MUSIC STUDENT TEACHING IN TEXAS:

A DELPHI STUDY OF ISSUES IN THE NEW MILLENNIUM

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The preparation of prospective music educators is a very complex undertaking that culminates with the student teaching practicum. However, the music student teaching experience may have less predictable expectations and results than the curriculum that precedes the event. The two-fold purpose of this study was (a) to investigate the music student teaching practicum in the State of Texas in an effort to establish current levels of success as perceived by the music educators involved in the process and (b) to identify any potentially problematic areas which might be in need of attention or revision. Thirty-six music educators (12 university supervisors, 12 cooperating teachers and 12 student teachers) who were recently involved in the music student teaching practicum in Texas were chosen as the sample in this two-round Delphi study. The first round Delphi survey, based on related literature, achieved consensus on 79% of the 108 item responses, and 15 of the 22 unresolved items reached consensus in round two of the Delphi process. The 34 sample members who completed the study ranked a final item in the second Delphi round concerning suggestions for the improvement of student teaching. The respondents showed a very high opinion of the music student teaching practicum. However, the cooperating teachers' responses were often lower, hence the recommendation that collaborative efforts between universities and public schools be strengthened. Recommendations for improvement were also made advocating: (a) adequate rehearsal

time to be afforded the student teacher, (b) expectations to be clearly defined and articulated, (c) classroom management, measurement and media, and content area reading classes to be taught by music faculty, (d) videotaping to be used in the teacher-training and student teaching process, and (e) the length of the student teaching practicum to be extended. Five additional recommendations for improvement were made in areas deemed less urgent.

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CHAPTER I

INTRODUCTION

Statement of the Problem

The student teaching practicum is a most important step in the process of training and certifying future music teachers for the public schools. Student teaching is an exciting time in the life of a young music educator. It is a developmental time when students become teachers, teachers become colleagues, and colleagues become friends and mentors (Fallin & Royse, 2000). It has been described as a time when theory meets reality (Krueger, 1997). Student teaching is generally considered by music educators to be the most important and unifying experience of music teacher preparation programs (Snyder, 1998). The public school music student teaching experience stands as the vital link bridging the formal music education program and the real world of music teaching (Svengalis, 1992).

Realizing the importance of this segment of music teacher training, one might assume that it would be well-planned, -executed, and -evaluated. Unfortunately, this critical experience is often a patchwork at best, with many of the essential components seemingly left to chance. Edward Asmus, editor of the *Journal of Music Teacher Education,* attributes this incongruity to the vast amount of changes that have taken place which cause the field of music education to be "dramatically different than it was when the music teacher preparation programs were originally conceived in the last century" (Asmus, 2000, p. 5). World music, popular music, non-traditional instruments, computer-based composition and music writing programs, block scheduling, and other factors have completely changed what is offered, how it is offered, and when it is offered in our public schools.

Student teaching, at present, represents a last chance for the preservice teacher to receive on-the-job guidance and constructive criticism (Rogers, 1995). Drafall & Grant (1994) note that student teachers are not yet capable of thinking about the teaching act in the same manner as reflective, experienced professionals. Student teaching offers the neophyte teacher an opportunity to apply those skills and theories recently learned and to benefit from feedback and guidance, without fearing endangerment of employment due to lack of experience in unfamiliar situations and unknown territories.

In 1999, the state of Texas had 41 public four-year institutions of higher learning and 57 private institutions of higher learning (*Chronicle of Higher Education*, 2000). Of these 98 Texas colleges and universities, 69 offered programs in teacher training and state certification sanctioned by the State Board for Educator Certification (SBEC), a division of the Texas Education Agency (TEA). SBEC establishes standards for certification in all academic areas of instruction, including music. All of these Texas institutions are subject to these standards for certification.

In the SBEC standards, under the sub-heading of *Educator Preparation Curriculum*, *Section 228.30, item c*, it is stated that "prior to issuance of the Standard Certificate under Chapter 232, Subchapter M of this title, relating to the Types and Classes of Certificates Issued, the preparation program shall require all candidates for certification to complete a minimum of twelve (12) weeks of full-day teaching practicum."

Recent implementation of a new alternative teacher education plan (the Education Career Alternatives Program) in Texas by SBEC in November, 2000, may be causing some degree of apprehension for those involved in teacher-training programs across the state. How this new plan might impact the procedures currently in place for certification of music students by four-year institutions of higher learning remains to be seen. At present, the All-level Music Certification remains unchanged, except for impending

changes in exit-testing. However, the effect of this new alternative plan on the welfare of existing certification structures in the future is uncertain at present.

As a result of this uncertainty, Texas music educators now have an even more urgent need to assess the value and effectiveness of current practices in music teacher preparation and certification. Methods courses required for the completion of the music education degree are certainly valuable but cannot be expected to fully prepare prospective students for the demands of the classroom (Ausmann, 1991; Bowles & Runnels, 1998; DeLorenzo, 1992; Parker, 1982). The preparation of prospective music educators is a very complex undertaking that culminates with the student's application of the knowledge and skills recently gained during the sheltered environment of the student teaching experience. Research in the area of music student teaching indicates that both preservice and in-service music teachers consider the student teaching experience valuable and critical in the preparation of music teachers (Jennings, 1988; Taylor, 1970; Wolfgang, 1991).

However, the music student teaching experience, critical as a culminating experience for neophyte music educators, may have less predictable expectations and results than the curriculum which precedes the event (Bowles & Runnels, 1998). A number of variable factors are involved, including the academic and musical preparation of the student teacher, the skill and practice of the cooperating teacher, and the quality of supervision. These variables contribute greatly to the unpredictability of the nature and result of the experience and give rise to differences in attitudes and opinions about the content and purpose of the student teaching experience among those involved. The music education community of Texas should maintain a firm assessment of the overall effectiveness of the student teaching practicum and remain vigilant for areas that might be in need of revision or improvement. This study will attempt to assess the effectiveness of the music student teaching experience in Texas as perceived by those music educators

who are involved in the process. If the music education community in Texas believes that the best method for training the music teachers of tomorrow is currently in place, then the best defense of this method would most certainly be a consummate knowledge of it. On the other hand, if the majority of music educators believe that student teaching needs improvement, then action is most assuredly needed. This study will attempt to establish those present levels of satisfaction with the current method in place, from the perspective of music educators involved in the process.

A review of literature related to music student teaching revealed a number of studies that have addressed many particular individual components of the music student teaching event. However, very few studies addressed the current state of affairs in a comprehensive manner. Most studies tended to focus on one or more facets of the larger picture. In the extant literature, no studies were found which attempted to assess the overall effectiveness of this music field experience in Texas at the present time. A comprehensive assessment of the music student teaching practicum and its perceived value and success in the field today is needed to identify and address current issues and concerns.

Music educators should not assume that the monitoring of the student teaching structure by various state and national entities is any guarantee that student teaching is accomplishing the desired intent of the music education community. Those involved in the music teacher training programs at the university level should make certain that student teaching is a nurturing, creative, and well-planned educational experience (Smith, 1991). Successful educational pursuits generally will involve meticulous planning and communication among those involved in the process (Bowles & Runnels, 1998). Music educators involved in the teacher-training process must work diligently to provide a predictable, positive, and successful learning experience for the music student teacher. The student teaching experience should most certainly undergo at least as rigorous

planning and revision as does the curriculum and structure of the course-work which precedes it. A comprehensive assessment of the overall effect of the music student teaching experience is needed. “Music teacher education has never before needed a base of substantive information about how best to prepare music teachers as it does now” (Asmus, 2000, p. 5).

Purpose of the Study

The purpose of this study was to investigate the music student teaching practicum in the state of Texas in an effort to establish current levels of success as perceived by the music educators involved in the process. A secondary concern of the study was to identify any areas which might be potentially problematic or in need of revision. To accomplish these goals, those individuals involved directly with the music student teaching practicum were identified and selected as the target population of the study because of their expertise in the event. Those members, hereafter referred to as the *student teaching triad*, are (a) university supervisors of music student teachers, (b) cooperating teachers serving music student teachers during their student teaching practicum in the public school setting, and (c) music student teachers who have completed student teaching within the past academic year. In searching the extant literature on the subject, only one study was found which attempted to assess perceptions of music student teaching by soliciting the opinions of these three groups. Bowles and Runnels (1998) conducted a survey in Minnesota but made no attempt to form any consensus from the responses of the participants. The study revealed common attitudes toward certain aspects of the music student teaching experience, while other results indicated moderate to wide disparity on some aspects. However, the researchers made no attempt to reconcile the disparities that were cited or to form any consensus of opinion among the participants who were involved in the study. Clearly, such a study is needed; it could be a definite advantage to Texas music educators to have such a reference.

Of the 69 institutions of higher learning presently involved in teacher certification in Texas, 34 maintain active membership in the National Association of Schools of Music (NASM). An organization of schools, colleges, and universities that offer music studies, NASM presently has 584 institutional members, nationwide. NASM establishes threshold standards for undergraduate and graduate degrees and other credentials. One of the main purposes stated in the NASM guidelines is to maintain professional leadership in music study and training and to develop a national context for the professional growth of the individual musicians as artists, scholars, teachers, and participants in music and music-related enterprises. Member institutions of NASM are therefore perceived as units that maintain high standards of excellence in the education of their music students. Thus, the population to be addressed in this study was determined to be those individuals involved in the music student teaching practicum in the SBEC-sanctioned universities and colleges of Texas that are members of NASM (see Appendix A for this listing). Though this exclusion will limit generalizability of the study findings in Texas, it will greatly increase generalizability among the other 550 NASM member-schools in the nation.

The Delphi method of research was selected as the methodological procedure of choice. Many studies related to student teaching have employed a survey methodology, but relatively few have utilized the Delphi method. This technique can provide information normally gathered by a survey technique, offers the ability to shape a consensus of opinion by the participants, and also features the potential to formulate predictions about a future state of affairs by an assembled group of experts. The group of experts chosen to participate in this study are the key participants in the music student teaching scenario, the student teaching triad, composed of the music student teacher, the cooperating teacher, and the university supervisor. One of the paramount features of the Delphi method of research is the use of *experts* in the field under investigation (Linstone & Turoff, 1975). This triad represents the true experts of the music student teaching

practicum, each possessing his or her own valuable and qualifying credentials, each representing a distinct and individual viewpoint exclusive of the other two areas of expertise. Although all the participants comprising the music student teaching triad can be said to possess *expert* knowledge, their level of expertise will most certainly vary according to their mode of participation in the event. Input of information from these three distinct subgroups will most likely represent the perspective of each contributor's own relative position of expertise in the music student teaching scenario.

Research Questions

The two-fold purpose of the study was (a) to investigate the music student teaching practicum in the state of Texas in an effort to establish current levels of success as perceived by the music educators involved in the process and (b) to identify any potentially problematic areas which might be in need of attention or revision. The following specific research questions were formulated to accomplish this two-fold purpose:

1. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of those music educators involved in the process?
2. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of university supervisors?
3. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of cooperating teachers?
4. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of recent student teachers?

5. Are there significant levels of interaction among the opinions of university supervisors, cooperating teachers, and student teachers concerning the perceived levels of success of the student teaching practicum?
6. Are there specific areas of the music student teaching practicum that are in need of attention or revision?

Research Strategy

While many diverse methods of assessment within arts education are presently being used today, there is a strong group of arts educators, artists, and advocators who are working toward a more unified approach (Saeler, 1995, pp. 8-9). The work of these arts proponents reportedly had beneficial effects in the late 1980s (Fowler, 1988; *Toward Civilization*, 1988; *Toward A New Era*, 1988). It does not appear, however, that the intent was to unify the methodology employed by arts advocates and researchers (Saeler, 1995). The National Standards Committee for the Arts has worked toward a unified content that may be approached through many methods:

> If we keep the standards focused on substantive content, and don't present them in a way that imitates a particular method of organizing and presenting that content, then we will create an umbrella under which proponents of various methodologies can continue to pursue the goal of student learning using their own favorite means…Our job is to create an umbrella, and we can do it by focusing on content. If we accomplish that goal, what the various professional organizations might do, or what their follow-up might be, is almost secondary. We will have diverse approaches to a common goal (*Perspectives on implementation*, 1994, p. 19).

The Delphi method is a strategy for reaching group consensus individually. The Delphi method allows a group of informed participants to interact anonymously and

privately rather than orally in a group setting. Delphi offers an alternative to the group setting and affords the individual respondent an opportunity to feel comfortable with expressing personal beliefs and opinions. Typical Delphi methodology provides an anonymous environment for achieving group interaction and working toward agreement on issues of importance and it has proven to be a viable tool for the formation and presentation of substantive research content.

The major steps in conducting a Delphi study are:

1. The identification of the purpose of the project, which usually involves one specific focus.
2. The establishment of a Delphi project committee, which lends credibility to the study, assists with determining the scope of the study, and reacts to drafts of questionnaires.
3. The determination of the scope of the study, such as which groups to include and appropriate sample size.
4. The implementation of the study at round zero, which refers to work done before distributing the first questionnaire, such as inviting members to participate.
5. The development of the round one questionnaire, which traditionally allows for free responses to open-ended questions.
6. The analysis of round one content, which provides a compilation of statements for the next round.
7. The processing of round two, which is used to provide feedback and to include any additions not addressed in round one.
8. The processing of round three and succeeding rounds, and using the results (Uhl, 1983).

Use of the Delphi method of inquiry has proven to be most appropriate when the

researcher “attempts to design a structure which allows many informed individuals in different disciplines or specialties to contribute information or judgments to a problem area which is much broader in scope than the knowledge that any one of the individuals possesses” (Linstone & Turoff, 1975, p. 28).

The actual process of the Delphi method proceeds in this manner: Through a series of questionnaires, each succeeding questionnaire being designed to account for responses from the preceding one, a group of respondents express their opinions and attitudes and have the opportunity to adjust their individual responses on the next questionnaire in light of the findings from the previous questionnaire. The basic type of feedback between rounds is the use of the median and the inter-quartile ranges from the previous round answers. Therefore, the group members who will generate an agreement are identified to the researcher, but interaction is individual so as to provide collective feedback to each member privately. Member respondents reconsider their initial posture based upon the group trend (Isaac & Michael, 1987). The Delphi method provides a non-threatening environment whereby participants may respond individually and react collectively in a confident manner.

In the 1960s the use of Delphi was relatively sparse in the research world; however, by the next decade the use of this methodology had almost tripled (Linstone & Turoff, 1975). Today, Delphi methodology has been used extensively in sectors such as business and industry, social sciences, and education. However, its use in music research has been rather limited to this date, although not totally absent. It is the desire of this researcher to employ the Delphi method as a *best tool* for the task at hand, while making every attempt to produce content in the study that is substantive and relevant and therefore valuable to the music education community. Researchers in music education have held substantive and relevant content as a prime objective although, as earlier stated, “we *will* have diverse approaches to a common goal” (*Perspectives on implementation*,

1994, p. 19).

No extant studies in music education were found which employed the Delphi technique to assess the music student teaching practicum in Texas or in any other state or nation. Although Bowles and Runnels (1998) had utilized the opinions of those involved in the music student teaching practicum to assess commonalties and differences of opinion about student teaching in the state of Minnesota, they made no attempt to forge any consensus of opinion. Bowles and Runnels had employed a conventional survey method in their study, but use of the Delphi approach would have made consensus a possibility. While Delphi techniques have been extensively used in other disciplines, use in the field of music education remains, to date, quite rare.

Assumptions

A basic assumption in the Delphi method of research is that the selected respondents are experts in the field under study. It is also assumed that when the Delphi method is employed, two substitutions are actually being made: (a) expert judgement for direct knowledge, and (b) a group for an individual (Linstone & Turoff, 1975).

Limitations

This study is limited to data collected from a population defined as those individuals involved in the music student teaching practicum in SBEC-sanctioned universities and colleges of Texas that are members of NASM. These individuals have been referred to as the music student teaching triad, comprised of university supervisors, cooperating teachers, and student teachers. The accuracy of the data collected is limited since it relies on the knowledge and perceptions of these individuals in the selected population sample who complete the Delphi survey instruments. Another sample, even though selected in the same manner would most certainly vary in their responses to the surveys.

Organization of the Study

The study is organized in five chapters. Chapter I states the problem, purpose, research questions, research strategy, innovations, assumptions, limitations, and organization of the study. The second chapter reviews the related literature in two sections: (a) literature related to the music student teacher practicum, and (b) literature related to the Delphi method of inquiry. Chapter III explains the methodology of the study including the establishment of the Delphi committee, identification of the population, sample selection, question development for the two rounds of Delphi surveys, piloting of the round one Delphi Questionnaire, and the proposed data analyses of the two rounds of Delphi questionnaires. The fourth chapter reports the results of the data analyses; and the final chapter interprets the results, reviews and summarizes the study, and offers conclusions and recommendations.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The purpose of the study was to investigate the music student teaching practicum in the state of Texas in an effort to establish current levels of success as perceived by the music educators involved in the process. A second concern was to identify any potentially problematic areas that might be in need of attention or revision. Six specific research questions were designed to accomplish this two-fold purpose:

1. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of those music educators involved in the process?
2. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of university supervisors?
3. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of cooperating teachers?
4. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of recent student teachers?
5. Are there significant levels of interaction among the opinions of university supervisors, cooperating teachers, and student teachers concerning the perceived levels of success of the student teaching practicum?
6. Are there specific areas of the music student teaching practicum that are in need of attention or revision?

The Delphi method of research was selected as the methodological procedure for the study. A consensus of opinion was to be sought by using the Delphi technique in an effort to supply answers for these six research questions.

The review of related literature is divided into two sections: (a) a review of literature on the subject of issues related to the music student teaching practicum, and (b) a brief history of the development of the Delphi method of research followed by a review of literature concerning the use of the Delphi research method in the fields of education and music education. The purpose of the review of literature on the subject of the music student teaching practicum was to discover current issues of concern in recent research, but not to discover every facet of the student teaching practicum that should be evaluated. Should there be any important current issues inadvertently neglected by the literature review, use of Delphi techniques should allow for their inclusion (via subjects' written responses). This approach, fostering the potential to add to the body of knowledge in an appropriate and accepted manner, enabled the researcher to address issues raised by Delphi respondents that, though important to the focus of the study, may not have been topics of recent research.

Related Literature Involving Music Student Teaching

Research on the subject of music student teaching shows many paradigm shifts since the past mid-century when the practice of student teaching began. Little research was found which addressed the issues of student teaching from the viewpoint of the opinions and perspectives of the participants involved in the event. There was, however, a sizeable amount of literature found which addressed the many related components of the music student teaching experience. The studies selected for inclusion in the literature review fell into these five basic categories:

1. collaboration
2. competency
3. curriculum
4. supervision
5. environment

Since this study focused on current issues, reports of more recent literature have been included. The consideration of the possible impact of these music student teaching components upon the present overall state of affairs will serve as a basis for construction of the Delphi method of inquiry employed in the methodology.

Issues of Collaboration

A proportionately large number of recent studies have dealt with the subject of collaboration in the music student teaching practicum. Collaboration has been defined as "a process of working together where the responsibility and authority for decision making is shared…it may involve joint planning, joint implementation, and/or joint evaluation between individuals or organizations" (Gregory, 1992, p. 15). This collaboration involves the working relationship between the university supervisor and the cooperating teacher but ultimately affects the student teacher. Goal-setting, classroom observation, use of videotapes and journals, interaction between the university supervisor and the cooperating teacher, evaluation, and grading are all crucial to the partnership and collaboration between teacher educators on the college campuses and teacher educators in the public schools (Drafall & Grant, 1994). Ideally, the supervisor and cooperating teacher will work toward the same goal: the preparation of intelligent, reflective, and successful music educators.

Varying attitudes of the student teacher, cooperating teacher, and university teachers about the student teaching experience have been recently researched by Bowles

and Runnels (1998). These Minnesota-based researchers employed a survey instrument, addressed questions closely related to the concerns of the present study, and assumed a comprehensive structure in their assessment of student teaching. The researchers designed a questionnaire divided into six parts: (a) instructional responsibility, (b) student teacher preparation, (c) behavior management, (d) relationships, (e) evaluation, and (f) supervision. Opinions and perspectives of those responding to the Bowles and Runnels survey indicated a disparity in attitudes, some of which were significant.

It was beyond the scope of the Bowles and Runnels (1998) research to formulate any solutions to these differences in opinions and expectations. The main thrust of the researchers' recommendations was that better collaboration between the university and the public school is needed for improvement of the music student teaching event. As points of departure for better collaboration, the authors offered these recommendations:

1. The supervisor and cooperating teacher should have fixed criteria by which to structure the experience.
2. Agreement should be reached prior to the student teaching experiences as to the following:
    (a) when the student teacher will begin teaching.
    (b) how long the student teacher should have full responsibility and for what portion of the day.
    (c) under what conditions the cooperating teacher should be in or out of the classroom when the student teacher has instructional responsibility.
    (d) for which teaching segments the student teacher should submit lesson plans and how much direction the student teacher should have in developing lesson plans.

(e) how the student teacher will handle behavior problems.

(f) under what conditions the cooperating teacher and supervisor should intervene when the student teacher is responsible for instruction.

(g) how much responsibility the student teacher should have for performances.

(h) how much responsibility the student teacher should have in relating to parents and students.

(i) How deficiencies in student teacher preparation and performance should be reported and corrected.

3. Formalized methods should be developed for evaluating not only the student teacher, but the cooperating teacher and supervisor as well.
4. New cooperating teachers should participate in a training session with other cooperating teachers.
5. Plans should be made to video-tape student teaching segments for review (in addition to frequent supervisor visitations), and supervisors should convene classes throughout the experience in which student teachers gather to share experiences and evaluate progress (Bowles & Runnels, pp. 23-24).

The researchers concluded that collaborative planning might provide a more predictable positive and successful learning experience for the student teacher.

In another study, Legette (1997) stressed the importance of the cooperating teacher's role in the collaborative process. Legette postulated that "a correlation may exist between the classroom teaching performances and beliefs of cooperating teachers and student teachers" (p. 28). In cases where no correlation was found, questions might be raised about the overall effectiveness of the cooperating teacher in helping the student

teacher deal with classroom management problems. This statement also reinforces the concept of evaluation of all parties (cooperating teacher, student teacher, and supervisor) involved in the student teaching practicum (Bowles & Runnels, 1998; Legette, 1997; Shires, 1990).

An emphasis on the importance of the cooperating teacher in the student teaching scenario was also presented by Fenton and Rudgers who evaluated the qualities needed by cooperating K-12 music teachers when mentoring student teachers. They identified six particular qualities of importance: (a) the motivation to invest time and energy into the future of music education, (b) knowledge of classroom management techniques, (c) broad musical repertoire, (d) planning skills, (e) high professional standards, and (f) ability to plan experiences to build on the student teacher's successes (Fenton & Rudgers, 1988). The role of the cooperating teacher, who serves as the host and mentor to the neophyte teacher in this final portion of the music teacher training program is most important to the success of the student and is therefore one of the most important facets of the collaborative design.

Collaborative efforts have been referred to as a *partnership* (Svengalis, 1992). Public schools and universities currently share students preparing to become teachers in a variety of ways. Unfortunately, according to Svengalis, "the relationship between these institutions are frequently sporadic and hampered by a hint of distrust" (p. 31). Svengalis concluded that the best interests of both institutions, which have a common goal of providing effective teachers for the future, would be well served by rethinking this relationship. Despite the physical or psychological distance separating the two, they remain heavily codependent in this endeavor. The music department, school, or college within the university provides opportunities for students to study music as a part of their general studies or to prepare for a career, including preparation for public school

teaching. In turn, the public schools prepare and encourage their precollege music students to pursue music as a career or continue their music interests as an elective. A collaborative effort that might be defined as a partnership of the two institutions is to the mutual advantage of both entities and long overdue, according to Svengalis.

Warren (1989) suggested that the involvement and institution of school-university collaborations would serve to (a) foster better communication, awareness, and understanding, (b) provide enhancement of individual knowledge and skill, and (c) help develop stronger music education programs at both the public school and the university level. The methodology in the Warren study was designed in a questionnaire-survey format. Results indicated that very few university graduate music education departments or music education professors have participated in or have initiated collaborative projects with surrounding school districts or teachers. In addition, the results of the survey of inservice music teachers indicated that very few public school music teachers have participated in school-university collaborations. However, it was noted that school music teachers expressed a willingness to participate in coequal relationships with professors in order to address music education concerns, needs, interests, and problems.

In an investigation of the collaborative efforts of the university and public school in the music student teaching practicum, Gregory (1992) found that although 97% of the higher education institutions in the study which trained music teachers collaborate in some form with K-12 schools, only 16% allowed K-12 personnel to participate as equal partners in group decision-making. Gregory discovered that K-12 school personnel participated in decisions most often by providing feedback after decisions were implemented (65%), and by providing input before decision-making (46%). This suggests that the normal collaboration is most likely heavily dominated by the university participants with regard to decision-making.

Researchers attempting to strengthen collaborative efforts between the university and the public school have often addressed the subject of relationships. Most often, the relationships formed between the student teacher and the cooperating teaching are addressed, though at times the relationship between the student teacher and the university supervisor is discussed. Stroker (1993) investigated differences in the thinking styles of cooperating teachers and supervising teachers in an effort to denote any differences between these thinking styles. Twelve thinking styles were measured. The sample included 44 music methods teachers from universities and colleges with an undergraduate music education certification program in the state of Michigan and 76 experienced cooperating teachers in the same state. One test instrument and one demographic data survey were used to obtain the necessary data. To measure thinking styles, Stroker used the *Level 1: Life Styles Inventory*®, a test developed by J. Clayton Lafferty and the Human Synergistics Inc. in Plymouth, Michigan. Both the test and a demographic data survey were self-administered by all sample subjects. Results from the study indicate that a number of experienced Michigan cooperating teachers might lack confidence in others and may be more inclined to attempt to control all aspects of the student teaching process. Stroker concluded that these problems should be addressed and resolved by involving the music faculties from higher education institutions and the public schools in student teaching seminars or workshops.

Recent research by Snyder (1998) indicated that collaborative efforts between the university and the public schools in Ohio could prove to be beneficial for both the student and cooperating teacher. Efforts to ensure that the methods of classroom management taught in university classes match those needed to succeed at the student teaching school site were recommended. Snyder also recommended that university supervisors and school-site cooperating teachers must acknowledge the importance of the student

teacher's developing role identity and assist in building on what the student teacher has learned in the university methods courses.

In summary, collaborative issues have been addressed utilizing many different approaches and research methodologies by researchers in the literature, leading to the assumption that successful collaboration is paramount to the success of the student teaching effort. While many worth-wile conclusions and recommendations have been offered by these researchers, any ultimate solution to the relationship problems and difficulties which have been identified and addressed have not yet have been forthcoming. The concept of collaboration would appear to be so multi-faceted and complex that many research efforts may be required to properly address these problems and difficulties. More study is needed on the subject of collaboration in the music student teaching practicum.

Issues of Competency

Competency is also a recurrent issue in the related literature. It has been suggested that the issue of competency is one that should be addressed prior to the student teaching experience (Chadwick, 1976). Before issues of competency can be addressed, they must be defined. The need to define needed competencies for teachers has historically led to the somewhat obvious solution of the creation of competency lists. Lists of competencies for music teachers vary from state to state according to their originating sources, which are many. Most competency lists originate from the various agencies and entities who are responsible for setting levels for music standards. D. L. Jennings (1988) conducted a research that provided a listing of resources used by the Directors of Teacher Education and Certification in an effort to establish music standards in Indiana:

1. State Supervisor(s) of Music and/or Fine Arts
2. Proposed Standards for State Approval of Teacher Education (revision

of 1952 issue OE Circular No. 351, National Association of State Directors of Teacher Education and Certification, assisted by U.S. Office of Education)

3. National Council for Acccreditation of Teacher Education (NCATE) Standards
4. Music faculty of the state university
5. Teacher Education Committee of the State Music Educators Association
6. An advisory council of concerned music department heads
7. Music Education Standards of the National Association of Schools of Music (NASM), (Jennings, 1988, p. 7).

Were this listing adapted for present use in the State of Texas, it would most likely include:

1. Texas Education Agency (TEA)
2. State Board for Educator Certification (SBEC)
3. Proposed Standards for State Approval of Teacher Education (National Association of State Directors of Teacher Education and Certification, assisted by U.S. Office of Education)
4. NCATE
5. Music faculties of state colleges and universities involved in teacher education
6. Texas Music Educators Association (TMEA)
7. Texas Association of Music Schools (TAMS)
8. NASM
9. Music Educators National Conference (MENC)

In a recent study, Byo (1997) conducted a comparison of general education classroom teachers' and music specialists' perceived ability to implement the National Standards for Music Education (NSME). While the bulk of Byo's study does not relate directly to student teaching experience, it was noteworthy that the research yielded results indicating that certain standards (History & Culture, Singing, and Analyzing Music) are more feasible for both general classroom teachers and music specialists to teach than other standards (Playing Instruments, Improvising, and Composing). It also verified that music specialists are considerably more amenable to the implementation of content standards than the general educators with respect to professional and resource items listed in the NSME. Both groups indicated an overall lack of time and resources to effectively teach most standards. This last finding might need to be addressed in preservice music methods classes so that music educators might maintain the tradition standards of excellence in music education instruction.

One inherent problem with listings of standards which ultimately affects both curriculum and competency goals is that such listings have proven to be time-sensitive. Attitudes regarding the importance of various competencies do tend to change over time. This phenomenon was addressed in a study concerning the effectiveness of instrumental music teacher preservice training experiences as perceived by college and high school band directors (Jennings, 1988). Results from this study indicated that while college and high school band directors agreed on the importance of competencies needed by public school band directors, their perceptions of the importance of competencies have changed over a period of ten years. Also noteworthy was the fact that the majority of the undergraduate music courses were perceived as helpful in the development of competencies. Of the 64 particular competency statements used in Jennings' questionnaire, 48 were considered essential by the directors surveyed; 42 of these 48

essential competencies were identified as competencies that were frequently used by the directors. A rank order of undergraduate courses in the preservice curriculum with regard to their effectiveness in competency development included:

1. Student Teaching
2. Symphonic/Concert Band
3. Method Courses
4. Conducting
5. Applied Lessons
6. Jazz Ensemble
7. Technique Courses
8. Marching Band
9. Orchestration & Arranging
10. Music Theory
11. Music History

Raiman (1975) conducted a study designed to identify and classify the competencies that students should have achieved by the end of student teaching. The purpose of this Connecticut-based study was to identify and classify, in a hierarchy of competencies, objectives of student teaching in music that should have been achieved at the completion of student teaching. The resulting data suggested that there was agreement on those objectives that are important. However, Raiman concluded that no generally agreed-upon listing of music teacher competencies and their relative importance currently exists as a tool of common practice, though many such lists have been compiled to suit regional needs. This study by Raiman is discussed in more detail in the review of Delphi literature section of the present study because he used the Delphi technique in his methodology.

One of the more important competencies critical to the success of the music student teacher is classroom management, (often referred to as behavior management in the literature). Saker (1982) undertook a study designed specifically to evaluate the effectiveness of a developed simulation training program, presented via videotape, on the perceived ability of band student teachers to deal with student behavior-management problems which might occur during the student teaching experience. Twenty-four band student teachers from three universities constituted the sample that was divided into a control group, which received no training, and an experimental group, which received a *Simulation Training Program* incorporating the use of videotape review and evaluation. Results of the study revealed that the experimental group subjects were more confident in their perceived ability to deal with behavior-management problems during the student teaching experience. Saker concluded that the *Simulation Training Program* was an effective addition to the pedagogical materials available for the education of teachers in the band area. The use of videotaping has been recommended in much of the extant literature as a valuable resource tool.

The ability to control discipline in the classroom involves careful monitoring of the total environment, including instruction and student learning, in such a way as to promote an atmosphere in which learning can take place (Snyder, 1998). Snyder found that external influences on classroom management, such as class activity and the guidance offered by the cooperating teacher, are important, but preservice teachers' personal histories also have a great influence on their approach to classroom management. The student teacher's personal history comprises many factors, including the course-work taken prior to field experience, role models provided by influential instructors, and parental and school influences from an even earlier time in the student teacher's life. These factors may do more to shape the image of *teacher* in their minds

than the external structures placed upon them by their education programs and the student teaching experience. Snyder found that music student teachers tended to accept or reject techniques that will or will not work for them according to their personalities. Student teachers are often overwhelmed by the amount of information that must be processed during the typical rehearsal. Snyder recommended the use of videotaping of the student teacher by the cooperating teacher, followed by a conference in which the two review the tape. It was also suggested that student teachers are more likely to incorporate suggestions from their university supervisor about their teaching when they have shared common experiences that relate to teaching. The trust built during the university preparation transfers into better communication and cooperation between the students and supervisors in the field. The researcher advocated that classroom management techniques shown to be successful in practice and in the literature should be stressed to music student teachers:

1. Creating a structured classroom environment (including chair and stand set-up).
2. Establishing classroom rules from the first day of class.
3. Being consistent in the application and follow-up of these rules.
4. Creating opening routines for the students.
5. Pacing activities to allow for maximum time-on-task with students.
6. Maintaining teacher eye contact.
7. Using nonverbal and verbal cues to regain student attention.
8. Stopping student talking and disruptions early -- before they escalate.

The relationship of classroom management attitudes and skills of music student teachers and cooperating teachers was investigated by Terry (1991), who assessed changes in those attitudes and skills of student teachers during the period of student teaching. Data were collected from a sample of 33 student teachers and 33 cooperating

teachers. Each subject was given a *Beliefs on Discipline Inventory* form and a *Behavior Management Skills Inventory* form. Multivariate analysis of variance (MANOVA) was employed to assess changes in student teachers' classroom management attitudes during the period of student teaching. Results indicated no significant relationship between student teachers' and cooperating teachers' classroom management attitudes and skills at the start of student teaching or at the end of student teaching. Based on these findings, Terry concluded that student teachers' classroom management attitudes and skills are not related to cooperating teachers' classroom management attitudes and skills. The results indicated that student teachers did not experience change from pre-student teaching to the end of the student teaching experience in classroom management attitudes and classroom management skills. It may be assumed from this finding that the responsibility rests on the university to implement substantive and effective course offerings in classroom management during the preservice course of study.

Another issue of competency addressed by the literature has been the issue of personality. Teachout (1997) conducted a study that included personality as a contributing factor in the music student teacher's success. The purposes of the study were to determine if significant differences existed among the six occupational personality types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) of music student teachers and to determine if any of the occupational personality types significantly contributed to the teaching effectiveness of music student teachers. The subjects were from the population of music education majors at institutions in Ohio who were involved in music student teaching. Data were gathered using four different inventory forms. Subjects were videotaped and then evaluated by three judges. Significant within-group differences were found to exist among the occupational personality types of music student teachers. Subjects' three highest mean scores were on

the Artistic, Social, and Investigative personality scales respectively. However, none of the six occupational personality types was found to significantly contribute to the overall variance of teaching effectiveness.

While the previous study related teaching success to personality, the following study relates teaching style to a *display of self*. Szpiczka (1990) discovered two conflicting aspects of self-display in her study. The *reserved self-display* includes the professional aspect of teaching, and the *revealed self-display* includes those behaviors which encouraged familiarity between novices and pupils. Becoming a teacher is postulated not to be a linear process of steps that individuals go through in a systematic fashion. Instead, becoming a teacher is related to a process of continual negotiation. Spickza described how the preservice teacher negotiated the tensions between these two conflicting self-displays. In conclusion, she stated that understanding individuals' self-display is not simply noting observed behavior; it means understanding how individuals evolve into a teacher through the relationships they hope to develop with their pupils. Self-display was said to underscore preservice teachers' intentions for behaving the way that they do.

Barnes (1998) conducted a comparison of self-efficacy and teaching effectiveness in preservice string teachers. Self-efficacy is a construct originated by Albert Bandura to describe an individual's belief in his or her own capabilities. High levels of self-efficacy in teachers may have a positive impact on student achievement according to Barnes. While teaching-efficacy refers to a belief in the power of teaching, personal-efficacy refers to one's perceived ability to influence classroom events. This study compared preservice string teachers' changing levels of self-efficacy, self-ratings of videotaped teaching segments, and ratings by experienced educators. Eighteen preservice string teachers worked in a laboratory setting that involved practical experience while providing

music lessons to community children. Their levels of self-efficacy were measured using the *Teacher Efficacy Scale* three times during two semesters. Preservice teachers were also videotaped three times during the study. Videotapes were evaluated by both the preservice teachers and experienced music educators using a *Music Teaching Observation Form*. Barnes found a significant positive correlation between preservice teachers' self-ratings of teaching effectiveness and self-efficacy for the second and third assessments. The mean data indicated that self-ratings of teaching effectiveness increased somewhat while overall levels of self-efficacy decreased slightly. Self-efficacy of the preservice teachers and ratings of teaching effectiveness by experienced educators were correlated in the first assessment. Experienced educators rated the second and third videotaped episodes of teaching substantially higher. Opportunities to practice effective teaching behaviors and regular self-assessment were recommended for music teacher education. Comparing teacher efficacy and student achievement was recommended for future research.

A recent research project focused on preservice music education students' struggle to establish a professional identity and had as its purpose the acquisition of an understanding about how music education students come to think of themselves as music educators (Prescesky, 1997). Guided by the theme "learning from experience," Prescesky drew upon research related to constructivist theory and biographical inquiry, as well as literature pertaining to construction of images of self. This qualitative study explored four music education students' perceptions of themselves as musicians and as educators. Believing that self-perceptions are rooted in personal biographies, Prescesky investigated autobiographical and journal writings to establish links between participants' perceptions and biographies. Issues encountered by participants as they began to think of themselves as music educators were uncovered. Participants' perceptions of their *selves* were said to

be rooted in childhood memories and models of practice. Therefore, participants' images of self-as-musicians and self-as-educators were connected by a common thread, that of the image of self. Subjects who viewed self-as-performer encountered conflict between their identities as musician and as educator. Other subjects who constructed images of self-as-participants experienced a sense of unity and resonance between their identities as musicians and educators. Issues directly related to their self-perceptions surfaced as subjects began to think of themselves as music educators. The study considered the implication of these issues for teaching practice, and the relationship between these issues and preservice teacher training.

Development of pedagogical knowledge in relationship to an understanding of music content was a central concern for choral music teacher education research by Snow (1998). The study investigated an alternative model of preparation and planning for music teaching and learning in the choral rehearsal. The model emphasized brainstorming and imagining for teaching as documented by a visually-oriented map of student thinking. This qualitative endeavor was a formative research study in which the teacher functioned as researcher in the investigation of one proposed curricular model. Research participants included six junior-level undergraduates in a choral methods class at a large mid-western university over a fifteen-week period. Data included written teaching plans, video footage of conducting episodes, teacher-researcher field notes, and student written assignments. Results of the study supported increased attention to the preparatory process for teaching based on rich musical understandings gained through immersion in score study and analysis. Implications of this study for improved classroom practice included a redefinition of the preparatory process for teaching to reflect a three-part process: (a) score analysis and study, (b) brainstorming as represented by a visual map, and (c) planning for instruction.

Competencies of preservice teachers have been recently investigated by using methods of skill comparison between preservice and inservice teachers. One such study by Goodman (1999) proposed to determine if there were differences between the number and type of teaching features identified by preservice and experienced educators. Goodman encouraged 37 preservice and 36 inservice subjects to take notes while viewing a video of a music lesson in a third grade classroom. Subjects were then asked to write a narrative of the lesson while referring to their notes. A significant difference was found in the number of teaching features identified by the two groups. Experienced subjects discussed twice as many as novice subjects. Experienced teachers also discussed up to three times as many teaching features as the preservice teachers in the sub-categories of lesson content, teacher involvement, teacher feedback, and pace of lesson. Preservice subjects identified more enthusiasm of teachers and appropriateness of lesson-teaching features than the experienced subjects did.

Another study that compared skill levels of preservice and inservice teachers was done by Doerksen (1999). The purpose of this study was to investigate the aural-diagnostic and prescriptive skill of preservice instrumental music teachers and expert instrumental music teachers. Preservice subjects were senior undergraduate instrumental music education majors at Ohio State University and the inservice experts were Ohio band directors who had scored first divisions with their ensembles at least four times. Subjects listened to audiotape recordings of various styles of band music performed at various levels of expertise and were asked to make quality ratings of nine selected music elements, rank the nine elements, prescribe rehearsal solutions for performance problems, and estimate time needed to correct the identified problems. Results indicated a surprisingly high level of similarity among the preservice and expert teachers, as related to their aural-diagnostic and prescriptive approaches for ensemble performance problems

(Doerksen, 1999). In a very similar study, with very similar results, Sheldon (2000) concluded that the level of teaching experience did not seem to affect subject response (Sheldon, 2000, p. 21). However, in a comparison of expert and novice teachers' preparing identical band compositions, Goolsby discovered that though ten novice teachers used much more time to rehearse a band piece for performance, the ten expert teachers' performances were evaluated to be superior to those by the novice teachers (Goolsby, 1999).

In conclusion, when considered on the whole, these studies relating to issues of competency seem to stress the importance of the establishment of instructional content, evaluative norms, and selected procedures that have been employed in the process of delivering those predetermined desirable qualities necessary for successful preparation of the music student teacher. Perhaps a study is needed to ascertain the current levels of satisfaction with these issues of competency by those who are presently involved in the process of music student teaching.

Issues of Curriculum

Closely related to the issue of competency in music student teaching is the issue of curriculum. The determination and examination of what should be conveyed to the developing future teacher to insure success has been the impetus for a large body of research in music education. Wollenzien (1999) examined various music education curriculum topics in colleges and universities of the North Central Division of the Music Educators National Conference (MENC). Data were collected through a survey instrument which was mailed to a music education faculty member at each the National Association of Schools of Music (NASM) accredited school in the division. Data from the 47 participating institutions were compared and analyzed according to the type of institution (doctoral, comprehensive, or general baccalaureate). A comparison was also

made to a similar study by Schmidt (1985, cited in Wollenzien, 1999), and apparent trends in curriculum content were identified. Findings indicated that the curricular components of institutions in the study varied only slightly from NASM guidelines. Participants also provided information regarding 76 curriculum topics, whether the topic was offered, which music education majors were required to study each topic, and how much time was allotted to the topic in the curriculum. The findings indicated that there was a great deal of variability among schools regarding the curriculum topics. Most institutions offered and required such topics as music history, conducting, and methods for teaching. Less attention is given to such topics as music for unique learners, techniques for teaching improvisation, and music as an integrated subject. Wollenzien reported in his research (1999) that several curricular topics received a higher priority rating since the earlier Schmidt study (1985) had been conducted, including music of world cultures, music in early childhood, and research in music education. Applications of technology and the National Standards of Music Education were found to be making a considerable impact on music education curricula. Wollenzien concluded that music teacher educators should continue to keep abreast of trends and developments reported in research because evaluation of curricular priorities and the flexibility to change were reported to be key elements to maintaining the vitality of the profession.

Seven areas of curriculum were used to organize data collection in a West Virginia-based investigation of the *ideal* music curriculum (Saeler, 1996). The methodological technique used by Saeler will be discussed in more detail in the section related to Delphi literature. Of importance to this curricular section of the present study was Saker's use of seven curricular areas to organize data collection: (a) purposes of music, (b) goals of music, (c) important characteristics of a music curriculum, (d) methods and procedures used in teaching, (e) characteristics exhibited by a person who

has been musically educated, (f) considerations in the development of curriculum, and (g) determinants of curriculum. Round one of the Delphi procedure employed by Saker obtained a convergence of opinion for six of the seven areas of curriculum. The seventh area achieved consensus in round two. The results of a content analysis of curriculum guides revealed that they were, in actuality, reductions of the state guide. The comparison made between the Delphi-generated data and the data generated by the content analysis uncovered many similarities. Issues of inconsistency between the rankings of expert respondents about curriculum and curriculum adjustments were resolved through the content analysis comparison.

Another investigator dealing with curricular issues redefined the presently oft-used term *core curriculum* in terms of the requirements for instrumental music teaching students. For the purposes of this particular study, the core curriculum for the preparation of instrumental music educators was defined as courses in conducting, woodwind, brass, percussion, string methods, marching band techniques, and band methods (Cooper, 1994). Three groups of instrumental music educators in the Indiana region were surveyed in this study: (a) 25 teachers of college band methods courses, (b) 125 high school band directors of *model* band programs, and (c) 125 randomly selected high school band directors. Two separate surveys were developed -- one for use at the university level, and one for use at the high school level -- and 142 surveys (52%) were returned. There were two major findings of this study which were rather alarming: College band methods courses were rated no better than *adequate* by 65% of high school band directors, and concerns about the lack of recent successful public school teaching experience by those who teach those courses were raised by the high school band directors. These directors recommended that several topics could be eliminated from the band methods course-work, including *History and Philosophy of Music Education*, *String Methods*, *Choral*

Methods, *Research in Music Education*, and *Learning Theories*. Topics suggested by the high school directors as new areas of study included *Computers and Other New Technology*, *Education Reform*, and *Public Relations*. The fact the 66% of all respondents were in favor of making the area of marching band techniques a separate and required course would indicate that perhaps the band methods courses in this area of the nation might have too much curricular material under one course-heading.

The development of a casebook for use in instrumental music education methods courses was the subject of recent research conducted by Conway (1999). The casebook was intended to provide a source for the use of the case method, an approach to instrumental music teacher education grounded in problem-solving, reflective thinking, and practical applications of pedagogical content knowledge (Conway 1999, p. 344). The study was based on data gathered from interactions with four instrumental music teachers (one elementary, two middle school, and one high school) and included researcher observations of instrumental music lessons, researcher observations of instrumental music students in large and small ensemble settings, and two types of teacher interviews, structured and unstructured. It was recommended that the casebook be considered for usage by college methods instructors and that the design used to create the cases might be used as a model for the development of a course in casebook literature in instrumental music education.

In another curriculum-related study, an investigation of the relationships between undergraduate music education students' early field experience and their student teaching performance was conducted by Fant (1996) with 40 music student teachers from eleven universities as his subjects. Student teaching performance was examined by use of video samples and two teacher effectiveness forms. Two independent judges were used and interjudge reliability was reported to be .73 and .69 on the two forms utilized, with a

between-form reliability of .88. While he concluded that early field experience with feedback and peer microteaching was positively related to student teaching performance, Fant found that early field experience without feedback had a negative impact on student teaching performance. It was recommended that a methods/conducting lab is an effective setting for microteaching experiences prior to student teaching.

In another research utilizing the microteaching technique, the researcher concluded that preservice teachers have a clear picture of what it means to be an effective teacher (Butler, 1999). Their curricular path is most certainly a determinant in this outcome. In this study, an effective teacher is described by preservice teachers as one being knowledgeable, possessing a variety of personal characteristics, and engaging in specific teacher actions. Butler found that although preservice teachers' cognitive structure did not change after the completion of two microteaching experiences, there was some indication that changes in the content of their thinking did arise following their microteaching experience. This means that while cognitive structure was not altered, the content of thinking style was affected, and this is significant. No relationship between preservice teacher's cognitive structure and their ability to demonstrate effective teaching behaviors was found. However, Butler found that qualitative analyses suggested a possible connection between the content of their thinking and their ability to teach effectively.

Stegman (1996) investigated six choral music student teachers' perceptions of successes and problems during instruction when encouraged to reflect on their teaching through guided questioning. A primary goal of the study was to describe and analyze the content of reflection on instruction and how it influences instructional judgments, to include decisions and actions about curricular matters. Data collected provided insight into choral music student teachers' perceptions, interactive thoughts, reflections, and

related experiential learning. Data collection and analysis occurred throughout the study, involved constant comparison, and allowed for emergent patterns. Data analysis provided descriptive and interpretive accounts that took the forms of case-study portraits and cross-case analysis and reporting. Conclusions and recommendations for music teacher education and further research were drawn related to five general areas that appeared to influence and interact with the student teachers' interactive thoughts, reflections, practice, and what they learned from experience: (a) beliefs about teaching and learning, (b) orientation to subject matter, (c) perspectives regarding curriculum and planning, (d) reflection, and (e) images, models and metaphors.

In another study related to cognitive approaches to curricular issues, a holistic viewpoint was applied in the formulation of a philosophy for music teacher education by Parr, (1996) who set about to discover what the ideas of Jerome S. Bruner, Maxine Greene, and Vernon A. Howard might reveal when reconsidering the music teacher preparation paradigm. The view of education these writers espouse supports the concept of a democracy, that is, an education that aims at recreating or realizing a democracy. The resulting re-conceptualization of music teacher preparation focused on a holistic and democratic process of creating self, symbolic mediation, practice, philosophical reflection, and political advocacy. Emerging from this analysis were six principles that would under-gird this new approach to music teacher preparation. The first three principles centered on the internal processes of knowing and understanding needed as a student and as a music performer. The second three principles converged around the external or outward processes of both reflecting on one's practice as a teacher and holding that image against one's beliefs. Parr concluded that the image, if done well, should always change and be ever evolving but also be clearly in focus. Together, these six principles suggested a holistic view of music teacher preparation (Parr, 1996).

Creative studies such as this that attempt to significantly relate accepted learning theories to the music education process of student teaching possess a validity well-grounded in theory and well-support by evidence of implementation in practice.

However, curricular issues related to the topic of multiculturalism, although having received a good amount of attention, have received little uniformity in implementation. Montague (1988) investigated the multicultural component of music education teacher training programs, preservice in particular, in selected universities and colleges. A secondary intent of this study involved investigation of the extent to which state legislation and policy exists in multicultural education, with effort made to determine whether correlations existed between university teacher training in multicultural music education and policy legislation in the state. Montague ultimately discovered a disparity of implementation. Although teacher-training programs in multicultural music education were found in states with multicultural legislation and policies, other universities in those same states did not have such a program. It was concluded that the inconsistencies resulted from the general nature of most of the laws. Montague found that a more significant factor for the existence of multicultural instruction in higher education institutions was the personal background and/or training of individual faculty members or administrators. It was concluded that laws which do exist are important since they can serve both as a basis for seeking the establishment of teacher training programs in multicultural education as well as the basis for seeking the establishment of specific mandates.

Okun (1998) also investigated multicultural perspectives in undergraduate music teacher education programs. Recent laws and regulations stressing pluralistic values signal that an evolution away from a previously culturally biased music curriculum is underway. Okun's study investigated how undergraduate music teacher education

programs can respond to these new demands, specifically those demands concerning cultural diversity in the public schools. The study provides a synthesis of the ideals of leaders in the sub-discipline of multicultural music education (notably William Anderson, Patricia Shehan Campbell, Barbara Reeder Lundquist, David McAllester, Bruno Nettl, and Will Schmidt). Results of the research showed that music teacher education nationwide does not adequately address preparation of primary and secondary teachers to present a global perspective in their classroom. Two contrasting approaches which undergraduate programs can employ to implement multicultural perspectives into the music curricula were discussed. It was reported that many music educators would like to see multicultural perspectives incorporated in their students' entire curricula. Undergraduates would then have multicultural content infused in theory, history, composition, and even ear-training components. A different approach was found at the University of Washington. Multicultural music education courses have been added to the requirements in the preservice teachers' curricula, and in some cases, have replaced courses deemed less applicable to their current needs. The study concluded that consensus points to the need for preservice music teachers to have a balance of experiences, including listening to and/or appreciation of a wide variety of music and music cultures, performance on a non-Western musical instrument, and in-depth study of one or more unfamiliar music cultures, as well as opportunities to investigate teaching strategies and materials which include multicultural perspectives.

In summary, implementation of multicultural offerings into the curriculum, although supported by research, may not have received uniform implementation into the music student curriculum in all areas of the state or nation. A study which would canvas those currently involved in the student teaching process, soliciting their opinions on (a) the *importance* of multicultural issues in student teacher-training and (b) the present rate

of *success* in implementing multicultural content into the student teacher-training curriculum is needed.

Issues of Supervision

The supervision of the music student teacher by a qualified university professor has been the subject of recent investigations. The supervision a student teacher receives can be a primary influence on the development of the student's perspectives. Though most consider the cooperating teacher to be the dominant supervisory influence during the music student teaching experience, there is much support for the belief that the university supervisor can provide a perspective that is beneficial to the student teacher's growth and development (Glass, 1997). Glass undertook a study that attempted to provide a holistic description of the role of the university supervisor and the ways it can influence the development of the music student teacher. Two central areas of concern that arose were issues of communication between the triad members and issues of supervisory style. The nature of the relationships formed between each of the participants, both prior to and during student teaching, played a key role in the supervisors' influence on the development of their student teachers. A strong link emerged between supervisory style issues and the development of reflection in the student teachers. Other themes identified in the study were the formation of alliances within the triad, knowledge of each other's teaching styles, content of conversations, and the search for a philosophical common ground between triad participants. Two general conclusions from this study were that supervisors strongly influenced many aspects of the student teacher's experience, and that supervisory style was the most critical factor affecting the supervisor's influence on the student teacher's development.

Supervisory style was addressed in another study that formulated a clinical supervision model for use by college and university music faculty in supervision of music

education student teachers (Smith, C. W., 1989). However, this study, undertaken in Mississippi, made the assumption that music faculty personnel always supervise the music student teacher. In Texas, this has not been the case. Education faculty members, or qualified personnel selected by them, often perform this duty. After Smith completed a review of literature, a questionnaire was developed, pilot-tested, and sent to music faculty at selected colleges and universities. Results indicated that the respondents used few clinical supervision models and inspection/rating supervision models. A proposed clinical supervision model was developed from information found in clinical supervision models of Cogan, Goldhammer, Acheson and Gall, and from responses to the questionnaire. The resulting proposed clinical supervision model was intended to augment inspection/rating supervision models by providing for structured focus on improvement of teaching and rehearsing skills without the threat of inspection/rating.

Drafall and Grant (1994) also recommended the use of clinical supervision of music student teachers in their research centered on the premise of improving communication with student teachers. In this study, the role of the cooperating teacher is expanded to include advisor, evaluator, troubleshooter, safety valve, and parent. According to the researchers, the most important instructional mode of the student teaching experience is the one-on-one conference between the cooperating teacher and the student teacher. The researchers noted that "student teachers are not yet capable of thinking about the teaching act in the same manner as reflective, experienced professionals" (p. 36). Building on theories of child development espoused by Piaget and others, the researchers structured a clinical supervision model based on the premise that developing teachers go through three separate stages of thought development. These levels are not determined merely by age nor experience, but reveal a continuum of profession reflection and emotion maturity. Most student teachers begin at the lowest

level in which there is confusion concerning how their pupils are responding. The student teacher tends to react to situations out of habit or instinct and does not consider alternative approaches to those they had previously planned. They have difficulty understanding the relationship between their own teaching behavior and classroom problems, if they are indeed even aware of any problems. The second-level student teachers are at the middle level of thought development and realize that what they do in the classroom affects how the pupils respond. They are able to recognize many of their own instructional problems although they still experience difficulty in deciding how to solve their problems. Student teachers at this middle level are often anxious to discuss their problems. Student teachers at this level may not realize when their students are watching, rather than learning. The third and highest level of thought development is characterized by an ability to respond immediately to any problem that arises in the class or rehearsal with an alternative approach. They are able to *think on their feet*. These student teachers have moved away from egocentric or self-conscious concerns and are focused on the learning and achievement of the pupils. Cooperating teachers can be a major influence in the student teacher's passage through these stages toward reflective and effective teaching. The conference approaches described in this study reflect the various needs of the three stages. These conference approaches are categorized in three steps: (a) The directive conference approach, in which the cooperating teacher takes a high level of responsibility, gives clear directions, and establishes specific goals for the student teacher, (b) the collaborative approach, which represents a decrease in cooperating teacher responsibility and an increase in student teacher responsibility regarding instructional decisions, characterized by an exchange of ideas and suggestions, and (c) the non-directive approach, which is centered on the student teacher and calls for the cooperating teacher to act as an objective sounding board, a clarifier, an encourager,

and a reinforcer of the student's assessment of his or her own situation and the subsequent course of action. The researchers in this study stressed that the cooperating teacher's communication approach should match the developmental level of the student teacher (Drafall & Grant, 1994).

The use of developmental clinical supervision with student teachers in secondary choral music was examined employing a case study methodology (Drafall, 1991). The purpose of this study was to develop a holistic description of activities of two cooperating teachers who used developmental clinical supervision in their work with secondary choral music student teachers. Drafall scrutinized (a) characteristics of the school settings, (b) professional characteristics of the cooperating teachers and student teachers, (c) organization and conduct of the cooperating teacher supervision workshop, (d) passage of the participants through directive, collaborative and non-directive conference approaches, (e) student teachers' instructional development during the student teaching experience, and (f) perceptions of the cooperating teacher toward their instruction in developmental clinical supervision. The data were gathered from frequent observations of two *ideal* case selections, interviews with participants, video-tapes of weekly supervisory conferences and student teacher lessons, and journals kept by subjects cooperating teachers and their student teachers. The two cooperating teachers selected were given a workshop based upon principles set forth by Glickman, Acheson and Gall, Cogan, and McGreal which ultimately prepared them for a working knowledge of the use of developmental clinical supervision. At the conclusion of the exercise, both subjects expressed highly positive opinions toward the use of developmental clinical supervision procedures and expressed satisfaction with their instruction. Further research concerning the beneficial effects of formal cooperating teacher preparation was recommended. Use of a control group (enabling some sort of comparative data) might have been beneficial to

the impact of the research conclusion in this study.

A contrasting approach to the subject of supervision was presented in a journal format of methodology. The professional growth of a music student teacher was traced in a journal that portrays the student's challenges and triumphs in the classroom (Krueger, 1997). Krueger concluded that "although she was guided to evaluate her classes and teaching methods, this new teacher soon learned to explore her own classroom problems and search for new solutions and teaching methods" (p. 37). In this study, the cooperating teacher and the university supervisor used non-directive supervision techniques, encouraging self-analysis of classroom events by the student teacher herself. Krueger cites Glickman who has suggested non-directive supervision practices to encourage self-analysis and to solve one's own instruction challenges in the following manner:

1. A preobservation conference, in which the student teacher outlines the process and intent of the lesson to be taught and identifies any area(s) of concern in which he or she would like feedback from the supervisor.
2. A postobservation conference, in which the student teacher analyzes the lesson and areas of concern with guidance from the supervisor.
3. After teaching a lesson, the teacher is asked to write a brief analysis of lesson strengths and weaknesses, and potential actions or changes that need to be made (Glickman, 1990, cited in Krueger, 1997).

Non-directive supervision techniques may include (a) listening: waiting for and listening to the teacher's initial statements and analysis, (b) reflecting: verbalizing an understanding or paraphrasing the problems stated, (c) clarifying: questioning for underlying problems and more information, (d) encouraging: helping the teacher to identify underlying problems and being willing to listen and reflect further, (e) problem solving: asking the teacher to think of possible actions and to consider their

consequences, and (f) follow-through: asking the teacher for commitment to a decision, a plan of action, and a timetable for implementation. It was concluded that cooperating teachers and supervisors who are consciously analytical and self-evaluative about their own teaching and who implement non-directive supervision techniques can help student teachers develop a similar reflective teaching practice of their own.

D'Arca (1985) who studied teacher-training institutions in seven mid-western states has investigated qualifications, training, and the function of supervisors of student teachers in music. A description of supervisors of music student teachers was derived from their responses to a questionnaire and then subjected to statistical analysis. D'Arca discovered that most supervisors of music student teachers are music specialists with doctoral degrees and some elementary and/or secondary teaching experience. Approximately half of them had served as cooperating teachers and were actively involved in the current school music teaching situation. Contrary to the findings of previous research in this area, almost 56% had completed some type of formal training for this role of supervision. D'Arca concluded that the results of the study reflected the influences of competency-based teacher education, early field experiences, and teacher education centers. A trend was detected toward a higher, more consistent level of qualifications and training for these supervisors.

The practice of videotaping segments of the music student teacher while teaching has been used as a valuable supervisory procedure. Broyles (1997) found that university supervisors were highly supportive of videotaping student teachers, reporting that videotape analysis strengthened participants' teacher identity, increased their commitment to refining teaching tasks and skills, and enhanced their concern for pupil learning. Cooperating teachers also reported that the videotape analysis seemed to help their student teachers improve in their teaching and become more aware of how well their

pupils were learning. Further research using the videotape process was recommended: (a) varying the videotape regimen, (b) utilizing a variety of observation instruments, and (c) examining the use of videotape analysis in pre-student teaching curricular experiences.

Issues of Environment

Closely related to the success of supervision in the student teaching event is the issue of environment. If the student teacher is placed in a poor environment, or has not been trained to deal with environments other than those previously encountered, then all of the positive effects of successful supervision may be negated by the student's lack of success in such a situation. Environment of the student teaching event is therefore of the utmost importance to the success of the endeavor.

With regard to potential problems in the environmental setting of the music student teaching practicum, Brand (1978) noted that environmental concerns for the music student teacher are often compounded by larger-than-average classroom sizes, the interdependency of ensemble members, and the organization and activities of various music classes. Brand also related that music student teachers often find themselves in environments during student teaching situations and subsequent *real life* situations where they lack the necessary requisite training to cope with the situation.

Classroom management is an important factor involved in the student teacher's ability to exercise control in any environmental setting. Previously cited earlier in this chapter under heading of issues of curriculum (but of extreme importance to the issue of environment) was a study by Snyder (1998) who found that external influences on classroom management, such as class activity and the cooperating teacher, are important. Also cited under the same heading was a related study by Saker (1982) who reinforced the concept that one of the more important competencies critical to the success of the music student teacher is classroom management. Saker undertook a study designed

specifically to evaluate the effectiveness of a developed simulation training program, presented via videotape, on the perceived ability of band student teachers to deal with student behavior-management problems which might occur during the student teaching experience.

A study done in Ohio examined the value of music student teaching experiences and their influences on the student teacher in a somewhat holistic manner (Gallant, 1992). Gallant also investigated the merits of evaluation of the student teaching event and studied problems of first-year teachers in an effort to see what lasting effects the student teaching experience might have on the student teacher. Gallant found that "while student teaching is regarded as a valuable bridge between theory and practice, the literature suggests that student teaching is different from teaching and the lessons learned in student teaching may not transfer adequately" (Gallant, 1992). The Ohio-based researcher noted that time devoted to field experience varies among five-year programs, induction-year programs, and alternative certification programs. Also noted was the fact that research has yet to confirm their respective merits. In this study, evaluations of videotapes of seven student teachers were made by the student teacher and by two professional raters. Rating of lessons taught to *most problematic* and *least problematic* classes were compared. Wilcoxon Matched-Pairs and t-test analyses indicated differences between the ratings. Both categories of raters generally evaluated the teaching of more problematic classes lower than they evaluated the teaching of less problematic classes. Results indicated that further research is needed concerning the nature of the music student teaching environment. Perhaps a study that assessed the opinion of music educators concerning the importance of the control of environment is needed. The other issue that Gallant raised about the lack of research on the issue of the merits of alternative certification compared to the student teaching practicum might also be addressed in such

a study.

Literature Related to the Delphi Method of Inquiry

The term Delphi originated from early Greek mythology. Delphi was a center of wealth, culture, and learning in Greece. The oracle Apollo made his forecasts and predictions from this center. Thus the term Delphi, associated with forecasting the future in ancient Greece, became the term for a more contemporary technique of forecasting as develop and explored at the Rand Corporation in Santa Monica, California (Uhl, 1983).

The Delphi method evolved from defense research initiated by the U.S. Air Force in the early 1950's. *Project Delphi* was the name given to the study initiated by the Rand Corporation, sponsored by the Air Force. It concerned the use of expert opinion. The prime objective of the original Delphi study was to "obtain the most reliable consensus of opinion of a group of experts … by a series of intensive questionnaires interspersed with controlled opinion feedback" (Linstone & Turoff, 1975, p. 10). The actual subject of this first study was the application of an optimal U.S. industrial target system and the estimation of the number of A-bombs required to reduce the munitions output by a prescribed amount. Utilized as a means for advising both industry and government in policy and decisional making propositions, particularly in work that centered on atomic warfare, Delphi became the name of "a set of procedures for eliciting and refining the opinions of a group of people" (Dalkey, 1967, p. 1). Individuals outside the defense community became more aware of this Delphi technique in 1964 when T. J. Gordon and Olaf Helmer published a Rand paper titled *Report on a Long-Range Forecasting Study*. The aim of the researchers was to assess the direction of long-range trends, with special emphasis on science and technology, and their probable effects. The researchers were said to have set about to explore both the methodological aspects of the Delphi technique

and to obtain substantive results as well.

Since Delphi was originally designed as a forecasting technique, many studies have been initiated at the Rand Corporation that have prediction as their purpose (Anderson, 1975; Brown, 1973; Kosy, 1974; Mooz and Mow, 1973; Park, Johnson, & Fishman, 1976; Salter, 1973; Turn, 1972; Wolf, Relles, & Navarro, 1980). Forecasting future events is quite different from seeking solutions to existing problems. The Delphi technique has been applied to both these objectives in business and education (Uhl, 1983). In its early applications, the Delphi technique was employed primarily to make forecasts or predictions of the future. However, its great potential for improving communication and generating consensus in solving complex problems is beginning to be realized.

Shortly after this early development of the Delphi technique, it is interesting to note that Japan began intensive foresight studies beginning at the end of the 1960s. Japan started its development in science and technology later than most other countries but was nevertheless quite successful. The Delphi method was one technique used for foresight activities. Delphi was not considered a tool for prediction by the Japanese, but rather an instrument to systematically look into the long-term future (Kuwahara, 1999). The forecasting results of the Delphi methodology provided the language to communicate among Japanese governmental personnel involved in science, technology, and society. Kuwahara notes that although many countries stopped their national foresight activities in the 1970s, the Japanese Delphi process continued and was applied every five years. In 1997, the sixth study was finished. The Delphi method has proven to be a most valuable tool in helping to stimulate the Japanese national welfare.

Though originating in the nonprofit sector, Delphi methodology soon filtered into government, industry, and finally academe (Linstone & Turoff, 1975) in response to a

demand for improved communications among larger and/or geographically dispersed groups which cannot be satisfied by other available techniques.

The Delphi method, although administered in a survey procedure, is a more concentrated and in-depth application than the normal survey method. Delphi can forge a consensus, and Delphi can predict. Through a series of questionnaires, each succeeding questionnaire being designed to account for responses from the preceding one, a group of respondents express their opinions and attitudes and have the opportunity to adjust their individual responses on the next questionnaire in light of the findings from the previous questionnaire. In some Delphi research, feedback is supplied by the use of the median and the inter-quartile ranges from the previous round answers. Respondents reconsider their initial posture based upon the group trend and then adjust their response if they so desire (Isaac & Michael, 1987). In this way, the Delphi allows a group of participants to interact anonymously rather than orally in a group setting. In a typical group setting all participants are aware not only of what is being said about a given topic, but also of who is saying it. Often individuals are reluctant to address pertinent issues honestly because they fear how others may perceive them. Instead of speaking out about issues of importance, some individuals choose to remain silent rather than risk conflict or confrontation. The Delphi method offers an alternative to the group setting and affords the individual respondent an opportunity to feel comfortable with the expression of person beliefs and opinions. The Delphi procedure provides an anonymous setting for achieving group interaction and working toward agreement on issues of importance. The Delphi method provides a non-threatening environment where participants may respond individually yet react collectively in a confident manner. Participants may then more easily perform their functions of consensus building and/or prediction.

