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**REHEARSING IN THE CHORAL CONTEXT: A QUALITATIVE
EXAMINATION OF UNDERGRADUATE CONDUCTOR/TEACHER PLANNING
PROCESSES AND RELATIONSHIPS TO EMERGENT PEDAGOGICAL
KNOWLEDGE EVIDENCED IN TEACHING**

By

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ABSTRACT

REHEARSING IN THE CHORAL CONTEXT: A QUALITATIVE EXAMINATION OF UNDERGRADUATE CONDUCTOR/TEACHER PLANNING PROCESSES AND RELATIONSHIPS TO EMERGENT PEDAGOGICAL KNOWLEDGE EVIDENCED IN TEACHING

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Development of pedagogical knowledge in relationship to an understanding of musical content is a central concern for choral music teacher education. This study investigates an alternative model of preparation and planning for music teaching and learning in the choral rehearsal. The model emphasizes brainstorming and imagining for teaching as documented by a visually-oriented map of student thinking.

The qualitative study can be described as a strand of formative research whereby the teacher functions as researcher in the investigation of one proposed curricular model. The research participants included 6 junior-level undergraduates in a choral methods class at a large mid-western university over a 15-week period. A 15-week pilot study preceded the project. Data collection during the project period included: 1) written teaching plans, 2) video footage of conducting episodes, 3) teacher/researcher field notes, and 4) student written assignments. Analysis occurred both alongside data collection and more exhaustively at the culmination of the project. Analytical tools included the coding of teaching plans and a profiling of narrative for themes and patterns relevant to the process.

The results of this study supported increased attention to the preparatory process for teaching based on rich musical understandings gained through immersion in score study and analysis. The alternative brainstorming model seemed to foster expansion of novice conductor/teacher thinking in the preparation for teaching, including both teacher decisions about the music and imagined teaching strategies to carry out musical objectives. Planning was seen as organizing for instruction and an outgrowth of the more intensive preparatory process.

The brainstorming model reflected the following features: 1) the exercising of an “expert-like” mindset towards development of expertise, 2) a linking of musical content knowledge to growing pedagogical knowledge, and (3) the improved attention towards teaching for contextual, particularized understandings of the music.

Implications of the study for improved classroom practice included a re-definition of the preparatory process for teaching to reflect a three-part process: 1) score analysis and study, 2) brainstorming as represented by a visual map, and 3) planning for instruction.

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**To my students past and present who infuse my teaching with meaning and
bring joy to my music-making.**

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CHAPTER 1

INTRODUCTION: BECOMING A TEACHER

A fourth-year student in vocal music education has just completed all pre-service teaching requirements and expresses the following in her daily journal:

For all the times I have been in front of the choir, for all the discussion about teaching choral music and studying conducting I have been engaged, for all the eagerness and motivation I have for learning about how to teach, I feel distinctly unprepared to student teach next week.

Surely every student must feel this way, yet, I somehow have the feeling that something has been missing. I am so afraid of being in this new situation and having no idea what to do before the students. I have kept every lesson plan I have ever written, I have kept every observation form of my teaching from peers and professors, yet I know when I step before the choir Monday morning, it will be a brand-new ball game, just like it has been each occasion I have taught these past semesters.

I only wish I felt like what I know inside, who I am as a musician, could translate into my teaching. My professors tell me experience is the only thing that can help this occur, but I feel there is so much more of me to share than anyone has ever seen. Why is it I don't feel like my own strengths as a musician intersect with my teaching? I know I can do better, but I just don't know how.

This narrative account is a composite of concerns I expressed in my personal journal the semester before student teaching. It captures a familiar ambivalence observed in many of my college students, namely, that the integration of one's musicianship and newly developing educatorship feels inadequate before the impending student teaching experience.

Teacher preparation remains a central concern of the music teacher education profession. As educators are held increasingly responsible for the educational crisis facing the United States, teacher preparation will remain a critical site of inquiry (Apple, 1995). The persisting focus on the teacher as incompetent can only cloud progress towards educational reform in an environment in which the educator is already subjected to countless varieties of institutional control, systematic de-skilling by “teacher-proofing” curriculum, and waning or misdirected resources (Apple, 1993; 1995). According to Lanier and Little (1986, p. 542), research indicates both prospective and practicing teachers have low expectations for their professional knowledge or improvement of practice:

The desire for serious and continued learning for improvement purposes is understandably low in light of growing declines in extrinsic and intrinsic rewards for the occupation of teaching itself. Further, aspirations to employ new understandings and intellectual insights while remaining in teaching are often perceived as dysfunctional, because opportunities to exercise informed judgment, engage in thoughtful discourse, and participate in reflective decision making are practically nonexistent as teaching is presently defined.

It is in the transition from student to emerging professional that the choral music education profession can hope to have its greatest impact. Teacher preparation requires a critically reasoned examination of the way in which choral music educators are prepared in the university setting, as well as establishing a strengthened platform from which new teachers can survive and grow in the current educational environment.

Choral Teacher Education

In choral music education there has been a growing interest in research on teacher education, most notably in the areas of developing teacher expertise or musicianship (Davidson & Scripp, 1992; Dolloff, 1994; Standley & Madsen, 1991), the examination of power relations in the choral ensemble (O'Toole, 1994), as well as considerable philosophical grounding for practice from philosophers/practitioners (Bowman, 1998; Elliott, 1995; Rao, 1988, 1987; Reimer, 1989). At a 1996 conference, Retreat for Choral Music Education, held at the University of Illinois and dedicated to choral teacher education, distinguished educators and beginning collegiate teachers alike compared experiences in the quest for better ways to teach choral methods and conducting courses. The conference represented an important effort by the profession to come together in dialogue to stimulate research and provide networking of professionals for resources and support.

The Research Problem

This study grew directly from my experiences with beginning and advanced choral conducting and methods classes during my first three years teaching at the collegiate level. Teacher research can be thought of "as systematic, intentional inquiry by the teacher" (Cochran-Smith & Lytle, p.4). Emergent issues at both the beginning and advanced levels began to take shape as I documented both the successes and challenges encountered by my students and as I began to examine my role in facilitating their learning and growth.

I made the following related observations: students often taught with little or no regard for the musical sounding presented by the laboratory chorus, frequently employing a “laundry list” approach to rehearsing; teaching actions regularly appeared unrelated to personal musicianship as demonstrated in ensemble or studio contexts; experiments with planning for rehearsals did not seem to adequately facilitate student comprehension of the teaching process nor did it seem to increase understanding of the music under study.

As an example, one conducting class student had planned to teach a warm-up sequence that utilized solfege syllables, which she hoped would solve an interval problem in the upcoming repertoire. She had the singers replicate a solfege pattern, using hand signs until the intervallic relationships were approximated. The choir, however, sang without breath support, which adversely affected tone and pitch. The result was the establishment of bad vocalism for the very place in the repertoire the student wanted to solve.

In deconstructing the event, the student was unable to identify the bad vocalism, focusing instead on the fact that the choir was able to replicate her modeling. The student did not seem to listen in the actual sounding but rather focused on progression through a sequence of teaching activities. Her method of evaluation took into account only those instructional steps she planned prior to the teaching event.

As an educator, I wanted to better understand my role in these observations in terms of course structure and content, environment established by my words and actions, and the influence or lack of influence my model

provided in conducting class and in the choirs many of the students participated in alongside conducting and choral methods course-work. The development of this project is an initial foray in exploring these issues.

Overview of the Study

Six students in an undergraduate choral methods course at a large mid-western university served as participants over a 15-week semester. One year earlier, a 15-week pilot study preceded the project in which a similar class developed and experimented with a co-created model of teacher planning. The model is best described as a brainstorming inventory of student thought in relationship to upcoming teaching. It emphasizes linking personal understanding about a musical score to development of teaching strategies to carry out teacher decisions about the work. As a means of examining teacher planning practices, analysis of the pilot project encouraged further attention and refinements to the preparatory process which shaped the development of the research project.

Data collection during both the pilot study and research project reflects the teacher/researcher's interest in participant experience and includes collection of written teaching plans, video footage of conducting episodes, and teacher/researcher field notes and journal entries. Also collected were student written assignments such as reflections on teaching and planning processes, assigned topics for short answer, and self and peer reflections.

Narration of the pilot study and research project includes a description of the class experience, explication of the system of score analysis used in relationship to the planning process, and documentation of student experience in

the form of narrative vignette. Data display is accompanied by interpretive analytic commentary and features an in-depth analysis of written teaching plans. The analysis views both within-case and across-case examples as a means of viewing both breadth and depth of participant experience.

Analytic tools include a coding process developed to order observations of written teaching plans, the use of narrative to explicate primary themes emerging from participant experience, and interpretive commentary derived from researcher observations about student experience and the teaching plans in particular.

Purpose of the Study

The study explores ways to better prepare undergraduate conductor/teachers for real-world teaching experiences. Growing out of my own questions about teaching conducting, I began to recognize common difficulties my students encountered. As a teacher, it was apparent to me that students who excelled in the studio or choral ensemble often floundered when conducting, particularly when rehearsing the laboratory chorus. While I felt confident in addressing gestural issues related to conducting study, I became increasingly uncomfortable in my inability to provide links between their musical knowledge and emerging teacher knowledge.

The area of primary dissonance for me became the rehearsal planning question. I understood well that students must have an adequate process of planning for rehearsal rooted in score study. This process needed to include ways of bridging the musical discoveries students were able to make with an

ability to present and teach the material to the laboratory chorus. I began to notice that in the construction of rehearsal guides (lesson plans), without specific coaching from me, students organized their plans from the behavioral objectives model and more often than not taught according to a “laundry list” of activities to accomplish.

When the students approached rehearsing in this way, they often disregarded the actual sounded musical challenges, even at times appearing not to “hear” the sounding at all. As a teacher, I needed to adopt the researcher perspective in order to better understand the phenomena I observed and to rethink my role in the process, as well as ways of adjusting the class to better meet the needs of my students.

The primary focus of the study was the development of an alternative process for rehearsal planning in the choral teaching context. Following an initial pilot study in which various approaches to rehearsal planning were cultivated, the project narrowed to a co-created, non-linear model of rehearsal planning which became the central focus for the teacher planning question. This non-linear model emphasizes brainstorming and generative thought represented by visually-oriented maps of student thinking. Student self-perception and researcher observation played an important role in the emergent model as documented throughout the project.

Qualitative Inquiry and the Project

The research questions are embedded in personal experience, in individual perception, as well as in culturally shared understandings among class

members. According to Rubin and Rubin (1995, p. 35), “interpretive researchers seek thick and rich descriptions of the cultural and topical arenas they are studying and try to develop an empathetic understanding of the world of others.”

Music education has only recently begun to recognize qualitative studies as scholarly investigations on par with well-established quantitative paradigms. Qualitative research can be considered “multi-method in focus, involving an interpretive, naturalistic approach to its subject matter” (Denzin & Lincoln, 1994, p. 2). It is particularly suited to investigations of shared experience and socially constructed meaning, and acknowledges the researcher as inextricably embedded in the context to be studied.

Qualitative methodology, or strategies of research, differ significantly from a positivist, quantitative approach. The application of common terminology such as triangulation, validity, generalizability, and reliability further confuse the reader as usage differs widely between the two paradigms. Qualitative investigation implies an emphasis on process and the cultivation of an interpretation of the experience rather than on methods of measurement to describe a research hypothesis. According to Denzin and Lincoln (1994, p. 11), quantitative research results are often generalized to the larger population while qualitative results emphasize local, small-scale theories fitted to specific problems and specific situations.

Formative Research as Qualitative Inquiry

Formative research or development research is a disciplined, systematic examination of an educational product or program within the natural classroom

environment (Bresler, 1994). According to Bresler, its explicit purpose is improvement of the product or program under study, or of the developers' ability to design and produce similar products or programs in the future. "Such examination should focus on teachers' perceptions and adaptations of the materials to the existing curricula, as well as students' interactions and experiences with the materials" (p. 11).

When formative research functions as a strand of action research, the researcher and teacher become one in the context of the researcher's classroom setting. Drawing on the pragmatist tradition, the goals of action research are fitted, local, and specific to the research question at hand. Formative research frequently contributes to the generation of theory, drawing on scholarly literature for its conceptualization (Bresler, 1994). According to Bresler (p. 13), "It can lead to the generation of new theories which are rooted in specific programs and immediate, particle concerns. Because of the goals and nature of formative research, its audience includes practitioners as well as academics." The generated theory is the result of an examination of local, practical, contextual issues broadened to larger issues of teaching practice.

Viewed differently, the teacher/researcher strives to become what Eisner (1991) terms an educational connoisseur. The development of this form of heightened sensitivity to the classroom environment serves as ". . . the means through which we come to know the complexities, nuances, and subtleties of aspects of the world in which we have a special interest" (p. 68). He identifies

educational curricula, textbooks, and materials as important for assessment by educational connoisseurs as a way of satisfying educational aims and goals.

Following Bresler's (1994, p. 15) definition, this study can be characterized as formative by meeting her stated criteria: the research is applied and concerned with improvement of teaching, it is interactive and involves student perception and experience, and it contributes to practice in such a way that others can interpret for themselves the applicability to their own teaching circumstances.

Validity, Generalizability, and Reliability

In the qualitative paradigm, validity refers to whether the description of the observed phenomenon credibly explains the phenomenon. A central way to check for validity is to seek participant review, which occurs both during and more comprehensively at the culmination of the project. According to Erickson (1996), there tends to be a bias towards typical or frequently occurring events when ascertaining validity. Rare events are also important, and internal validity is strongest when it accounts for patterns across both rare and familiar events.

It is commonly understood that generalizing results of a qualitative study can be done insofar as a future reader can identify with the experience. The careful framing of patterns with respect to certain themes becomes a central challenge (Carter, 1993). The researcher will make no attempt to generalize results to all undergraduate conducting study, instead painting as rich a portrait of the specific case as possible. Future readers may target areas of commonality, examining their own situations in relationship to the findings.

Bresler (1994, p. 23) addresses the issues of validity and generalizing results in formative research:

Since formative research is contextual and naturalistic, development researchers build upon the uniqueness of personal understandings, offering a credible account and a vicarious experience. Researchers also ask each reader to incorporate the account into prior experience and belief. By reporting the kind of detail that enables readers to bring their developed faculties of judgment into play, it facilitates inferences by the reader regarding other situations. Readers transfer insights from a study to other situations based on the similarity they perceive between the situations, intuitively weighted as to what is important and unimportant in the match.

Reliability, with emphasis on replication of results in a new setting, is not a particularly useful concept in most qualitative research. According to Lee and Yarger (1996, p. 32), "It would seem almost contradictory to specify procedures for data collection and analysis when so much of the nature of the study depends on personal experiences of researchers and subjective meaning making of the phenomenon as the study progresses."

Design and Triangulation

Qualitative methodology is by nature emergent. In a discussion of interviewing techniques, Rubin and Rubin (1995) note that design should be flexible, iterative, and continuous rather than rigid. Flexibility refers to the ability to react to emerging data as new themes or directions present themselves. Iteration is the process of continually examining data towards ever-refined understandings of the major themes presented. Continuous design reflects the nature of the process as well as the open-mindedness of the researcher toward the project.

Triangulation in qualitative research, unlike in its quantitative counterpart, is concerned with a multi-method approach to research strategies rather than a means of validating data. The use of multiple methods “reflects an attempt to secure an in-depth understanding of the phenomenon in question” (Denzin & Lincoln, 1994, p. 2).

The emergent process is evident throughout the project as data are simultaneously collected and initially analyzed through examination of field notes, content analysis of rehearsal plans, and personal reflection in the form of written assignments, and self and peer evaluations. The area of rehearsal planning, as shaped by student experience during conducting/teaching rounds, is a central focus of the study.

Professional Philosophy of Teacher Education: Issues of Neutrality

When the researcher is also the teacher, issues of objectivity invariably arise. I have not engaged in this project with the intent of distancing myself; indeed my role as teacher is central and germane to the questions asked. Clandinin and Connelly (1988, p. 25) define personal practical knowledge a teacher’s “reconstructing the past and the intentions for the future to deal with the exigencies of a present situation.” To this end, image is important within experience, embodied in us and expressed and enacted in our practices and actions. It affects choices teachers make with regard to teaching and curriculum (p. 60). Finally, these images serve as metaphors: “We understand teachers’ actions and practices as embodied expressions of their metaphors of teaching and of living” (p. 71).

With this in mind, an explicit philosophical emphasis was placed on the development of conducting/teaching in which the role of the classroom teacher was that of facilitator or mentor, in which overt attempts were made at redefining the power structure of the choral classroom towards shared inquiry, and in which reflective thinking on the part of the novice teacher was at the heart of decision-making and problem-solving. Equally important was the guiding belief that students brought to the class various degrees of musicianship and artistry that could be directed toward the conducting/teaching process.

As both instructor of the course and primary researcher, I am inextricably embedded in the study, and my beliefs form the basis for the investigation. I am not a neutral party and therefore define my experiences in the class alongside those of my students.

Outline of the Chapters

In answering the research questions, the discussion is anchored in the wider literature on teacher thinking and expertise. Chapter Two establishes operational definitions and philosophies of teaching and conducting, particularly as it relates to the various kinds of thinking required to carry out both musical and teaching actions. Chapter Three situates the discussion in the music education research base as it pertains to studies of teacher effectiveness/teacher competency, expertise, and conducting/choral methods. The chapter traces rehearsal planning considerations from the general music domain and specific to the choral teaching circumstance.

The review examines various forms of knowledge that are particular to thinking in music. The role of reflection is explored as a central feature to the development of conductor/teacher expertise. Planning for rehearsal counts as an important dimension of reflection about upcoming teaching.

Chapter Four describes research in the field of education on teacher thinking. Research on teacher thinking, interactive teaching, and teacher belief systems is more developed in education than in music education. Taken as a whole, these studies provide important links to understanding and defining teacher knowledge, describing the role of improvisation in the teaching process, identifying ways experienced teachers plan for instruction, and exploring how interactive decisions are made in the teaching act.

The unfolding of the 15-week pilot study is documented in Chapter Five including a description of the class experience, methodology utilized and adjusted during the project, presentation of the data and emerging rehearsal planning model.

Chapter Six establishes the research setting and method, including a description of upcoming analysis of within-case and across-case examples of participant data. Within-case analysis will examine teaching plans and supporting data in a single participant's output over the course of the project. Across-case analysis will examine a single teaching plan across all class participants for comparative purposes. Chapter Seven reports within-case analysis of three students which view all teaching plans submitted during the project period. Chapter Eight examines across-case analysis of all class

participants by viewing the teaching plans of a single piece submitted mid-project. In “telling the story” of both within and across-case examples, several modalities are presented including narrative story-telling, visual presentation of the data, and reflections of the researcher.

The narration illustrates emergent patterns and themes of student experience in relationship to the rehearsal planning process. Analysis and interpretation includes the development of categories that enable grouping of themes and patterns through a coding process. A comparative examination of both within-case and among-case student work adds breadth to the analysis. Triangulation through student narrative and researcher observation provides further depth.

Chapter Nine, a meta-analysis, includes practical implications for the improvement of the researcher’s classroom practice as well as possible considerations for choral music education and future research in conductor/teacher thinking.

Summary

The study is expected to provide a rich description of the conducting class experience and illuminate central areas of dissonance and consonance as students negotiate the ideas underlying the rehearsal planning process. It is not expected nor intended to serve as a broad generalization of how to approach conducting study at the undergraduate level but is hoped to serve as a single strand in the growing discourse around teaching thinking in music education.

CHAPTER 2

FRAMING THE RESEARCH: OPERATIONAL PHILOSOPHIES

This chapter examines what it means to think as conductor/teachers towards development of teaching expertise. Operational definitions of terms such as musicianship, educatorship, improvisation, and reflection-in-action will establish philosophical parameters of the study. The perceived influence of a behaviorist orientation towards choral teacher training, as originally developed by Ralph Tyler (1950) mid-century, will further establish theoretical framework for the research problem and subsequent project.

Conductor/Teacher and Expertise

Conductor/teacher preparation necessarily involves at least two distinct areas of knowing: musical knowledge and teaching knowledge. In this study, the term conductor/teacher will be employed simultaneously to deliberately highlight both functions. Part of my premise is that the choral profession has unnaturally separated musical understanding (self) from the teaching of musical understanding (others) in the undergraduate education of young conductors. A recent conversation I had with one of my students highlights this point:

“Jeff” approached me after the first conducting class of the semester. He was concerned whether he had signed up for the right course. Jeff is a junior level vocal performance major and is required to take conducting study as part of his curriculum. When asked what the concern was, he replied “After reviewing the syllabus, and talking in class, I think the course must be for music education majors because the focus seemed to be on teaching. I was hoping for a class that focused on conducting, you know, to get me ready for a church choir job when I graduate.”

Jeff was clearly operating with the assumption that teaching was a subsidiary function of the conductor and that his time would be better spent focusing on **gesture** alone.

Thinking in music and thinking in teaching require rich, complex, and fluid **forms** of understanding. Recent research about these cognitive processes has **shed** new light on the general nature of knowledge as well as domain specific **cognition** (Carter, 1990; Gardner 1983; Grossman, 1990, Shulman 1987; **Sternberg** 1988).

Dolloff (1994) examined the nature of music teacher expertise in the **choral** music education context. In a study that focused on continuing **Professional** development issues for choral educators, she drew on literature **from** educational research and cognitive psychology to identify and trace strands **of** the related but separate domains of musicing and teaching. Following Elliott's **(1995)** view of music teaching and learning, Dolloff asserts music is a complex **form** of situated knowledge, and the teaching of this knowledge requires not only **the** base of musicianship but also situated knowledge of educatorship. The term **expert** in music teaching, then, refers both to a highly developed level of musicianship as well as the abilities to develop such in others.

Why is expertise a concern for conductor/teacher preparation at the undergraduate level? After all, novice teachers can hardly be expected to be characterized as such in a comparatively early stage of development. One of the ways in which the question of conductor/teacher expertise can be explored is to turn to research outside the field of music for consideration, deconstruction, and

possible portability to the choral music education circumstance. Much research exists about expertise as it relates to cognitive bases, behavioral and social manifestations, and examination of domain specific experts in fields as diverse as medicine, chess, sports, arts, and education (Bereiter and Scardamalia, 1993; Berliner, 1986; Ericsson, 1996; Hoffman, 1992;).

Bereiter and Scardamalia (1993) make useful distinctions between an expert and an experienced nonexpert. In the teaching context, an expert teacher will approach teaching as the constant search for new ways in which teaching challenges may be addressed. This "growing edge" of learning characterizes the openness, self-reflection, and continual sense of renewal evidenced by the expert:

Our conjecture is that in order to be experts, people must choose to address the problems of their field at the upper level of the complexity they can handle. And they must make this choice early in their careers, or perhaps even earlier, as school children. For it is through such working at the upper edge that people develop the deep knowledge that makes expert performance possible (p. 20).

It is important to distinguish the comparison between the experienced nonexpert and expert rather than traditional comparisons of the novice and the expert.

Bereiter and Scardamalia are concerned with expertise as process-based, and as such, drawing distinctions between those with similar backgrounds and experience levels.

Elliott (1995) likens the process approach of learning to teach music to improvisation, through which the musician seeks new ways of expressing herself rooted in a rich base of procedural knowledge (know-how). The expert teacher's paradigm is enlargement of the existing base of knowledge and experience in

the quest to facilitate learning and growth, both in terms of teacher and student. Thus, while the teacher continually pushes her upper limits of challenge, she is likewise engaged in the facilitation of a sense of collective expertise on the part of the ensemble.

The experienced nonexpert, instead of improvising, attempts to reduce the set of possibilities in the teaching act to single or familiar responses. As a course of habit, the experienced nonexpert will ritualize teaching so that it requires progressively less independent thought to carry out the teaching action. The experienced nonexpert shares similarities with the novice teacher as the novice does not yet have the procedural knowledge or experience to anchor improvisation in the teaching instance.

The cultivation of an expert-like model, based on a process-oriented understanding of developing expertise, might provide the novice teacher with ways of exercising musical content knowledge (musicianship) and teacher knowledge (educatorship) towards ever spiraling integration of the two. Further, it is important to acknowledge that expertise is relational in nature. As Howard notes, "what counts as understanding for the novice may only approximate that of the expert. Yet, because he is able to go on and do better we say of the novice he understands" (1982, p. 62). Such understanding can be thought of as expert-like, akin to a work in progress, in contrast to "an expert," one at the upper level of a field.

Pre-student teaching experiences might be structured in ways that emphasize the development of expert-like thinking. In the choral educator

professional development paradigm, Dolloff (1994) notes expert-like thinking will be most likely to develop when the opportunities are sustained over time, context-driven in a community of learners, and include observation of a master teacher. Curricula for undergraduate conductor/teachers could follow a similar approach as will be examined in this study.

Expertise as Process-Based

A process view of expertise has important implications for choral music educators. When expertise is examined as a process, not a product, it may be developed and exercised, and the mind-set for such development encouraged. As emerging conductor/teachers, our students can be taught to think of their growing educatorship as a process of integrating their already substantial musical understanding (or musicianship) with their emerging understanding of the teaching process. The integration of musicianship and educatorship is a critical concept, for conductor/teachers must depend on their rich musical understandings as the basis for developing a specialized form of improvisation in the conducting context - that of teaching.

By design, in fact, university training often separates the development of musicianship and educatorship. Choral conducting is frequently taught as a gesture-based course in which mastery of gesture is prerequisite to the teaching of rehearsal planning, score study, or the rehearsing of choral music. Conducting gesture is one of the most powerful teaching tools at our disposal, emphasizing non-verbal knowing, but the approach to the fundamental teaching

of gesture can be technique-based, largely separated from the personal demonstration of musical understanding and expression.

Similarly, choral methods study can be structured in such a way that isolates the physicality of conducting from the teaching of music. In this case, “methods” or pedagogy is a-contextually examined during which actual conducting may be limited to a few micro-teaching instances, and rehearsal planning is discussed generically and outside of a particular musical instance. Further, choral methods study frequently emphasizes the practical considerations of administering a choral program, which decreases instructional time allocated for development of teaching. The implicit message to students may be that their musicianship and educatorship are separate considerations, if not unrelated.

Complicated issues certainly imbue ways in which conducting and methods courses are typically structured. Conducting gesture is a kinesthetic form of cognition that requires sophisticated bodily knowledge as well as serving as a rich reflection of non-verbal musical understanding. But, the challenge to integrate conducting gesture with such understanding is a central concern.

Noted conducting pedagogue Elizabeth Green (1997) writes:

It is wise to build your technique away from the podium, for as soon as the music starts, in rehearsal or performance, the full powers of your mind switch over to the music, and your hands are left to their own skilled (or unskilled) devices . . . In one short, spicy sentence, musicianship is what your ear hears while you are conducting (p. 2).

Musicianship, Educatorship, and Improvisation

Several terms need to be operationally defined at this point. Musicianship is a rich form of situated knowledge expressed by the music-maker in relationship to specific standards and traditions of musical practice, and as active mental constructions cultivated by the music listener. Articulated by Elliott (1995), this view represents a praxial approach to music education in which musicianship is developed through the act of music-making, or musicing.

According to Elliott:

Musicing in the sense of musical performing is a particular form of intentional human action. Performing depends on the deliberate formulation of purposes in a definite context. A musician acts by selecting a particular situation or condition with an intention in mind; by deploying, directing, and adjusting certain actions to make intended changes of certain sounds of a certain kind; and by judging when the intended changes have been achieved in relation to standards and traditions of musical practice (1995, p. 50).

Elliott (1995) draws on the research of cognitive psychologists Bereiter and Scardamalia and the writings of philosopher Gilbert Ryle (1949), and identifies five kinds of knowledge that constitute musicianship: procedural (know-how), formal musical knowledge (knowing about), informal musical knowledge (gained through immersion into particular standards of musical practice), impressionistic musical knowledge (intuition which urges one towards particular musical decisions), and supervisory musical knowledge (the ability to monitor one's actions, musical and extra-musical, in the act of music-making).

Musicianship, then, can be seen as situated knowledge based in particular standards of musical practice. This in part explains why conductor/teachers are successful in some musical genre, say Baroque-era

music, and less so in others outside their experience, perhaps American jazz.

This has important implications for the breadth and depth of music chosen in conducting and choral methods classes, as well as for ensemble experiences *during* the collegiate experience.

If one applies the same principle to defining educatorship, situated *knowledge* embedded in the act of teaching, it becomes apparent for the *conductor/teacher* that musicianship and educatorship are mutually dependent *rather* than separate considerations. This seemingly obvious concept has *important* meaning as teaching must occur in relation to content, and content in *music* is not static or fixed, but directly related to the conductor/teacher's ongoing *musical* understanding. Conducting is both active, personal music-making and a *real-time* direct link to the music-making of others. As such, the continued *development* of individual expertise, or musicianship, impacts the ensemble's *collective* efforts towards musical understanding. Likewise, music-making occurs *in* a specific cultural instance with context dependent needs of the learner, demanding situated understandings of what it means to think in teaching.

Improvisation gives particular meaning to the process conductor/teachers must employ in a given musical instance. Alperson (1994) posits that musical improvisation includes composing in real time, interpreting, and performing. Teaching can also serve as a form of improvisation. Kennedy (1987) asserts that teaching requires the selection of a strategy that is codependent on the interpretation of that strategy in the teaching instance. This form of reflection-in-action has been written about extensively by Schön (1983, 1987) and will be

explored below. The teacher is improvising in the sense that she must “compose” or select a focus from many problem-setting possibilities, decide how to exercise the focus in real-time, carry out the focus based on her *understanding* of the context at hand, and evaluate in-action the decision made.

Reflection-in-Action

The notion of reflection, or reflecting-in-action has become central to **discussions** of teacher expertise. In his seminal account of the relationship **between** reflection and the work of professionals, Donald Schön (1983) **describes** what it means to “know” something and be able to reflect on this **knowledge** both in the action and independent of the action.

Knowing-in-action is the “characteristic mode of ordinary practical **knowledge**” (Schön, 1983, p. 54). Such procedural knowledge is so internalized **that** it can be carried out spontaneously, without thinking about it prior to **execution**. He describes knowing-in-action as often beyond verbal description **and** knowledge that does not necessarily stem from a prior intellectual operation. As it applies to music, this concept is fully outlined in Elliott’s discussion of what constitutes musicianship (1995, p. 55).

As Schön (1983) notes, it is possible to evaluate what we are doing as we are “in-the-action.” This “thinking on one’s feet” can be termed reflecting-in-action, which occurs in real time. It differs from reflecting on one’s actions either prior to or following an experience. He argues that reflecting-in-action is often far removed from conventions of professional practice. Schön describes:

When someone reflects-in-action, he becomes a researcher in the practice context. He is not dependent on the categories of established theory and technique, but constructs a new theory of the unique case (p. 68). . . Many practitioners, locked into a view of themselves as technical experts, find nothing in the world of practice to occasion reflection. They have become too skillful at techniques of selective inattention, junk categories, and situation control, techniques which they use to preserve the constancy of their knowledge-in-practice (p 69).

Note the similarity here between Bereiter and Scardamalia's (1993) discussion of **the** experienced nonexpert who progressively ritualizes knowledge in a given **domain** and Schön's description of professionals who do not actively reflect on **their** actions.

Schön (1983) describes the relationship between reflection-in-action and **musical** improvisation as one in which musicians make on-the-spot adjustments **and** new constructions based on their musical knowledge at both the individual **and** collective level. Such knowledge is the result of prior experience, but also of **reflecting-in-action** towards a new evolution of musical sound and structure. Far **from** a verbal reflection, this "feel for the music" seems to "focus interactively on **the** outcomes of the action, the action itself, and the intuitive knowing implied in **the** action" (p. 56).

The practice of teaching, then, might be described as a particularized form of reflection-in-action. Put differently, one must stimulate imagination as a primary tool of the reflective act. Howard (1982), discusses the ability to re-direct action in relationship to imagination. "In effect, it is imagination that enables us to adjust our know-how to particular cases and even to revise it radically or transfer it to new realms of application" (p. 135). He describes imaging, in the heuristic sense, as both the construction of a mental image, and the

performance of the image (p. 138). Both views hold important implications for the approach to teaching.

There are considerable problems to be faced in the domain of music with regard to the cultivation of reflective inquiry among music professionals. Music is foremost a nonverbal form of procedural knowing. Procedural knowledge in music, as explained by Schön (1987), may involve thinking that does not result in verbal concepts or need to be mediated by language. This know-how may be so internalized that it defies explanation, indeed may supersede explanation. When one considers how to teach or model reflecting-in-action and how to evaluate whether it is occurring in the novice conductor/teacher, one necessarily relies on language as the primary route of communication between persons.

Equating reflecting-in-action with verbalization about music and teaching is a persistent challenge. Verbalization, making formal tacit or nonverbal musical understandings, potentially re-situates the experience outside the music, away from the musician and musician's personal understandings. As Stublely (1996) notes, "It. . . leads me to wonder how many times we as music teachers have, in the name of developing critical thinking skills, asked a question, and in so doing, prevented the students from creating their own musical magic" (p. 7). Interrupting the musical experience with verbalization carries the risk of disrupting the potent nonverbal learnings that take place in the musical action.

Reflection in or on action is rooted in the larger research base on critical thinking. Indeed, in educational research a significant body of research exists about critical and reflective thinking (Richardson, 1992, p. 551). As it is a fairly

recent site of inquiry in music education, the distinctions between these terms and a concomitant philosophical grounding remains to be articulated comprehensively. Richardson outlines four areas of research studies that examine critical thinking and music: descriptive studies that focus on musical problem solving, correlation studies that focus on musical problem solving, correlation studies of the relationship between musical and nonmusical variables and measures of critical thinking, and verbal protocol analysis of musical thinking in the musical encounter (p. 553).

The Influence of Ralph Tyler and Research on Conductor Thinking

Music teaching, learning, and research have been influenced heavily by the behavioral objectives movement codified in mid-century by Ralph Tyler (1950) at the University of Chicago. