<td>30.42</td>
<td>1</td>
<td>30.42</td>
<td>165.53</td>
<td>.000</td>
<td>.342</td>
</tr>
<tr>
<td>Years Teaching (B)</td>
<td>7.47</td>
<td>4</td>
<td>1.87</td>
<td>4.31</td>
<td>.002</td>
<td>.051</td>
</tr>
<tr>
<td>Teaching Level (C)</td>
<td>.69</td>
<td>2</td>
<td>.35</td>
<td>.80</td>
<td>.452</td>
<td>.005</td>
</tr>
<tr>
<td>A x B</td>
<td>3.23</td>
<td>4</td>
<td>.81</td>
<td>4.40</td>
<td>.002</td>
<td>.052</td>
</tr>
<tr>
<td>A x C</td>
<td>.64</td>
<td>2</td>
<td>.32</td>
<td>1.73</td>
<td>.179</td>
<td>.011</td>
</tr>
<tr>
<td>B x C</td>
<td>3.79</td>
<td>8</td>
<td>.47</td>
<td>1.09</td>
<td>.367</td>
<td>.027</td>
</tr>
<tr>
<td>A x B x C</td>
<td>3.56</td>
<td>4</td>
<td>.44</td>
<td>2.42</td>
<td>.015</td>
<td>.057</td>
</tr>
<tr>
<td>Error (Within)</td>
<td>58.44</td>
<td>318</td>
<td>.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error (Between)</td>
<td>137.67</td>
<td>318</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The between subjects main effect for teaching level was found to be non-significant ($p = .452$). Both two-way interactions for identity by teaching level ($p = .179$) and for years teaching by teaching level ($p = .367$) were found to be non-significant. There was a three-way interaction effect for identity by years teaching by teaching level ($p = .015$). While univariate post hoc analyses revealed no significant differences in Music Teacher Self-Efficacy for years teaching by teaching level, a significant difference in Music Teacher Commitment was found at the six through ten
years of teaching experience ($p = .043$) between Middle /Junior High School ($M = 4.13; SD = .60$) and High School ($M = 3.56; SD = .64$), and again at the 31 + years of teaching experience ($p = .050$), between Middle /Junior High School ($M = 4.25; SD = .53$) and High School ($M = 3.83; SD = .62$) (see Figure 5).

Figure 5

*Profile Plot of Teaching Level Means for Music Teacher Commitment across Years Teaching*
Summary

The first research question was answered with a proposed definition for music teacher identity established through extant literature:

Music teacher identity is one’s conception of himself or herself as a music teacher, as affected by five faucets: (a) music teacher self-efficacy (i.e., one’s sense of his or her ability to affect students in the classroom setting, influence parents, administration and community, and be resilient in the face of adversity); (b) music teacher commitment (i.e., one’s willingness to expend personal time, money, and energy to teach; and to be involved in professional activities); (c) music teacher agency (i.e., one’s power to take charge of a particular situation and produce change); (d) music teacher collectivity (i.e., one’s belief in the ability of the team of teachers and administrators within the school to execute courses of action required to produce desired results); and (e) musician-teacher comprehensiveness (i.e., the breadth or narrowness with which one see’s one’s self as a musician and as a teacher).

The second research question evaluated the reliability and validity of the MTIS using the constructs of Music Teacher Self-Efficacy and Music Teacher Commitment across a sample of teachers grouped by 1–5, 6–10, 11–20, 21–30, and 31+ years of experience. The initial overall reliability for the MTIS was $\alpha = .86$. Initial Music Teacher Self-Efficacy construct had a reliability of $\alpha = .87$. Initial Music Teacher Commitment construct for the MTIS was $\alpha = .71$. Exploratory factor analysis identified six dimensions, two in Music Teacher Self-Efficacy and four in Music Teacher Commitment, underlying the two constructs. The total variance accounted for with Music Teacher Self-Efficacy and Music Teacher Commitment was 42.17%. Using descriptive statistics, inter-item correlation, Pearson’s Product Moment Correlation, and the exploratory factor analysis, items E8, E9, E10, C4, C6, and C7 were dropped from the
survey for further statistical analysis procedures for the remaining research questions. Seventeen items were identified for use in the MTIS; nine in Music Teacher Self-Efficacy and eight in Music Teacher Commitment. For the remaining 17 items, reliability estimates for the MTIS was $\alpha = .81$, with Music Teacher Self-Efficacy reliability remaining at $\alpha = .87$ and Music Teacher Commitment reliability at $\alpha = .67$. A total score mean was computed for each construct, that is, Music Teacher Self-Efficacy and Music Teacher Commitment, to answer research questions three through seven.

The third research question examined the differences between Music Teacher Self-Efficacy and Music Teacher Commitment among 1–5, 6–10, 11–20, 21–30, and 31+ years of experience. Statistically significant main effects were found between the identity constructs ($p = .000$), and among levels of years of experience ($p = .001$). There was also significant interaction effect between teaching experience and identity ($p = .000$). Statistically significant differences were found between the two constructs in all levels of teaching experience with teachers at all levels reporting self-efficacy being stronger than commitment ($p = .001$).

The fourth research question examined the differences between Music Teacher Self-Efficacy and Music Teacher Commitment among 1–5, 6–10, 11–20, 21–30, and 31+ years of experience and by gender. No statistically significance differences were found among Music Teacher Self-Efficacy and Music Teacher Commitment scores and years of experience by gender.
The fifth research question examined the differences between Music Teacher Self-Efficacy and Music Teacher Commitment among 1–5, 6–10, 11–20, 21–30, and 31 + years of experience and by school location (i.e., urban, suburban, rural). No statistically significant differences were found among Music Teacher Self-Efficacy and Music Teacher Commitment scores, years of experience and school location.

The sixth research question examined the differences between Music Teacher Self-Efficacy and Music Teacher Commitment among 1–5, 6–10, 11–20, 21–30, and 31+ years of experience and by teaching area (i.e., general music, choral music, instrumental music). No statistically significant differences were found among Music Teacher Self-Efficacy and Music Teacher Commitment scores, years of experience and teaching area.

The seventh research question examined the differences between Music Teacher Self-Efficacy and Music Teacher Commitment among 1–5, 6–10, 11–20, 21–30, and 31+ years of experience and by teaching level (i.e., elementary, junior high, high school). No statistically significant differences were found among Music Teacher Self-Efficacy and years of experience and teaching level. A statistically significant three-way interaction was found across years of teaching experience, teaching level and Music Teacher Commitment, among music teachers with 6-10 years of teaching experience between Middle /Junior High School and High School and again across the 31+ years of teaching experience between Middle /Junior High School and High School.
CHAPTER V
DISCUSSION

The two purposes of this study were to: (a) define music teacher identity and its underlying constructs based on a critical examination of the extant research, and (b) develop an instrument to measure selected constructs from among a sample of music teachers across years of teaching. Research questions associated with the present study included:

1. What constructs, supported by extant research and theoretical positions, effectively define in-service music teacher identity?

   Based on the critical examination of the extant research, two constructs were selected for further study.

2. What is the reliability and validity of an instrument developed to measure Music Teacher Self-Efficacy and Music Teacher Commitment across a sample of music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience?

3. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience ($p \leq .05$)?

125
4. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by gender ($p \leq .05$)?

5. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by school location (i.e., urban, suburban, rural) ($p \leq .05$)?

6. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by teaching area (i.e., general music education, choral music education, instrumental music education) ($p \leq .05$)?

7. Are there significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers with 1-5, 6-10, 11-20, 21-30, and 31+ years of experience by teaching level (i.e., elementary, middle)

To address the first purpose of the study, a thorough review of the research literature was conducted to ascertain specific constructs linked to music teacher identity construction. Theoretical literature regarding sociological theories, that is, social constructivism, symbolic interactionism, dramaturgy, and role theory, were presented to ground the literature used to extract constructs for the proposed definitions. Occupational identity, pre-service teacher and music teacher, and in-service teacher and music teacher issues in the literature were then examined closely to extrapolate constructs identified as
fundamental to music teacher identity. The analysis provided the foundation for a proposed definition of music teacher identity, grounded in social theory. Five constructs (i.e., Music Teacher Self-Efficacy, Musician-Teacher Commitment, Music Teacher Agency, Music Teacher Collectivity, and Music-Teacher Comprehensiveness) were identified.

The second purpose of the study was to develop an instrument for measuring selected constructs across a sample of music teachers grouped by years of teaching experience. Two constructs, Music Teacher Self-efficacy and Music Teacher Commitment, were selected for initial pilot testing based on the depth of extant research available in each construct area. Music Teacher Self-Efficacy was grounded though the larger scope of self-efficacy research (Bandura, 1977, 1997; Bandura & Walters, 1963; Hattie, 1992; Shavelson et al, 1976; Sherer, 1982; Sherer & Adams, 1983), with specific attention to teacher self-efficacy research (Bandura, 1997, 1977; Lortie, 1977; Sherer, 1982). The depth of research on commitment is rich, beginning with the Becker and Carper studies in the 1950’s (Becker & Carper, 1956; Carper & Becker, 1957) and continuing throughout occupational, teacher, and music teacher studies (Maddux et al., 1982; Nias, 1981; Nir, 2002; Reyes, 1992; Reyes & Shin, 1995; Rosenholtz & Simpson, 1990; Shin & Reyes, 1991; Troman, 2008; Tsui & Cheng, 1999; Tyree, 2001).

The resulting instrument titled the *Music Teacher Identity Survey* (MTIS) was designed by the researcher based on identified constructs and their dimensions selected from the literature and placed on a construct map (see Appendix B). The construct maps
for Music Teacher Self-Efficacy and Music Teacher Commitment served as guides for the construction of survey items. The items were scrutinized with the assistance of four experts in the field of music education and one in the field of educational research methods over several revisions (Appendix C). The resultant items were included in a pilot study (Appendix D). Following the analysis of the pilot study, 23 items were selected for the final MTIS (Appendix A); twelve items under Music Teacher Self-Efficacy and eleven items under Music Teacher Commitment. Survey Monkey© (Finley, 2009) was used to deliver the pilot and final surveys to all potential participants.

For research question two, descriptive statistics, Cronbach’s alpha reliability, inter-item correlation, and an exploratory factor analysis using Direct Oblimin rotation was used to determine the reliability and validity of the constructs of Music Teacher Self-Efficacy and Music Teacher Commitment as measured by the MTIS. Several repeated measures Analyses of Variance (ANOVA) were calculated for research questions three through seven to determine whether significant differences existed between the constructs of Music Teacher Self-Efficacy and Music Teacher Commitment, among years of experience, and across demographic information of gender, school location, teaching area, and teaching level.
Summary of Results

Demographics of Participants

The pilot study participants were fall 2010 graduate students enrolled in music education classes at The University of North Carolina Greensboro. For the final survey, a sample of 2,500 potential participants was drawn from Music Educators National Conference (MENC) membership rolls for November 2011. The study participants were selected using a stratified sampling technique, based on music teaching level (K-12), and drawn proportionately from each of the six MENC divisions.

Research Question One

The first purpose of the study was to propose a definition of in-service music teacher identity supported by extant theoretical and research literature. The definition of music teacher identity explored in the present study is as follows:

Music teacher identity is one’s conception of himself or herself as a music teacher, as affected by five facets: (a) music teacher self-efficacy (i.e., one’s sense of his or her ability to affect students in the classroom setting, influence parents, administration and community, and be resilient in the face of adversity); (b) music teacher commitment (i.e., one’s willingness to expend personal time, money, and energy to teach; and to be involved in professional activities); (c) music teacher agency (i.e., one’s power to take charge of a particular situation and produce change); (d) music teacher collectivity (i.e., one’s belief in the ability of the team of teachers and administrators within the school to execute courses of action required to produce desired results); and (e) musician-teacher comprehensiveness (i.e., the broadness or narrowness with which one see’s one’s self as a musician and as a teacher).
**Research Question Two**

The second purpose of the study was to develop a survey instrument using selected constructs identified as Music Teacher Self-Efficacy and Music Teacher Commitment. Cronbach’s coefficient alpha was used to evaluate the overall reliability of the MTIS and the individual constructs. Pearson’s product-moment correlation analysis was used to examine the degree to which the two constructs related to each other. The composite MTIS reliability was considered acceptable, as were the subsets of the survey, including Music Teacher Self-Efficacy and Music Teacher Commitment. Each subset of the survey was near the top of the moderately acceptable reliability range.

An exploratory factor analysis was used to determine the extent to which the constructs contributed to the concept of music teacher identity. Two factors were found to contribute 42.17 percent of variance to the solution, with Music Teacher Self-Efficacy (factor one), contributing 30.91 percent of the variance and Music Teacher Commitment (factor two), contributing 11.26 percent of the variance.

In examining the performance of the MTIS through inter-item correlations matrices, the Music Teacher Self-Efficacy items were found to function well. The Music Teacher Commitment items were not found to function as well as the Music Teacher Self-Efficacy items. Although MTIS items used to measure Music Teacher Commitment served the purposes of the present study adequately, further steps should be pursued to strengthen the Music Teacher Commitment portion of the MTIS.
Research Question Three

The purpose of research question three was to uncover differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers grouped by years of teaching experience. Significant differences were found between the two identity constructs at all levels of experience with teachers at all levels reporting self-efficacy being stronger than commitment. Expectedly, self-efficacy in music teachers increased at each successive level of teaching experience, with significant increases found between the 1-5 Years category and all other experience categories beginning with the 11-20 Years category. Similarly, a significant increase was found between the 6-10 Years category and the 31+ Years category. Interestingly, when considering the trajectory of results regarding Music Teacher Self-Efficacy, there does not seem to be a point of experience at which a sense of self-efficacy ‘levels off.’ Music Teacher Commitment, however, started out at a moderate level with those in the 1-5 Years category (i.e. $M = 3.85$ on a 1-5 scale) and remained relatively stable, with only a slight increase across all years of experience.

Research Question Four

The purpose of research question four was to uncover differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers grouped by years of teaching experience due to gender. No significance difference for the main effect of gender was found. Further, no significant two-way interaction was found for gender by years of teaching experience or three-way interaction for gender by identity by
years of teaching experience. However, a significant two-way interaction was found for
gender by identity with men and women differing only on the construct of Music Teacher
Commitment and not Music Teacher Self-Efficacy. Female music teachers indicated a
significantly higher level of commitment than did male music teachers.

**Research Question Five**

The purpose of research question five was to determine whether or not there were
significant differences between Music Teacher Self-Efficacy and Music Teacher
Commitment among music teachers grouped by years of teaching experience and by
school location, designated as urban, suburban, and rural. No significant differences
were found for the main effect of location. Further, no two-way or three-way interactions
effects involving location were found.

**Research Question Six**

The purpose of research question six was to uncover differences between Music
Teacher Self-Efficacy and Music Teacher Commitment among music teachers grouped
by years of teaching experience due to teaching area (i.e., general music, choral music,
instrumental music). No significance for the main effect of teaching area was found.
Further, no two-way or three-way interactions effects involving teaching area were
found.
Research Question Seven

The purpose of the seventh research question was to determine whether or not there were significant differences between Music Teacher Self-Efficacy and Music Teacher Commitment among music teachers grouped by teaching level, designated as elementary, middle/junior high school, and high school. No significant differences were found among Music Teacher Self-Efficacy and years of experience and teaching level. A significant three-way interaction was found across years of teaching experience, teaching level and Music Teacher Commitment, among music teachers with six through ten years of teaching experience between Middle /Junior High School and High School and again across the 31+ years of teaching experience between Middle /Junior High School and High School.

Research Conclusions

The purpose of the current study was two-fold: first, to define music teacher identity and its underlying constructs based on a critical examination of the extant research, and second, to develop an instrument to measure selected constructs from among a sample of music teachers across years of teaching. The definition of music teacher identity is grounded in the literature, and thus provides the constructs selected for inclusion in the MTIS. Five facets of music teacher identity were identified, including, Music Teacher Self-Efficacy, Music Teacher Commitment, Music Teacher Agency, Music Teacher
Collectivity, and Musician-Teacher Comprehensiveness, which may contribute to music teacher identity construction throughout a teaching career.

**Definition of Music Teacher Identity**

Music teacher identity is fluid over time, contexts, and impacted by individual experiences (Chreim et al., 2003; Wenger, 1998), with the proposed definition grounded in social constructivist theory. Understanding music teacher identity construction may assist in developing effective teacher preparation and mentoring support for new teachers. Attention to such issues may increase retention for music teachers, impacting both school children, educational outcomes, and quality of teaching lives (Darling-Hammond, 2003; Madsen & Hancock, 2002). The needs of beginning and experienced teachers are vastly different (Battey & Franke, 2008; Ryan, 1990), and the difficulties faced by beginning music teachers may be pronounced as they struggle to balance their musical lives and idealized teacher identity with the realities of difficult working conditions, isolation, and low community perception of music in the schools (Bouij, 2004; Roberts, 2004; Ryan, 1990; Scheib, 2004).

**Music Teacher Identity Survey**

The MTIS proved to be a valid and reliable instrument for measuring the two constructs selected for the current study. The constructs of Music Teacher Self-Efficacy and Music Teacher Commitment explain a great deal of the total variance, leaving appropriate room for the remaining identified constructs of Music Teacher Agency,
Music Teacher Collectivity, and Music-Teacher Comprehensiveness, to explain additional contributions to music teacher identity construction.

The initial strength of reliability and validity for the MTIS provides a strong base upon which to continue research. The current study is an initial examination of constructs. Music Teacher Self-Efficacy and Music Teacher Commitment have been examined thoroughly in teacher education and occupational identity literature. Music Teacher Agency, Music Teacher Collectivity and Music-Teacher Comprehensiveness were not examined in the present study, as confirming more than two constructs at a time would prove difficult for the scope of one study. Research for the last three constructs is also relatively new in comparison to the depth of research available for the constructs of self-efficacy and commitment. Even though the study is concerned with only two of five identified constructs related to music teacher identity, these results nonetheless represent a substantial contribution to the whole.

**Music Teacher Self-Efficacy and Commitment Across Years of Teaching Experience**

Significant differences exist between the constructs of Music Teacher Self-Efficacy and Music Teacher Commitment across all years of teaching experience, as grouped for the present study, situating the music teacher identity definition within a social constructivist theoretical framework. The results also support the premise that beginning in-service teachers construct an identity through which self-efficacy is more likely to change and commitment more likely to remain stable over time.
Strikingly, in each example, first through fifth year teachers indicate lower levels of self-efficacy and commitment to music teaching. This result confirms extant research identifying the first five years as important to retention of teachers (Glickman & Tamashiro, 1982; Hamilton, 2007; Hancock, 2008; Madsen & Hancock, 2002; Marso & Pigge, 1994; Scheib, 2004; Rots et al., 2007), reaffirming mentoring processes and inservice development programs as crucial for the teacher in the first five years of induction and the importance of offering a variety of inservice development to teachers, as their needs are varied across teaching experiences (Abramo, 2009; Cherubini, 2007; Darling-Hammond, 2003; Draves, 2010; Fantilli & McDougall, 2009; Feiman-Nemser, 2001; Madsen & Hancock, 2002; Swackhamer, 2009; Worthy, 2005).

It would appear that inservice music teachers begin with a tentative sense of commitment and self-efficacy, perhaps riding on the limited experiences from student teaching. The dissonance of the idealized teacher identity and reality of the workplace may be partially responsible for the relatively low position of both constructs until years six through ten (Sundin, 2001; Ritter, 2007; Worthy, 2005). As the sample is not longitudinal, and the data from participants in each of the first five years were not separated from one another, it is difficult to determine whether the rise in teacher commitment happens gradually over time, or if it is truly linked to teaching experience across time. There is also a possibility that beginning teachers with a low sense of Music Teacher Self-Efficacy and/or Music Teacher Commitment are leaving the profession early in their careers. A cross-sectional study, rather than a longitudinal study, fails to
represent music teachers whose low sense of commitment and/or self-efficacy has prompted them to leave the profession.

Contrary to claims of wavering or reduction of commitment over time (Beijaard et al., 2000; Evans & Tribble, 1986), results of this study indicated steady commitment across years of teaching experience. Beijaard et al., (2000) and Evans & Tribble (1986) did not differentiate self-efficacy from commitment, and perhaps the decline found in those studies was due to influences of other music teacher identity constructs changing over time. If commitment to teaching is constructed primarily during university training and student teaching, Music Teacher Commitment may indeed be stable even as one enters the profession. Researchers have pointed to early career choices in music occurring in high school (McClellan, 2007; Schmidt et al., 2006), whereas feelings of teacher self-efficacy occur much later in the process of music teacher identity construction. One may be committed to becoming a music teacher prior to developing the skills necessary to consider oneself a music teacher.

Surprisingly, Music Teacher Commitment did not load as strongly in the exploratory factor analysis as expected, given the depth of extant commitment literature and previous pilot survey results. Low levels of inter-item correlation across the commitment construct indicate that the dimensions for commitment need to be clarified or re-examined. As the literature for commitment to occupational identity dates back to the 1950’s, the generational effect of the word ‘commitment’ is problematic. Commitment, as Nias (1981) pointed out, may be identified in different ways, across years of teaching.
suggesting that the different initial meanings of commitment may begin to merge into a singular meaning the longer one remains in the profession. Day, Elliott, and Kington (2005) suggested further that commitment is a nested phenomenon and may be based in a sense of self-identity and personal values and beliefs. The complexities of connecting commitment with identity and separating it from self-efficacy were suggested by Bogler and Somech (2004) in their research on three different levels of commitment, leading to what may also be described as empowerment or agency. That Music Teacher Commitment did not change significantly with teaching experience might point toward the idea that one’s level of commitment might be a more fixed ‘trait’ rather than a malleable ‘state’ characteristic that is able to change relative to other influences.

The fact that Music Teacher Commitment remained the same while Music Teacher Self-Efficacy increased with experience is both positive and perplexing. This finding helps provide a foundation upon which to plan the trajectory of future investigations. Nonetheless, why Music Teacher Commitment does not change significantly over time begs for further examination.

**Future MTIS Constructs**

The present iteration of the MTIS included only two of the identified constructs related to music teacher identity construction. Critical influences, such as mentors, colleagues, professional growth opportunities, and context, converging with complications such as marginalization of the music curriculum, acceptance of symbolic representations of professionalism, role overload and isolation (Rich, 2004; Scheib, 2003)
have not yet been isolated. Specifically, collegial relationships, role overload and isolation may affect expressions of Music Teacher Collectivity and marginalization of the music curriculum and professional growth opportunities may indeed affect a sense of Music Teacher Agency. Musician-Teacher Comprehensiveness may explore attitudes toward student learning, content knowledge, pedagogical knowledge, and mentoring relationships. The constructs of Music Teacher Agency, Music Teacher Collectivity, and Musician-Teacher Comprehensiveness have not yet been explored as a part of the MTIS.

**Demographic Variables**

Participants were asked to indicate their gender, school location, teaching area, and teaching level. The influence of socially constructed boundaries embedded with personal experiences may influence Music Teacher Commitment through personal identity construction. In this case, Music Teacher Commitment, not self-efficacy, was sensitive to gender, where female commitment levels were significantly higher than male commitment levels.

Results of the present study are congruent with those of case studies in which occupational commitment and identity differences were reported by gender (Dillabough, 1999; Gill et al., 2009; Ibarra, 1999, Nias, 1981). Dillabough (1999) stated that the construct of agency draws upon feminist perspectives, implicating gender politics in the construction of occupational identity. Gill et al. (2009) exposed the gender politics involved in construction of female engineering professional identity, implicating a layer of conflict in occupational identity based on being in a profession in which the majority
of members are men. Female engineers reported feeling the need to express higher levels of commitment than men (Gill et al., 2009). Commitment was found to be affected by female teachers’ concerns about motherhood and childrearing in Troman’s (2008) research in England. Different career path opportunities for men may also lead to a difference in commitment to a particular role identity. While gender was examined in the present study, additional elements of personal identity and experiences may impact professional identity construction, including culture, race, and socioeconomics. Additional research should continue to include gender as a variable in the construction of music teacher identity.

Context in terms of school location is a broad category. Participants were not asked to validate how they selected their teaching location, but were asked to indicate their perception of the location. Troman (2008) asserted that culture, commitment, and career affect professional teaching life, as have others who highlight individual experiences and the interactions of individual experiences and context as a part of constructing a teaching identity (Cole & Knowles, 1993; Egan, 2009; Gaudelli & Ousley, 2008; Haniford, 2010; Horn et al., 2008; Knowles, 1993; Ross, 1987). Pre-service teacher identities are constructed in an environment relatively free from the reality of the school setting (Cole & Knowles, 1993) and for the newly-inducted music teacher, this may indeed cause some dissonance between idealized and realized music teacher identities (Bernard, 2009; Campbell & Thompson, 2007; Conkling, 2004; Conway, 2002; Dolloff, 1999, 2008; Isbell, 2008; L’Roy, 1983; Roberts, 1991). In the current study, the broad categories
identified by participants, did not reflect differences due to the complexities of context indicated in extant research. Nevertheless, school location should be included in future iterations of the MTIS.

Teaching areas may be another contextual experience, as was school location. DeLorenzo (1992) found main concerns of first and second year general music teachers to be focused on content and curricular issues, while Abramo (2009) found instrumental music teachers to be focused on the complexities of music teaching pedagogies and negotiation of personal memories of mentors and prior ensemble experiences. Few researchers have examined music teaching across areas, and none compared music teacher areas, years of teaching experience or either construct of Music Teacher Self-Efficacy and Music Teacher Commitment.

As music teacher identity construction begins first through music performance, the instrument or voice chosen by the individual also influences the choice of area specialization within music teaching. Economic and geographic factors may cause music teachers to take a position in a teaching area they do not identify with strongly through their music teacher identity. A sense of Music Teacher Agency, or loss of such, might drastically alter a sense of self-efficacy and commitment. Intersecting with these factors, may be teacher collectivity. Collectivity is a sense of belonging to the profession, which has been found to play an important role in early novice teacher socialization (Bouij et al., 2004; Maclean & White, 2007; Olesen, 2001; Skaalvik & Skaalvik, 2010; Ritter, 2007; Worthy, 2005). As such, collectivity may play an increasingly important role in
construction of music teacher identity throughout a career and may be greatly affected by the dissonance created between teaching areas as a way of identification. The Musician-Teacher Collectivity construct may play an important role in the construction of music teaching identity through specialization of music area.

Teaching levels may be another contextual experience, as were location and area. No studies were identified in which researchers compared teaching levels to one another in terms of teacher self-efficacy and commitment, however, a few researchers examined teacher self-efficacy and commitment constructs within a level, designated as elementary or middle/junior high and high school, but not examining years of experience. From the results of these studies, the researchers uncovered differences between constructs within the levels between self-efficacy and commitment (Abramo, Skaalvik & Skaalvik, 2010; Swackhammer, 2009). Skaalvik and Skaalvik (2010) investigated elementary and middle school teachers and found school context to have different relationships with individual and collective teacher efficacy, with teacher self-efficacy most strongly related to teacher relations with parents and collective teacher self-efficacy more strongly related to supervisory support. Nested in area and level, DeLorenzo (1992) found music teacher concerns differed by grade level with teachers at the secondary level concerned with recruitment and general music teachers concerned with content and curricular issues, but did not address years of experience or self-efficacy and commitment for music teachers.

It is not clear why grade level interacts with years of experience across a teaching career in terms of commitment. Evans and Tribble (1986) found higher levels of teacher
efficacy and commitment to teaching within elementary teachers as compared to secondary teachers. It may be that grade level is tied to the chosen area of music teaching specialization, such as general music, instrumental music, and choral music, and the level chosen to teach may become the important variable of consideration when examining the construct of Musician-Teacher Comprehensiveness. For example, if a music teacher thinks of herself as an instrumental specialist, with a narrow musical focus, she may be more likely to chose the secondary level, leaning toward high school aged musicians and ensemble work rather than a music teacher who is more broadly-focused and chooses to teach general music, and as such would be an elementary music specialist.

The demographic variables of gender, school location, teaching area, and teaching level are uniquely woven into the constructs selected for future inclusion in the MTIS. As all social constructions are imbued with social meaning, the demographics may also aid in understanding of music teacher identity construction over a teaching career. The overall development of MTIS in the future will need to continue to include and perhaps expand on demographics, such as adding socioeconomic status and culture, as each of the constructs is examined.

Limitations

Sampling limitations. Three issues plauged the low response rate of the survey (16.6%), which in turn affected how the data could be analyzed. First, the lack of control over when the initial survey and when reminders were sent to participants may have hindered the completion rate, as the first and second reminder occurred six weeks apart.
Second, the limitations of sampling selected by MENC made it impossible to determine how many members received the survey who did not fit the designated profile of K-12 teaching at the present time. Accuracy was dependent upon member notification of any status changes. The membership of MENC is always in flux and often will not reflect retirees, those who leave teaching, or those who may change jobs, if the membership dues are not up for renewal when these status changes take place. Third, the inability to identify participants based on specific years of teaching experience prior to sample selection made the resultant sample difficult to describe.

The resulting data set was grouped by years of teaching experience. The group of six through ten years of teaching experience accounted for only 11.4% of the distribution. The first five years of teaching experience were relatively balanced against the other remaining teaching experience groupings, each accounting between 21.1% and 23.7% of the distribution. Almost half of the music teacher sample came from suburban schools (47.1%), with urban (25.8%) and rural schools (26.1%) making up the rest. Most of the respondents indicated they taught in areas of instrumental music (58.9%), with choral music (23.4%) and general music (17.7%) finishing out the sample. The teaching level distribution closely matched that of teaching level with high school music teachers representing 55.3% of the sample followed by middle/junior high music teachers (27.3%) and elementary music teachers (17.3%).

In examination of MENC membership rolls available for November 2011, from which the sample for the MTIS was drawn, there were 51,241 total MENC members.
Demographic membership information was available for grade levels and music areas taught, but not for years of teaching experience, gender, or location of teaching assignment. Many music teachers select more than one area and level of teaching, making determination of final percentages for MENC membership difficult to discern. As membership is not separated by teaching level and area, these percentages were even more difficult to compare to the sample drawn and participant percentages. Based on these overlapping numbers, instrumental music was the largest area with 28,276 members (40.8%), followed by choral music with 21,069 members (30.5%), and general music was the smallest area with 19,901 members (28.7%). The MTIS participant sample was skewed toward instrumental music, with the percentage of choral music participants higher than MENC membership percentage, and the percentage of general music participants lower than MENC membership percentage. For teaching levels, 18,780 members selected elementary school (29.6%), 23,036 members selected middle/junior high school (36.5%), and 21,368 selected high school (33.8%). The MTIS returned survey was slightly skewed toward high school music and away from the elementary music in teaching level.

It is difficult to know whether the random sample from MENC was naturally skewed due to selection, improper or non-delivered emails, actual membership or whether participants more likely to return the survey are those with more preparation time during the school day, an advantage that would not favor elementary music teachers. As for the teaching area, many music teachers teach in music classes outside of what they might
consider their primary teaching area. The survey intended to get at the chosen identity as it related to area, not necessarily what was actually taught, as the MENC membership rolls may indicate. Whether or not participant percentages accurately reflect the demographics of the MENC membership may be questionable, but they are relatively close, offering some reassurance that the sample was indeed randomly drawn, and perhaps drawing attention to the differences between how one perceives one’s music teacher identity and the job one actually does.

In any cross-sectional study, the resulting responses are across participants, not across time, which is important to consider when examining the data from the present study. Participants did not include music teachers who have left the occupation, which may indicate that those with the lowest levels of self-efficacy and commitment to the profession did not participate. A longitudinal study would enrich understanding of self-efficacy and the effect it has on retention.

Despite the limitations, Music Teacher Self-Efficacy and Music Teacher Commitment were found to be different among music teachers according to groups of years of experience. The current study intended to create a picture of music teacher identity applicable for all music teachers. It was not intended, and indeed did not identify significant differences among music teachers by location or area. Interesting trends regarding gender and level indicate that differences between the groups may exist, as sub-cultures within the profession. Current results perhaps point to ways in which music teacher identity is similar across areas of teaching, rather than ways in which they are
different. Beyond that there are many questions that may be addressed in future research studies.

**Future Research Suggestions**

The present research study was intended to establish a definition of music teacher identity based on a review of extant research associated with selected teacher identity constructs. Associating the definition of the constructs in social theory, grounded a broad understanding of identity as situational and personally symbolic constructions (Bankston, 2000; Buechler, 2008). Examination of two constructs, Music Teacher Self-Efficacy and Music Teacher Commitment, provides a baseline from which the MTIS can be used to explore the proposed definition. Discussions of the research suggestions for each of the constructs of Music Teacher Self-Efficacy and Music Teacher Commitment are presented, followed by the remaining three constructs of Music Teacher Agency, Music Teacher Collectivity, and Music-Teacher Comprehensiveness. In the future, all constructs must be examined to complete the MTIS and to validate the overarching definition of music teacher identity proposed.

Music Teacher Self-Efficacy did not appear to level off for any group of teaching experience in this study. In the future, examining the correlation between Music Teacher Self-Efficacy and a more sensitive measure of teaching experience by year, rather than by groups, might help reveal a more precise pattern regarding the relationship between the two variables. Music Teacher Commitment did not change over years of teaching experience. Future research questions might explore the dimensions of the commitment
construct through more current research, to improve the strength of the construct itself. Other questions might explore whether there is a limit to the ‘degree’ of commitment that music teachers experience, or whether or not another construct or dimension is suppressing commitment. It would also be worth examining whether or not music teacher commitment is functioning as a fixed trait for those remaining within the profession.

Agency has been defined within this study as one’s power to take charge of a particular situation and produce change. Music Teacher Agency has been identified as a constructivist principle (Beijaard et al., 2004) and must include a study of both the person and the place through which experiences are interpreted. Context creates complexities, as interactions within particular communities or situations differ greatly based on personal experiences and are in constant reinterpretation by an individual (Flores, 2006). Examination of the constructs of agency and collectivity may be valuable in understanding the aforementioned complexities and how the constructs of music teacher identity are interrelated. For example, commitment and self-efficacy may also inform agency, and may be closely related to empowerment, a process through which teachers develop “competence in taking charge of their own growth and resolve their own problems” (Short, Greer, & Melvin, 1994, p. 38).

Collectivity is a type of group efficacy and though it has been positively correlated with self-efficacy in teachers (Skaalvick & Skaalvick, 2010), it has been implicated in other studies, particularly by Lave and Wenger’s (1991) work defining Communities of
Practice. Relationships of collectivity and self-efficacy have not been explored nor has the relationship of collectivity to music teacher identity construction. These unexplored areas offer a rich opportunity for future researchers to study how music teacher identity construction may affect one’s belief in the ability of teams of teachers and administrators within schools to execute courses of action required to produce desired results.

Musician-teacher comprehensiveness has been defined in the present study as the broadness or narrowness with which one sees one’s self as a musician and as a teacher. When one pursues a path in music with the intention to become a teacher, socialization unique to the music profession begins. First, the individual has already begun a musical performance career as a young person, either through a school music program or through music lessons. This first gateway to a career as a music teacher involves demonstration of an adequate performance level on one’s chosen musical instrument or voice to gain acceptance into a school of music (Barnes, 1972; Bladh & Bouij, 1996; Bouij, 1998, 2004; Clinton, 1997; Dolloff, 1999; Harris, 1991; Roberts, 1991; White, 1996; Wolfgang, 1990; Woodford, 2002). Second, training in the university includes immersion into musical performance practices, constructed through individual private lessons (Bouij, 2004).

The negotiation of the space between musician and music teacher happens throughout university training and a career in music. The difficulty of negotiating the space may lie in the transition period between university training and induction into the workplace. Constructing a music teacher identity through this time is a complex process including
negotiations of new occupational reference groups, such as the larger collective of teachers and administrators, and the context of music education within the larger fabric of society. An examination of the Musician-Teacher Comprehensiveness construct through two subsets: (a) comprehensiveness of the teacher role, using a continuum of student-centered (i.e. broad comprehensiveness) to subject-centered (i.e., narrow comprehensiveness) teacher roles, and (b) comprehensiveness of the musician role, using a continuum of all-around musician (i.e. broad comprehensiveness) to performer (i.e. narrow comprehensiveness) roles (Bouij, 2004), may begin to uncover these complexities. An examination of the Musician-Teacher Comprehensiveness construct may also offer possible directions for pre-service music teacher training and in-service music teacher mentoring, leading to new understandings of how to examine music teacher effectiveness.

Work will need to continue to refine each rendition of the MTIS, beginning with a reexamination of the commitment construct. Examination of the most current research available in occupational and professional development literature will allow the dimensions to be redefined. More problematic, the social meaning of commitment to the profession may have changed dramatically since research on occupational identity began. Further, the social meaning of commitment to the profession may be greatly affected by current social pressures of school reform. Neither issue has been considered in the current study. As constructs are defined and items added to the MTIS, further refinement
may need to occur, as the dimensions of the constructs may overlap or become nested. Each of the iterations will need to be evaluated carefully and retested.

It is of particular concern that those individuals who choose to leave the profession and may have the most difficulty in establishing a music teacher identity are absent from the present survey. Retention has been tied to feelings of self-efficacy (Glickman & Tamashiro, 1982). A longitudinal study would provide needed juxtaposition to the sample across years of experience used currently. One overarching goal of having an MTIS is to be able to identify in broad ways how music teachers negotiate and construct their professional identity over time. In identifying these constructs and understanding their importance to the whole, we might better prepare pre-service teachers for the future and provide effective mentoring and appropriate professional development programs for in-service teachers.

Though some variables (i.e., gender, school location, teaching area, and teaching level) did not always produce significant results in the current study, they should be included in future research on the MTIS to continue to examine the data for differences among all constructs. Separately, each of these variables might be refined and examined with the MTIS in more complex ways. For example, gendered experiences may impact professional identity. Other personal experiences of culture, socioeconomics, and race might also be examined in the future. In the current study, the importance of teacher perspective of their school location, primary teaching area, and teaching level were deemed most important, however, examining what a music teacher is actually teaching in
terms of area or level versus what he or she believes to be his or her primary area or level, could uncover more complexities affecting music teacher identity construction. This difference may be particularly true of beginning teachers, who are more likely to begin their teaching careers in an assignment where they are teaching in a different music area, grade level, or location than they might prefer.

Care was taken to eliminate any attributes of personality or disposition of individuals so the MTIS might only measure how one thinks of oneself in the role of music teacher. Once the MTIS is in place, further studies might examine connections to psychological constructs as they interact with music teacher identity construction. Self-identity and self-concept certainly interact with occupational identity construction. Ways in which personal identity interface with occupational identity may be a necessary component to examine when looking toward identification of teaching effectiveness and/or longevity within the profession for the future.

The present study was conducted to begin an examination of the broad scope of music teacher identity construction within the teaching profession. Occupational identity is not simply what one chooses to do, but may continue to influence how one thinks and makes choices in the future. As the act of making music is socially-constructed, the function of identity for music teachers is also socially-charged with contextual roles and cultures and sub-cultures within schools and communities. Socialization of new music teachers is not simply the job of the university, but the responsibility of the entire teaching profession. Until a stable definition and understanding of music teacher identity exists, it is difficult
to determine what is needed regarding the professional development of music teachers. By creating such a definition and an instrument through which music teacher identity might be understood broadly, the profession might begin to bridge the gap between university training and induction, enriching the lives of music teachers over an entire career span.
REFERENCES


APPENDIX A

MTIS SURVEY

Survey of Music Teacher Professional Identity

If after reading the consent form you do not wish to participate, please check the NO button and exit the program.

1. UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
CONSENT TO ACT AS A HUMAN PARTICIPANT: LONG FORM
Student Participant

Project Title: Defining and Measuring Music Teacher Professional Identity

Project Director: Mrs. Cindy Wagoner, Dr. David Teachout (advisor)

What is the study about?
The purpose of the study is to examine professional music teacher identity through an online survey.

Why are you asking me?
We are looking for music educators at all levels of teaching experience teaching in grades K-12.

What will you ask me to do if I agree to be in the study?
We will ask you to complete the online survey.

What are the dangers to me?
The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses no risk to participants. The researcher will not be able to identify answers by participant through the online survey program.

If you have any concerns about your rights, how you are being treated or if you have questions, want more information or have suggestions, please contact Eric Allen in the Office of Research Compliance at UNCG at (336) 256-1482 Questions, concerns or complaints about this project or benefits or risks associated with being in this study can be answered by Mrs. Cindy Wagoner, who may be contacted at 336-517-3440 or clwagone@uncg.edu.

Are there any benefits to me for taking part in this research study?
There are no direct benefits from this study, though you may enjoy the opportunity to answer questions about your personal development as a music teacher.
Survey of Music Teacher Professional Identity

Are there any benefits to society as a result of me taking part in this research? The benefits to society may include greater understanding of the process of professional music education development for the music education community.

Will I get paid for being in the study? Will it cost me anything? There are no costs to you or payments made for participating in this study. You may sign up for a drawing for one of five iPod shuffles at the end of the survey.

How will you keep my information confidential? The online survey separates data from participant. The consent forms will be kept in a locked file cabinet for three years. All information obtained in this study is strictly confidential unless disclosure is required by law.

What if I want to leave the study? You have the right to refuse to participate at any time, without penalty. If you do not participate, it will not affect you in any way. If you choose to not complete the survey in full, your data will not be used.

What about new information/changes in the study? If significant new information relating to the study becomes available which may relate to your willingness to participate, this information will be provided to you.

Voluntary Consent by Participant: By reading this consent form you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By continuing with the survey, you are agreeing that you are 18 years of age or older and are agreeing to participate in this study.

- Yes, I have read the consent form and I agree to participate in the study.
- No, I do not agree to participate in the study

There are just a few demographics needed for the survey statistics. These will not be identifiable with you personally.
Survey of Music Teacher Professional Identity

2. How many years have you been teaching, including the current school year?
   - 1
   - 2
   - 3
   - 4
   - 5 - 10
   - 11 - 20
   - 21 - 30
   - 30 +
   - 40 +

3. What best reflects your current school location?
   - Urban
   - Suburban
   - Rural

4. What do you consider your PRIMARY teaching area?
   - General Music Education
   - Choral Music Education
   - Instrumental Music Education

5. What do you consider your PRIMARY teaching level?
   - Elementary School
   - Middle School/Junior High
   - High School

6. What is your gender?
   - Male
   - Female

Please read each item and indicate how strongly you agree with each statement.

7. Most of the time, my priority is to have an organized lesson plan for each day I teach.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

8. It is a priority to organize my classroom, even if it takes extra time.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong
Survey of Music Teacher Professional Identity

9. Becoming a music teacher requires time for learning effective music teaching techniques and strategies.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

10. Most days, I feel I want to continue to teach music.
    - Extremely strong
    - Very strong
    - Strong
    - Somewhat strong
    - Not strong

11. Having my students master their instrument or voice is my primary objective as a music teacher.
    - Extremely strong
    - Very strong
    - Strong
    - Somewhat strong
    - Not strong

12. Most days, I believe music teaching is a great profession.
    - Extremely strong
    - Very strong
    - Strong
    - Somewhat strong
    - Not strong
Survey of Music Teacher Professional Identity

13. Teaching musicianship through individual performance on an instrument or voice is an important aspect of my job.
   ○ Extremely strong
   ○ Very strong
   ○ Strong
   ○ Somewhat strong
   ○ Not strong

14. When I spend money on musical supplies, such as books, I feel I am investing in my profession.
   ○ Extremely strong
   ○ Very strong
   ○ Strong
   ○ Somewhat strong
   ○ Not strong

15. Finding new ways to fund my music program is a priority for me.
   ○ Extremely strong
   ○ Very strong
   ○ Strong
   ○ Somewhat strong
   ○ Not strong

16. When I am able, I spend my own money for needed musical supplies for my classroom.
   ○ Extremely strong
   ○ Very strong
   ○ Strong
   ○ Somewhat strong
   ○ Not strong
Survey of Music Teacher Professional Identity

17. I make the time to be actively involved in professional activities.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

Please read each item and indicate how strongly you agree with each statement.

18. I can be successful in keeping students engaged with musical activities in my classroom.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

19. I can help my students view music as valuable in their lives.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

20. I can influence my students to become musically literate.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong
21. I can work with parents to promote music in the schools.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

22. Most days, I am secure in my music teaching abilities.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

23. I can model strong musical behaviors for my students most days.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

24. I can set musical goals for my students that they are able to achieve.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong
Survey of Music Teacher Professional Identity

25. I can develop lesson plans in a timely manner even when I am tired.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

26. I can continue to learn new musical techniques even when I have other time commitments.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

27. I find ways of being musical even if I am busy with teaching.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong

28. I can find new ways to teach musical concepts.
   - Extremely strong
   - Very strong
   - Strong
   - Somewhat strong
   - Not strong
Survey of Music Teacher Professional Identity

29. I can help my students succeed, even when musical activities seem difficult for some of my students.
   ○ Extremely strong
   ○ Very strong
   ○ Strong
   ○ Somewhat strong
   ○ Not strong

30. If you would like to enter the drawing for one of five iPod Shuffles, please enter indicate below.
   ○ Yes, I would like to enter the drawing
   ○ No, I don’t wish to enter at this time.

Please enter your first name and email address to be notified if you are selected as a winner of an iPod Shuffle.

31. Please enter your first name only, followed by your email address.
   
Thank you for your help with this survey!
For more information, please contact dwagoner@uncg.edu.
APPENDIX B

CONSTRUCT MAP: MUSIC TEACHER SELF-EFFICACY
AND MUSIC TEACHER COMMITMENT

Observable behaviors relating to the construct of Teacher Self-Efficacy, (Avalos, 2007; Bandura, 1986; Dolloff, 1999; Hancock, 2008; Hargreaves et al., 2007; Lortie, 1977; Sherer, 1982)

- Security in one’s abilities (1, 2, 3, 4, 5, 6)
- Setting goals and priorities in achievable ways (7, 8, 9, 10)
- Problem-solving abilities in complicated issues (11)
- Perseverance through adversity (12)

<table>
<thead>
<tr>
<th>Low Self-Efficacy</th>
<th>Moderate Self-Efficacy</th>
<th>High Self-Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insecure in musical teaching abilities</td>
<td>Moderately secure in musical teaching abilities</td>
<td>Secure in musical teaching abilities</td>
</tr>
<tr>
<td>Doesn’t set achievable goals/can’t establish priorities</td>
<td>Inconsistent in setting achievable goals/priorities</td>
<td>Consistent in setting achievable goals/priorities</td>
</tr>
<tr>
<td>Possesses little problem-solving skill in complex issues</td>
<td>Possesses moderate problem-solving skill in complex issues</td>
<td>Possess high problem-solving skills in complex issues</td>
</tr>
<tr>
<td>Gives up when faced with adversity</td>
<td>Struggles to persevere through adversity or is inconsistent</td>
<td>Perseveres through adversity consistently</td>
</tr>
</tbody>
</table>

SURVEY ITEMS

1. I can be successful in keeping students engaged and with music in my classroom. (*Security in one’s abilities*)

2. I can help my students view music as valuable in their lives. (*Security in one’s abilities*)

3. I can influence my students to become musically literate. (*Security in one’s abilities*)

4. I can work with parents to promote music in the schools. (*Security in one’s abilities*)

5. Most days, I am secure in my music teaching abilities. (*Security in one’s abilities*)
6. I can model strong musical behaviors for my students. *(Security in one’s abilities)*

7. I can set musical goals for my students that they are able to achieve. *(Setting goals and priorities in achievable ways)*

8. I can develop lesson plans in a timely manner even when I am tired. *(Setting goals and priorities in achievable ways)*

9. I continue to learn new musical techniques even when I have other time commitments. *(Setting goals and priorities in achievable ways)*

10. I find ways of being musical even if I am busy with teaching. *(Setting goals and priorities in achievable ways)*

11. I can find new ways to teach musical concepts. *(Problem-solving abilities in complicated issues)*

12. I can help my students succeed, even when musical activities seem difficult for some of my students. *(Perseverance through adversity)*
### CONSTRUCT MAP: COMMITMENT TO TEACHING

*Observable behaviors to measure commitment to music teaching.* (Coladarci, 1992; Day et al., 2005; Ebmeier, 2003; Firestone & Pennell, 1993; Firestone & Rosenblum, 1988; Fresko et al., 1997; Merseth, Sommer, Dickstein, 2008; Mowday et al., 1979; Nias, 1981; Rosenholtz, 1985; Tyree, 2001)

- Involvement in teaching activities (1)
- Personal resources of time and energy (2, 3, 4)
- Attitude/investment toward professional music teaching goals (5, 6, 7, 8)
- Personal resources of money (9, 10)
- Involvement in professional activities (11)

<table>
<thead>
<tr>
<th>Low Commitment</th>
<th>Moderate Commitment</th>
<th>High Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low involvement in classroom teaching activities. (Superficial work, not in-depth or well-thought out)</td>
<td>Moderate involvement in classroom teaching activities. (Some in-depth work done, inconsistent in-depth work)</td>
<td>High involvement in classroom teaching activities. (Much in-depth work done consistently)</td>
</tr>
<tr>
<td>Little time and/or energy spent outside of required work hours</td>
<td>Moderate time and/or energy spent outside of required work hours</td>
<td>High amount of time and/or energy spent outside of required work hours</td>
</tr>
<tr>
<td>Low attitude toward investment in teaching books, aids, materials with own money</td>
<td>Moderately positive attitude toward investment in teaching books, aids, materials with own money</td>
<td>Highly positive attitude toward investment in teaching books, aids, materials with own money</td>
</tr>
<tr>
<td>Low involvement or low attitude toward involvement in professional activities, including membership, conference &amp; meeting attendance, school and district meetings beyond required.</td>
<td>Moderate involvement or moderate attitude toward involvement in professional activities, including membership, conference &amp; meeting attendance, school and district meetings beyond required.</td>
<td>High involvement or highly positive attitude toward involvement in professional activities, including membership, conference &amp; meeting attendance, school and district meetings beyond required.</td>
</tr>
</tbody>
</table>

1. Most of the time, my priority is to have an organized lesson plan for each day I teach. *(Involvement in teaching activities – lesson preparation, personal resource of energy)*

2. It is a priority to organize my classroom, even if it takes extra time. *(Personal resources of time)*
3. Becoming a music teacher requires time for music-pedagogical study. (*Personal resources of time, personal resource of energy*)

4. Most days, I feel I want to continue to teach music. (*Personal resource of energy*)

5. Having my students’ master their instrument or voice is my primary objective as a music teacher. (*Attitude toward professional music teaching goals*)

6. Most days, I believe music teaching is a great profession. (*Attitude toward investment in professional music teaching goals*)

7. Teaching musicianship through individual performance on an instrument or voice is an important aspect of my job. (*Attitude toward professional music teaching goals*)

8. When I spend money on musical supplies, such as books, I feel I am investing in my profession. (*Attitude toward professional music teaching goals, personal resources of money*)

9. Finding new ways to fund my music program is a priority for me. (*Personal resources of money*)

10. When I am able, I spend my own money for musical supplies for my classroom. (*Personal resources of money*)

11. I make the time to become more involved in professional activities. (*Involvement in professional experiences*)
APPENDIX C

ORIGINAL LIST OF ITEMS CONSIDERED FOR MTIS

Original possible items for Music Teacher Self-Efficacy
1. I organize myself so I can focus on teaching.
2. I can’t breakdown complicated teaching tasks into manageable steps.
3. I have enough time in the day to finish lesson planning.
4. I like the challenge of new situations.
5. I work at finding new ways to teach concepts.
6. I like the challenges of my job.
7. When I have a bad day, I just work harder the next day.
8. I am motivated to work harder at a task if I have previously failed at that task.
9. I finish projects that I start if they seem difficult.
10. I am insecure about my teaching abilities
11. Teaching is harder than I thought,
12. I think about careers other than teaching.
13. I am secure with my musical abilities
15. I model confidently for my students.
16. I give up if I am not initially successful.
17. I trust myself to solve problems when I am teaching.
18. I handle unexpected problems very well.
19. I do the unpleasant tasks of teaching as soon as I can.
20. I organize my day to get the most important tasks done first.
21. I set goals for myself that are achievable.
22. I have a hard time getting my teaching work started.

Original possible items for Music Teacher Commitment
1. My students can count on me to be in school everyday.
2. Teaching takes energy I don’t have.
3. I don’t mind giving up personal time for my teaching responsibilities.
4. I willingly purchase teaching materials, such as music and books, to improve my teaching knowledge.
5. I attend professional meetings.
6. I participate in faculty gatherings only because they are required.
7. Whenever I can, I attend in-service training.
8. I relate well to other teachers in my building.
9. I spend time outside-of-school hours helping students.
10. Lesson plans help me to organize my teaching.
11. I volunteer for extra-curricular duties in my school.
12. I enjoy chaperoning student activities.
13. I see music teaching as a lifelong career.
14. Learning about teaching takes time beyond completing baccalaureate degree requirements.
15. I don’t plan to teach more than 5 years.
16. Most days, I would to leave teaching if I could.
17. My teaching job is satisfying to me.
18. I believe teaching is a great profession.
19. I am proud to be a teacher.
20. My teaching job is satisfying to me.
21. I set goals for myself that are achievable.
APPENDIX D

MTIS PILOT SURVEY ITEMS

Likert-type scale for both constructs:
SA = Strongly Agree
A = Agree
SWA = Somewhat Agree
SWD = Somewhat Disagree
D = Disagree
SD = Strongly Disagree

MUSIC TEACHER SELF EFFICACY ITEMS

SA A SWA SWD D SD E1. My plans for behavior management make me successful with student behavior in my classroom.

SA A SWA SWD D SD E2. I am confident I can get music students to work well together in my classroom.

SA A SWA SWD D SD E3. I set musical goals for my students that they are able to achieve.

SA A SWA SWD D SD E4. I can develop lesson plans in a timely manner when I am tired.

SA A SWA SWD D SD E5. I can continue to learn new musical techniques even when there are other time commitments.

SA A SWA SWD D SD E6. My students view music as valuable.

SA A SWA SWD D SD E7. I can influence my students to become musically literate.

SA A SWA SWD D SD E8. I can assist my administration in understanding the value of school music.

SA A SWA SWD D SD E9. I can work with parents to promote music in the schools.
E10. I promote parent involvement in music productions.
E11. I find ways of being musical even if I am busy with teaching.
E12. I keep trying, even when teaching is difficult.
E13. I influence how music is perceived in the community.
E14. Making our school more musical is achievable for me.
E15. I can influence how music is funded in my community.
E16. I enjoy the challenges of teaching music in the schools.
E17. I am discouraged when musical activities seem difficult for some of my students (reverse scoring).
E18. I am discouraged when I encounter student attitude problems (reverse scoring).
E19. I keep a positive attitude when I suffer setbacks in the classroom.

**MUSIC TEACHER COMMITMENT ITEMS**

C1. It is a priority to organize my classroom, even if it takes extra time.
C2. I spend as little time as possible outside of the school day to prepare lesson plans.
C3. I find the musical experiences I have with my students energizing.
C4. Becoming a music teacher requires time for music-pedagogical study.
C5. Music education should allow us to celebrate musical traditions.
C6. Having my students’ master their instrument or voice is my primary objective as a music teacher.
C8. Teaching musicianship though individual performance on an instrument or voice is an important aspect of my job.
C7. I find ways to become more involved in professional activities.
C9. I intend to make teaching my career.
C10. I spend my own money for musical supplies for my classroom.
C11. I resent spending my own money for teaching (reverse score).
C12. Finding new ways to fund my program is a priority to me.