While prediction can be an essential and valuable factor in policy formulation and

planning, it is very important to know just how valid those prediction (often referred to as *forecasting* in Delphi vernacular) techniques can be. The Delphi technique has been called the "cornerstone of futures research" (Ono & Wedemeyer, 1994). The researchers reported the results of an assessment of the accuracy of the forecasts derived from futures research. Twenty-five experts in the field of communication assessed 24 trends and 17 events in the state of Hawaii as of 1991. The assessments made by this panel of experts were then compared with the forecasts previously made by utilizing the Delphi technique 16 years earlier. The researchers showed that the previous trend forecasts were significantly correlated with the current trend assessment. They also revealed that the Delphi technique had accurately forecasted approximately half the events that could be evaluated as of 1991. Results from this study lend support to the use of the Delphi method in long-range forecasting and reveal some interesting findings in forecasting the development of communication in Hawaii.

In the Delphi methodology, the situation is one in which "not enough of the structure has been blueprinted to discriminate which of many possible foundations supply the 'best' underpinnings" (Linstone and Turoff, 1975, p. 15). The underlying philosophy is such that there does not exist some concrete listing of Delphi models from which the researcher may choose. Most Delphi models are basically researcher-created to serve the needs of the inquiry based on underlying philosophical considerations. There was an attempt by Helmer and Rescher in their classic paper *On the Epistemology of the Inexact Sciences* in which one foundation was proposed, largely of a Lockean nature, which was very adequate for the typical technological forecasting application for which Delphi has been popular. The concept of Delphi as the process of structuring human communications closely relates to Helmer and Rescher's theories. Linstone and Turoff have classified extant pre-1975 Delphi methodologies with regard to the philosophies of Hegel, Kant,

Leibniz, Locke, and Singer. In doing so, they were said to be largely following "… the morphological structure of philosophical inquiry first proposed by C. West Churchman in his *Design of Inquiring Systems*" (p. 15).

For one to have a working knowledge of the potential of the Delphi method of inquiry, it is necessary to understand those philosophical underpinnings advocated by Linstone and Turoff. Underlying any scientific technique, theory, or hypothesis should always be some philosophical basis or theory about the nature of the criteria upon which that technique, theory, or hypothesis fundamentally rests. In the Delphi system of reasoning, there is no one best way for all applications, but rather some broad encompassing adaptations to philosophical systems that serve as a "starting place" for investigators interested in using the Delphi method in their own research. These systems are based upon the philosophies of inquiry represented by Hegel, Leibniz, Locke, Kant, and Singer:

1. The Hegelian (Dialectical) mode of inquiry asks the question: "Does there exist some sharply differing world-view that would permit the serious consideration of a completely opposite set of propositions?" In this system, the investigation of a plan and a counterplan might be expected to produce a third plan, referred to as a "creative synthesis." This mode of inquiry is most applicable to situations where extreme conflict is present in the opinions of the "experts."
2. The Kantian mode of inquiry assumes that data and theory always exist side by side and seeks the existence of some combination of data or expert judgment plus underlying theoretical justifications for the data that would justify the propositions in question.
3. The Leibnizian mode of inquiry seeks to give a purely rational justification of

the proposed proposition or assertion independently of any empirical or personal considerations.

4. The Lockean mode of inquiry assumes that data are always extant prior to the development of formal theory. Therefore, the following questions are asked: How can one independently of any formal model justify the assertion by means of some objective data or the consensus of some group of expert judges that bears on the subject matter of the assertions? What are the supporting statistics? What is the probability that one is right? Are the assertions a good estimate of the true empirical state of affairs?
5. The Singerian mode of inquiry would address the questions: Have we taken a broad enough perspective of the basic problem? Have we from the very beginning asked the right question? Have we focused on the right objectives? To what extent are the questions and models of each inquirer a reflection of the unique personality of each inquirer as much as they are felt to be a natural characteristic or property of the real world? (p. 19).

The present research implements the use of the Lockean system of inquiry, based on the premise of pre-existing data, (not previously *gathered*, but pre-existent), and seeking the consensus of a panel of judges (experts) to reach a good estimate of a true empirical state of affairs, with supporting statistics and accountability for the probability of correctness.

Delphi Applications in the Fields of Education, Music, and Music Education

Delphi in Education

Review of the literature reveals that the Delphi method of inquiry has been used extensively in the field of education to address a wide array of topics, for example, the impact of reduced funding of community college education in Texas (Norwood, 1996),

the criteria for developing and implementing of distance education programs in college and universities (McWright, 1999), teacher beliefs about educational software now and in the future (Williams, 1999), school psychologists' perceptions of learning styles, discrepancy formulas, and the learning disabilities identification process (Winterton, 2000), and American schools' performance in preparation of students for the twenty-first century (Ziegler, 1995). Use of the Delphi method in these and other related studies enabled the researchers to gather data not before accessible by the use of typical survey techniques.

The two most prominent features of the Delphi method, which differentiate it from normal survey technique, are the features of (a) consensus forging and (b) predictability. Some Delphi studies in education form only a consensus with no predictive attempts (Chizari, & Taylor 1991; Facione, 1990; Martorella, 1991). Other educational studies that have employed Delphi bypass consensus and only ask the experts to respond to predictive criteria (Alley, 1985; Hales and Carlson, 1992; O'Brien, 1988; Wagschall, 1983). While both features are not always present in a single study, the potential for their simultaneous use remains.

Consensus building and predictability were both utilized in a Delphi study regarding undergraduate preparation for professions in the hospitality industry (Lonam, 1999). The findings and conclusions of Lonam postulated the knowledge and competencies that may be required of graduates from baccalaureate hospitality programs in the year 2010. The purpose of the study was twofold: (1) to identify the knowledge and competencies that undergraduate hospitality education programs should develop and teach to best prepare students for entry-level managerial positions in the hospitality industry, and (2) to identify emerging trends related to present managers' undergraduate preparation. The research question was "What will be the knowledge and competencies

required of graduates from baccalaureate hospitality programs in the year 2010?" A three-round Delphi study was employed to collect data and a consensus was formed among the eleven *expert* participants. The results predicted an increased emphasis on general business courses and structured internships versus hospitality-specific courses as the most likely components of future undergraduate hospitality curricula. Implications for practice included a possible *Curriculum of the Future*, inclusion of second language studies, more emphasis on industry internships, and special emphasis on human resources and communications studies within undergraduate hospitality programs. In conclusion, the researcher inferred that findings may indicate, given the global importance of the tourism industry, that the time has come for a new hospitality education paradigm based on the reality that tourism is mainstream business rather than a niche or departmental consideration (Lonam, 1999).

A four-round Delphi procedure was used to ascertain and gain consensus on key ethical issues facing human resource development (HRD) professionals in the future (Roberson, 1999). Secondary purposes of the study were to identify ethical issues meriting further research and to determine if HRD professionals considered corporate social responsibility an ethical issue to be faced in the future. Round one consisted of an open-ended questionnaire eliciting perceived future ethical issues in the field of HRD. Rounds two, three and four sought consensus regarding the importance of the 65 ethical issues identified in round one to the field of HRD. Forty-one issues were identified as future ethical issues in the field of HRD. The panel of experts arrived at consensus on all 41 issues identified as ethical. The Delphi panel consisted of 30 members of the Academy of Human Resource Development (AHRD). The *Statistical Analysis System* (SAS) was the statistical analysis program used in the study. For each issue, the mean, frequency distribution and standard deviation were computed. The analysis indicated that

after round four, 25 issue statements had means from "4" (*important*) to "5" (*very important*) while 16 issue statements had means from "3" (*moderately important*) to "4" (*important*). Although the means of other issues increased slightly, the mean of only one issue changed enough to move it into a higher category. Results of the study indicated that there are several ethical issues facing HRD professionals in the future. Consensus on the issues was easily reached indicating that ethical issues identified were not highly debatable. According to Roberson, HRD professionals seem to be in agreement regarding key ethical issues.

The future of computer-assisted reporting courses in university journalism programs was researched using the Delphi method (Lee, 1995). The study employed a three-round Delphi technique in an effort to seek consensus among a panel of experts regarding the benefits, problems, and problem solutions associated with the introduction of computer-assisted reporting courses in university journalism programs. Panelists included professional journalists working for numerous newspapers, a wire service, a newspaper conglomerate, a national news magazine, and a broadcast network news program. In round one, the 29 panelists listed 108 potential problems. Similar answers were consolidated into a master list of 26 problem statements for use in the round two questionnaire. In round one, the panelists also had listed 123 potential benefits. Similar answers were consolidated into a master list of 35 benefit statements, which fell into four broad categories: (a) student-related, (b) graduate-related, (c) faculty-related, and (d) journalism program-related. The panelists' problem statements were grouped into five broad categories: (a) equipment-related, (b) institution-related, (c) curriculum-related, (d) student-related, and (e) cost-related. In round two, the panelists rated the likelihood of each problem statement on the list of 26 procured from round one and ranked the top five *biggest* problems on the list. Interestingly, the top three most likely and the top three

biggest problems were the same on both lists: (a) cost of equipment, (b) lack of qualified faculty, and (c) maintenance of equipment. The other four problems were: (a) class sizes limited because of equipment costs, (b) curriculum revision necessary, (c) resistance of faculty, and (d) resistance of university administrators. In round three, panelists were asked to suggest possible solutions to these top-rated problems. Their solutions pointed to increased cooperation among entities within the university and between professionals and educators (Lee, 1995). Although discovered entirely by coincidence, the close similarity to the solutions offered in the Lee study and the possible need for better collaboration between the university and the public school in the student teaching practicum as investigated in the present study is duly noted.

The purpose of a study by Scarpa (1998) was to identify leadership practices and technology competencies needed by administrators in order to implement technology in their organizations. A panel of experts who had implemented technology in their own organizations rated leadership practices and technology competencies identified by research as important for implementation of technology. The panel was composed of superintendents, assistant superintendents, principals, and assistant principals. Two research questions guided the study:

1. What leadership practices are necessary to implement technology?
2. What technology competencies are required to implement technology?

A modified Delphi method was utilized by Scarpa to gain consensus from the panel of experts. The Delphi study consisted of three rounds. In round one, six leadership practices and five technology competencies were identified from the review of literature. A six-point Likert scale was used to rate the importance of each practice and competency. The analysis of the data included the mean, median, range, and inter-quartile range of the panelists' responses. The panelists' responses from round one, along with comments,

were utilized to design the panelist response form for round two. The round two panelist response form listed the panelists' range of ratings and comments for each practice and competency from the completed round one form. Panelists utilized the same six-point Likert scale to evaluate each practice and competency. Results from the round two form were utilized to develop the round three panelist response form, which listed the group response mean of each practice and competency, as well as the round two response of the particular expert. In round three, a consensus of the panel was achieved. Results from round three indicated that three leadership practices were essential: (a) vision, (b) staff development, and (c) communication. Three leadership practices were considered very important: (a) integration into organization culture, (b) support, and (c) adequate funding. One technology competency was considered essential: integration into instruction. Integration into curriculum was rated very important. Three other technology competencies were identified as moderately important: (a) software, (b) terminology, and (c) hardware (Scarpa, 1998).

Delphi techniques were employed by Bornyas (1995) to forecast the emerging role of the teacher in schools using *total quality management*. Bornyas also sought to identify the traditional role of the teacher and the elements of total quality management that were applicable to an educational organization. A two-round Delphi technique was utilized. In the round one questionnaire, W. Edwards Deming's fourteen points of quality management were matched with characteristics identified by the National Education Association's (NEA) Strategic Work Team on the emerging role of the teacher. After each characteristic the response panelists indicated, through the use of a Likert Scale, how relevant that particular characteristic was to Deming's quality point and to the role of the teacher in a school using total quality management. Under each quality point, space was provided for the panelists to add other characteristics that they thought were

appropriate for all panelists to see in round two. The round two questionnaire was prepared from data generated through round one. The second questionnaire contained the original list of 52 characteristics grouped by appropriate quality points with first round scores and 57 additional characteristics generated by the panelists in the first round. The data were obtained from respondents constituting the sample composed of ten middle school teachers from across the nation who were major authors or contributors to their school's U.S. Department of Education Blue Ribbon application. The results obtained identified eleven of Deming's fourteen points that were applicable to classroom organization. Characteristics of these eleven points were combined to form the following professional skills, activities, and training: (a) eighteen skill areas that teachers must develop if they are to be successful in schools using total quality management, (b) three major activities that teachers will be involved in during the day in schools using total quality management, and (c) five components of training and learning that prospective teachers should have to be adequately trained to work in schools using total quality management (Bonyas, 1995).

In 1991 the Delphi approach was used as a method to create consensus concerning major issues in the field of social studies (Martorella, 1991). Social studies education, similar to other disciplines, has suffered from a lack of consensus regarding curriculum goals, major problems within the field, and needed areas of research. Having utilized the traditional avenues for building consensus such as policy statements, publications, conferences; and noting the controversial effects that the National Council for Social Studies was having on social studies educators with regard to adoption of scope and sequence standards, Martorella employed a Delphi technique to facilitate dialog among experts. In the study, three issues were identified as significant: (a) desired goals of the curriculum, (b) major problems confronting the field of social studies, and (c)

needed research in specific areas. Three rounds were administered in the questioning process. The first round was a classically designed Delphi in that it initiated the study with three global open-ended questions:

1. What should be the major goals of the social studies curriculum?
2. What are the major problems within the field that social educators need to address?
3. What are the major questions in the field of social studies education that require further research? (p. 85)

Although this particular social studies investigation used a traditional round one Delphi format, Uhl (1983) suggests an alternative approach to first round open-ended questioning. He proposes a structured questionnaire with a long list of goals whose importance is indicated by the participants through ranking. Space is left for participants to modify and/or add goals that they also believe are important. "Delphi studies using these two different approaches indicate that researcher can expect a much higher participant dropout rate with the unstructured questions than with the structured questions" (Uhl, 1983, p. 91). Use of a structured approach to round one is actually technically considered to be round two in the Delphi process.

At the end of round three in the Delphi process utilized in the Martorella (1991) social studies research, consensus on each of the priority issues had been achieved. To examine the amount of agreement among respondents in the ranking of questionnaire items, the Kendall Coefficient of Concordance (W) was computed for round two and round three. A level of agreement among the respondents was statistically significant ($p <$ .02 to $p < .001$) in round two for curriculum goals and major problems and for all three issues in round three (p. 87).

Chizari (1991) investigated agriculture teacher views on the critical needs, major

obstacles, and support needed in the planning and delivery of adult education programs in agricultural production in the southern region of the United States. An open-ended questionnaire consisting of three broad questions was utilized for round one. A Delphi panel from the faculty in the Department of Agriculture and Extension at Mississippi State University evaluated the three broad questions to determine their appropriateness to the objective of the study. Each state supervisor of agricultural education from thirteen southern states nominated five expert respondents from that state. These 65 nominees, who served as expert respondents, were secondary teachers of agriculture. An overall total response rate of 84% was achieved from the teachers for the three rounds. Responses from each statement were summarized using frequencies, percentages, and ranks. Twenty-two critical educational needs were collected from round one. Consensus was achieved for 15 of those needs. Twenty-five statements about obstacles in agricultural education were collected. However, agreement was reached on only six. Seven types of support needed in agricultural education were identified as well as eighteen sources for support. Consensus was reached on all seven types of support and on fourteen of the eighteen sources for support.

Delphi in Music and Music Education

The determination of contemporary issues confronting college music departments during the 1980s and the problems associated with these issues were addressed by Ritschel (1981) in a three-round Delphi study. One hundred twenty-six potential respondents representing the leaders of the music profession from private and public institutions were asked to identify the issues confronting collegiate music departments and to participate in the study. In response to the researcher's letter of invitation to participate, 63 respondents agreed to become involved, while 92 respondents identified the issues used for the study. In round one the participants were requested to speculate on

the problems which they believed were associated with the issues of (a) enrollment declines and recruitment/retention, (b) inflation and financial concerns, (c) program development and improvement, (d) changing mission and purpose, (e) endowment and fundraising, (f) improvement and maintenance of instructional equipment, (g) faculty development, (h) faculty salary parity, and (i) emphasis on teacher education.

Responses to this questionnaire generated 144 statements that provided the basis of the second questionnaire. In round two, panel members were asked to assess the probability of the statements becoming a reality during the 1980s and to indicate the most critical problems facing departments of music. Respondents were also encouraged to offer some suggestions, responses, or solutions to the problems. The responses of the panel to this questionnaire narrowed the scope of the study to 17 critical problems, each problem having three potential responses. In round three the 52 remaining panel members were asked to reconsider their ratings of the probability of the problems becoming a reality according to whether or not they agreed with the mode rating of round two. If the respondents disagreed with the mode response, they were asked to explain their reasons. Panel members were also asked to rank-order the responses to the problems and were given an opportunity to offer any additional suggestions other than those given. This third and final round of the study which dealt with these 17 critical problems yielded data that predicted: (a) There will be increased emphasis on attracting non-majors and people interested in lifelong learning, (b) Time and training will be needed for faculty members chosen to seek funds for the department, (c) Smaller schools will need to eliminate weak programs in order to survive, (d) Fewer tenure track positions and delays in acquiring tenure will be evident, and (e) New graduate programs should not be developed when present in other institutions. Ten other problems received a moderate agreement rating among the panel of experts, and two problems received a weak agreement rating.

Possible responses to these problems, plus the additional comments from the panel members are included in the study to provide the music professoriat some suggestions for planning effective policies to cope with the issues and problems of the 1980s. The validity of this study would then seem to vary with the interpretation of what degree these critical points did indeed occur in the 1980s (Ritschel, 1981).

Moonjoo Seog (1991) undertook a Delphi study that attempted to project the state of music education in Korea through the year 2000. A two-round Delphi that utilized 39 *experts* who were teachers, administrators, and government officials looked at changes in teacher education at the college level in Korea through the year 2000. Seog investigated the experts' opinions regarding:

1. Entrance examinations for admission and selection of students for music education programs.
2. Faculty qualifications for teachers of music education.
3. Research and development in learning and teaching.
4. Teacher certification requirements.
5. Status of music educators at the college level in music-teacher education.

Seog also asked for recommendations about changes in music education regarding implementation of programs and the formulation of national educational policy issues.

The researcher utilized a structured first round Delphi, a practice initiate in prior research, which effectively replaced the need for the usual first-round. Therefore, Seog's first round serves the function of the normal round two in the original Delphi plan (Uhl, 1983). The questions for Seog's round one (normally round two) were developed after careful review of the literature concerned with music education in Korea. Six areas identified as potential problems in Korean music education were utilized for organization of the questionnaire. The first round was piloted with 17 graduate students in the doctoral

program at the University of Illinois at Urbana-Champaign. The purpose of the pilot was to "assess the clarity of statements and instructions, and the validity of the instrument" (p. 46). The mean and the standard deviation determined consensus in the study. Comparison of the round one mean with the round two mean and examination of the standard deviation between the means illustrated consensus. "Based on the round two responses, means and standard deviations for priority classification were used to rank the statements for each category" (p. 53). This study serves as example of how older Delphi studies can now be validated due to the passing of time.

Craig Hamilton (1994) designed a study for the purpose of creating and gaining consensus of an essential curriculum for teaching score study in the undergraduate instrumental conducting class. Hamilton set about to determine what methods, materials, and evaluations should be used to teach score study to undergraduate instrumental conducting students. Resolving the questions of the study required the collection of information and data on the methods, materials, and evaluations used in teaching score preparation in the undergraduate instrumental conducting class and the opinions of conductors and teachers of conducting about those methods, materials, and evaluations. Similar to the present study in design, the Hamilton research utilized three subgroups: (a) those who conduct a band or wind ensemble only, (b) those who teach undergraduate instrumental conducting only, and (c) those who conduct a band or wind ensemble and teach undergraduate instrumental conducting. A three round Delphi opinionnaire was used. A Multiple Analysis of Variance (MANOVA) and discriminant analysis were computed to determine the differences in opinion ranking of the three subgroups. The MANOVA showed no significant differences in the mean rankings of the items by group membership and the discriminant analysis showed that none of the categories employed significantly predicted group membership. By computing pooled within-group

correlations, Hamilton found twelve variables that discriminated at or above the level of .60. The study resulted in the recommendation of a curriculum which included 80 separate items in seven major categories to be used in the undergraduate conducting class to teach score study. Included in the results is a recommended list of 170 references used by the participants in the study to teach score study.

In a more recent study, Rogers (1997) addressed issues of college student transfer of music courses in Texas. The purpose of the study was to identify recurring issues related to student transfer of music courses in Texas and to reach a consensus on recommendations to alleviate future transferability problems. A secondary objective was to ascertain variances on recommendations that might occur between types of institutions, institutional service areas, NASM accreditation, Texas Association of Music Schools (TAMS) membership, and number of undergraduate music majors. Rogers employed an innovation in an effort to increase reliability that is not found in the majority of Delphi studies. The study was divided into two phases. In Phase I, data were collected by means of a three-round Delphi technique. Responses were elicited from Texas junior and community college and four-year college and university music department chairpersons. A separate panel was then assembled in Phase II in an effort to validate the Delphi results and increase reliability of the study. A total of 12 issues were identified as critical transfer areas accompanied by a list of 82 recommendations. Using the median to measure consensus and the interquartile range to measure data variation and convergence, an analysis of the data using the Monte Carlo significance of the Marginal Homogeneity Test found that the Phase I panel was in agreement on 63 recommendations to alleviate future transferability problems. To increase reliability, all 82 items from the Phase I Delphi instrument were submitted to the Phase II panel for verification. Using the Monte Carlo significance of the nonparametric Mann-Whitney U Test, Rogers compared each

item on the two studies to confirm the plausibility of each recommendation. As no significant difference was found on the majority of the items, the results were verified. The study found that eleven applied music recommendations, thirteen music theory recommendations, eight inconsistency of credit hours recommendations, three prerequisites and remedial courses for music majors recommendations, six articulation agreement recommendations, four standardization of music curricula recommendations, ten lack of communication between educational entities recommendations, two music literature recommendations, two recital attendance recommendations, one conducting course recommendation, two transferability of courses recommendations, and one basis core curriculum recommendation should be used to alleviate future transferability problems. Also, the Mann-Whiney U Test was used to test significance on subgroups with two categories formed from information received by the Phase I and Phase II panels. Subgroups with three or more categories were tested by the nonparametric Kruskal-Wallis Test. No significant difference was found on the majority of the transfer recommendations between type of institution, institutional service area, NASM accreditation, TAMS membership, and number of undergraduate music majors.

Raiman conducted a study designed to identify and classify the competencies that students should have achieved by the end of student teaching (Raiman, 1975). The purpose of this Connecticut-based study was to identify and classify, in a hierarchy of competencies, objectives of student teaching in music that should have been achieved at the completion of student teaching. Raiman employed a partial Delphi approach in which the respondents were first asked to assess a researcher-prepared list of objectives which had been developed from a review of literature and then to rate the items by degree of importance. On a second questionnaire, the respondents were given the opportunity to agree or disagree with the results of the first survey, thus generating data for the

construction of a final hierarchy of objectives. The ranked items from these two questionnaires were than subjected to a Spearman rank difference method for determining a correlation coefficient. The resulting coefficient was then subjected to a test for significance. Raiman found a correlation coefficient of .65 between the surveys, which proved to be significant beyond the $p < .01$ level. The data suggested that there was agreement on those objectives that are important. However, the impact of the study was that no generally agreed-upon listing of music teacher competencies and their relative importance currently exists as a tool of common practice, though many such lists have been compiled to suit regional needs.

Seven areas of curriculum were used to organize data collection in a West Virginia-based investigation of the *ideal* music curriculum (Saeler, 1995). The methodology was divided into three parts. In the first part a two-round Delphi questionnaire was administered to 25 representative music educators in which the respondents were asked to rank those ideas and issues according to the importance they held for them. Respondents also included their concerns for evaluation by all questionnaire respondents in round two and thereby participated in the development of a consensus of opinion with regard to issues about curriculum. In the second part of the methodology a content analysis procedure was applied to the curriculum guides comparing a representative number of county guides to the state document, and then to each other. Framing questions were used which were developed from the textual content of the curriculum guides. The contents of the guides were then audited against the framing questions. The third phase of the methodology involved a comparison of the first two steps (Delphi vs. content analysis). The seven areas of curriculum used to organize data collection were (a) purposes of music, (b) goals of music, (c) important characteristics of a music curriculum, (d) methods and procedures used in teaching, (e)

characteristics exhibited by a person who has been musically educated, (f) considerations in the development of curriculum, and (g) determinants of curriculum. Round one of the Delphi procedure obtained a convergence of opinion for six of the seven areas of curriculum. The seventh area was achieved consensus in round two. The results of the content analysis of curriculum guides revealed them to be reductions of the state guide. The comparison made between the Delphi-generated data and the data generated by the content analysis revealed many similarities. Issues of inconsistency between the rankings of expert respondents about curriculum and curriculum adjustments were resolved through this comparison.

Summary

Summary of the Review of Literature in Music Student Teaching

A review of literature related to the subject of the music student teaching practicum was initiated for the purpose of identifying current issues that were relative and pertinent to the event. These issues reported in the literature were placed into the categories of collaboration, competency, curriculum, supervision, and environment.

On the subject of collaboration in the music student teaching practicum, literature was found that illuminated the understanding of the concept of collaboration (Drafall & Grant, 1994; Gregory, 1992). Attitudes of music student teachers, cooperating teachers, and university teachers have been recently addressed (Bowles & Runnels, 1998) and it has been suggested that collaborative planning might provide a more positive and successful learning experience for the student teacher. The importance of the cooperating teachers' role in the music student teaching event has been affirmed (Legette, 1997). Studies have shown that there is a trend of thought toward the evaluation of all members of the student teaching triad (Bowles & Runnels, 1998; Legette, 1997; Shires, 1990). Six pertinent qualities of cooperating teachers were identified by Fenton and Rudgers,

(1988). Svengalis (1992) advocated that benefits to all parties were to be had by the successful collaboration of the university and public school and has referred to these collaborations as partnerships. Gregory (1992) has identified a collaborative problem related to the dominance of the university in the normal collaborative effort. The need for more collaborative projects where the public school teachers have a co-equal status with the university teachers was the result of research by Warren (1989). Stroker (1993) has investigated relationships of the music student teaching triad by comparing the thinking styles of the university supervisor and the cooperating teacher. Collaboration of efforts was cited as a need in the development of role identity of the student teacher (Snyder, 1998).

Competency should be addressed prior to student teaching according to Chadwick (1976). Various listings of standards for competencies were said to exist at state and national levels (Byo, 1997; Jennings, 1988; Wolf, 1972). Byo has investigated the implementation of National Standards of Music Education (1997). Desired competencies which should be achieved by the end of the student teaching have been identified and classified (Raiman, 1975). Classroom management skills have been a recurrent topic of research (Saker, 1992; Snyder, 1998; Terry, 1991). Saker (1992) and Snyder (1998) have advocated use of videotaping for the skill development of the student teacher. Personality type as a contributor to success in student teaching has been investigated (Teachout, 1997) as well as display of self as an explanation of behavior in the student teaching practicum (Szpiczka, 1990). Barnes (1998) has reported the relation of self-efficacy to the level of student achievement. The student teacher's development of a personal identity as a contributing factor to success in student teaching was the theme of research by Prescesky (1997). Snow (1998) has recently researched the development of pedagogical knowledge and its relation to the understanding of content. Some very recent research has

dealt with skill comparisons between preservice teachers and experienced teachers (Doerksen, 1999; Goodman, 1999; Goolsby, 1999; Sheldon, 2000).

Several studies involving curriculum were reported: Wollenzien (1999) has examined curriculum topics, Saeler (1995) has attempted to synthesize the ideal music curriculum, and Cooper (1994) has developed a core-curriculum for music teacher preparation. The use of a casebook approach for organizing content of methods classes has been advocated (Conway, 1999). Parr (1996) has stated a philosophy for music teacher training where beliefs were said to be ever changing but always clearly focused. The subject of multiculturalism in the music teacher preparation curriculum has been researched (Montague, 1988; Okun, 1998). Fant (1996) has performed a study relating the value of early field experience to success in student teaching. Butler (1999) has found that student teachers generally have a firm concept of what it means to be a teacher and discovered that while their cognitive structure remained unchanged during student teaching, their content of thinking changed. Guided reflection and its effect on the teaching process were found to be central issues of a Stegman (1996) research.

Related literature on the topic of supervision was represented by contributions from (a) Glass (1997), who has presented a holistic view of the role of supervisors; (b) C. W. Smith (1989), Drafall (1991), and Drafall & Grant (1994), who have made contributions advocating the use of clinical supervision models; (c) Krueger (1997), who has discussed the concept of self-analysis by the student teacher though the process of keeping a journal; (d) Glickman (1990), who was referenced for his contributions in the area of non-directive supervision; (e) D'Arca (1985), who has discussed qualifications, training, and functions of supervisors; and (f) Broyles (1997), who has advocated the use of videotaping as a supervisory tool.

Issues of environment have been cited (Brand, 1982; Gallant, 1992). Brand has

recognized the issues of diversity related to the environment in which the student teacher performs, and Gallant has contrasted the success of student teachers in relation to teaching in problematic and non-problematic environments.

Summary of the review of literature in Delphi studies

The historical origins of Delphi and an explanation of the Delphi process have been reported (Linstone & Turoff, 1975; Uhl, 1983). Some of the early applications of Delphi were reported (Isaac & Michael, 1987; Kuwahara, 1999). Ono and Wedemeyer (1994) have addressed validity of Delphi-based techniques. Underlying philosophies of the Delphi system of inquiry were related (Linstone & Turoff, 1975). The use of Delphi in the field of education was represented by various researches (Bornyas, 1995; Lee, 1995; Lonam, 1999; McWright, 1999; Roberson, 1999; Scarpa, 1998; Seog, 1991; Williams, 1999; Ziegler, 1995). The use of the Delphi method in music and music education has been found in studies by (a) Raiman (1975), who used a Delphi method to conduct a study designed to identify and classify the competencies that students should have achieved by the end of student teaching; (b) Ritschel (1981), who used a Delphi technique to determine current issues confronting college music department during the 1980s; (c) Rogers (1997), who addressed issues of college student transfer of music courses in Texas; and (d) Saeler (1996), who utilized Delphi to organize an investigation based on the pursuit of the ideal music curriculum.

Conclusion of Summaries

These issues concerning music student teaching and the Delphi method of inquiry found in the literature were used to structure the methodology in Chapter Three. This Delphi methodology was selected as the best available procedure to effectively accomplish the purpose of the study. The two-fold purpose of the study was (a) to investigate the music student teaching practicum in the State of Texas in an effort to

establish current levels of success as perceived by the music educators involved in the process, and (b) to identify any potentially problematic areas which might be in need of attention or revision. The following six specific research questions were designed to accomplish this two-fold purpose:

1. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of those music educators involved in the process?
2. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of university supervisors?
3. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of cooperating teachers?
4. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of recent student teachers?
5. Are there significant levels of interaction among the opinions of university supervisors, cooperating teachers, and student teachers concerning the perceived levels of success of the student teaching practicum?
6. Are there specific areas of the music student teaching practicum that are in need of attention or revision?

CHAPTER III

METHODOLOGY

Introduction

This chapter describes the methodological framework used in the study: (a) the establishment of the Delphi committee, (b) the selection of participants from the population, (c) the construction of the Delphi questionnaires, (d) the construction and administration of the pilot study, (e) the administration of the Delphi surveys via rounds one and two, and (f) the description of data collection and proposed analysis procedures.

This methodological framework was designed to facilitate the accomplishment of the two-fold purpose of the study which was (a) to investigate the music student teaching practicum in the state of Texas in an effort to establish current levels of success as perceived by the music educators involved in the process, and (b) to identify any potentially problematic areas which might be in need of attention or revision. The following six specific research questions were designed to accomplish this two-fold purpose:

1. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of those music educators involved in the process?
2. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of university supervisors?

3. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of cooperating teachers?
4. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of recent student teachers?
5. Are there significant levels of interaction among the opinions of university supervisors, cooperating teachers, and student teachers concerning the perceived levels of success of the student teaching practicum?
6. Are there specific areas of the music student teaching practicum that are in need of attention or revision?

The methodological procedures outlined in this chapter will serve as a means to the end result of addressing these six research questions.

Establishing the Delphi Committee

The Delphi technique is defined as "a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem" (Linstone & Turoff, 1975, p. 3). The purpose of the Delphi technique is to achieve an anonymous, structured interaction among experts, using a questionnaire approach with controlled feedback of information designed to eliminate or to reduce the shortcomings of a face-to-face meeting, such as individual domination, group pressure, or confusion (Helmer, 1983; Jones & Twiss, 1978).

In educational planning, the Delphi technique has been used with increasing frequency to elicit preferences and opinions from experts in the field. The Delphi technique has been used to improve the formulation of educational policies and plans, expanding awareness among educational participants of alternative future options as well as the expectations that exist about such options (Weaver, 1971, in Seog, 1991). Such endeavors parallel the intent of the present study, as the expected outcome will most likely show data-based qualities allowing assessment, some degree of prediction, and recommendations to be formulated.

Once the problem to be subjected to the Delphi process has been identified, then participants who have expertise in the area can be selected (Uhl, 1983). Participants in the Delphi process must have a strong interest in the problem being studied as well as knowledge and experience to share (Delbecq, Van de Ven, & Gustafson; 1986). A committee was formed by the researcher for the purpose of assisting in the structuring of the initial Delphi questionnaire. Five colleagues in the field of music education at the researcher's university were chosen because of their expertise and their varied experiences in Texas music education. The committee for the present study reflected expertise from the fields of band, choir, orchestra, music education, and education. Due to the nature of this research and the fact that it was a single-author doctoral dissertation, this Delphi Committee served in a very limited advisory fashion as a consultory group. In this capacity, the Delphi committee assisted the researcher in identifying experts from the National Association of Music Schools (NASM) listing for inclusion in the sample (see Appendix A), and reviewed the questionnaires before each round was sent. The

researcher was ultimately responsible for the construction of each questionnaire, after which the Delphi committee reviewed the questionnaire for content, grammatical accuracy, and layout. Committee members also assisted in editing the pilot study questionnaire and selecting participants. Some members of the committee actively participated in the pilot study in the capacity of university supervisors.

Selection of Participants from the Population

Because the process of the Delphi technique relies on the responses by informed participants to successive rounds of questionnaires relating to the topic of the study, a panel representing expert opinion of the subject at hand is a critical factor of the Delphi technique. The rationale for the use of expert opinions in Delphi studies has been historically dependent upon the subject of the research (Linstone & Turoff, 1975). The population for this study was defined as those individuals involved in the music student teaching practicum in the universities and colleges of Texas whose institutions are members of NASM. All student teaching practicums in the State of Texas are sanctioned by State Board for Educator Certification (SBEC). This population therefore comprises university supervisors, cooperating teachers, and student teachers who are the active participants in the music student teaching practici in Texas. The actual selection process began by consulting the NASM listing (Appendix A) in an effort to locate schools where preferred experts could be found. The next step was to consult the Texas Association of Music Schools (TAMS) directory and the College Division listings in the Texas Music Educators Association (TMEA) directory. Universities falling into these three categories were selected as sites where participants would be selected. This helped to narrow the list

and assured the selection of participants who were presently active in music education at the university level in Texas. From these specific locations, university music education professors were identified in two ways: (a) those who possessed an outstanding reputation in the field of music education (as known to the researcher and/or committee members); and, (b) (where background information was not known), those listed as professors of music education in the College Music Society (CMS) yearbook. The researcher and committee members were challenged to include participants from all areas of the state so that an equal representation might be obtained across the state, thereby increasing the future generalizability of the study. Therefore, the NASM listing, which included 34 universities and colleges, was divided into four geographical groups: north, south, east, and west. Contacts were then made to each chosen potential participant asking for: (a) his or her participation in the Delphi project as a university supervisor, and (b) the names and contact information of those in their respective university settings who might be potential candidates for the study in the capacity of cooperating teachers and recent student teachers (that is, those who had student-taught within the last year). If those contacted were not university supervisors, they were asked to recommend the appropriate person at their institution who might be interested in participating in the study. Those recommended by these chosen contacts were then contacted and invited to become members of "The Texas 2001 Delphi Assessment of Music Student Teaching Research Group." Contact information not furnished was searched in the current TMEA directory or in Lycos "Switchboard: Find a Person." The demographics of the selected sample are given in Table 1. A balance was sought with regard to regional representation

and the participants' area of emphasis was also considered.

Table 1.

Respondent Demographics

Code #	Region	Specialization
U.S.#1	West	Choir
U.S.#2	North	Choir
U.S.#3	West	Band
U.S.#4	East	Band
U.S.#5	South	Band
U.S.#6	North	Choir
U.S.#7	West	Band
U.S.#8	North	Orch.
U.S.#9	South	Orch.
U.S.#10	East	Choir
U.S.#11	East	Choir
U.S.#12	South	Orch.
C.T.#1	West	Band
C.T.#2	South	Band
C.T.#3	North	Choir
C.T.#4	South	Choir
C.T.#5	East	Band
C.T.#6	North	Orch.

C.T.#7	West	Band
C.T.#8	East	Band
C.T.#9	South	Band
C.T.#10	East	Band
C.T.#11	South	Band
C.T.#12	East	Choir
S.T.#1	South	Choir
S.T.#2	East	Band
S.T.#3	East	Band
S.T.#4	North	Choir
S.T.#5	East	Orch.
S.T.#6	West	Band
S.T.#7	South	Band
S.T.#8	East	Band
S.T.#9	North	Orch.
S.T.#10	North	Band
S.T.#11	South	Band
S.T.#12	West	Choir

Note. U.S. = University Supervisor, C.T. = Cooperating Teacher, S.T. = Student Teacher

Summaries: North=8, South=10, East=11, West=7, (Total = 36)

Band=19, Choir=11, Orchestra=6, (Total = 36)

The researcher anticipated that giving the group a working title, "The Texas 2001 Delphi Assessment of Music Student Teaching Research Group," would enhance the appeal to participate. An appropriate statement was included in the formal written invitation to all three classes of participants noting that their active participation in such a research group would constitute a legitimate addition to their resume as a professional activity. A brief explanation of the proposed two-round Delphi study and the purpose of the endeavor was explained in the invitation as well as the researcher's intent to safeguard their anonymity throughout the process (see cover letter, Appendix B).

With regard to the number of participants selected for use in the study, the researcher chose to include twelve participants in each of the three categories of the student teaching *triad* (university supervisors, cooperating teachers, and student teachers) for a total of 36 participants. The researcher felt that it was important to maintain a balance of representation between the three groups. The key variable in the use of the Delphi is a sufficient number of representative experts in a study in order to gather accurate information and to test the validity of the Delphi studies (Seog, 1991). Delphi studies utilizing fifty or fewer respondents are common (Cyphert & Gant, 1970). Jones and Twiss (1978) claim that generally ten to fifty participants are acceptable, and Delbecq (1975) has stated that within a homogeneous group (e. g., the student teaching triad) few new ideas are gained once the size exceeds 30 participants. By selecting 36 participants, it was the hope of the researcher that an appropriate number would be able to complete the study. The use of 36 participants in the study was consistent with Delphi

studies of similar scope in education.

The researcher also decided that all respondents would be given the same questionnaire, even though those respondents from the student teacher group might not be as familiar with some of the terminology and procedures addressed. The researcher felt that it was important to make an effort to discover what degree of knowledge about music student teaching that the recent music student teacher possessed upon completion of the event. By classifying the collected data by subgroup for future reference, explanation of any abnormalities among subgroups in the results could then be made possible. That possibility of interaction among subgroups was of extreme interest since research question five raised the question of the existence of subgroup interaction.

A need for examining Delphi panel subgroups has been cited by Goldstein (1975) who emphasized that knowledge could be learned about the phenomenon through this comparison. According to Reiger (1986), it appears that an increasing number of researchers are interested not merely in what the majority view of the panel might be, but also in investigating differences between and among groups (and groupings) of panel respondents. Such is the case in the present study since the various levels of expertise among the chosen participants shall be expected to vary, each subgroup having its own measure of expertise based on their particular backgrounds. While consensus of opinion might be expected among members of each group, such may not be possible among the three groups on certain issues since their levels of expertise, experience, and specific areas of interest are so varied. The student teacher subgroup, for example, obviously had less experience than the other two subgroups; however, they were the *experts* on the

subject of music student teaching from the viewpoint of those most recently completing the process and therefore brought to the study a vital input worthy of serious consideration. What they have learned (or not learned) during the process of teacher-training and student teaching was of extreme interest in this study.

Development of the Round-One Delphi Questionnaire

The objective of the Delphi technique is to obtain the most reliable consensus of opinion from a panel of experts. It attempts to achieve this goal by a series of questionnaires which not only ask questions but also provide information to the panel members about the degree of group consensus and the arguments presented by the panel members for and against various positions (Martino, 1983). The Delphi procedure presented in the bulk of extant literature typically consists of three rounds of questionnaires. A fourth round has been found to produce "no significant difference from the previous rounds" (Cyphert & Gant, 1971). Typically, the Delphi procedure includes "some feedback of individual contributions of information and knowledge; some assessment of the group judgement or view; some opportunity for individuals to revise views; and some degree of anonymity for the individual respondents" (Linstone & Turoff, 1975, p. 3).

Many initial Delphi studies have been characterized by open-ended questions on the first round instrument. However, more recent studies, such as those by Cyphert and Gant (1970) and Uhl (1971), have employed a more structured format in which participants select, rank, or otherwise evaluate items which have been generated independently (Weatherman and Swenson, 1974).

Adams (1980), Everett (1988), Raiman (1972), and Seog (1991) developed an initial list of issues through an extensive review of related literature as has been done in the present study. From this initial list, the formal survey questionnaire was developed and a Likert rating scale was used to facilitate a collection of opinion from respondents. The value of the Likert-type scaling is that it lends itself to showing relative strength and intensity of the responses of the participants (Babbie, 1986) and expresses the result in a numerical format. Furthermore, the Likert scale used in this study was a seven-point scale with a zero point (*no opinion/undecided*) assigned to the number four. The seven-point Likert scale was chosen for two reasons: (a) it was the most often used by the literature discussed in Chapter II, and (b) it offers a more precise presentation of opinion than a six (or less) point scale. The formulation of a structured questionnaire format for the first round of inquiry eliminates the need for a normal open-ended first round questionnaire (Cyphert & Gant, 1971; Seog, 1991). In effect, the normal round one questionnaire is then replaced by the review of related literature and what is then labeled *round one* is actually what would have been called *round two* in the normal old-styled three-round Delphi.

In the present study the researcher mailed reiterative questionnaires in two rounds to the selected panel of identified experts. Since the researcher had effectively replaced the traditional round one questionnaire with a structured development of issues and concerns found in the related literature, a third round was not necessary. Between rounds one and two, data were collected and analyzed, and the instrument was modified to reflect the results of the initial round. This was accomplished in the following manner:

The researcher fashioned 53 statements emanating from the knowledge gleaned from the literature concerning current issues and stated them in such a manner that they took on the character of *concepts*. The purpose of these statement/concepts, coming directly from existing recent related literature, was to serve as a foundation to elicit opinion which would reveal current levels of satisfaction as perceived by the three sub-groups utilized in the study. These levels were interpreted, or equated, as perceived success of the current music student teaching scenario. In round one, participants responded to two items concerning each statement/concept:

1. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?
2. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

To this end, a structured questionnaire on the round one instrument was used to assess the opinions, priorities, and initial reactions of the experts. The researcher, to insure that the content of statements in the first round questionnaire generated information significant to the purpose of the study, selected statements for the round one questionnaire following an extensive review of the literature concerning the music student teaching event. That is, items to be included on the round one questionnaire were constructed directly from the literature review in Chapter II. As stated earlier, the purpose of this review of literature review was to discover topics and concerns in recent research on the subject of student teaching. This review was not meant to produce an all-inclusive listing of all issues pertinent to the subject of student teaching, but only those of recent

concern and study. Provision was made for the inclusion of comments on the survey, giving respondents an opportunity to add any concern(s) not included in the questionnaire. The fifty-three items in section one, each couched in the form of a statement/concept, represented pertinent issues of importance concerning the music student teaching paradigm which have been recently addressed by music education researchers. Also, three additional items were formulated in a summative fashion and included in section two of the round one questionnaire. Whereas section one had garnered opinion of the music student teaching practicum by eliciting responses on specific individual items which collectively contribute to the totality of the event, section two, asked for responses of a more global and all-encompassing nature including: (a) an opinion of the recently-implemented alternative certification program and its relationship to the present music student teaching process, (b) a single item response concerning the overall opinion of the state of music student teaching, and (c) an open-ended item in which respondents listed any areas of the music student teaching experience that were perceived to be in need of attention, revision, or change.

Respondents indicated their opinion on each item by circling their choice on a Likert scale. A seven-point Likert rating scale with a neutral midpoint assigned to the number 4 (*Undecided/No Opinion*) was used in both of the surveys in an attempt to avoid forcing a respondent to rate a statement with which he or she was either undecided or unfamiliar (and thus violate the tenet of *expert* rationale). The 1-7 Likert rating system yields ordinal data. This system assumes that the values between scores (i. e., 1 to 2, 2 to 3, etc.) are equal. Therefore, the data may be treated as interval data and statistical

assumptions appropriate to such data may be made (Vasil, 1973). The following table illustrates categories used to evaluate the items of each survey:

Table 2.

Likert Scale Rating Categories

Importance ("A" Items)	*Success ("B" Items)*
7 = Very Important	7 = Very Successful
6 = Important	6 = Successful
5 = Somewhat Important	5 = Somewhat Successful
4 = Undecided/No Opinion	4 = Undecided/No Opinion
3 = Somewhat Unimportant	3 = Somewhat Unsuccessful
2 = Unimportant	2 = Unsuccessful
1 = Very Unimportant	1 = Very Unsuccessful

Items were grouped under the five categories used in the literature review in Chapter II: (a) collaboration, (b) competency, (c) curriculum, (d) supervision, and (e) environment. In addition, a space for comments was provided after each category section so that respondents' contributions could be considered for inclusion in the round two questionnaire.

Few studies offer a concrete rationale for using one measure of reporting agreement over another (e.g., mode, mean, or median). Oftentimes, the median is used in surveys focusing on judgements of time or quantity, while the mode is generally favored in an effort to gain opinions about desired future conditions. For this study, as in others of a similar nature, the mean was chosen as the best method of reporting agreement, especially when coupled with the reporting of the standard deviation, which serves as an indicator of the amount of variation around the mean. The mean is reported as an *average* of opinion, while a pre-specified unit of the standard deviation is used to declare

consensus of opinion. In most Delphi studies, consensus is assumed to have been achieved when a certain percentage of the responses fall within a prescribed range (Scheibe, Skutsch, & Schofer, 1975). In the present study, those responses falling into a specified numerical parameter expressed in relation to the standard deviation are then interpreted as showing a consensus of opinion.

The items in the round one survey were taken directly from the reviewed literature and therefore fall into the same categories of organization and classification utilized in Chapter II:

Table 3.

Organization/Classification of Items in the Round One Survey

Classification	Item No.
Section I.	
Issues of Collaboration	Items 1 – 8
Issues of Competency	Items 9 – 25
Issues of Curriculum	Items 26 – 37
Issues of Supervision	Items 38 – 49
Issues of Environment	Items 50 – 53
Section II.	
Summative Items	Items 54 – 56

Raw data from the round one questionnaire is reported in Appendix E. Written comments were transcribed and assessed by the researcher for feasibility of inclusion in the round two questionnaire. Those items possessing a group standard deviation less than 1.25 were declared to have achieved consensus and thereby eliminated from inclusion in

the round two questionnaire (Linstone and Turoff, 1975, p. 222). Items not achieving a standard deviation less than 1.25, along with any additional items originating from the study of written comments were to be included in the round two questionnaire. Typically, successive rounds of the modern Delphi technique "shorten" the process in this manner (Ritschel, 1981). The pilot study testing had shown that the setting of consensus at the mark of 1.25 standard deviation proved to be viable, yielding enough initial agreement on the items to shorten the projected round two questionnaire to a reasonable length. Had a standard deviation of 1.0 been used as the consensus mark, too little agreement would have resulted: Had a standard deviation of 1.5 been used there would have been little need for a second round as consensus would have been reached on most items.

A consensus mark of 1.0 standard deviation was used by Seog in a Delphi study regarding music education in Korea (Seog, 1991). Although Seog employed three subgroups, just as this study does, her subgroups were not quite as diverse in their backgrounds by comparison (government education officials, university administrators, and university teachers). Goldstein, on the other hand, performed a Delphi study where the backgrounds of her subgroups were quite diverse, including respondents from the steel industry, government, universities, institutes, and trade publications. Goldstein used a standard deviation of 1.3 as a mark of consensus (Goldstein, 1975). With the diversity of backgrounds found in the three subgroups of this study, the 1.25 standard deviation used as the level of consensus was determined to be an appropriate standard. The results of the pilot study, as discussed in the previous paragraph, reinforce the decision for the choice of 1.25 standard deviation for the mark of consensus in this study.

In the round two questionnaire, each individual respondent was asked to address only those items not in consensus in which his or her response fell outside the parameter of 1.25 standard deviation. Therefore, each questionnaire in the round two procedure had to be individually prepared for each individual respondent. The respondent was shown his round one response to the item, along with the group mean response, and then asked to reconsider his or her assessment. By this means, each respondent was encouraged to move toward the group norm and hopefully move toward a consensus on the item. Those not willing to deviate from their original response were asked to please explain why they elected not to modify. This is a typical Delphi technique and serves to help the respondent more freely consider moving toward consensus. It serves the purpose of giving the researcher dialogue with which to attempt to explain the respondent's opinion as well.

After data were collected and reported as mentioned above, appropriate univariate statistics were calculated to statistically test for significant differences of opinion existing among the three subgroups (university supervisors, cooperating teachers, and student teachers). The use of the univariate analysis of variants (ANOVA) procedure employing multiple comparisons using the Fisher's least significant difference (*LSD*) technique in this instance is utilized with caution. Justification for the use of univariate statistics is supported by its use in previous literature of a similar nature. Some critics may propose that this statistical procedure is not an entirely sound application in this instance. More than one basic assumption of the ANOVA procedure is violated by the underlying principles of the Delphi technique: (a) random sampling (Delphi respondents are intended

to be *selected* experts), and (b) subjects are assumed to be representative of the population (Delphi respondents should be *experts* in their field, not respondents who would be referred to as "average"). The principle of homogeneity of variances would also be compromised by this procedure. Perhaps this is the reason why many Delphi studies rely heavily upon substantive qualitative reports rather than elaborate statistical reports, since many of our statistical models for analysis of significance and comparison rely on basic assumptions that are at odds with the basic tenets of the Delphi procedure. However, univariate statistical procedures are normally considered to be robust with regard to minimal violation of the basic assumption and are employed with frequency in the existing literature.

Execution of the Pilot Study

A pilot study was conducted June 24, 2001 to July 13, 2001 for the purpose of testing the proposed round one questionnaire. The pilot questionnaire was sent to four university supervisors of music student teachers, four cooperating teachers involved in recent music student teacher practicums, and four recent music student teachers who had completed the practicum within the past calendar year, all of whom were associated with the researcher's university. These twelve respondents were asked to complete the questionnaire as though they were actually participating in the study. They were also asked to make comments about the validity of the contents, to check for clarity and phrasing of the items, and to make any additional comments they thought might improve the questionnaire. They were also asked to report how long it took to complete the survey. After the collection of the pilot study questionnaires, the Likert scale responses to

the items were tabulated and analyzed statistically to determine the degree of panelists' agreement on each item as they perceived it in the context of their own personal experiences with music student teaching. For this purpose, the mean and the standard deviation of each item were calculated to identify the consensus of opinion by the participants as a whole. The mean indicates the average rating for each item, whereas the standard deviation indicates the amount of agreement on each item.

Raw data were first entered into a table showing each respondent's reply on each item, with mean and standard deviation reported for each item response. Means and standard deviations were then calculated in three individual tables for each of the three sub-groups: (a) university supervisors, (b) cooperating teachers, and (c) student teachers. Individual written comments were transcribed and studied for the purpose of determining if any modifications or added items might be needed.

The average time needed to complete the pilot study questionnaire was reported to be approximately forty-five minutes, with a minimum reported completion time of thirty minutes (by one student teacher respondent who wrote no comments), to one hour and twenty minutes (by one university supervisor respondent who wrote many comments). The researcher had desired to fashion a questionnaire which ideally would take only thirty to forty minutes to complete and was depending on the pilot study to provide insight on how to shorten the somewhat lengthy questionnaire form before use in the actual study. By inspecting the lower-rated items with regard to perceived importance, coupled with a re-examination of these items regarding their ability to directly contribute to the answering of the research questions, the researcher had originally hoped to shorten

the questionnaire for use in the actual round one questionnaire. However, upon consultation with the Delphi committee and the major professor, the researcher determined that all items were valid and should be utilized in the round one questionnaire. All "A" items (those dealing with perceived importance of the item) possessed a mean rating above the "5" (*Somewhat Important*) scale. The fact that they were derived from existing research literature was cited repeatedly by committee members as the probable reason for the success of these items with regard to their perceived importance.

Theoretically, in many Delphi studies consensus is assumed to have been achieved when a certain percentage of responses falls within a prescribed range (Seog, 1991). When an item possessed a standard deviation less then 1.25, then a consensus of opinion was declared. Therefore, if the pilot study had been the actual round one questionnaire, items that were declared to have achieved consensus would be eliminated from the round two questionnaire. The round two questionnaire would then contain only those items with standard deviations greater than 1.25, indicating a large enough disagreement of opinion on the item that their inclusion in an additional round would be appropriate in an effort to establish consensus. Only respondents whose ratings fell outside the prescribed parameter of 1.25 standard deviation on non-consensus items would be asked to reconsider their responses to those particular items. Those items lacking consensus, any items added as a result of the consideration of written comments, and a final item asking all respondents to rank pertinent responses to the concluding open-ended item in the actual round one questionnaire would then constitute the round

two questionnaire (a hypothetical projection, given that the present discussion relates to the one-round pilot study). The round two questionnaire is ideally much shorter in length than the first. This shortening of the round two questionnaire would allow each respondent more time to focus and concentrate on the critical items without the distraction of having to labor over items already declared to be in consensus.

Written comments from the pilot study were quite numerous and quite often somewhat superfluous. Upon inspection of the written comments, the researcher found virtually no new topic areas that would warrant addition to a round two questionnaire. Respondents seemed to use this opportunity to amplify concerns that were already addressed by the items in the questionnaire. The researcher decided that the layout of the pilot study had invited too many comments by providing a space after each individual item. Too many opinions were given which had absolutely no effect on the consideration of revision. As a result of the pilot study, the researcher determined that the revised round one questionnaire would have space for comments only at the end of each category of items. This also served to shorten the physical form of the questionnaire by eliminating much of the blank space on each page as used in the pilot study. The resulting revised version which became the actual Round One Questionnaire is included in Appendix D. The original pilot study questionnaire is not included because the items used were the same. Only a few grammatical adjustments were made. “Prestige” items (where references to published research had been cited) were re-phrased with references removed, and the space after each item was removed, leaving only a space after each category grouping for comments. A final concern that was addressed after the pilot study

was the ability of the four student teachers to understand all of the items because they obviously lacked the experience and background of the other two subgroups. They were contacted and asked if they were able to understand each of the items. In response to this query, none of the four reported any problems with item comprehension.

In the pilot study, the most significant contributions in the form of written comments were found on the final open-ended item which had asked the respondent(s) to list any areas of the student teaching event in need of attention or revision. In the round two questionnaire that would have followed, these responses would be listed for ranking of importance by the respondents (after editing) in an effort to achieve consensus on their importance to the group as a whole. These issues would then be qualitatively addressed in Chapter IV with appropriate conclusions and recommendations to follow in Chapter V.

An interesting feature of the design of the study is the fact that comparison of the entire first section, intended to reveal an opinion of music student teaching by surveying individual components, can be directly compared to the answer to the summative Item 55 of the round one questionnaire that directly asked for a numerical rating of the opinion of the quality of music student teaching overall. The researcher, having no prior conceptions as to the outcome, thought that this contrast might reveal interesting information showing the relation of an individual's opinion when asked to respond to a question in two different ways: (a) an estimation of the state of affairs by the examination of the various inner-components which contribute to the wholeness of the event; versus, (b) an estimation of the state of affairs in totality.

The Round One Delphi Questionnaire

The round one survey was initiated in December 2001 and concluded in March 2002. A rather extended time frame was needed so that the researcher could replace non-respondents as needed until a full complement of 36 participants was obtained. These 36 subjects included 12 active university supervisors, 12 experienced cooperating teachers, and 12 recent music student teachers who had completed their student teaching practicum within the last calendar year. The 12 university supervisors had been appointed by the researcher and the Delphi committee while the cooperating teachers and student teachers were selected from a pool of names submitted by the chosen university supervisors. No attempt was made to match participants to one another with regard to any demographic quality (such as location or specialization) as this would serve no purpose in addressing the research questions. Round one survey instruments were gathered in March 2002 and the resulting data were tabulated. The round one survey instrument consisted of 53 two-part items in section one and three additional items in section two. In section one, each of the 53 two-part items solicited responses to two items:

1. An "A" item soliciting the respondent's opinion as to the importance (validity) of the statement/concept by asking the question, "What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?"
2. A "B" item soliciting respondent's opinions regarding the success of implementation of the statement/concept in the field of music student teaching by asking, "Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching

practicum?"

Respondents were asked to rate each item response on a seven-point Likert scale.

Section two of the round one survey (as in the pilot study) included only three items having in common a rather summative design. Whereas the first 53 two-part items had dealt with very specific items related to various facets of the music student teaching scenario, the first two items in section two were of a more summative nature in that they asked for opinions in a more global and all-encompassing manner. First, Item 54 asked respondents to agree or disagree to the statement; "It is unrealistic to expect an alternative certification program to offer the quality or depth of training received in a university/college-based teacher-training program." Respondents replied to this item on a Likert scale ranging from 1 (*Strongly Disagree)* to 7 (*Strongly Agree)* with a neutral midpoint of 4 (*Undecided/No opinion)*. The item was intentionally phrased in such a manner that a higher response number-choice would equate to a positive vote for the success of current music student teaching, and a lower response number-choice would indicate the opposite (favoring the merits of alternative certification). This item represented an effort to respond to previous research that had reported a need for investigation and further study of this comparison (Gallant, 1992) and recently has become an issue of current interest in music education. Item 55 utilized the same Likert scale to report opinions regarding the respondent's position of agreement with the statement, "Based on your own personal experience and knowledge, would you agree that the overall effectiveness and value of the music student teaching practicum as it now exists is of the highest quality?" The final item (56) in section two was an open-ended

response item that simply asked respondents to "Please list any areas of the music student teaching experience that you perceive to be in need of attention, revision, or change." It was the intent of the researcher to recycle pertinent listed concerns for consideration of the respondents in the round two questionnaire in the form of a ranking item after editing and consolidating these concerns.

In March 2002 the round one surveys were collected and data were tabulated. The results of this tabulation are discussed in Chapter IV. The 53 two-part items plus the two additional single-response items brought the total number of responses in the round one questionnaire to 108 (excluding the final open-ended item). The group reached the predetermined mark set for consensus (*SD* = 1.25) on all but 22 of the items in round one, representing a consensus of 79% of the total items in the round one questionnaire. The implications of these results, to include statistical analyses are discussed in Chapters IV and V.

Responses to the final (56) item were transcribed and reported in Appendix E. After careful study of these responses, a ranking item based on the responses was designed for use in the round two survey. This item will be discussed further in the next section.

The Round Two Delphi Questionnaire

The 22 items lacking consensus represented 21% of the total items. These 22 items, having standard deviations larger than 1.25, were therefore retained for inclusion in the round two survey. The two summative items in Section Two reached consensus (*SD* = 1.19 and 1.13, respectively) and were not included on the round two questionnaire.

Their results were quite positive with means of 6.28 for Item 54, and 5.61 for Item 55. Of extreme importance in the construction of the round two survey was the use of the results from the final open-ended item in section two of the round one survey which asked respondents to list any areas of the music student teaching experience that needed attention, revision or change. These responses are listed in Appendix E. From these responses, a concluding item was fashioned for the round two survey which asked respondents to rate ten of these respondent-generated items with regard to their perceived hierarchical importance. Reduction of the many responses to ten items was not a difficult task because so many of the items shared similar concerns and were listed repeatedly (see Appendix E).

The researcher had expected other written comments to surface at the end of each category of items in section one of the round one survey. The anticipated comments were to be used for consideration in the modification of the second round questionnaire. These comments were almost non-existent and offered no input that could be used in the construction of the round two survey. Respondents, on the whole, chose not to utilize this optional response opportunity.

Each round two questionnaire had to be individually constructed for each subject. Only those items where individual responses fell outside the boundaries of the predetermined level of consensus ($SD = 1.25$) were included on each individual's questionnaire. As a result of the round one outcome, one respondent was required to reply to only three re-circulated items, while one respondent received all 22 of the items lacking consensus.

Section two of the round two survey included ten statements related to various facets of the music student teaching practicum which might be in need of attention or improvement. These ten statements were fashioned from written comments by respondents on the round one survey. The ten statements were *suggestions for improvement* of the music student teaching event. Respondents were asked to rank the items according to importance in their opinion, one through ten (one being the most important, ten being the least). Respondents were also asked to rank *all* items. Data were gathered from this final item and reported in Appendix G. Discussion and statistical inferences concerning this item are included in Chapters IV and V.

Round two questionnaires were mailed in May 2002 and collection began over the summer months. The round two survey collection was halted in August 2002 with 34 of the 36 subjects responding. One cooperating teacher and one student teacher did not respond to the round two survey even after repeated requests and reminders. The resulting data was organized, analyzed, and reported in Chapter IV.

CHAPTER IV

RESULTS OF THE STUDY

The purpose of this study was to investigate the music student teaching practicum in the state of Texas in an effort to establish current perceived levels of success as determined by music educators involved in the student teaching process. A second concern was to identify potentially problematic areas in need of attention. To accomplish this two-fold purpose, these six specific research questions were developed:

1. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of those music educators involved in the process?
2. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of university supervisors?
3. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of cooperating teachers?
4. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of recent student teachers?
5. Are there significant levels of interaction among the opinions of university supervisors, cooperating teachers, and student teachers concerning the

perceived levels of success of the student teaching practicum?

6. Are there specific areas of the music student teaching practicum that are in need of attention or revision?

To generate response to these questions, a two-round Delphi research technique was employed. After an extensive review of literature on the subject of music student teaching, an initial questionnaire was constructed which addressed issues of current and recent concern on the subject of music student teaching. After pilot testing and subsequent revision, a round one questionnaire was sent to 36 subjects, (12 university supervisors, 12 cooperating teachers, and 12 recent student teachers). This round one survey process was begun in December 2001 and concluded in March 2002. This rather extended time frame was necessary because non-respondents were replaced until a full complement of 36 participants was obtained. Round one survey instruments were gathered in March 2002 and results were tabulated. The round one survey consisted of 53 two-part items and three additional items. Each item was fashioned as a "statement/concept" which had been gleaned from concerns and topics found in the review of literature on the subject of music student teaching. In the two-part items, the first response ("A") solicited the respondents' opinion as to the validity of concept/statement, asking the question, "What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?" The second response ("B") required respondents' opinions regarding the success of implementation of the statement/concept in the field of music student teaching by asking the question, "Based on your personal experience, to what degree is this issue being

successfully addressed in the current music student teaching practicum?" Respondents were asked to rate each response on a seven-point Likert scale.

Round One, Section One

Considering all 55 items as a whole, the sample had a mean response rate of 5.69 on the seven-point Likert scale, with the university supervisor sub-group having a mean response of 5.78, the cooperating teachers averaging 5.39, and the student teacher sub-group averaging 5.88. A more detailed comparison of these response means will be made later in this chapter. Suffice it to say, these subgroup means indicate that student teachers felt the highest degree of satisfaction with the validity of the items and their degree of successful implementation, while the university supervisors were only slightly lower. However, the cooperating teachers were quite a bit lower (although still on the positive side of the seven-point scale) than the other two subgroups with a mean of 5.39. The standard deviation for the (whole) group was 1.07. Sub-group standard deviations were 0.94 for the university supervisors, 1.07 for cooperating teachers, and 1.02 for student teachers. This indicates that there was more agreement among the university supervisor subgroup, less agreement in the student teacher sub-group, and more disagreement in the cooperating teacher subgroup overall. The 53 two-part items plus the two additional items brought the total number of responses in the round one questionnaire to 108. The group reached the predetermined mark of consensus ($SD = 1.25$) on all but 22 of these 108 items in round one. This means that consensus was reached on 79% of the round one items in total. Table 4 shows the location of unresolved items with regard to the five categories of items:

Table 4.

Round One Items Failing to Reach Consensus, Shown by Category

Category	Total Items	Items Failing Consensus
Collaboration	16	3 (19%)
Competency	34	2 (6%)
Curriculum	24	9 (38%)
Supervision	24	6 (25%)
Environment	8	2 (25%)
Totals:	106	22 (21%)

Respondents reached consensus on 79% (84 items) of the 106 two-part items on the round one survey. Twenty-one percent (22 items), having standard deviations larger than the a priori 1.25, were retained for redress in the round two survey. Results indicated that more items failing to reach consensus existed under the heading of curriculum. On the other hand, more agreement existed on items related to competency with only 6% of the items failing to reach consensus on the first round. Cronbach's alpha was computed at a level of .94, indicating a high degree of reliability for these 53 two-part items.

When the 53 two-part items were tested for statistical significance, it was found that the cooperating teacher subgroup was significantly lower than the university supervisor subgroup and the student teacher subgroup as well. No statistical differences were found between the university supervisors and the student teachers (see Table 5).

Table 5.

Oneway ANOVA for All Two-part Items, (Items 1-53, A & B Mean Responses)

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	1.58	2	0.79	5.58	.01
Within Groups	4.67	33	0.14		
Total	6.25	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.39*	0.15	.02
US – ST	-0.11	0.15	.46
CT – US	-0.39*	0.15	.02
CT – ST	-0.50**	0.15	.01
ST – US	0.11	0.15	.46
ST – CT	0.50**	0.15	.01

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

*The mean difference is significant at the $p < .05$ level.

**The mean difference is significant at the $p < .01$ level.

However, when the "A" items were isolated and tested for significance, it was found that no statistical differences of significance were present (see Table 6).

Table 6.

Oneway ANOVA for Mean Responses of "A" Items

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	0.09	2	0.04	0.21	.81
Within Groups	6.72	33	0.20		
Total	6.80	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	-0.06	0.18	.77
US – ST	0.06	0.18	.73
CT – US	0.06	0.18	.77
CT – ST	0.12	0.18	.52
ST – US	-0.06	0.18	.73
ST – CT	-0.12	0.18	.52

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers.

*No mean difference is significant at the $p < .05$ level.

This is a particularly desirable result since the purpose of the "A" items was to determine their pertinence and validity in relation to the research questions. The mean group response on all "A" items was 6.25 (*SD* = 0.87), indicating that the items were, as a whole, valid and pertinent to the subject at hand in the opinions of the respondents. The

lowest individual item mean was 4.92, which further supports the preceding statement. Furthermore, only three "A" items failed to reach consensus on the round one survey and were subsequently resolved by consensus in the round two survey. Cronbach's alpha was computed at the .90 level for these items.

When the "B" items were isolated and tested for statistical significance, it was found that the cooperating teachers were significantly lower than the other two subgroups (as shown in Table 7):

Table 7.

Oneway ANOVA for Mean Responses of "B" Items

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	3.72	2	1.86	5.77	.01
Within Groups	10.65	33	0.32		
Total	14.37	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.71**	0.23	.01
US – ST	0.05	0.23	.83
CT – US	-0.71**	0.23	.01
CT – ST	-0.66**	0.23	.01
ST – US	-0.05	0.23	.83
ST – CT	0.66	0.23	.01

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers.

**The mean difference is significant at the $p < .01$ level.

No significant differences were found between the university supervisor subgroup and the student teacher subgroup. This result of statistical testing of the isolated "B" items is remarkably similar to statistical testing of the "A" and "B" items combined (see Table 5, p. 104). The Cronbach's alpha level for the "B" items testing was .94.

Round One, Section Two

Item numbers 54 and 55 were unique in their construction, differing from the previous 53 two-part items. Item 54 solicited opinions concerning the viability of an alternative certification program as a replacement for the university-based teacher-training program presently in place. The group mean for this item was 6.28 which would indicate, because of the way the item was phrased, that there was a resounding consensus ($SD = 0.87$) that such an alternative program would not suitably replace the current program of music student teacher training.

Item 55 queried the opinion of respondents asking, "Based on your own personal experience and knowledge, would you agree that the overall effectiveness and value of the music student teaching practicum as it now exists is of the highest quality?" In effect, this is the underlying question that the 53 two-part items were also seeking to find. The researcher had intended to construct a questionnaire which would canvas the sample using various pertinent items related to the research questions in an effort to reveal their opinions about the current status and effectiveness of the student teaching practicum. Item 55 asked for this same information in one item, point-blank. Results of Item 55 were

a mean of 5.61 for the group with a standard deviation of 1.11. This compares to a group mean on all 53 two-part items of 5.69 (*SD* = 1.07). This indicates that this particular sample may have tended to have a slightly higher opinion of the student teaching process when "looking at the (individual) trees rather than the (whole) forest." That is, the group's collective opinion, as expressed through the group mean on the multiple two-part item segment of the questionnaire, was slightly higher than the group mean on the singular item which probed the same question in Item 55.

Item 56 of the round one survey was an open-ended item which asked respondents to list any areas of the music student teaching experience that were perceived to be in need of attention, revision, or change. These responses are listed in Appendix E. From these written responses, a concluding item was fashioned for the round two survey in which respondents were asked to rate ten of these inputted items into a hierarchical order of importance.

Round Two, Section One

After round one data was tabulated, the round two questionnaire had to be individually constructed for each subject based on the results. Of the 22 items failing to reach consensus in the round one survey, only those items having individual responses outside the boundaries of the predetermined level of consensus (*SD* = 1.25) were included on each individual questionnaire.

Data from the responses on these 22 items failing to reach consensus on the round one instrument were compiled and tested for statistical significance. The group mean was 4.92 (*SD* = 1.15). It was found that the university supervisor subgroup was significantly

higher in their mean responses than the cooperating teacher subgroup $F(2,33) = 11.1$, $p = .01$. Also, the student teacher subgroup mean was significantly higher than the cooperating teacher subgroup mean $F(2, 33) = 11.1$, $p = .01$. There were no significant differences between the university teachers and the student teachers $F(2, 33) = 11.1$, $p = .24$. Table 8 statistically illustrates these findings:

Table 8.

Oneway ANOVA for Mean Responses of All Non-consensus Items

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	4.58	2	2.29	11.10	.01
Within Groups	6.81	33	0.21		
Total	11.39	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.84**	0.19	.01
US – ST	0.22	0.19	.24
CT – US	-0.84**	0.19	.01
CT – ST	-0.62**	0.19	.01
ST – US	-0.22	0.19	.24
ST – CT	0.62**	0.19	.01

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

**The mean difference is significant at the $p < .01$ level.

Reliability of these 22 reconsidered items was computed to be at the .84 alpha level.

After the data from the round two survey were tabulated, 15 of the 22 items reached consensus as a result of the reconsideration by respondents. The subjects had been furnished the group mean for each item and their round one response choice and were encouraged to reconsider the item based on that information. Some respondents changed their responses, while some did not. Those who chose not to change were asked to explain why they chose to retain their round one choice. This procedure is a standard Delphi procedure and was used in this study, not for the intent of making it easier to change the response and avoid a written explanation, but rather to supply the researcher with needed information to explain why the respondent felt so strongly about the decision to remain "outside the boundaries of the group norm." However, many respondents, while choosing not the change, also chose not to supply any verbal explanation concerning why they felt so strongly about their original item choice. This is unfortunate because such written comments could have supplied valuable information about the respondent's opinion and its implications. Nonetheless, this process resulted in resolution (consensus) of 15 of the 22 items. As these responses were changed, moving them closer to the group mean, this resulted in a smaller standard deviation which, upon reaching the preset mark of consensus (*SD* = 1.25), signaled consensus on the item. Seven items having standard deviations higher than the consensus mark (*SD* = 1.25) upon the conclusion of the round two data computations remained outside the boundaries of consensus.

The 15 items previously failing to reach consensus which were resolved in round

two were tested for significance with regard to subgroup membership:

Table 9.

Oneway ANOVA for Mean Responses of (15) Items Reaching Consensus in Round Two

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	2.74	2	1.37	8.37	.01
Within Groups	5.40	33	0.16		
Total	8.14	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.61**	0.17	.01
US – ST	0.04	0.17	.80
CT – US	-0.61**	0.17	.01
CT – ST	-0.56**	0.17	.01
ST – US	-0.04	0.17	.80
ST – CT	0.56**	0.17	.01

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

**The mean difference is significant at the $p < .01$ level.

With regard to these items reaching consensus in the round two questionnaire, statistical analysis revealed that the university supervisor subgroup had a mean significantly higher than the cooperating teacher subgroup, $F(2,33) = 8.37$, $p = .01$, as did the student teacher

subgroup, $F(2, 33) = 8.37$, $p = .01$. No significant differences were found between the university teacher subgroup and the student teacher subgroup, however, $F(2, 33) = 8.37$, $p = .80$. The alpha level for this comparison was .75.

The seven items defying consensus in round two were tested for significance of group membership:

Table 10.

Oneway ANOVA for Mean Responses of (7) Items Failing to Reach Consensus in Round Two

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	6.76	2	3.38	5.39	.01
Within Groups	20.66	33	0.63		
Total	27.42	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	1.03**	0.32	.01
US – ST	0.28	0.32	.40
CT – US	-1.03**	0.32	.01
CT – ST	-0.75*	0.32	.03
ST – US	-0.28	0.32	.40
ST – CT	0.75*	0.32	.03

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

*The mean difference is significant at the $p < .05$ level.

**The mean difference is significant at the $p < .01$ level.

The end results of this statistical endeavor (Table 10) were the same as those in the previous table (see Table 9, p. 111). The university supervisor subgroup mean (5.05) was significantly higher than the cooperating teacher subgroup mean (4.02), $F(2,33) = 5.39$, $p = .01$. The student teacher subgroup was also significantly higher ($M = 4.77$) than the cooperating teacher subgroup, $F(2, 33) = 2, 33) = 5.39$, $p = .03$. No significant differences existed between the university teacher subgroup and the student teacher subgroup, $F(2, 33) = 5.39$, $p = .40$. The Cronbach's alpha level was computed at .72 for this test.

When the data from the 22 unresolved items that had been "recycled" in round two were merged back into the original two part items from the round one survey instrument, the group mean changed from 5.69 ($SD = 1.07$) to 5.71 ($SD = 0.98$). An increase in the group mean equates to an increase in regard to the favorable disposition of the items. However, a decrease in the standard deviation indicates an increase in the unity of the opinion (consensus) as it indicates a smaller spread of the responses. The results of a univariate ANOVA for the two-part items after the round two input was merged are shown in Table 11:

Table 11.

Post Round Two Oneway ANOVA for Mean Responses for All Two-part Items

Source	*SS*	*df*	*MS*	*F*	*P*
Between Groups	1.09	2	0.55	4.80	.02
Within Groups	3.76	33	0.11		
Total	4.85	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.33*	0.14	.02
US – ST	-0.07	0.14	.62
CT – US	-0.33*	0.14	.02
CT – ST	-0.40**	0.14	.01
ST – US	0.07	0.14	.62
ST – CT	0.40**	0.14	.01

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

*The mean difference is significant at the $p < .05$ level

**The mean difference is significant at the $p < .01$ level.

When the "A" part of the items were isolated after the merger, the group mean rose from 6.25 to 6.29, while the standard deviation decreased from 0.87 to 0.86. There was no significant interaction on "A" items in round one, and the interjection of round two results did not change this outcome:

Table 12.

Oneway ANOVA for Mean Responses of All Non-consensus Items

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	0.61	2	0.30	1.75	.19
Within Groups	5.73	33	0.17		
Total	6.34	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.07	0.17	.68
US – ST	-0.23	0.17	.18
CT – US	-0.07	0.17	.68
CT – ST	-0.30	0.17	.08
ST – US	0.23	0.17	.18
ST – CT	0.30	0.17	.08

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

*No mean difference is significant at the $p < .05$ level.

The "B" part items had originally recorded a grand mean in the round one survey of 5.11 (*SD* = 1.26); after the merger the mean rose to 5.13 while the standard deviation decreased to 1.11. Results from the Oneway ANOVA analysis of "B" items in round one had indicated a significant difference between the cooperating teacher subgroup and the university supervisor and student teacher subgroup as well, $F(2, 33) = 4.33$, $p = .01$, and

$F(2, 33) = 4.33$, $p = .02$ respectively. The round two data did not change this outcome and the cooperating teacher subgroup remained significantly lower than the university supervisor and student teacher subgroups as seen in Table 13, $F(2, 33) = 4.33$, $p = .01$, and $F(2, 33) = 4.33$, $p = .02$, respectively:

Table 13.

Post Round Two Oneway ANOVA for Mean Responses of "B" Items

Source	*SS*	*df*	*MS*	*F*	*p*
Between Groups	2.05	2	1.03	4.33	.02
Within Groups	7.82	33	0.32		
Total	9.87	35			

Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.52**	0.20	.01
US – ST	0.03	0.20	.88
CT – US	-0.52**	0.20	.01
CT – ST	-0.49*	0.20	.02
ST – US	-0.03	0.20	.88
ST – CT	0.49*	0.20	.02

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

*The mean difference is significant at the $p < .05$ level.

**The mean difference is significant at the $p < .01$ level.

Round Two, Section Two

The second section of the round two questionnaire asked respondents to rank, from one to ten (most important to least important), ten items constructed from the responses received on Item 55 of the round one questionnaire. Raw data for the ten items ranked in the second section of the round two instrument are reported in Appendix G. Results of the item ranking are presented by subgroup membership in Table 14 showing the results in two ways; (a) by item, and (b) by group rank.

Table 14.

Round Two, Section Two, Ranking Results by (a) Item and (b) Group Rank

Item	US Rank	CT Rank	ST Rank	Group Rank
1	5	3	2	3
2	4	1	1	1
3	8	9	7	8
4	9	8	9	9
5	10	10	10	10
6	2	2	3	2
7	7	6	5	7
8	6	4	6	5
9	3	5	4	4
10	1	7	8	6

Group Rank	US Rank	CT Rank	ST Rank	Item
1	4	1	1	2
2	2	2	3	6
3	5	3	2	1
4	3	5	4	9
5	6	4	6	8
6	1	7	8	10
7	7	6	5	7
8	8	9	7	3
9	9	8	9	4
10	10	10	10	5

Note. US = university supervisors, CT cooperating teachers, ST = student teachers

These ranked items are listed in Table 15 including the item number and the actual item in the order of group preference:

Table 15.

Results of Ranked Items for Round Two

Rank	Item No.	Item
1	2.	Music student teachers need to be given more time during the practicum to improve their rehearsal skills. (More "podium-time" is needed.)
2	6.	Expectations of the music student teacher need to be more clearly defined prior to the student teaching event. The setting of common criteria for evaluation, the

structure of the practicum, and the procedures to be followed should be more clearly defined and understood by all parties involved.

3 1. Classroom Management, Measurement & Media, and Content Area Reading classes should be taught by music faculty so that course content will be relevant to the music student teacher.

4 9. Video-taping needs to be used more extensively both in the teacher-training program and the student teaching practicum so that the students can benefit from the feedback and analysis of teaching skills made available by this procedure.

5 8. Consideration needs to be given to extending the student teaching event to include an entire semester (rather than just the 12 weeks presently required by the State Board of Educator Certification).

6 10. The teacher-training program should be scrutinized to address improvement in the area of aural-diagnostic skills of the music student teacher.

7 7. More field experience in the music teacher preparation curriculum (prior to student teaching) is needed.

8 3. Student teachers need to be more carefully matched with successful cooperating teachers by university personnel who have the opportunity to know the strengths, weaknesses, and personalities of both.

9 4. Music technology (computer programs and electronic tools related to music teaching) needs to be more fully addressed in the teacher-training curriculum.

10 5. Non-Western music needs to be more fully addressed in the teacher-training curriculum

Subgroup means by item for each subgroup is shown in Table 16:

Table 16.

Subgroup means for Round Two, Section Two

Item No.	US Mean	CT Mean	ST Mean	Group Mean	Rank
1	4.83	4.45	3.73	4.34	3
2	4.75	3.09	3.45	3.76	1
3	5.58	6	5.64	5.74	8

4	7.25	7.36	6.82	7.14	9
5	8	9.18	9	8.73	10
6	4.42	3.55	4.55	4.17	2
7	5.58	5.36	5.45	5.46	7
8	5.5	4.82	5.55	5.29	5
9	4.67	4.91	4.82	4.80	4
10	4.33	5.91	6	5.41	6

Note. US = university supervisors, CT = cooperating teachers, ST = student teachers

This ten-item ranking was tested for statistical significance using Friedman's Twoway Analysis of Variance. The Friedman's test is a nonparametric analog for the randomized block design and is an extension of the Kruskal-Wallis Oneway Analysis of Variance that is appropriate for ranked items (ordinal data) involving three independent subgroups (Hinkle, Wiersma, & Jurs, 1988, pp 572-574). Friedman's test is more appropriate for the present research design because it facilitates comparison of the three subgroups while blocking, or controlling, for the effects of the ten items involved. This technique of blocking for effects changes the relationship of the subgroups from "independent" to "related" subgroups because all three subgroups have been, in effect, equalized (related) by this procedure (Fraenkel & Wallen, 1993, p. 201). No reliability level is reported for the Friedman's Test because of the design of this test and the fact that only one response is available for each subject on each item. Because of these

factors, there is no data for comparison that would produce a reliability rating. Results of the Friedman's test are shown in Table 17.

Table 17.

Friedman's Twoway ANOVA, Round Two, Section Two

Source	Type III *SS*	*df*	*MS*	*F*	*p*
Group	0.08	2	0.04	.01	.99
Item	665.60	9	0.20	11.41	.01
Error	2125.24	328	6.48		
Total	13021.00	340			

Group Multiple Comparisons LSD

Subgroup Comparison	Mean Difference	*SE*	*p*
US – CT	0.03	0.34	.93
US – ST	-0.01	0.34	.98
CT – US	-0.03	0.34	.93
CT – ST	-0.04	0.34	.92
ST – US	0.01	0.34	.98
ST – CT	0.04	0.34	.92

Note. $\Delta R^2 = .831$. US = university supervisors, CT = cooperating teachers, ST = student teachers.

*No mean difference is significant at the $p < .05$ level.

The post-hoc *LSD* computation in the Friedman's test indicates that no significant differences between subgroups were present on the ten-item ranking.

Implications of the data reported in this chapter will be discussed in Chapter V with appropriate conclusions and recommendations.

CHAPTER V

CONCLUSION

The impetus for this study was a desire to conduct a current assessment of the overall effectiveness of the student teaching practicum in the field of music in Texas. If the best method for training the music teachers of tomorrow is currently in place, then the best defense of that method would be a consummate knowledge of it. With the advent of alternative certification in the State of Texas, the music education community may soon have a need for data that would support the music student teaching practicum as it presently exists. Some music educators may perceive that the existence of the new alternative certification has the potential to significantly detract from the value of the established method of teacher certification presently embraced and perpetuated by teacher-training institutions. Suspecting that the merits of the time-tested educational institution of student teaching may, at some future date, be subjected to comparison to the recently implemented alternative certification, the researcher had an interest in providing ammunition for defense of music student teaching, should it be needed. If not, research results should indicate where areas of improvement might be needed in the process. The process of music student teaching will most likely never be perfect, but it is executed by consummate professionals who have a history of constantly striving to improve their craft and have an ongoing desire to improve the status of their profession within the educational community. Thus, this study attempted to assess the effectiveness of the

music student teaching experience as perceived by those music educators presently involved in the process.

To that end, the researcher attempted to establish those present levels of satisfaction with the current method in place, from the perspective of current university supervisors, current cooperating teachers, and recent music student teachers, and to identify any potentially problematic areas that might be in need of attention or revision. The following specific research questions were formulated to accomplish this two-fold purpose:

1. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of those music educators involved in the process?
2. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of university supervisors?
3. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of cooperating teachers?
4. What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of recent student teachers?
5. Are there significant levels of interaction among the opinions of university supervisors, cooperating teachers, and student teachers concerning the perceived levels of success of the student teaching practicum?
6. Are there specific areas of the music student teaching practicum that are in

need of attention or revision?

This chapter summarizes the implications of the data in the present research and makes recommendations by addressing the relationship between the data gathered and the six research questions first postulated in Chapter I. A two-round Delphi survey technique was determined to be the most practical and appropriate procedure to employ. This technique "…attempts to design a structure which allows many informed individuals in different disciplines or specialties to contribute information or judgments to a problem area which is much broader in scope than the knowledge that any one of the individuals possesses" (Linstone & Turoff, 1975, p. 28). Since the three subgroups involved in the study possessed such diverse backgrounds, it was determined that this procedure was the most appropriate.

Research Question 1

Research question one asked, "What is the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of those music educators involved in the process?" The data showed that the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of participating music educators is very positive. Nearly all of the data gathered in the study was the result of respondents' reaction to items that used a seven point Likert scale. The group mean response remained on the positive side of the mid-point (4 = *undecided/no opinion*) on all of the 108 items on the round one survey, except for three instances where the mean fell below a "4" rating (where 1 = *negative*, 7 = *positive*). The group mean for all items on the round one survey was 5.68 (*SD* = 1.01). This improved to a 5.71 group mean after the round two data were processed (*SD* = 0.95). A decreasing standard deviation signals increasing agreement or consensus. These statistics indicate that while the group mean rose, a higher level of agreement was also

reached as evidenced by a decline in the standard deviation from 1.07 to 0.98.

More succinctly, this positive assessment can be summarized and supported by perusal of the group means at various points in the data. In the first round survey, the “B” parts of the opening fifty-three two-part items asked for the respondents’ perception of the level of success of each particular item. The group mean for “B” items on the round one survey was 5.11 (*SD* = 1.26). After data from the round two survey was collected and analyzed, the "B" item group mean rose to 5.13 while the standard deviation decreased to 1.11. While these statistics indicate only a slight rise in the group mean, a markedly higher level of consensus is shown by the 0.15 decrease in the standard deviation between the two surveys. These results clearly exemplify the basic tenet of the Delphi research method at the heart of which is the establishment of consensus (Linstone & Turoff, 1975, p. 28).

Two single-response items elicited agreement using a Likert-style response mode in the section two portion of the round one survey (where 1 = *strongly disagree*, and 7 = *strongly agree*). The first of these, Item 54, asked respondents to react to an item regarding the comparison of the present music student teaching system with an alternative certification program. In response to this item, the group felt very strongly that it was “unrealistic to expect an alternative certification program to offer the quality or depth of training received in a university/college-based teacher-training program” (Item 54 -- *M* = 6.28, *SD* = 0.87). Music educators involved in teacher training at the university level may have perceived the advent of alternative certification as a threat to the system that they currently endorse. The findings of this study are supported by perceived opinions of a small sample of those involved in the music student teacher training process in the State of Texas and therefore should be interpreted with caution. The selection of another sample, even if the procedure were executed under the same guidelines used in

the present research, would likely cause some variance in the results of the study. However, the present study results should give those concerned with music student teaching in Texas some encouragement. Findings of the study indicate that the system that they know, support, and endorse, is viewed by those who participated in this study as a viable procedure.

Item 55 asked point-blank if respondents agreed that "the overall effectiveness and value of the music student teaching practicum as it now exists is of the highest quality." The group mean for this item was 5.61 (*SD* = 1.11) indicating consensus on a strongly positive assessment of the current music student teaching process.

The 22 survey items failing to reach consensus in the round one survey were re-circulated in section one of the round two survey. Of these two-part items, three of them were "A" items (dealing with "importance" or validity of the item). The group mean for these "A" items, after some respondents adjusted their ratings in round two, was 6.29 (*SD* = 0.86) indicating a high rating for the importance and validity of these items coupled with a fairly high rate of agreement as shown by the comparatively low standard deviation. The remaining nineteen re-circulated items were "B" items (dealing with the "success" of the item in actual student teaching). Respondents were able to resolve fifteen of the nineteen "B" items in conflict and the group mean for these items was 4.92 (*SD* = 1.19) which represents a positive rating with an acceptable amount of agreement as indicated by the standard deviation (*SD* < 1.25).

The seven items which defied resolution (*SD*s > 1,25) and remained outside the limits of consensus had a group mean of 4.62 which is still on the positive side of the seven-point Likert scale employed; however, the mean standard deviation was 1.44, which exceeds the 1.25 level set for consensus. None of the seven individual items was able to meet the 1.25 standard deviation requirement for consensus, with 1.33 as the

lowest standard deviation of any of these non-consensual items. These seven unresolved items possessed the potential to show areas where improvement of the student teaching practicum might be made. While the data had indicated that the group as a whole appeared to be very positive ($M = 5.71$) about the general state of affairs in music student teaching, these seven unresolved items served as catalysts for addressing the sixth research question which involved possible areas of improvement that might be needed. These seven items will be discussed later in this chapter under the heading of Research Question Six.

Research Question 2

Research Question Two queried the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of university supervisors. Of the three subgroups involved in the study, the university supervisor subgroup might be considered by many to be the most knowledgeable regarding the subject of student teaching. Perhaps this is due to their background, duties, and responsibilities in the process. This perception of superiority may originate from the fact that not only are they representatives of the institution responsible for the training of the student teacher, but they are also responsible for the ultimate assessment, governing, and grading of the student teaching event.

Examination of the data indicates that university supervisor ratings showed positive responses throughout the study. The subgroup mean was always either the highest or second of the three subgroups, and never the lowest. The round one subgroup mean for supervisors was 5.78 ($SD = 0.94$) which places the group in the middle when compared to a somewhat higher student teacher subgroup mean of 5.88 ($SD = 1.02$) and a much lower cooperating teacher subgroup mean of 5.39 ($SD = 1.07$). However, the fact that the university supervisor subgroup had the lowest standard deviation indicates that

this group had the highest internal consensus of the three on the round one questionnaire.

Of particular interest is the manner in which the university supervisor subgroup responded to the two final Likert-style single response items on the section two portion of the round one survey. Item 54 was a source of particular amazement in that the university supervisor subgroup responded with such surprising unification. When asked if "it is unrealistic to expect an alternative certification program to offer the quality or depth of training received in a university/college-based teacher-training program," all 12 university supervisors responded with the very highest possible response, a "7" (*strongly agree*) rating (*SD* = 0.00). Although not entirely surprising that this subgroup would unanimously vote a top rating since the university is responsible for the teacher-training, administration, and supervision of student teaching, it should be nonetheless assuring to those involved in the process that this particular sample subgroup had such a high degree of confidence in the present system. The US subgroup also had the highest mean on Item 55 (which asked for a quality rating of the present music student teacher practicum). Supervisors had a subgroup mean of 5.83 (*SD* = 0.72) on this item while cooperating teachers averaged a 5.42 (*SD* = 1.31) and student teachers centered on a 5.58 (*SD* = 1.31).

Research Question 3

Research Question Three investigated the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of cooperating teachers. The cooperating teacher subgroup indicated a positive assessment of the music student teaching event as indicated by a mean of 5.39 (*SD* = 1.07) on the round one survey. However, of the three subgroups, they were quite often the lowest rating group on survey items throughout the study, and never the highest. For example, in section one of the round one survey, cooperating teachers had a group mean of 5.39 which, although a positive rating, was the lowest of the three, (US = 5.78 and ST

= 5.88). Also, the group had less internal consensus as evidenced by the highest standard deviation on these two-part items (CT = 1.07, US = 0.94, and ST = 1.02).

On Item 54 of section two in the round one survey (concerning the viability of alternative certification), cooperating teachers were again the lowest rating group with the least consensus (CT = 5.67 [*SD* = 1.50] as compared to US = 7.00 [*SD* = 0.00] and ST = 6.17 [*SD* = 1.11]). Although still a positive rating (*M* = 5.67), the cooperating teachers' response to this item was the lowest of the three, indicating a less confidence in the present system in place than the other two subgroups.

In like manner, the cooperating teachers' mean response on the assessment of the quality of present music student teaching (Item 55 on the round one survey) was again the lowest at 5.42. This result compares to a subgroup mean of 5.58 for student teachers and 5.83 for university supervisors.

Although the cooperating teachers rated items toward the positive end of the seven-point Likert scale, it was easy to detect more discontent with the system by this subgroup when compared to the other two. Item 55, which asked for written responses related to perceived areas in need of improvement, reinforced this premise. This will be discussed in more detail under the heading of Research Question Six in this chapter.

Research Question 4

The fourth research question probed the perceived level of success and effectiveness of today's music student teaching practicum in Texas from the perspective of recent student teachers. The student teacher group might be expected to lack the experience and knowledge needed to comprehend the survey items with the depth of understanding possessed by the other two subgroups. It is most certainly a correct assumption that the student teacher subgroup lacked the experience of the other two subgroups, each comprised of experienced professionals. However, the results of this

study may suggest the possibility that they might have learned more than expected during the process of teacher-training and student teaching. There were no comments at any point in the survey process concerning any perceived lack of understanding of any of the items on either survey by any member of the student teaching subgroup. They were very positive throughout with regard to their attitudes as reflected by item responses. Their assessment of the items tended to be either at the top end of the spectrum or slightly below and never on the bottom of the data spectrum. It was not difficult to ascertain that their personal satisfaction with their own student teaching event (by perusal of the survey data) was markedly positive. In statistical support of this premise, the mean response for the student teacher subgroup on the round one survey was 5.88, the highest of the three subgroups (US = 5.78 and CT = 5.39). The lowest individual mean response rating by this subgroup on all two-part items in round one was a 4.50, the highest being 6.92. The ST subgroup fell in the middle when compared to the other two on both Items 54 (concerning the viability of alternative certification where they were surpassed by the university subgroup) and 55 (an assessment of the quality of current music student teaching, with the university supervisor subgroup again having a higher rating).

If the music education industry were viewed as a business, then it might be of some comfort to those actively involved in the industry to know that the "customers" (in this case, the student teaching subgroup) are obviously pleased with the "product" (student teaching). The statistics and the written comments for Item 55 offer additional support to this concept (see Appendix E).

The few somewhat negative written comments, however, provide an impetus for thought on the subject of improvement of the student teaching process. For example, the use of videotaping in the teacher-training process as well as during the student teaching process was appreciated by those student teachers who had experienced it and desired by

some who were not afforded this opportunity. Previous studies have recommended the use of videotaping as a valuable tool in the music teacher-training and student teaching process (Broyles, 1997; Drafall, 1991; Fant, 1996; Gallant, 1992; Saker, 1982). Perhaps all music student teachers should be offered this valuable training and assessment technique.

Another somewhat negative revelation occurred in the study regarding student teacher placement. It became apparent in the present study that at least one of the student teachers was not comfortable with her "pairing" with the cooperating teacher, giving rise to the importance of careful matching of the student teacher with the mentoring cooperating teacher. Drafall and Grant (1994) had concluded in a recent research that cooperating teachers can be a major influence in the student teacher's passage toward reflective and effective teaching. The researchers stressed that the cooperating teacher's communication approach should match the developmental level of the student teacher. The matching of the student teacher to the appropriate cooperating teacher presently remains the responsibility of the university.

Research Question 5

Research Question Five constituted a search for significant levels of interaction among the opinions of university supervisors, cooperating teachers, and student teachers concerning the perceived level of success of the student teaching practicum. Interaction among the three subgroups, when significantly present, was consistently characterized by a difference between the cooperating teacher subgroup and the other two subgroups. There were no significant differences in sample subgroup mean responses on the "A" items in the round one survey that had dealt with the importance (validity) of the

individual items (see Table 6, p. 105 in Chapter IV). The purpose of the "A" items was to determine their pertinence and validity in relation to the research questions. The mean group response on these items was 6.25 (SD = 0.87) which indicated that the items were, as a whole, valid and pertinent to the subject at hand in the opinions of the respondents. The lowest individual item mean was 4.92, which further supports the preceding statement. Cronbach's alpha for the "A" items was computed to be at the .90 level. All but three of these "A" items (6A, 34A, and 38A) were in consensus (SD = 1.25) in round one and those three unresolved items (SDs > 1.25) reached consensus when re-circulated in round two. Fisher's Least Significant Difference (LSD) post-hoc multiple comparison technique yielded a value of $F(2, 33) = 0.21$, $p < .05$, revealing no significant differences between groups on the round one survey. This result remained unchanged after the round two survey data was analyzed (see Table 12, p. 115).

However, when the "B" items from round one were isolated and tested for statistical significance, it was found that the cooperating teachers' ratings were significantly lower than those by the university teacher subgroup and the student teacher subgroup (as seen in Table 7, p. 106), $F(2, 33) = 11.1$, $p = .01$ in both cases. The "B" items asked for opinions related to the *success* of each item. No significant differences were found between the university supervisor subgroup and the student teacher subgroup. Cronbach's alpha for this "B" item testing was .94.

When the 53 items were tested using data from both "A" and "B" items combined, a Oneway ANOVA using the post-hoc multiple comparison technique of LSD showed results similar to the testing of the "B" items alone. The ratings of the

cooperating teacher subgroup were significantly lower than those of the university supervisor subgroup and the student teacher subgroup as well (shown in Table 5, p. 104), $F(2, 33) = 5.58$, $p = .02$, and $F(2, 33) = 5.58$, $p = .01$ respectively. No significant differences were found between the university supervisors and the student teachers. Cronbach's alpha was reported at the .94 level for this comparison.

These results are not totally surprising when one considers the fact that while the university supervisors and the student teachers have been members of the same institutional entity, and have been for at least the past four years, the cooperating teacher only comes in to the student teaching scenario in the last weeks of the process. Differences of opinion, when viewed from that light, might even be expected. Research (Snyder, 1998) has suggested that student teachers are more likely to incorporate concepts and suggestions given by the university supervisor during student teaching when the two have shared common experiences during the previous teacher-training process. This thread of commonality cannot exist between the student teacher and the cooperating teacher.

The section of the round one survey dealing with the subject of collaboration between the university and the public schools showed positive results. However, written comments, coupled with perusal of data, indicate that perhaps improvement in the relationship between the training institution and the final field-study hosts (cooperating teachers) might require further investigation. This is consistent with the findings and recommendations of previous research on the subject of collaboration (Bowles & Runnels, 1998; Drafall & Grant, 1994; Gregory, 1992; Svengalis, 1992). The possibility

exists that the motivation for cooperating teachers to become involved in the student teaching process may differ from teacher to teacher. Because of this possibility, the expectations of the cooperating teacher will most certainly vary depending upon that motivation. If the main motivating force behind the desire for the cooperating teacher to become involved in the student teaching process is to gain some needed instructional assistance, then the cooperating teacher may have expectations of the student teacher that might be above that which he or she should be expected to deliver. Student teaching must not be seen as some kind of "harvest" of the talents and abilities of the neophyte musician-teacher by cooperating teachers who feel a need for more staff help; instead, it must be more of a time of nurturing and assistance in the development and refinement of the skills of the student teacher. Those cooperating teachers who are able to find joy and satisfaction in the wholesome and rewarding process of bringing the talented neophyte to a higher level should be commended for their attitudes. Their suggestions for improvement would be of a more significant value to the music education industry. Legette (1997) stressed the importance of the cooperating teacher's role in the collaborative process, postulated an implication that "a correlation may exist between the classroom teaching performances and beliefs of cooperating and student teachers" (p. 28), and concluded that in cases where no correlation was found, questions might be raised about the overall effectiveness of the cooperating teacher.

Research Question 6

Research Question Six triggered a search for specific areas of the music student teaching practicum that might be in need of attention or revision. Because of the nature and dynamics of this endeavor, the resolution of this research question involved a slightly more complicated and involved response than the other five questions.

Implications of Ranked Items, Round Two, Section Two

To address Research Question Six, the researcher chose to first investigate the implications of the ranked items in section two of the round two survey. Specific areas of the music student teaching practicum that were perceived as being in need of attention or revision were directly solicited from the respondents in the final open-ended Item (55) in the round one survey. These responses were transcribed and can be seen in Appendix E. These responses were studied and used to fashion the ten items for ranking in section two of the round two survey. Many of the concerns listed by the respondents occurred repeatedly, making the reduction to ten items a fairly simple task. The results of this ranking can be seen in Table 13 (p. 116).

The top-ranked item on this ranking portion of the round two survey indicated that respondents agreed that the music student teacher needs more time during the practicum to improve their rehearsal skills (i.e., more "podium-time"). Perhaps the strangest anomaly here is that the cooperating teachers had the lowest subgroup mean on this item ($M = 3.09$) as seen in Table 16, p. 119, indicating that they felt even more strongly about this item than the other two subgroups (ST, $M = 3.45$, and US, $M = 4.75$). (It should be noted at this point that since this was a ranking item, the lower mean

indicates a higher ranking.) This is particularly enigmatic because the cooperating teachers are the sole determinants of how much actual rehearsal time the student teacher is allowed to have during the student teacher practicum. (Perhaps they think that "other" cooperating teachers are at fault here.)

The second most important area cited in the ranking was the need for expectations of the music student teacher to be more clearly defined prior to the student teaching event. This concept is aligned with the results of a research effort by Bowles and Runnels (1998) where the need for expectations of the music student teacher to be clearly conveyed prior to the event is cited as a recommendation. Respondents in the present study agreed that the setting of common criteria for evaluation, the structure of the practicum, and the procedures to be followed should be more clearly defined and understood by all parties involved. The Bowles and Runnels research concluded that collaborative planning (to include the setting of fixed criteria by which to structure the experience) might provide a more predictable, positive, and successful learning experience for the student teacher. The need for joint-planning and joint-structuring of the music student teaching practicum by the university supervisors and cooperating teachers has been emphasized in research by Gregory, (1992). The importance of goal-setting and effective interaction between university supervisors and cooperating teachers as they structure the student teaching event has been previously researched by Drafall and Grant (1994).

Third in the ranking process was an item which addressed the possible need for classroom management, measurement and media, and content area reading classes to be

taught by music faculty rather than education faculty during the teacher-training process. Since the item was ranked third in importance in the ten-item ranking, it is assumed that this is an important and desirable goal for the music student teacher-training process. The instruction of these classes by qualified music education professionals offers the potential to greatly benefit the music student teacher, who in some cases might have difficulty in relating the course content when it is presented in a format far removed from music teaching. The obvious obstacle might be professorial teaching loads and the possibility of conflicts of interest between education and music faculties where such an arrangement does not currently exist. The possible benefits and improvements for the music student teacher would appear to be meritorious enough to warrant pressing in this direction of change in locations where this arrangement does not currently exist.

The concept of videotaping as a teaching tool is not a recent one and previous research has emphasized the importance of the technique (Broyles, 1997; Drafall, 1991; Snyder, 1998; Teachout, 1997). However, results of the present research indicated that the technique is not used in some areas of this state. This fourth-ranked item stated that "videotaping needs to be used more extensively both in the teacher-training program and the student teaching practicum so that the students can benefit from the feedback and analysis of teaching skills made available by this procedure." An important caution might appear to be that the needed feedback and analysis of teaching skills should be supplied by qualified teaching personnel.

The consideration of extending student teaching to cover an entire semester (rather than just the twelve weeks currently required by SBEC) was ranked fifth. While

this concept might be interesting and appealing to some, the chances for implementation seem remote given the present system of student teaching governance in Texas. The length of the practicum in the state of Texas is ultimately governed by SBEC, and this body has defined a "minimum" length of twelve weeks for the student teaching practicum. Individual university programs are free to extend the time frame past this minimum, but no evidence was available to the researcher to indicate any institutions that have done this or are planning to do so. At some institutions, a course taken concurrently with the student teaching practicum occupies the remaining available weeks of the collegiate semester and involves student teacher meetings during the practicum, making such a change impractical for some. Some of these concurrent courses begin before the university semester starts. Perhaps the concept of lengthening the student teaching practicum might be a future consideration for music educators. The advantage would be that the student teacher would have more time to experience the beginning and end of the public school semester (and therefore all of the organizational and summative procedures that occur) rather than coming in "late" and leaving "early."

The remaining five items which were ranked somewhat lower in the ten-item section included, in their hierarchical order:

(6) improvement in the aural-diagnostic skills of student teachers

(7) more field experience needed prior to student teaching

(8) the importance of matching of student teacher to cooperating teacher

(9) more music technology instruction needed in the teacher-training curriculum

(10) inclusion of non-western music in the teacher-training curriculum.

Of these last five items receiving a comparatively less important rating, number six might warrant more acknowledgement than the others because the university supervisor subgroup rated the item in first place with a subgroup mean of 4.33 (see Table 16, pp. 119-120). The other two subgroups did not share this opinion -- the CT rank ranked the item seventh ($M = 5.91$) while the ST ranked it eighth ($M = 6.00$). Cooperating and student teachers did not share the opinion of the university supervisors on this item that stated that "the teacher-training program should be scrutinized to address improvements in the area of aural-diagnostic skills of the music student teacher." Recent research has indicated that few differences existed between preservice and expert teachers with regard to aural-diagnostic and prescriptive approaches for ensemble performance problems (Doerksen, 1999). In like manner, Sheldon's research (2000) concluded that the level of teaching experience did not seem to affect subject response on items related to aural-diagnostic skills. However, Goolsby (1999) discovered that though novice teachers used much more time to rehearse a band piece for performance, the expert teachers' performances were evaluated to be superior to those by the novice teachers. Although the CT subgroup and the ST subgroup in the present study did not rate this item highly enough to indicate strong importance to them, the fact that the US subgroup ranked it first suggests further investigation may be needed. Present research on the topic, having inconclusive and conflicting results, indicates that more study is needed to resolve this issue.

The last two ranked items in section two of the second round might appear to be somewhat an enigma. The ninth-ranked item dealt with the need for music technology to

be more fully addressed in the teacher-training curriculum. Music technology has mushroomed in the last decade, and the success of the future music educator will more than likely depend on his or her ability to have knowledge of the latest resources available for instruction. Perhaps it is assumed by the sample that much of this knowledge is either (a) presently being taught in a systematic and up-to-date manner or (b) acquired by the enterprising neophyte who has the wherewithal to realize its value and the initiative to learn the technology on his or her own volition.

The tenth-ranked item regarding the need for more fully addressing non-western music in the teacher-training process might represent a degree of disappointment for those institutions harboring a high regard for NASM ideals. NASM has advocated the inclusion of non-western music instruction in the curriculum for all music degrees and has done so for the past decade. Respondents in the present survey did not embrace this concept. The popularity of new age music, which draws heavily on non-western sources, coupled with the current widespread interest in world music gives relevance to the importance of the premise. However, Texas music educators, as represented by this sample, seem to hold to the premise that the western-based music instruction process, time-tested and firmly in place, is sufficient for the task at hand (with regard to the preparation of future music educators for the public schools). Perhaps the continual upgrading and additions to current state-prescribed music listings (i.e., the annual U. I. L. Prescribed Music List) are accomplishing the inclusion of non-western music in our educational process at a rate commensurate with the desires of most educators.

Seven Items Failing to Reach Consensus

The seven items which defied the resolution of consensus in the round two survey also have the potential to suggest specific areas in need of improvement. The first (Item 35B) concerned the success of implementation of course-work involving the application of modern electronic technologies. This item received a *success* rating of 4.17 although the standard deviation (an indication of agreement/disagreement) was 1.40, well above the 1.25 mark set for consensus. This mid-point score of 4.17 indicates that the group was not clear, positively or negatively, on the successful implementation of technology instruction for music student teachers. In the ten-item ranking, the application of modern electronic technology was rated next to last, indicating a lack of perceived importance by the subjects involved in the study. In the present age of technological emphasis, it would appear that further investigation of this perceived need is warranted. The study showed that while the respondents agreed that technology training was important, they were unsure as to the success of its implementation.

The second unresolved item (36B) dealt with the need for university music education instructors to have had public school music teaching experience. Of the seven unresolved items, this item had the highest mean rating (5.78) indicating that respondents perceived that this was a concept which was being successfully attended to (owing to the manner in which the item was phrased). However, the standard deviation of 1.33 on the item might indicate that this has not been the case in the experience of some respondents. It is interesting to note that cooperating teachers rated this item the lowest of the three

subgroups ($M = 5.00$), student teachers in the middle ($M = 5.92$), and university supervisors, the highest ($M = 6.42$).

The third item (37B) defying resolution concerned respondents' opinions regarding the successful use of videotaping as a valuable tool for analyzing and fostering skills development of the student teacher during the music teacher training process. This item, coupled with the next (38B) pertaining to the use of videotaping during the supervision of student teaching, could not be resolved in the round two survey. Both items received *success* ratings in the "4" region of the seven-point scale (37B = 4.31, and 38B = 4.03) indicating a somewhat neutral assessment of successful implementation; however, the data showed a rather large difference of opinion on these items as indicated by the standard deviations (37B = 1.47, and 38B = 1.58). By assessing this data in tandem with observation of the supplied written comments, the researcher came to the realization that many music student teacher programs do indeed currently use videotaping as an instructional tool with an apparent degree of success. However, others do not employ the technique. This disparity might account for the lack of consensus on these two items. The concept of videotaping as a teaching tool is not a recent one, and previous research has emphasized the importance of the technique (Broyles, 1997; Drafall, 1991; Snyder, 1998; Teachout, 1997). Those presently not taking advantage of videotaping would probably do well to consider the implementation of this valuable technique.

Also related to the previous two videotaping items, respondents were unable to come to a consensus on Item 39B, "supervised videotape analyses strengthen the music student teacher's 'teacher identity,' increases their commitment to refining teaching tasks

and skill, and enhances their concern for pupil learning." The perception of the success of this item was neither positive nor negative with a mean response of 4.03 (*SD* = 1.52). The group had reached consensus on the "A" portion of this item in the round one survey with a mean response of 6.17 (*SD* = 1.00) indicating a consensus for a high degree of perceived importance of the item. In other words, respondents agreed that this was a valid concern but could not agree as to the success of its implementation in the music student teaching process. This lack of agreement might stem from the fact that some training programs are presently using the videotaping technique, and some are not. This would have a tendency to skew responses accordingly, making consensus virtually unobtainable for this item.

Item 41 stated that "university supervising teachers should convene meetings throughout the student teaching experience in which student teachers gather to discuss and share experiences." Respondents had come to a consensus that Item 41A was a valid concern in the round one survey as indicated by a group mean of 6.31 (*SD* = 1.00). However, the "B" portion of the item failed consensus on round one with a mean of 5.14 (*SD* = 1.61) and was not able to be resolved in the round two survey either, with a mean of 5.08 (*SD* = 1.36). Bowles and Runnels (1998) had recommended regular meetings for student teachers during the practicum as a valuable tool that would encourage assimilation of recently learned teaching concepts. It was discovered through the supplied written comments that this item is attended to in many different fashions throughout the state and not done at all in some areas. Some respondents mentioned bi-weekly meetings, some indicated one meeting during the practicum, some indicated that they had two

meetings, and so on. Perhaps some statewide standardization of this procedure is needed to assure that music student teachers receive the benefits of this opportunity for educational growth and assimilation since the sample agreed that it is a valid concept. Music educators might be wise to strive to initiate some logical standardization while it is still within their power to do so (before being instructed to do so by some higher authority, i.e., SBEC).

The final unresolved item was number 48, "all members of the music student teacher triad…should be evaluated at the end of the practicum." This item received consensus (*SD* = 0.90) on the "A" portion with a mean response of 6.19, but failed to reach consensus on the "B" portion in round one (*SD* = 1.66) with a mean response of 4.64. On the second round survey, the mean rose to 4.92 although the standard deviation of 1.44 kept the item from reaching consensus. Respondents thought the item was extremely important but could not agree on the success of its implementation, even after reconsideration. As before, music educators should act to standardize evaluation of all parties of the student teaching triad to promote an atmosphere of personal professional improvement by the participating parties. This concept has been supported by existing literature (Bowles & Runnels, 1998; Legette, 1997; Shires, 1990).

Recommendations for Improvement of Music Student Teaching

These recommendations are based on the results of the study with an emphasis on the final ranking of the round two, section two concluding section. Respondents had submitted suggestions for areas in the music student teaching experience perceived to be

in need of attention, revision, or change in a final open-ended item at the conclusion of the round one survey. These items were then studied and fashioned into a concluding ten-item ranking item in the round two survey.

In the opinion of the sample involved in this study, the most pressing need identified was for music student teachers to receive more time during the practicum to improve their rehearsal skills (i.e., more "podium-time"). The development of the neophyte music teacher's rehearsal skills might represent the highest order of the application of theoretical knowledge to a present concrete reality. This skill development would appear to be one of the most important components of music student teaching. Music student teachers must be given adequate time to test theories and principles learned in the teacher training process and learn which techniques work for them, as well as which techniques might need to be learned, refined, or considered. Perhaps improvement in this area might be accomplished by the implementation of the second-ranked item of importance in the present study.

The second-ranked item cited the need for the expectations of the music student teacher to be more clearly defined prior to the student teaching event. The planned allotment of adequate rehearsal time for the student teacher should be one of the facets included in the careful and collaborative structuring of the practicum by the university supervisor and the cooperating teacher. This recommendation is consistent with recommendations of previous research. Bowles and Runnels (1998) recommended that expectations of the music student teacher need to be clearly conveyed prior to the event. Gregory (1992) emphasized a need for more joint-planning and joint-structuring by the

university supervisors and cooperating teaches in his research. Drafall and Grant (1994) conveyed very similar research results. Respondents in the present study agreed that the setting of common criteria for evaluation, the structure of the practicum, and the procedures to be followed should be more clearly defined and understood by all parties involved. This collaborative planning should provide a more predictable, positive, and successful learning experience for the student teacher.

Another concern raised on the subject of collaboration involves evaluation. Perhaps Texas music educators need to address the possibility of standardization of evaluation for all parties at the end of the practicum. Some respondents indicated that they were aware that evaluations were used for all involved, others reported evaluations for some but not for all, and others were unaware of any evaluation procedure. It could be that evaluations are executed in some cases but those evaluated are not given the benefit of any feedback in the process. A standardized procedure might help strengthen the music student teaching process by supplying all participants the benefit of feedback, affording the individual an opportunity to improve and adjust their role in the process. Previous research has revealed that there is a trend toward the evaluation of all members of the student teaching triad (Bowles & Runnels, 1998; Legette, 1997; Shires, 1990). Music educators in Texas should strive to capture the benefits that the evaluation of all parties could bring to the student teaching event by striving to standardize this important procedure statewide.

If the senior-level teacher-training courses involving classroom management, measurement and media, and content area reading could be taught by members of the

music faculty (rather than education faculty), then the training received by the music student teacher in these courses would be greatly improved in both validity and applicability. Respondents ranked this topic third in the ranking of areas needing improvement in music student teaching. At present, there appears to be no uniformity statewide concerning this issue, and institutions vary widely with regard to the assignment of music and education faculties to these courses. The possible benefits and improvements for the music student teaching practicum would indicate that music education faculty (and music administrators) should strive to arrange for these classes to be taught by qualified music faculty personnel on campuses where this arrangement does not exist.

Respondents agreed that "videotaping needs to be used more extensively both in the teacher-training program and the student teaching practicum so that the students can benefit from the feedback and analysis of teaching skills made available by this procedure." This item, ranked fourth in importance, is not a new or recent one and previous research has emphasized its importance (Broyles, 1997; Drafall, 1991; Snyder, 1998; Teachout, 1997). Results of the present study indicate that the technique is not used in some areas of the state. The music education industry has a reputation for striving to remain on the "cutting edge" in all facets of research and instruction directly related to the profession. With recent refinements in the field of video equipment, coupled with lowered costs of the equipment due to advancements in technology, the implementation of videotaping would appear to be more viable and accessible for those not presently using the technique than ever before and therefore is strongly recommended. It is

cautioned that purchase of the equipment alone does not constitute the completion of the goal but only the means to a more desirable outcome. Perhaps the most important aspect of the implementation of videotaping is the feedback and analysis given to the student by qualified music faculty enabling the student to gain the full benefit of the procedure.

The concept of extending the length of the student teaching practicum was ranked fifth by the respondents in this study. While this concept might be interesting and appealing to some, the chances for statewide implementation might be rather remote given the present system of student teaching governance afforded by SBEC. This state board currently requires a minimum of 12 weeks for the student teaching practicum. Any lengthening of the practicum at present would be a local decision. The advantage of adding extra time to the practicum would be that the student teacher would then have more time to experience the beginning and/or end of the public school semester and therefore all of the organizational and summative procedures that occur during this important time, rather than coming to the campuses two or three weeks into the semester and leaving before the end of the public school term. Student teachers would be afforded the opportunity to observe and participate first-hand, getting a truer picture of the entire teaching process from beginning to end and therefore benefiting from the knowledge of those procedures at both the onset and conclusion of the semesterly teaching endeavor. It is recommended that music education faculty study this option at the local level and consider implementation of additional time for the practicum.

Since the remaining five ranked items were not as important to the sample, as indicated by the survey responses, the researcher is reticent to make any hard-line

recommendations based on their content. However, the sixth-ranked item should be mentioned for consideration based on the merit that the university supervisors ranked the item first (as seen in Table 14, p. 117). This item stated that the teacher-training program should be scrutinized to address improvement in the area of aural-diagnostic skills of the music student teacher. Apparently, the university supervisors thought that this was the most important item in need of improvement, while the cooperating teachers rated the item seventh, and the student teachers eighth. Perhaps the university supervisors tended to have a totally different perspective on the criteria used to assess aural-diagnostic skills. They may have had a tendency to expect more of their students than the cooperating teachers or the students themselves. The fact that the university supervisors are the representatives of the teacher-training institution and are responsible for the successful administration and grading of the student teaching event as well gives credence to their contrasting opinion. In tandem with this issue, extant literature related to aural-diagnostic skills of student teachers was found to be somewhat mixed in outcome and contradictory in nature. Recent research has indicated that little differences existed between preservice and expert teachers with regard to aural-diagnostic and prescriptive approaches for ensemble performance problems (Doerksen, 1999). Sheldon's research (2000) concluded that the level of teaching experience did not seem to affect subject response on items related to aural-diagnostic skills. However, Goolsby (1999) discovered that though novice teachers used much more time to rehearse a band piece for performance, the expert teachers' performances were evaluated to be superior to those by the novice teachers. Although the CT subgroup and the ST subgroup in the present study did not rate

this item highly enough to indicate strong importance to them, the fact that the US subgroup ranked it first might indicate a justification for at least some degree of consideration for improvement.

The seventh-ranked item recommended the implementation of more field experience in the music teacher preparation curriculum prior to student teaching. This researcher surmises that this item was ranked seventh more than likely because of mixed implementation throughout the state. In areas where field experience prior to student teaching is lacking, this would most certainly be an area that needs attention in that locale, whereas in areas where the practice of early and frequent field experience is routinely utilized, it would not be expected to be a priority.

In like manner, the eighth-ranked item might have been ranked lower because of inequities of implementation throughout the state. The item stated that "student teachers need to be more carefully matched with successful cooperating teachers by university personnel who have the opportunity to know the strengths, weaknesses, and personalities of both." This is obviously an important issue but most likely surfaces only as a problem when student teaching assignments are made without consideration of these factors. Evidently the concept is successfully implemented in most areas of the state, at least most of the time. In actuality, if student teachers did not relate well to their cooperating teacher and therefore did not enjoy the student teaching experience, then this item would most certainly become an important issue in their perception. The majority of successful student teachers who were satisfied with their student teaching experience and enjoyed their time with the cooperating teacher will most likely not perceive this item as an

important issue. It is noted that this item relates directly to the second-ranked item that dealt with the need for adequate collaboration in an effort to properly structure and organize the student teaching event. The university personnel responsible for student teacher assignment for the practicum, whether the university supervisor or perhaps a director of field studies, is directly and ultimately responsible for this important assignment decision and the ensuing outcome of the relationship between the student teacher and the cooperating teacher.

The researcher also presumes that the ninth-ranked item was not ranked higher because of a mixed degree of implementation across the state. Evidently, teacher-training programs where adequate course-work and training in music technology is offered probably outnumber those programs offering little or no music technology in the curriculum. Teacher-training universities and colleges should continually strive to remain abreast with technological advancements related to music education and ensure that the students are given an opportunity to learn the skills necessary to efficiently employ the latest technologies in their classrooms and rehearsals for the ultimate benefit of the teacher and student alike.

The tenth-ranked item concerned the need for non-western music to be more fully addressed in the teacher-training curriculum. Teaching non-western music at the university level has been strongly advocated by NASM throughout the last decade. However, Texas music educators (as represented by the present sample) seem to hold to the premise that the western-based music instruction process presently employed is

sufficient for the teacher-preparation curriculum. Therefore, no recommendation is made in regard to this item.

Recommendations for Further Study

These recommendations are based on the results of the present study with an emphasis on the final ranking of the round two, section two concluding item. Respondents submitted suggestions for areas in the music student teaching experience perceived to be in need of attention, revision, or change in a final open-ended item at the conclusion of the round one survey. These items were then studied and fashioned into a concluding ten-item ranking section in the round two survey. The importance of the relationship between these items and existing literature is the impetus for the formulation of possible future research areas and topics.

For example, the importance of adequate time for the development of rehearsal skills during the music student teaching practicum was cited as the single most important issue in need of improvement by the respondents in this study. Previous literature based primarily on competency skills has cited the development of rehearsal skills as an important factor (Byo, 1997; Jennings, 1988; Wolf, 1972). Raiman (1975) identifies and lists this quality in his research related to the classification of competencies for music student teachers. The subject of adequate rehearsal opportunity for the purpose of rehearsal skill development is cited as an important component of the student teaching practicum by Bowles and Runnels (1998). However, no studies were found that made a statistically-supported effort to affirm the benefit of adequate rehearsal opportunities for

the student teacher during the student teaching practicum. A study could be undertaken that would record the total rehearsal time conducted by the student teacher and relate that data to the success of the student teacher, as determined by the perception of the (a) student teacher, (b) cooperating teacher, (b) supervising teacher, or (d) all three participants of the student teaching triad.

The understanding of the expectations of the music student teacher during the practicum, the setting of common criteria for evaluation, the structure of the practicum, and the procedures to be followed were all considered to be very important issues in the present study. Extant literature reinforced this premise and was reported in Chapter II under the heading of Collaboration (p. 15). In summary, literature was found that illuminated the understanding of the concept of collaboration (Gregory, 1992; Drafall & Grant, 1994). Attitudes of music student teachers, cooperating teachers, and university teachers and how they affect the music student practicum have been recently addressed (Bowles & Runnels, 1998), and it has been suggested that collaborative planning might provide a more positive and successful learning experience for the student teacher. Svengalis (1992) noted that the successful collaboration of the university and public school benefits all parties, referring to these collaborations as *partnerships*. Gregory (1992) identified a collaborative problem related to the dominance of the university in the normal collaborative effort. The need for more collaborative projects where public school teachers have a co-equal status with the university teachers was the result of research by Warren (1989). Stroker (1993) investigated relationships of the music student teaching triad by comparing the thinking styles of the university supervisor and the cooperating

teacher. Collaboration of efforts was cited as a need in the development of role identity of the student teacher (Snyder, 1998). Because the concept of collaboration is so complex in its structure, future research on the subject will be an ongoing need and is highly recommended. As conditions change over time, current research dealing with collaboration will always be needed in order to keep the music education profession abreast with the times.

Although classroom management skills have been a recurrent topic of research (Saker, 1992; Snyder, 1998; Terry, 1991), the recommendation that classroom management, measurement and media, and content area reading classes be taught by qualified music faculty was made without the benefit of support from extant research. Research is needed to support this concept. A study designed to present comparative data between these classes taught by (a) music faculty and (b) education faculty would have the potential to promote the implementation of the concept.

Related research literature contains studies showing the viability of using videotape procedures in both the teacher-training process and the student teaching practicum as well (Broyles, 1997; Saker, 1992; Snyder, 1998). However, more studies are needed which might illuminate the importance using modern electronic media and computer programs which the music teachers of the future will need to understand and use. Innovative studies involving the use of DVDs, Powerpoint, Finale, virtual reality, and so on, would be valuable to the music education community.

Research is needed to reinforce the value of early and frequent field experiences during the teacher-training process. It became apparent during this study that some areas

of the state may not offer as much field experience opportunities as some others prior to student teaching. Although Fant (1996) conducted a study which emphasized the value of early field experiences, a more comprehensive and current study showing the advantages of adequate, or even enriched, field experiences prior to student teaching is needed. By contrasting a group with enriched field study experience with a control group with minimal field experience, the importance of field experience and how it relates to a more successful student teaching practicum could be shown.

Respondents in the present study indicated a desire for the length of the music student teaching practicum to be extended. Research supporting this proposal would certainly be welcomed by those who desire it, but this researcher is at a loss to be able to envision such research under present conditions. SBEC mandates that the student teaching practicum run a minimum of twelve weeks, and the twelve-week practicum seems to be the norm across the state. Given the current misalignment of beginning and ending dates existing between the public schools and the universities, the prospect of setting up an experimental lengthened practicum that would remain a viable option for those bound by the university schedule might prove to be very difficult if not impossible. If such an experiment could be done and properly researched during the process, the results would be valuable to the music education community.

Perhaps the most significant result of the present study was the discovery that the cooperating teachers in the sample did not possess as high an opinion of music student teaching in Texas as did the other two subgroups. This is most likely a product of unsuccessful collaborative efforts. One of the most important dynamics of collaboration

revealed by this study was the role of the cooperating teacher. Legette (1997) has affirmed the importance of the cooperating teachers' role in the music student teaching event. Fenton and Rudgers (1988) identified pertinent qualities of cooperating teachers. However, further study is needed to assess possible improvements or recommendations with regard to strengthening the cooperating teacher's role and the ultimate positioning of the cooperating teacher in the structure of the music student teaching paradigm. Study results indicated that the cooperating teachers were not as satisfied with the music student teaching event as the other two subgroups. More research targeting improvement of this shortcoming is needed. Although the opinions expressed by the cooperating teachers were positive, they were often significantly lower than the other subgroups. Studies have shown the value and importance of collaboration between the university and the public schools, while emphasizing the role of the cooperating teacher within this relationship (Bowles & Runnels, 1998; Fenton & Rudgers, 1988; Gregory, 1992; Legette, 1997). Some research has specifically shown the value of collaboration based on decision sharing and equality with regard to the relationship between the university and the cooperating teacher (Warren, 1989). Further research is needed that would investigate and better define the cooperating teacher's role in the music student teaching process and possibly suggest or recommend methods that would foster a more positive appreciation of the music student teaching event by the cooperating teachers, enabling the cooperating teachers to reach the level of satisfaction demonstrated by the university supervisors and student teachers in this study.

Taken in sum, this study has shown that music student teaching is held in high regard by those involved in the process. The student teaching triad possesses very positive feelings about the worth and value of the practicum and reflects a high level of confidence in the system. However, there is room for improvement. The study revealed that cooperating teachers do not have as high a regard for the student teaching process as the other members of the triad, according to the sample. Collaborative steps should be taken to improve the relationship between the university and the public school and therefore cultivate a higher regard of the student teaching event by the cooperating teacher. Cooperating teachers should be made to feel more a part of the process by being allowed more interaction in decision-making, training, and evaluation. For example, they should be included in planning sessions involving procedures and policies governing student teaching, they should be invited to serve as guest lecturers and used as resource faculty in music education methods classes, and they could be consulted concerning the evaluation procedures to be used in the student teaching practicum.

The study also recommended that the following improvements should be made in music student teaching:

1. Adequate rehearsal time should be given to the student teacher during the practicum.
2. Expectations of the student teacher should be clearly articulated prior to the practicum.
3. Classroom management, measurement and media, and content area reading classes should be taught by qualified music department faculty.

4. Feedback and analysis of videotaping should be a standard procedure used in the teacher-training and student teaching process.
5. Extension of the twelve-week student teaching practicum should be considered.

Other recommendations of a less pressing nature include: (a) improvement of the aural-diagnostic skills of student teachers, (b) more field experience prior to student teaching, (c) careful matching of the student teacher to the cooperating teacher, (d) adequate implementation of music technology in the teacher-training curriculum, and (e) inclusion of non-western music in the teacher-training curriculum. Further research that would address these needs and make recommendations for improvement should be undertaken, for such study would prove beneficial to the music education community.

APPENDIX A

NATIONAL ASSOCIATION OF SCHOOLS OF MUSIC, TEXAS LISTING

Table A1.

National Association of Schools of Music accredited institutional members (as of 12/12/2001) in the State of Texas (34 total listings) Divided into Geographical Regions

North Region		
Amarillo College	Amarillo	TX
Baylor University	Waco	TX
Midwestern State University	Wichita Falls	TX
Southern Methodist University	Dallas	TX
Southwestern Baptist Theological Seminary	Fort Worth	TX
Tarleton State University	Stephenville	TX
Texas Christian University	Fort Worth	TX
Texas Wesleyan University	Fort Worth	TX
Texas Woman's University	Denton	TX
University of North Texas	Denton	TX
University of Texas, Arlington	Arlington	TX
South Region		
Del Mar College	Corpus Christi	TX
Saint Mary's University of San Antonio	San Antonio	TX
Southwest Texas State University	San Marcos	TX
Southwestern University	Georgetown	TX
Texas A&M University - Corpus Christi	Corpus Christi	TX
Texas A&M University - Kingsville	Kingsville	TX

Trinity University	San Antonio	TX
University of Texas, Austin	Austin	TX
University of Texas, San Antonio	San Antonio	TX
East Region		
East Texas Baptist University	Marshall	TX
Lamar University	Beaumont	TX
Sam Houston State University	Huntsville	TX
Stephen F. Austin State University	Nacogdoches	TX
Texas A&M University - Commerce	Commerce	TX
University of Houston	Houston	TX
West Region		
Abilene Christian University	Abilene	TX
Angelo State University	San Angelo	TX
Hardin Simmons University	Abilene	TX
Howard Payne University	Brownwood	TX
Odessa College	Odessa	TX
Texas Tech University	Lubbock	TX
University of Texas, El Paso	El Paso	TX
West Texas A&M University	Canyon	TX

APPENDIX B

COVER LETTER

The Texas 2001 Delphi Assessment of Music Student Teaching Research Group

Dear Fellow Texas Music Educator,

I hereby take this opportunity to formally invite you to participate in **"The Texas 2001 Delphi Assessment of Music Student Teaching Research Group."** Since you have been actively involved in the capacity of *(university supervisor, cooperating teacher, or student teacher)*, I am keenly interested in your opinion on several items concerning the welfare and success of the music student teaching practicum in the State of Texas. I am reasonably sure that you share an interest in the welfare of teacher training in our profession. You were selected for this study based on your obvious commitment to the profession and evidence of excellence as a *(university supervisor, cooperating teacher, or recent student teacher)*.

The two-fold purpose of this research group is (a) to investigate the music student teaching practicum in the state of Texas in an effort to establish current levels of success as perceived by the music educators involved in the process, and (b) to identify any potentially problematic areas which might be in need of attention or revision. The information gathered in this study should be of critical interest to the music education community at large.

In order to accomplish this task, a two-round Delphi procedure will be used. The Delphi research method involves the use of selected "experts" who respond to repeated questionnaires on the subject of their expertise. In that respect, it's like serving on a committee that never meets. In the first questionnaire you will be asked to respond to 54 items which deal with music student teaching. This procedure should only take 25-30 minutes of your time to complete. The second round questionnaire will show your response compared to the group (all participants') response on each item and you will be given the opportunity to adjust your response if you so desire based on that information. By using this Delphi procedure, we should be able to achieve a group consensus on most items. You will receive a copy of the results at the end of the study.

Your active participation as a member of **"The Texas 2001 Delphi Assessment of Music Student Teaching Research Group"** constitutes a legitimate addition to your resume as a professional activity. Thank you in advance for agreeing to participate in this study. Your professional commitment to the vitality of our profession through the time and effort you give is to be commended. Because of the nature of this Delphi study, it is extremely important that every participant completes BOTH questionnaires, so I am asking for your commitment to do so. This is not a study where a large number of participants are involved. You are a member of an exclusive panel of only 36 "experts" on the subject of music student teaching! Your participation is crucial to the success of the study and greatly appreciated.

Please read and sign the consent form (a necessary formality) on the next page and return it along with the round one Delphi Questionnaire in the enclosed envelope.

Sincerely,

Rodney M. Cannon,
Professor of Music
Sam Houston State University

APPENDIX C

RESEARCH CONSENT FORM

RESEARCH CONSENT FORM:

This research study has been reviewed and approved by the University of North Texas Committee for the Protection of Human Subjects (940) 565-3940. The UNT faculty sponsor for this research project is Dr. Darhyl S. Ramsey, College of Music, (940) 565-3749.

I have read the cover letter explaining this research and understand the purpose and procedures involved and my role in the process. I understand that there are no risks involved and that my confidentiality is to be safeguarded by the researcher at all times. I understand that Rod Cannon will answer any questions that I might have during the course of the study. I also understand that I do not have to take part in this study, and my refusal to participate will involve no penalty or loss of rights to which I am entitled. I may withdraw at any time without penalty or loss of benefits to which I am entitled. The researcher can stop my participation at any time if it appears to be harmful to me, if I fail to follow directions for participation in the study, if it is discovered that I do not meet the study requirements, or if the study is canceled.

In case there are problems or questions, I have been informed that I can call Rod Cannon at telephone number (936) 295-3673.

FOR THE PARTICIPANT:
I understand my rights as a research subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I will receive a signed copy of this consent form.

_____ _____
Subject Signature Date

FOR THE RESEARCHER:
I certify that I have reviewed the contents of this form with the person signing above, who, in my opinion, understood the explanation. I have explained the known benefits and risks of the research.

_____ _____
Rodney M. Cannon (researcher) Date

Code #_____

APPROVED BY THE UNT IRB
FROM 9/6/01 TO 9/5/02

APPENDIX D

ROUND ONE QUESTIONNAIRE

The Texas 2001 Delphi Assessment of Music Student Teaching Research Project

Round One Questionnaire
November 2001

Name:_____ **Note: You will remain anonymous throughout this study. However, in order for the researcher to supply the proper feedback and communicate with you during the Delphi process, I will need to know your identity. Names will be deleted before all data are stored and/or made public.*

Note to respondents: *Please place an "X" in the appropriate blank indicating that your area of expertise results from your recent experience as a:*
_____university supervisor _____cooperating teacher _____student teacher

What is your "principle" area: _____ Band _____Choir _____Orchestra _____Keyboard _____General Music
****

Directions: Circle the number corresponding to your answer-choices for each question. Your (entirely optional) comments are invited at the end of each section and will be considered for inclusion in the Round Two Questionnaire. Please keep all comments brief, and to-the-point.) If you do not understand the question, cannot decide on an answer, or simply have no opinion, then circle number four (Undecided/no opinion).

SECTION I

A. Issues of Collaboration

A. Collaboration between the university/college and the public school is a critical factor in the success of the music student teaching practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

A. Collaborative efforts between the universities/colleges and the public schools involved in the music student teaching practicum should create an atmosphere conducive to the accomplishment of desired teacher training goals.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

A. An efficient and amiable working relationship between the university supervisor and the cooperating teacher is critical to the success and welfare of music student teaching.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

B. Collaborative planning provides a more predictable, positive, and successful learning experience for the student teacher.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

5. Collaborative efforts, as they now exist, should become less university/college-dominated, and assume a more co-equal framework with regard to the relationships formed with the public schools.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching

practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

6. Seminars for university supervisors and cooperating teachers provide a means of achieving commonalties in collaborative efforts and thereby increase the overall efficiency of the music student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

7. Collaborative efforts, as they now exist, may appear to be university/college-dominated (at the expense of the public school participants) simply because the ultimate responsibility/accountability for teacher training, by design, falls into the domain of the university/college.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

8. Collaboration might be improved by reaching an agreement prior to the beginning of student teaching on the following points:

(1) when the student teacher will begin teaching
(2) how long the student teacher should have full responsibility and for what portion of the day
(3) under what conditions the cooperating teacher should be in or out of the classroom when the student teacher has instructional responsibility
(4) for which teaching segments the student teacher should submit lesson plans and how much direction the student teacher should have in developing lesson plans
(5) how the student teacher will handle behavior problems
(6) under what conditions the cooperating teacher and supervisor should intervene

(7) when the student teacher is responsible for instruction
(8) how much responsibility the student teacher should have for performances
(9) how much responsibility the student teacher should have in relating to parents and students
(10) how deficiencies in student teacher preparation and performance should be reported and corrected

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments on Issues of Collaboration:

B. Issues of Competency

9. Student teachers must be adequately trained and knowledgeable concerning the required competencies needed to begin the student teaching practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

10. Student teachers must be given an opportunity to build on knowledge and competencies learned in their university training and to improve competencies during the student teaching experience.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

11. Music student teachers must demonstrate adequate musical understanding throughout the course of the student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

12. The aural-diagnostic and prescriptive skills of the music student teacher must be at a developmental level adequate to the needs and demands of the modern public school ensemble encountered in the student teaching practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

13. Music student teachers must demonstrate the ability to construct and carry out lesson plans during the student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

14. The occurrence of typically large classes for the music student teacher emphasizes the need for a solid foundation in classroom management techniques during teacher training.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

15. The following classroom management techniques should be stressed to music student teachers during the practicum:

1. Creating a structured classroom environment (including chair/stand set-up)
2. Establishing classroom rules from the first day of class
3. Being consistent in the application and follow-up of these rules
4. Creating opening routines for the students
5. Pacing activities to allow for maximum time on task with students
6. Maintain teacher eye contact
7. Using nonverbal and verbal cues to regain student attention
8. Stopping unnecessary student talking and disruptions early

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

16. Although classroom management attitudes and skills of the student teacher may differ from those of the cooperating teacher, this factor is not necessarily detrimental to the success of the student teacher in the practicum setting.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

17. Music student teachers should be able to demonstrate an adequate level of confidence throughout the student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

18. The personality of the music student teacher plays a major role in the success of his/her practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

19. Music student teachers tend to accept or reject techniques that will or will not work for them, according to their personalities.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

20. Student teachers experience an on-going development of perceiving themselves as musicians and educators, and the student teaching event should foster a healthy balance in the duality of this personal perception.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

21. The student teacher's personal history (course work, role-models, public school experience, parental influence, etc.) has a great influence on the approach to classroom management.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

22. Development of the student teacher's personal identity as a music teacher is a critical and ongoing component of the student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

23. A correlation may exist between the classroom teaching performance of the student teacher and the beliefs about teaching shared by the cooperating teacher and the student teacher.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

24. Self-efficacy of music student teachers (how they feel about themselves) and ratings of teaching effectiveness by supervising/cooperating teachers are most likely highly correlated.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

25. Student teachers should have a clear mental picture of effective teaching prior to the student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments on Issues of Competency:

C. Issues of Curriculum

26. The teacher-training curriculum for the music student teacher is adequate and relevant to the needs of the student teacher.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

27. Music student teachers should receive an adequate philosophical foundation for teaching prior to the student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

28. Evaluation of curricular priorities and the flexibility to change if necessary are key elements to the success of music student teaching and the vitality of the profession.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

29. The music teacher-training curriculum is evaluated and revised regularly to reflect the intent and desires of the music education community for the continued success of music student teachers.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

30. Music student teachers should receive early field experiences in their teacher-training curriculum prior to student teaching.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

31. Classroom management skills should be taught by qualified music department personnel who have experience in dealing with large ensembles and classes similar to those encountered by the music student teacher.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

32. Content-area reading skills should be taught by music department personnel and feature curricula pertinent to the music teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

33. The optimal length set (mandated) by SBEC for the student teaching practicum has been established to be a minimum of 12 weeks.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

34. Multiculturalism (training in non-Western musics) is presently included at an appropriate level in the teacher training process.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

35. Course-work covering the application of modern electronic technologies indigenous to the music field should be included in the music teacher-training curriculum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

36. It is most desirable for university methods instructors to have had public school teaching experience.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

37. Videotaping is a valuable tool for analyzing and fostering skill development of the student teacher during the music teacher training process.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments on Issues of Curriculum:

D. Issues of Supervision

38. Videotaping is a valuable aid in the supervision procedures used by university supervisors and cooperating teachers during the music student teaching practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

39. Supervised videotape analyses strengthen the music student teacher's "teacher identity," increases their commitment to refining teaching tasks and skills, and enhances their concern for pupil learning.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

40. The music student teacher should receive regular and adequate supervision from the university supervisor during the practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

41. University supervising teachers should convene meetings throughout the student teaching experience in which student teachers gather to discuss and share experiences.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

42. The supervising and cooperating teachers should have fixed criteria by which to structure, administer, and evaluate the student teaching experience.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

43. The music student teacher should receive regular and adequate supervision from the cooperating teacher during the practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

44. New cooperating teachers should participate in a training session to prime them for their role in the student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

45. The most important instructional mode of the student teaching experience is the one-on-one conference between the cooperating teacher and the student teacher.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

46. Cooperating teachers should possess:

1. The motivation to invest time and energy into the future of music education
2. Knowledge of classroom management techniques
3. Broad musical repertoire
4. Planning skills
5. High professional standards
6. Ability to plan experiences to build on the student teacher's successes

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

47. Supervision models (such as those espoused by Acheson, Gall, Cogan, McGreal, Glickman) that encourage self-analysis are preferred in the music student teaching practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

48. All members of the music student teacher triad (student teacher, cooperating teacher, and university supervisor) should be evaluated at the end of the practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

49. Supervisors and cooperating teachers must acknowledge the importance of the student teacher's developing role identity and assist in building on what the student teacher has learned in university methods courses.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments on Issue of Supervision:

E. Issues of Environment

50. Music student teachers should be placed into student teaching environments that foster their success in the practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

51. Efforts should be made to assure that the methods of classroom management taught in the university classes are applicable to those needed to succeed in the student teaching school site.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

52. Music student teachers should be afforded the opportunity to acquaint themselves with all dimensions and aspects of the student teaching environment during the practicum, to include performances, trips, planning sessions, teacher meetings, teacher duties, parent conferences, etc.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

53. Care should be taken not to place the music student teacher into a pre-existing problematic situation (with regard to classroom environment), since classroom management skills may not have a realistic chance to develop nor be adequate to handle the instructional situation.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided/ No opinion	Somewhat Important	Important	Very Important

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments on Issues of Environment:

SECTION II

54. It is unrealistic to expect an alternative certification program to offer the quality or depth of training received in a university/college-based teacher-training program.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Midly Disagree	Undecided/ No opinion	Mildly Agree	Agree	Strongly Agree

Comments:

55. Based on your own personal experience and knowledge, would you agree that the overall effectiveness and value of the music student teaching practicum as it now exists is of the highest quality?

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Midly Disagree	Undecided/ No opinion	Mildly Agree	Agree	Strongly Agree

Comments:

56. Please list any areas of the music student teaching experience that you perceive to be in need of attention, revision, or change:

APPENDIX E

ROUND ONE RAW DATA

Table E1.

Raw Data – Round One Survey

	University Supervisors												Cooperating Teachers												Student Teachers											
Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1a.	7	6	7	7	7	7	7	7	7	7	6	7	7	6	5	7	7	6	7	5	7	6	6	7	5	7	7	7	7	7	7	7	7	7	6	6
1b.	5	7	6	6	7	6	5	6	7	6	6	6	5	3	5	5	5	5	6	3	6	3	6	6	5	5	5	6	5	3	5	6	7	6	5	6
2a.	7	7	7	6	7	6	7	6	7	7	7	6	7	7	7	7	7	6	7	5	7	7	6	5	6	7	7	7	7	7	7	7	7	7	6	5
2b.	5	7	6	5	6	5	5	5	4	5	5	6	5	5	6	6	5	5	6	4	6	5	6	5	5	5	6	5	6	6	3	6	7	6	6	5
3a.	6	6	7	5	7	7	6	6	5	6	5	7	7	6	5	6	7	6	6	5	7	6	6	6	6	7	7	7	7	6	7	6	7	6	5	7
3b.	6	7	7	6	7	7	7	7	6	5	6	6	6	5	6	6	5	6	6	3	6	5	6	6	5	5	7	7	6	5	6	6	6	5	3	6
4a.	6	4	7	5	7	6	7	5	7	6	7	5	5	6	6	6	7	5	7	5	7	7	6	6	7	6	7	7	7	7	7	7	7	7	6	5
4b.	3	4	6	6	5	5	5	5	6	5	5	4	5	5	6	5	5	5	6	3	5	3	6	5	5	5	7	5	5	3	5	5	6	6	5	5
5a.	6	4	7	5	3	7	4	3	6	7	5	5	6	5	7	3	5	6	7	6	5	5	5	7	6	7	7	5	5	7	4	4	5	5	5	7
5b.	5	4	7	5	4	5	4	4	6	5	5	2	3	5	3	4	3	5	4	3	4	5	6	5	3	6	6	6	4	3	4	4	5	4	4	5
6a.	6	5	6	3	6	6	6	4	7	5	6	5	5	3	4	7	7	2	7	2	6	5	6	5	4	4	4	6	7	7	7	7	6	7	6	7
6b.	3	5	6	2	5	2	4	2	7	3	3	5	2	4	4	5	2	2	2	4	5	2	6	3	4	4	4	5	2	1	4	4	6	5	6	6
7a.	5	4	4	7	6	6	7	5	7	6	5	7	5	5	6	7	5	5	2	4	7	4	5	6	5	5	7	6	7	4	6	4	5	6	5	6
7b.	5	4	4	7	6	6	6	3	4	5	6	4	4	5	3	7	5	4	2	4	4	4	6	4	4	5	5	6	6	4	7	4	5	6	6	7
8a.	7	6	7	7	7	7	7	7	7	7	7	7	7	7	2	7	7	6	7	6	7	7	7	7	6	7	7	5	7	7	7	7	7	7	7	7
8b.	3	7	6	7	5	6	3	5	4	5	3	6	5	5	4	5	3	5	5	3	3	1	6	5	5	5	7	5	6	3	2	5	7	6	6	6
9a.	7	6	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	3	7	7	7	7	7	5	7	7	7	7	7	7	7	7	6	7
9b.	6	7	6	7	6	7	5	6	6	3	6	6	5	6	5	7	6	6	5	4	6	3	5	5	6	5	7	6	5	3	3	6	7	6	6	5
10a.	7	7	7	7	7	7	7	7	7	6	6	7	7	7	7	7	7	6	7	5	7	7	7	7	7	6	7	7	7	7	7	7	7	7	6	7
10b.	5	7	7	6	6	6	5	7	5	3	6	6	6	6	5	6	5	6	5	5	5	5	5	6	6	6	7	6	6	2	3	5	7	6	6	6
11a.	7	7	7	7	7	7	5	7	7	6	6	7	6	7	7	7	7	6	7	6	6	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7
11b.	5	6	6	6	5	7	5	6	6	4	5	6	5	6	4	6	6	6	5	5	6	6	6	5	6	6	7	6	6	5	5	6	7	6	7	7
12a.	7	7	7	5	7	6	5	6	7	6	7	6	5	6	6	7	7	6	7	5	6	7	7	7	7	7	7	6	7	7	7	7	7	6	7	7
12b.	6	6	6	5	5	6	4	6	5	4	5	6	5	5	5	6	2	5	5	5	5	3	5	5	5	3	5	5	6	5	2	6	7	5	7	7
13a.	7	5	7	7	7	7	7	6	7	7	7	6	7	6	4	6	5	3	7	3	7	6	6	7	7	6	7	6	7	7	7	7	7	7	6	7
13b.	3	6	6	7	5	6	6	5	6	4	5	6	6	5	4	5	5	5	6	3	6	6	6	5	5	6	7	3	5	6	6	6	7	5	6	7
14a.	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	6	7
14b.	2	6	6	6	5	5	5	6	6	3	5	6	5	5	3	5	3	5	6	2	5	5	5	3	5	3	5	5	7	3	2	7	7	3	6	5
15a.	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	5	6	7	7	7	7	7	7	6	7	7	7	7	7	6	7	7
15b.	5	5	6	5	5	6	6	5	7	5	6	6	5	5	5	5	3	5	5	3	4	5	5	3	6	6	7	3	7	6	2	6	7	6	7	6
16a.	6	7	6	4	7	6	6	5	7	7	6	4	5	6	4	6	6	2	4	6	6	6	7	6	5	7	7	6	7	7	7	4	7	6	6	6
16b.	3	4	6	6	5	6	6	5	4	5	5	4	5	5	4	6	4	4	4	5	6	6	6	4	3	6	6	5	7	5	1	4	7	4	6	6
17a.	6	7	6	7	7	7	4	5	7	6	7	5	7	6	6	7	7	6	5	5	5	6	7	7	6	6	7	6	4	7	7	6	7	6	7	6
17b.	5	7	6	6	5	7	5	5	4	5	5	6	6	6	5	6	5	5	6	4	5	5	7	4	4	6	7	6	4	5	5	6	7	4	7	5
18a.	6	7	7	7	6	6	3	5	7	6	5	5	5	6	7	7	6	7	5	6	5	6	7	7	7	5	7	5	6	7	6	5	7	7	7	7
18b.	5	6	6	7	5	6	6	6	5	5	6	6	5	6	4	6	5	6	4	4	6	5	7	5	5	4	7	6	5	2	5	4	7	3	7	7
19a.	6	4	6	7	4	6	6	4	7	7	6	6	6	6	6	3	7	6	4	6	3	5	7	7	6	5	5	6	5	5	7	7	7	6	7	4
19b.	3	4	6	5	4	5	6	4	5	5	5	4	5	5	4	4	3	6	4	5	4	5	6	5	4	5	4	6	4	3	3	4	7	5	6	4
20a.	7	6	7	6	7	6	7	5	6	5	7	6	7	7	5	6	7	6	7	6	6	7	7	7	7	7	7	6	6	7	7	6	7	4	6	6
20b.	5	5	6	5	5	6	5	5	5	5	6	5	6	5	5	6	5	5	7	5	4	3	6	5	3	7	7	6	7	6	6	6	7	4	6	5
21a.	7	7	7	7	5	7	5	4	7	6	7	5	5	7	7	7	7	7	5	5	7	7	7	5	7	7	7	7	5	7	7	3	7	5	6	5
21b.	5	6	6	3	5	6	6	4	5	5	5	6	5	7	6	6	6	5	5	4	4	2	6	4	4	6	7	7	6	5	3	4	7	3	6	4
22a.	7	7	7	6	7	5	7	6	7	7	7	5	6	7	6	7	7	6	6	5	5	7	6	7	4	6	7	7	7	7	7	7	7	7	6	7
22b.	5	6	6	5	5	5	5	6	5	6	6	6	5	5	6	6	3	5	6	4	4	2	6	5	4	6	7	6	6	5	5	5	7	6	6	6
23a.	5	5	6	5	5	6	7	3	7	7	7	5	6	7	6	6	7	5	6	5	6	5	7	7	5	6	6	6	7	7	7	6	5	6	6	6
23b.	5	6	6	5	5	6	5	4	6	5	5	5	5	6	4	6	3	5	6	4	5	4	7	6	6	6	6	5	6	6	3	5	7	5	6	5
24a.	6	5	6	7	2	6	4	5	7	7	7	6	6	7	6	6	7	6	6	4	7	6	7	7	6	6	5	6	4	6	6	7	6	5	6	6
24b.	3	5	6	7	6	6	4	5	7	6	5	6	5	6	6	6	3	6	6	4	3	3	7	7	5	6	5	6	4	5	6	7	6	4	7	7
25a.	7	5	7	5	7	7	7	5	7	7	7	6	7	7	6	7	7	5	6	5	7	6	7	7	7	6	7	5	6	7	7	7	7	6	6	5
25b.	2	5	6	5	5	6	5	5	5	6	5	5	3	6	3	6	5	5	5	5	2	3	7	3	6	5	5	7	5	2	5	6	6	5	6	7
26a.	6	5	7	7	6	7	7	7	7	7	7	6	7	7	6	7	7	6	6	5	7	7	7	6	6	7	6	7	7	7	7	7	7	7	6	6
26b.	3	5	6	5	6	3	5	5	5	3	5	6	3	5	3	5	5	5	3	4	5	3	6	3	6	6	6	5	5	3	5	6	7	5	5	7

	University Supervisors												Cooperating Teachers												Student Teachers											
Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
27a.	7	5	7	5	6	7	7	5	7	7	7	3	7	7	5	7	6	6	2	5	7	7	6	6	7	7	7	5	7	6	7	7	7	7	6	7
27b.	3	5	6	5	6	5	6	5	5	5	6	6	5	5	3	5	3	3	4	4	2	2	6	5	6	6	7	6	7	5	7	6	7	6	5	5
28a.	6	7	7	7	6	7	7	5	7	7	6	7	7	7	4	7	7	6	6	5	6	7	7	7	6	7	7	6	7	7	7	7	7	7	7	6
28b.	5	6	6	3	6	6	4	5	6	5	6	6	5	5	4	6	5	5	5	4	5	3	7	6	5	7	6	5	6	3	6	6	7	6	6	7
29a.	5	6	7	5	6	6	7	5	7	7	7	6	5	6	4	7	7	6	7	3	7	6	7	5	7	6	7	7	6	7	6	7	7	6	6	6
29b.	5	7	6	3	6	5	5	5	5	3	3	6	5	3	4	6	5	3	4	4	7	5	6	5	5	6	7	4	5	5	6	6	6	6	5	6
30a.	7	7	7	7	7	7	7	7	7	7	7	6	6	6	4	7	7	7	7	5	7	6	7	7	7	7	5	7	7	7	7	7	7	7	6	7
30b.	5	7	7	7	5	6	2	6	5	5	5	5	2	3	4	7	3	3	3	4	1	3	7	3	3	6	4	3	7	5	5	3	6	7	6	7
31a.	7	7	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7
31b.	5	5	6	5	7	6	3	5	4	6	5	5	4	4	3	7	3	3	2	6	1	2	7	3	5	6	7	2	7	7	5	6	5	7	5	6
32a.	7	4	6	5	3	7	7	4	7	6	6	5	4	6	6	7	7	7	4	4	7	7	7	5	7	6	7	4	7	7	7	7	6	7	6	6
32b.	5	4	6	4	4	3	2	3	4	3	3	3	4	4	5	3	4	5	4	4	1	2	5	4	1	6	7	4	1	5	6	3	5	1	2	7
33a.	6	5	6	6	6	7	7	7	7	5	2	7	6	6	7	6	6	6	4	5	7	4	7	7	7	6	7	4	6	7	7	7	7	7	6	7
33b.	7	6	7	7	6	7	2	7	4	7	6	7	6	4	2	6	6	6	4	5	6	4	5	2	4	6	6	7	6	7	7	6	7	7	6	7
34a.	5	3	6	2	6	6	6	5	4	5	5	6	4	2	3	5	3	4	4	1	6	4	6	6	5	6	7	6	7	6	5	6	5	6	6	5
34b.	6	5	6	3	5	5	6	3	4	5	5	5	4	4	4	6	3	4	4	4	5	4	4	6	4	6	5	2	7	2	3	3	5	5	5	6
35a.	7	5	6	5	6	7	7	5	7	6	7	6	7	6	6	7	6	5	6	7	5	6	6	3	7	7	7	6	7	6	7	7	7	7	6	7
35b.	5	6	6	5	5	6	2	5	2	3	5	5	4	3	5	3	6	5	2	4	3	5	4	4	2	3	7	3	1	2	6	2	5	5	2	7
36a.	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	5	7	7	7	6	7	7	7	7
36b.	5	7	7	7	6	7	7	6	7	5	7	6	5	5	4	7	3	5	1	5	7	6	6	1	5	5	5	5	3	5	7	5	7	7	7	7
37a.	5	7	6	5	7	7	7	5	7	7	7	7	7	6	5	7	7	5	5	6	7	7	7	3	7	7	7	6	7	7	7	7	7	7	6	7
37b.	2	7	6	2	6	7	3	5	4	2	5	6	3	3	3	5	2	5	4	4	2	2	5	4	6	6	3	2	7	3	6	5	7	5	5	5
38a.	5	7	6	3	7	7	7	5	7	5	7	7	7	6	5	7	7	5	2	5	7	7	7	4	6	4	7	5	7	7	7	4	5	7	5	6
38b.	2	7	6	2	6	7	3	3	4	4	6	6	3	3	3	2	2	5	4	4	2	2	4	4	1	4	3	4	7	3	7	4	6	5	4	6
39a.	5	7	6	4	7	7	7	5	7	6	7	7	5	6	6	7	7	5	5	5	7	7	7	4	6	7	7	5	7	7	7	5	7	7	5	6
39b.	2	6	6	4	6	6	3	4	4	2	5	6	3	3	3	2	2	5	4	4	2	2	4	4	1	6	3	4	7	2	7	4	7	5	2	7
40a.	7	6	7	7	7	7	7	7	7	7	6	7	6	5	5	7	7	5	6	5	7	6	7	6	7	6	7	7	7	7	6	6	7	6	5	7
40b.	6	7	7	7	6	7	5	6	6	5	5	6	5	5	4	5	5	5	3	4	4	6	6	6	5	3	6	6	3	5	6	6	7	5	5	5
41a.	6	2	7	7	7	7	6	3	7	6	7	7	7	5	6	7	5	5	7	5	7	6	6	7	7	7	7	7	7	7	7	6	7	7	6	7
41b.	5	2	7	7	7	5	5	3	6	4	6	6	5	4	6	7	2	3	4	4	2	4	6	7	3	5	7	7	3	7	7	6	7	5	6	5
42a.	7	3	7	7	7	7	6	3	7	5	7	7	6	6	6	7	6	6	7	4	7	6	6	7	5	5	7	6	7	7	7	6	7	7	6	4
42b.	2	7	7	7	6	7	5	4	4	3	5	6	5	5	6	6	6	5	5	4	4	6	6	6	5	5	7	6	5	5	6	6	7	7	6	4
43a.	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	6
43b.	5	7	6	7	6	6	5	5	6	5	5	6	6	5	6	6	6	6	7	6	5	3	6	7	5	7	7	3	7	7	6	6	7	6	7	5
44a.	6	3	7	6	7	7	5	3	7	6	7	5	7	7	5	7	6	6	7	3	7	6	6	7	6	6	7	5	7	7	7	6	7	5	5	7
44b.	4	3	6	6	2	3	5	5	4	2	2	4	3	5	2	1	6	3	1	4	1	3	4	4	4	6	6	4	5	3	6	4	4	4	6	3
45a.	6	4	7	6	6	7	7	6	7	6	6	6	7	7	7	5	6	5	7	7	6	7	7	7	6	7	7	6	4	7	6	6	7	7	6	6
45b.	5	4	6	6	5	6	6	5	6	5	3	5	6	7	7	6	6	5	7	7	3	6	6	7	6	7	7	2	4	7	6	5	7	6	7	7
46a.	7	7	7	7	7	7	7	6	7	7	7	7	7	7	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
46b.	6	7	6	7	6	7	5	5	5	5	6	6	7	7	6	5	6	7	6	6	3	6	6	6	7	7	7	3	7	5	5	7	7	5	7	7
47a.	5	4	7	4	5	6	4	5	7	7	7	6	4	4	4	7	4	4	4	4	6	4	6	4	5	6	5	6	4	4	4	4	6	6	4	4
47b.	5	4	7	4	5	6	4	5	4	5	5	5	4	4	4	5	4	4	4	4	3	4	5	4	4	5	4	6	4	4	4	4	6	5	2	4
48a.	7	5	7	6	6	7	7	5	7	7	7	5	5	7	5	7	5	5	7	3	7	6	6	4	6	6	7	7	7	7	7	6	7	7	6	7
48b.	3	2	7	6	6	6	6	6	4	6	6	6	5	3	3	6	3	5	3	4	1	3	6	4	5	5	5	6	2	1	2	6	7	7	6	5
49a.	6	4	7	6	6	7	7	6	7	6	6	7	7	6	5	7	6	5	6	4	6	6	7	7	5	4	7	7	7	7	7	7	7	7	6	7
49b.	5	4	6	6	6	7	5	5	4	5	5	6	6	6	5	5	5	5	6	4	3	5	6	6	5	4	6	5	4	5	5	6	7	6	6	6
50a.	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	6	7	7	7	6	7	6	7	7	7	7	7	6	7	7	7	7	7	7	7	6
50b.	6	7	6	7	6	7	5	5	6	5	6	6	6	7	6	6	7	6	5	6	3	5	7	6	6	7	7	6	6	6	7	5	7	6	7	7
51a.	7	4	7	7	7	7	7	6	7	7	7	5	7	7	7	7	5	6	7	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	6	7
51b.	3	4	6	6	6	7	5	5	4	5	5	5	5	5	5	6	6	5	4	4	4	5	6	3	5	3	6	5	6	3	3	5	6	5	6	7
52a.	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	4	7	6
52b.	6	7	7	7	6	7	5	6	6	5	6	6	7	5	6	7	2	6	3	7	1	3	7	5	5	6	7	5	6	6	3	5	7	4	7	7
53a.	7	7	7	6	7	7	7	7	7	6	7	6	7	5	5	7	7	6	6	5	7	7	7	7	7	7	7	6	7	7	7	4	7	5	6	3
53b.	6	7	6	6	6	6	6	5	6	5	6	6	7	6	4	6	7	6	4	4	1	5	7	5	6	7	7	7	6	2	2	4	7	4	6	6
54	7	7	7	7	7	7	7	7	7	7	7	7	7	6	5	7	6	7	5	5	7	3	3	7	6	7	7	6	7	4	6	7	7	7	4	6
55	6	6	6	6	7	6	6	5	7	5	5	5	7	5	5	6	5	6	7	5	6	5	6	5	5	6	7	6	5	5	5	6	6	7	6	6

Table E2.

Round One Data Summary by Subroup

	Univ. Super.		Coop. Teachers		Stud. Teachers		Group	
Items:	Mean	St. Dev.	Mean	St.Dev.	Mean	St.Dev.	Mean	St. Dev.
1a.	6.83	0.39	6.33	0.78	6.67	0.65	6.61	0.61
1b.	6.08	0.67	4.83	1.19	5.33	0.98	5.42	0.95
2a.	6.67	0.49	6.50	0.80	6.67	0.65	6.61	0.65
2b.	5.33	0.78	5.33	0.65	5.50	1.00	5.39	0.81
3a.	6.08	0.79	6.08	0.67	6.50	0.67	6.22	0.71
3b.	6.42	0.67	5.50	0.90	5.58	1.08	5.83	0.89
4a.	6.00	1.04	6.08	0.79	6.67	0.65	6.25	0.83
4b.	4.92	0.90	4.92	1.00	5.17	0.94	5.00	0.94
5a.	5.17	1.37	5.58	1.16	5.58	1.16	5.44	1.23
5b.	4.67	1.23	4.17	1.03	4.50	1.09	4.44	1.12
6a.	5.42	1.08	4.92	1.83	6.00	1.28	5.44	1.40
6b.	3.92	1.68	3.42	1.44	4.25	1.54	3.86	1.55
7a.	5.75	1.14	5.08	1.38	5.50	1.00	5.44	1.17
7b.	5.00	1.21	4.33	1.30	5.42	1.08	4.92	1.20
8a.	6.92	0.29	6.42	1.44	6.75	0.62	6.69	0.78
8b.	5.00	1.48	4.17	1.40	5.25	1.48	4.81	1.46
9a.	6.75	0.45	6.67	1.15	6.75	0.62	6.72	0.74
9b.	5.92	1.08	5.25	1.06	5.42	1.31	5.53	1.15
10a.	6.83	0.39	6.75	0.62	6.83	0.39	6.81	0.47
10b.	5.75	1.14	5.42	0.51	5.50	1.51	5.56	1.05
11a.	6.67	0.65	6.58	0.51	6.92	0.29	6.72	0.48
11b.	5.58	0.79	5.50	0.67	6.17	0.72	5.75	0.73
12a.	6.33	0.78	6.33	0.78	6.83	0.39	6.50	0.65
12b.	5.33	0.78	4.67	1.07	5.25	1.54	5.08	1.13
13a.	6.67	0.65	5.58	1.51	6.75	0.45	6.33	0.87
13b.	5.42	1.08	5.17	0.94	5.75	1.14	5.44	1.05
14a.	7.00	0.00	6.92	0.29	6.83	0.39	6.92	0.23
14b.	5.08	1.31	4.33	1.23	4.83	1.75	4.75	1.43
15a.	6.83	0.58	6.67	0.65	6.83	0.39	6.78	0.54
15b.	5.58	0.67	4.42	0.90	5.75	1.60	5.25	1.06
16a.	5.92	1.08	5.33	1.37	6.25	0.97	5.83	1.14
16b.	4.92	1.00	4.92	0.90	5.00	1.76	4.94	1.22
17a.	6.17	1.03	6.17	0.83	6.25	0.87	6.19	0.91
17b.	5.50	0.90	5.33	0.89	5.50	1.17	5.44	0.99
18a.	5.83	1.19	6.17	0.83	6.33	0.89	6.11	0.97

	Univ. Super.		Coop. Teachers		Stud. Teachers		Group	
Items:	Mean	St. Dev.	Mean	St.Dev.	Mean	St.Dev.	Mean	St. Dev.
18b.	5.75	0.62	5.25	0.97	5.17	1.70	5.39	1.09
19a.	5.75	1.14	5.50	1.45	5.83	1.03	5.69	1.20
19b.	4.67	0.89	4.67	0.89	4.58	1.24	4.64	1.01
20a.	6.25	0.75	6.50	0.67	6.33	0.89	6.36	0.77
20b.	5.25	0.45	5.17	1.03	5.83	1.27	5.42	0.92
21a.	6.17	1.11	6.33	0.98	6.08	1.31	6.19	1.14
21b.	5.17	0.94	5.00	1.35	5.17	1.43	5.11	1.24
22a.	6.50	0.80	6.25	0.75	6.58	0.90	6.44	0.82
22b.	5.50	0.52	4.75	1.29	5.75	0.87	5.33	0.89
23a.	5.67	1.23	6.08	0.79	6.08	0.67	5.94	0.90
23b.	5.25	0.62	5.08	1.16	5.50	1.00	5.28	0.93
24a.	5.67	1.50	6.25	0.87	5.75	0.75	5.89	1.04
24b.	5.50	1.17	5.17	1.43	5.67	1.07	5.44	1.22
25a.	6.42	0.90	6.42	0.79	6.33	0.78	6.39	0.82
25b.	5.00	1.04	4.42	1.56	5.42	1.31	4.94	1.31
26a.	6.58	0.67	6.50	0.67	6.67	0.49	6.58	0.61
26b.	4.75	1.14	4.17	1.11	5.50	1.09	4.81	1.11
27a.	6.08	1.31	5.92	1.44	6.67	0.65	6.22	1.14
27b.	5.25	0.87	3.92	1.31	6.08	0.79	5.08	0.99
28a.	6.58	0.67	6.33	0.98	6.75	0.45	6.56	0.70
28b.	5.33	0.98	5.00	1.04	5.83	1.11	5.39	1.05
29a.	6.17	0.83	5.83	1.34	6.50	0.52	6.17	0.90
29b.	4.92	1.31	4.75	1.22	5.58	0.79	5.08	1.11
30a.	6.92	0.29	6.33	0.98	6.75	0.62	6.67	0.63
30b.	5.42	1.38	3.58	1.78	5.17	1.59	4.72	1.58
31a.	6.92	0.29	6.92	0.29	6.92	0.29	6.92	0.29
31b.	5.17	1.03	3.75	1.96	5.67	1.44	4.86	1.48
32a.	5.58	1.38	5.92	1.31	6.42	0.90	5.97	1.20
32b.	3.67	1.07	3.75	1.22	4.00	2.34	3.81	1.54
33a.	5.92	1.44	5.92	1.08	6.50	0.90	6.11	1.14
33b.	6.08	1.56	4.67	1.50	6.33	0.89	5.69	1.32
34a.	4.92	1.31	4.00	1.60	5.83	0.72	4.92	1.21
34b.	4.83	1.03	4.33	0.89	4.42	1.62	4.53	1.18
35a.	6.17	0.83	5.83	1.11	6.75	0.45	6.25	0.80
35b.	4.58	1.44	4.00	1.13	3.75	2.14	4.11	1.57
36a.	6.92	0.29	6.83	0.39	6.75	0.62	6.83	0.43
36b.	6.42	0.79	4.58	2.02	5.67	1.30	5.56	1.37
37a.	6.42	0.90	6.00	1.28	6.83	0.39	6.42	0.86
37b.	4.58	1.93	3.50	1.17	5.00	1.60	4.36	1.56

	Univ. Super.		Coop. Teachers		Stud. Teachers			Group	
Items:	Mean	St. Dev.	Mean	St.Dev.	Mean	St.Dev.		Mean	St. Dev.
38a.	6.08	1.31	5.75	1.60	5.83	1.19		5.89	1.37
38b.	4.67	1.87	3.17	1.03	4.50	1.78		4.11	1.56
39a.	6.25	1.06	5.92	1.08	6.33	0.89		6.17	1.01
39b.	4.50	1.57	3.17	1.03	4.58	2.23		4.08	1.61
40a.	6.83	0.39	6.00	0.85	6.50	0.67		6.44	0.64
40b.	6.08	0.79	4.67	1.37	5.17	1.19		5.31	1.12
41a.	6.00	1.71	6.08	0.90	6.83	0.39		6.31	1.00
41b.	5.25	1.60	4.50	1.73	5.67	1.50		5.14	1.61
42a.	6.08	1.56	6.17	0.83	6.17	1.03		6.14	1.14
42b.	5.25	1.71	5.33	0.78	5.75	0.97		5.44	1.15
43a.	6.92	0.29	6.83	0.39	6.92	0.29		6.89	0.32
43b.	5.75	0.75	5.75	1.06	6.08	1.24		5.86	1.02
44a.	5.75	1.48	6.17	1.19	6.25	0.87		6.06	1.18
44b.	3.83	1.47	3.08	1.62	4.58	1.16		3.83	1.42
45a.	6.17	0.83	6.50	0.80	6.25	0.87		6.31	0.83
45b.	5.17	0.94	6.08	1.16	5.92	1.56		5.72	1.22
46a.	6.92	0.29	6.83	0.39	7.00	0.00		6.92	0.23
46b.	5.92	0.79	5.92	1.08	6.17	1.34		6.00	1.07
47a.	5.58	1.24	4.58	1.08	4.83	0.94		5.00	1.09
47b.	4.92	0.90	4.08	0.51	4.33	1.07		4.44	0.83
48a.	6.33	0.89	5.58	1.31	6.67	0.49		6.19	0.90
48b.	5.33	1.50	3.83	1.47	4.75	2.01		4.64	1.66
49a.	6.25	0.87	6.00	0.95	6.50	1.00		6.25	0.94
49b.	5.33	0.89	5.17	0.94	5.42	0.90		5.31	0.91
50a.	6.83	0.39	6.75	0.45	6.83	0.39		6.81	0.41
50b.	6.00	0.74	5.83	1.11	6.42	0.67		6.08	0.84
51a.	6.50	1.00	6.33	0.78	6.92	0.29		6.58	0.69
51b.	5.08	1.08	4.83	0.94	5.00	1.35		4.97	1.12
52a.	6.83	0.39	6.92	0.29	6.67	0.89		6.81	0.52
52b.	6.17	0.72	4.92	2.15	5.67	1.30		5.58	1.39
53a.	6.75	0.45	6.33	0.89	6.08	1.38		6.39	0.91
53b.	5.92	0.51	5.17	1.75	5.33	1.87		5.47	1.38
54	7.00	0.00	5.67	1.50	6.17	1.11		6.28	0.87
55	5.83	0.72	5.42	1.31	5.58	1.31		5.61	1.11
Grand:	5.78	0.94	5.39	1.07	5.88	1.02	Group:	5.68	1.01
	(M)	*(SD)*	*(M)*	*(SD)*	*(M)*	*(SD)*		*(M)*	*(SD)*

Table E3.

Round One, Section Two – Transcribed Written Comments, Item 56

Comments by University Supervisors:

There needs to be a setting of common criteria for student teaching– U.S.#1

There needs to be a setting of consistent structure and time for instruction by student teacher – U.S.#1

There should be more frequent dialogue between student teacher, university supervisor and cooperating teacher – U.S.#1

Student teachers need more instruction on classroom management skills and procedures – U.S.#1

Strong *(cooperating)* teachers *(are needed)* as mentors – U.S.#4

I am proud of the student teacher program. Students are prepared and successful in the experience – U.S.#4

"Matching-up" the student teacher to the mentor teacher needs to be done more carefully – U.S.#5

We need more qualified cooperating teachers in the field – U.S.#5

I like our practicums but there is always room for improvement – U.S.#6

Try to avoid placing insecure student teachers with a mentor who is unwilling to work with the ST in that area. – U.S.#7

The technique of videotaping student teachers should be a requirement. – U.S.#8

I believe it is important that all student teachers be given the opportunity to observe recorded video of his/her teaching, reflect, and share those reflections with their supervisor and mentor. -- U.S.#9

Non-western music needs to be worked into the teacher-training curriculum – U.S.#9

Much more exposure to school ensembles *(needed)* sooner than the student teaching experience – U.S.#12

Comments by Cooperating Teachers:

More collaboration *(needed)* between the university supervisor and the coordinating teacher – C.T.#1

Better evaluation criteria and procedures *(are needed)* – C.T.#1

Fourteen weeks for the student teaching practicum would be better, but I feel the student-teaching experience should be restricted to one semester. – C.T.#1

Aural diagnostic skills need to be better addressed at the university level – C.T.#2

Cooperating teacher should have more input into determining what determines a successful student teaching experience. – C.T.#2

It's very important for the student teacher to have some idea of what is expected of him/her. – C.T.#2

For an all-level degree it's 6 weeks *(in)* lower grades and 6 weeks *(in)* upper. This isn't enough. – C.T.#2

Determining goals and objectives and how to best obtain them is the responsibility of the cooperating teacher with assistance of the student teacher. – C.T.#3

Cooperating teachers tend to not give enough rehearsal time to the student teacher to allow for flexibility to change presentation. – C.T.#3

Student teaching sessions not timed correctly. Often times student teachers come in too late in the student teaching process. (Ex.: Planning stages for football and/or concert season). *(Student teachers need to)*…start day one of in-service. Student teachers need to see and be involved in the establishment of the expectations in the classroom. Terms should be longer, at least a semester. – C.T.#3

I find that most student teachers lack problem-solving skills, especially when dealing the beginner band students. In particular fixing "playing problems" on instruments which are not their "major." – C.T.#4

Student teachers entering too late during semester. Student teaching should cover one full university session – not just 12 weeks. – C.T.#4

I see no evidence that all student teachers know how to (A) set up recording equipment, (B) burn a CD, (C) rules for utilizing electronics at marching/concert contests. Students not aware of latest hardware/software available to teach music. – C.T.#5

Need more early field experiences prior to student teaching – C.T.#6

Not enough information about the cooperating teacher and current situation are being gathered by the university prior to placement. – C.T.#6

Put student teachers with successful cooperating teachers – C.T.#8

Student teachers need more training in being able to hear musical problems in the ensemble – C.T.#9

Needs to be much more interaction between supervisor, teacher, and student teacher, including a much greater structure on specific activities for student teacher – C.T.#10

I felt question #52 was extremely important, but 12 weeks only scratches the surface of all those events. A concert performance addresses different issues compared to moving a marching band, organization, etc. Student teaching should last longer – C.T.#10

Here is the survey, great idea, very thought provoking – C.T.#10

No comments. A very good job! – C.T.#11

Comments by Student Teachers:

Classroom management skills are sharpened when a prospective teacher physically has a classroom to manage. We need more early field experiences prior to student teaching – S.T.#1

More time needed on the podium for student teacher – S.T.#1

Videotaping should be mandatory! It is review-able, and impartial. – S.T.#1

Music department personnel should be teaching the ed.-block classes so that they will be relevant to the music student teacher – S.T.#3

I believe that more hands-on field experience should be required prior to student teaching – S.T.#4

With the increase of technology in education, we need to add music technology in our training curriculum because it is another tool for us to use to teach students, but we can't use it if we don't understand it. – S.T.#4

A greater sense of accountability should be placed on the cooperating teacher – S.T.#4

Kodaly training needed for wind and percussion majors – S.T.#5

Teacher training curriculum needs improvement – S.T.#5

Cooperating teachers need to be more carefully selected – S.T.#6

More rehearsal time should be given to student teachers – S.T.#6

Classroom management course needs to be improved – S.T.#7

I think that it is important that we have more field experiences prior to our student teaching, especially with beginning level students. – S.T.#8

The content area reading class we had was taught in a way that it's curricula had little to do with applied music teaching. This needs to be fixed – S.T.#8

Supervisors and cooperating teachers need to agree on what the student teacher is supposed to be doing – S.T.#9

I feel that technology and the content area reading classes should be present by music faculty so they will be relevant – S.T.#11

University supervisor should meet with the cooperating teacher before the student teacher begins so that they have an understanding of what needs to be accomplished – S.T.#11

APPENDIX F

ROUND TWO QUESTIONNAIRE

The Texas 2001-2002 Delphi Assessment of Music Student Teaching Research Project

ROUND TWO QUESIONNAIRE
April, 2002

Dear _____,

Thank you for your participation in the **Texas 2001-2002 Delphi Assessment of Music Student Teaching Research Project**. Thanks to your collective efforts our research group was able to form a consensus of opinion on 86 items on the Round One Survey. This second (and final) survey is therefore much shorter and will not take so much of your time to complete. Please return this survey in the stamped envelope enclosed. I will mail a summary to each of you when the study is completed. Have a great summer!

Section I. ***(Instructions:)***
Section I of this survey involves the reconsideration of questions in which the research group failed to reach a consensus of opinion. The measure of consensus was pre-set at Standard Deviation = 1.25 (S.D.=1.25) based on procedures from related literature and data from the pilot study. Your Round Two Questionnaire includes only those items from the twenty-two questions which failed to reach consensus in round one where YOUR response lies more than one digit below or above the group mean. You are given your round-one response and asked to reconsider your response while taking into consideration the group mean response which is indicated by the bold underlined numeral within the choice-scale. Respondents are encouraged to consider adjusting their response toward the group mean response. This is the basic tenet of the Delphi process which enables the research group to attempt to form a consensus of opinion on items previously not in consensus. Should you feel so strongly about any given item that you choose NOT to change your response, please supply a brief phrase or sentence explaining your opinion on the item. This will enable the researcher to include meaningful dialogue explaining unresolved items in the study. Where consensus is not possible, this dialogue will be extremely valuable to the researcher as he attempts to account for items which cannot be resolved.

(Question numbers are taken from the Round One Survey.)

6. Seminars for university supervisors and cooperating teachers provide a means of achieving commonalties in collaborative efforts and thereby increase the overall efficiency of the music student teaching event.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

Your Round One response = _____ *Round One Group Mean response =* **5.44**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided. No opinion	Somewhat Important	Important	Very Important

Comments:_____

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response =* **3.86**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

8. Collaboration might be improved by reaching an agreement prior to the beginning of student teaching on the following points:

(1) when the student teacher will begin teaching
(2) how long the student teacher should have full responsibility and for what portion of the day
(3) under what conditions the cooperating teacher should be in or out of the classroom when the student teacher has instructional responsibility
(4) for which teaching segments the student teacher should submit lesson plans and how much direction the student teacher should have in developing lesson plans
(5) how the student teacher will handle behavior problems
(6) under what conditions the cooperating teacher and supervisor should intervene
(7) when the student teacher is responsible for instruction
(8) how much responsibility the student teacher should have for performances
(9) how much responsibility the student teacher should have in relating to parents and students
(10) how deficiencies in student teacher preparation and performance should be reported and corrected

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.81**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

14. The occurrence of typically large classes for the music student teacher emphasizes the need for a solid foundation in classroom management techniques during teacher training.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.75**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

25. Student teachers should have a clear mental picture of effective teaching prior to the student teaching event.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.94**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

27. Music student teachers should receive an adequate philosophical foundation for teaching prior to the student teaching event.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **5.08**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

30. Music student teachers should receive early field experiences in their teacher-training curriculum prior to student teaching.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.72**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

31. Classroom management skills should be taught by qualified music department personnel who have experience in dealing with large ensembles and classes similar to those encountered by the music student teacher.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.86**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

32. Content-area reading skills should be taught by music department personnel and feature curricula pertinent to the music teaching event.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **3.81**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

33. The optimal length set (mandated) by SBEC for the student teaching practicum has been established to be a minimum of 12 weeks.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **5.69**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

34. Multiculturalism (training in non-Western musics) is presently included at an appropriate level in the teacher training process.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

Your Round One response = _____ *Round One Group Mean response* = **4.92**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided. No opinion	Somewhat Important	Important	Very Important

Comments:_____

35. Course-work covering the application of modern ***electronic*** technologies indigenous to the music field should be included in the

music teacher-training curriculum.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.11**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

36. It is most desirable for university methods instructors to have had public school teaching experience.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **5.56**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

37. Videotaping is a valuable tool for analyzing and fostering skill development of the student teacher during the music teacher training process.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.36**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

38. Videotaping is a valuable aid in the supervision procedures used by university supervisors and cooperating teachers during the music student teaching practicum.

A. What is the relative importance of this statement/concept with regard to the welfare and success of music student teaching?

Your Round One response = _____ *Round One Group Mean response* = **5.89**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unimportant	Unimportant	Somewhat Unimportant	Undecided. No opinion	Somewhat Important	Important	Very Important

Comments:_____

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.11**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

39. Supervised videotape analyses strengthen the music student teacher's "teacher identity," increases their commitment to refining teaching tasks and skills, and enhances their concern for pupil learning.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.08**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

41. University supervising teachers should convene meetings throughout the student teaching experience in which student teachers gather to discuss and share experiences.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **5.14**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

44. New cooperating teachers should participate in a training session to prime them for their role in the student teaching event.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **3.83**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

48. All members of the music student teacher triad (student teacher, cooperating teacher, and university supervisor) should be evaluated at the end of the practicum.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **4.64**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

52. Music student teachers should be afforded the opportunity to acquaint themselves with all dimensions and aspects of the student teaching environment during the practicum, to include performances, trips, planning sessions, teacher meetings, teacher duties, parent conferences, etc.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **5.58**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

53. Care should be taken not to place the music student teacher into a pre-existing problematic situation (with regard to classroom environment), since classroom management skills may not have a realistic chance to develop nor be adequate to handle the instructional situation.

B. Based on your personal experience, to what degree is this issue being successfully addressed in the current music student teaching practicum?

Your Round One response = _____ *Round One Group Mean response* = **5.47**

Your Round Two response: (Circle one)

1	2	3	4	5	6	7
Very Unsuccessfully	Unsuccessfully	Somewhat Unsuccessfully	Undecided/ No opinion	Somewhat Successfully	Successfully	Very Successfully

Comments:_____

Section II. ***(Instructions:)***

Section Two of this survey includes ten statements related to various facets of the music student teaching practicum which might be in need of attention or improvement. These items were fashioned from written comments by respondents on the Round One Survey. The ten statements are "suggestions for improvement" of the music student teaching event. Please rank the items according to your opinion of their importance, one through ten (one being the most important, ten being the least). Please rank <u>all</u> items.

_____ Classroom Management, Measurement & Media, and Content Area Reading classes should be taught by music faculty so that course content will be relevant to the music student teacher.

_____ Music student teachers need to be given more time during the practicum to improve their rehearsal skills. (More "podium-time" is needed.)

_____ Student teachers need to be more carefully matched with successful cooperating teachers by university personnel who have the opportunity to know the strengths, weaknesses, and personalities of both.

_____ Music technology (computer programs and electronic tools related to music teaching) needs to be more fully addressed in the teacher-training curriculum.

_____ Non-Western music needs to be more fully addressed in the teacher-training curriculum.

_____ Expectations of the music student teacher need to be more clearly defined prior to the student teaching event. The setting of common criteria for evaluation, the structure of the practicum, and the procedures to be followed should be more clearly defined and understood by all parties involved.

_____ More field experience in the music teacher preparation curriculum (prior to student teaching) is needed.

_____ Consideration needs to be given to extending the student teaching event to include an entire semester (rather than just the 12 weeks presently required by the State Board of Educator Certification).

_____ Video-taping needs to be used more extensively both in the teacher-training program and the student teaching practicum so that the students can benefit from the feedback and analysis of teaching skills made available by this procedure.

_____ The teacher-training program should be scrutinized to address improvement in the area of aural-diagnostic skills of the music student teacher.

APPENDIX G

ROUND TWO, SECTION ONE RAW DATA

Table G1.

Round Two, Section One Raw Data

	University Supervisors												Cooperating Teachers												Student Teachers													
Item	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	*M*	*SD*
6a.	6	5	6	5	6	6	6	4	7	5	6	5	5	4	4	5	7	2	6	2	6	5	6	5	4	4	4	6	5	6	5	5	6	5	6	7	5.19	1.17
6b.	3	5	5	4	5	2	4	3	7	3	3	5	4	4	4	5	2	3	3	4	5	4	4	3	4	4	4	5	2	1	4	4	6	5	4	6	3.97	1.23
8b.	5	6	6	7	5	6	5	5	4	5	3	6	5	5	4	5	3	5	5	5	5	3	6	5	5	5	5	5	6	5	3	5	5	6	6	6	5.03	0.94
14b.	3	6	6	6	5	5	5	6	6	5	5	6	5	5	3	5	3	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	5.06	0.75
25b.	3	5	6	5	5	6	5	5	5	6	5	5	5	6	3	6	5	5	5	5	5	5	5	5	6	5	5	5	5	5	5	6	6	5	6	7	5.19	0.75
27b.	5	5	6	5	6	5	6	5	5	5	6	6	5	5	3	5	3	3	4	4	5	5	6	5	6	6	5	6	7	5	6	6	5	6	5	5	5.17	0.91
30b.	5	6	7	7	5	6	5	6	5	5	5	5	4	3	4	5	3	3	4	4	5	4	6	5	3	6	4	3	7	5	5	5	5	5	6	7	4.94	1.17
31b.	5	5	6	5	7	6	5	5	4	6	5	5	4	4	3	6	3	3	5	6	5	5	6	3	5	6	5	3	7	5	5	6	5	7	5	6	5.06	1.12
32b.	5	4	5	4	4	3	2	3	4	3	3	3	4	4	5	3	4	5	4	4	2	4	5	4	4	4	4	4	1	5	5	3	5	4	4	7	3.92	1.08
33b.	7	6	7	7	6	7	6	7	4	7	6	7	6	5	2	6	6	6	6	5	6	6	5	6	5	6	6	7	6	7	7	6	7	7	6	7	6.08	1.02
34a.	5	4	6	5	6	6	6	5	4	5	5	6	4	2	3	5	3	4	4	1	6	4	6	6	5	6	5	6	4	6	5	6	5	6	6	5	4.89	1.24
35b.	5	5	6	5	5	6	2	5	2	3	5	5	4	3	5	3	6	5	3	4	3	5	4	4	2	3	5	3	1	2	6	4	5	5	4	7	4.17	1.40
36b.	5	7	7	7	6	7	7	6	7	5	7	6	5	5	4	7	3	5	6	5	7	6	6	1	5	5	5	5	6	5	7	5	7	7	7	7	5.78	1.33
37b.	2	7	5	4	6	7	3	5	4	4	5	4	3	3	3	5	2	5	4	4	2	2	5	4	5	5	3	2	7	3	5	5	7	5	5	5	4.31	1.47
38a.	5	7	6	6	7	7	7	5	7	5	7	7	7	6	5	7	7	5	5	5	7	7	7	6	6	6	7	5	7	7	6	6	5	7	5	6	6.19	0.86
38b.	2	7	5	4	6	7	3	3	4	4	4	4	3	3	3	2	2	5	4	4	2	2	4	4	1	4	3	4	7	3	7	4	6	5	4	6	4.03	1.58
39b.	2	6	5	4	6	6	3	4	4	4	5	6	3	3	3	2	2	5	4	4	2	2	4	4	1	4	3	4	7	2	6	4	5	5	4	7	4.03	1.52
41b.	5	2	7	7	6	5	5	4	6	4	6	6	5	4	6	7	2	3	4	4	5	4	6	7	4	5	5	5	3	7	7	6	5	5	6	5	5.08	1.36
44b.	4	3	5	4	3	3	5	5	4	4	4	4	3	5	2	2	6	3	4	4	4	3	4	4	4	4	4	4	5	3	4	4	4	4	4	3	3.86	0.83
48b.	5	2	7	6	6	6	6	6	4	6	6	6	5	3	3	6	3	5	4	4	6	5	6	4	5	5	5	6	2	1	4	6	5	7	6	5	4.92	1.44
52b.	6	7	7	7	6	7	5	6	6	5	6	6	7	5	6	7	2	6	6	7	6	3	7	5	5	6	7	5	6	6	5	5	7	6	7	7	5.92	1.13
53b.	6	6	6	6	6	6	6	5	6	5	6	6	6	6	4	6	7	6	4	4	5	5	7	5	6	7	5	5	6	4	3	6	6	4	6	6	5.53	0.94

Note. Un-shaded data cells = round two survey responses. Shaded data cells = round one responses within 1.25 standard deviation of the group mean, (no round two response were solicited for these items).

"Boxed" cells in the SD column = items not in consensus after the round two survey (*SD*s > 1.25).

Cooperating teacher #3 and Student teacher #12 did not respond to the round two survey: Their round one data were included in round two computations (although unchanged as a result of their non-response in round two).

Table G2.

Post Round Two, Section One, Data Summary by Subroup

	Univ. Super.		Coop. Teachers		Stud. Teachers		Group	
Items:	Mean	St. Dev.	Mean	St.Dev.	Mean	St.Dev.	Mean	St. Dev.
1a.	6.83	0.39	6.33	0.78	6.67	0.65	6.61	0.61
1b.	6.08	0.67	4.83	1.19	5.33	0.98	5.42	0.95
2a.	6.67	0.49	6.50	0.80	6.67	0.65	6.61	0.65
2b.	5.33	0.78	5.33	0.65	5.50	1.00	5.39	0.81
3a.	6.08	0.79	6.08	0.67	6.50	0.67	6.22	0.71
3b.	6.42	0.67	5.50	0.90	5.58	1.08	5.83	0.89
4a.	6.00	1.04	6.08	0.79	6.67	0.65	6.25	0.83
4b.	4.92	0.90	4.92	1.00	5.17	0.94	5.00	0.94
5a.	5.17	1.37	5.58	1.16	5.58	1.16	5.44	1.23
5b.	4.67	1.23	4.17	1.03	4.50	1.09	4.44	1.12
6a.	5.58	0.79	4.75	1.54	5.25	0.97	5.19	1.17
6b.	4.08	1.38	3.75	0.87	4.08	1.44	3.97	1.23
7a.	5.75	1.14	5.08	1.38	5.50	1.00	5.44	1.17
7b.	5.00	1.21	4.33	1.30	5.42	1.08	4.92	1.20
8a.	6.92	0.29	6.42	1.44	6.75	0.62	6.69	0.78
8b.	5.25	1.06	4.67	0.89	5.17	0.83	5.03	0.94
9a.	6.75	0.45	6.67	1.15	6.75	0.62	6.72	0.74
9b.	5.92	1.08	5.25	1.06	5.42	1.31	5.53	1.15
10a.	6.83	0.39	6.75	0.62	6.83	0.39	6.81	0.47
10b.	5.75	1.14	5.42	0.51	5.50	1.51	5.56	1.05
11a.	6.67	0.65	6.58	0.51	6.92	0.29	6.72	0.48
11b.	5.58	0.79	5.50	0.67	6.17	0.72	5.75	0.73
12a.	6.33	0.78	6.33	0.78	6.83	0.39	6.50	0.65
12b.	5.33	0.78	4.67	1.07	5.25	1.54	5.08	1.13
13a.	6.67	0.65	5.58	1.51	6.75	0.45	6.33	0.87
13b.	5.42	1.08	5.17	0.94	5.75	1.14	5.44	1.05
14a.	7.00	0.00	6.92	0.29	6.83	0.39	6.92	0.23
14b.	5.33	0.89	4.75	0.87	5.08	0.29	5.06	0.75
15a.	6.83	0.58	6.67	0.65	6.83	0.39	6.78	0.54
15b.	5.58	0.67	4.42	0.90	5.75	1.60	5.25	1.06
16a.	5.92	1.08	5.33	1.37	6.25	0.97	5.83	1.14
16b.	4.92	1.00	4.92	0.90	5.00	1.76	4.94	1.22
17a.	6.17	1.03	6.17	0.83	6.25	0.87	6.19	0.91
17b.	5.50	0.90	5.33	0.89	5.50	1.17	5.44	0.99
18a.	5.83	1.19	6.17	0.83	6.33	0.89	6.11	0.97

	Univ. Super.		Coop. Teachers		Stud. Teachers		Group	
Items:	Mean	St. Dev.	Mean	St.Dev.	Mean	St.Dev.	Mean	St. Dev.
18b.	5.75	0.62	5.25	0.97	5.17	1.70	5.39	1.09
19a.	5.75	1.14	5.50	1.45	5.83	1.03	5.69	1.20
19b.	4.67	0.89	4.67	0.89	4.58	1.24	4.64	1.01
20a.	6.25	0.75	6.50	0.67	6.33	0.89	6.36	0.77
20b.	5.25	0.45	5.17	1.03	5.83	1.27	5.42	0.92
21a.	6.17	1.11	6.33	0.98	6.08	1.31	6.19	1.14
21b.	5.17	0.94	5.00	1.35	5.17	1.43	5.11	1.24
22a.	6.50	0.80	6.25	0.75	6.58	0.90	6.44	0.82
22b.	5.50	0.52	4.75	1.29	5.75	0.87	5.33	0.89
23a.	5.67	1.23	6.08	0.79	6.08	0.67	5.94	0.90
23b.	5.25	0.62	5.08	1.16	5.50	1.00	5.28	0.93
24a.	5.67	1.50	6.25	0.87	5.75	0.75	5.89	1.04
24b.	5.50	1.17	5.17	1.43	5.67	1.07	5.44	1.22
25a.	6.42	0.90	6.42	0.79	6.33	0.78	6.39	0.82
25b.	5.08	0.79	5.00	0.74	5.50	0.67	5.19	0.75
26a.	6.58	0.67	6.50	0.67	6.67	0.49	6.58	0.61
26b.	4.75	1.14	4.17	1.11	5.50	1.09	4.81	1.11
27a.	6.08	1.31	5.92	1.44	6.67	0.65	6.22	1.14
27b.	5.42	0.51	4.42	1.00	5.67	0.65	5.17	0.91
28a.	6.58	0.67	6.33	0.98	6.75	0.45	6.56	0.70
28b.	5.33	0.98	5.00	1.04	5.83	1.11	5.39	1.05
29a.	6.17	0.83	5.83	1.34	6.50	0.52	6.17	0.90
29b.	4.92	1.31	4.75	1.22	5.58	0.79	5.08	1.11
30a.	6.92	0.29	6.33	0.98	6.75	0.62	6.67	0.63
30b.	5.58	0.79	4.17	0.94	5.08	1.31	4.94	1.17
31a.	6.92	0.29	6.92	0.29	6.92	0.29	6.92	0.29
31b.	5.33	0.78	4.42	1.24	5.42	1.08	5.06	1.12
32a.	5.58	1.38	5.92	1.31	6.42	0.90	5.97	1.20
32b.	3.58	0.90	4.00	0.85	4.17	1.40	3.92	1.08
33a.	5.92	1.44	5.92	1.08	6.50	0.90	6.11	1.14
33b.	6.42	0.90	5.42	1.16	6.42	0.67	6.08	1.02
34a.	5.25	0.75	4.00	1.60	5.42	0.67	4.89	1.24
34b.	4.83	1.03	4.33	0.89	4.42	1.62	4.53	1.18
35a.	6.17	0.83	5.83	1.11	6.75	0.45	6.25	0.80
35b.	4.50	1.38	4.08	1.00	3.92	1.78	4.17	1.40
36a.	6.92	0.29	6.83	0.39	6.75	0.62	6.83	0.43
36b.	6.42	0.79	5.00	1.71	5.92	1.00	5.78	1.33
37a.	6.42	0.90	6.00	1.28	6.83	0.39	6.42	0.86
37b.	4.67	1.50	3.50	1.17	4.75	1.48	4.31	1.47

	Univ. Super.		Coop. Teachers		Stud. Teachers			Group	
Items:	Mean	St. Dev.	Mean	St.Dev.	Mean	St.Dev.		Mean	St. Dev.
38a.	6.33	0.89	6.17	0.94	6.08	0.79		6.19	0.86
38b.	4.42	1.56	3.17	1.03	4.50	1.78		4.03	1.58
39a.	6.25	1.06	5.92	1.08	6.33	0.89		6.17	1.01
39b.	4.58	1.31	3.17	1.03	4.33	1.83		4.03	1.52
40a.	6.83	0.39	6.00	0.85	6.50	0.67		6.44	0.64
40b.	6.08	0.79	4.67	1.37	5.17	1.19		5.31	1.12
41a.	6.00	1.71	6.08	0.90	6.83	0.39		6.31	1.00
41b.	5.25	1.42	4.75	1.54	5.25	1.14		5.08	1.36
42a.	6.08	1.56	6.17	0.83	6.17	1.03		6.14	1.14
42b.	5.25	1.71	5.33	0.78	5.75	0.97		5.44	1.15
43a.	6.92	0.29	6.83	0.39	6.92	0.29		6.89	0.32
43b.	5.75	0.75	5.75	1.06	6.08	1.24		5.86	1.02
44a.	5.75	1.48	6.17	1.19	6.25	0.87		6.06	1.18
44b.	4.00	0.74	3.67	1.15	3.92	0.51		3.86	0.83
45a.	6.17	0.83	6.50	0.80	6.25	0.87		6.31	0.83
45b.	5.17	0.94	6.08	1.16	5.92	1.56		5.72	1.22
46a.	6.92	0.29	6.83	0.39	7.00	0.00		6.92	0.23
46b.	5.92	0.79	5.92	1.08	6.17	1.34		6.00	1.07
47a.	5.58	1.24	4.58	1.08	4.83	0.94		5.00	1.09
47b.	4.92	0.90	4.08	0.51	4.33	1.07		4.44	0.83
48a.	6.33	0.89	5.58	1.31	6.67	0.49		6.19	0.90
48b.	5.50	1.31	4.50	1.17	4.75	1.71		4.92	1.44
49a.	6.25	0.87	6.00	0.95	6.50	1.00		6.25	0.94
49b.	5.33	0.89	5.17	0.94	5.42	0.90		5.31	0.91
50a.	6.83	0.39	6.75	0.45	6.83	0.39		6.81	0.41
50b.	6.00	0.74	5.83	1.11	6.42	0.67		6.08	0.84
51a.	6.50	1.00	6.33	0.78	6.92	0.29		6.58	0.69
51b.	5.08	1.08	4.83	0.94	5.00	1.35		4.97	1.12
52a.	6.83	0.39	6.92	0.29	6.67	0.89		6.81	0.52
52b.	6.17	0.72	5.58	1.62	6.00	0.85		5.92	1.13
53a.	6.75	0.45	6.33	0.89	6.08	1.38		6.39	0.91
53b.	5.83	0.39	5.42	1.08	5.33	1.15		5.53	0.94
54	7.00	0.00	5.67	1.50	6.17	1.11		6.28	0.87
55	5.83	0.72	5.42	1.31	5.58	1.31		5.61	1.11
Grand:	5.81	0.88	5.46	0.99	5.86	0.93	Group:	5.71	0.95
	(M)	*(SD)*	*(M)*	*(SD)*	*(M)*	*(SD)*		*(M)*	*(SD)*

Note. "Boxed" cells in the SD column = seven items not reaching consensus.

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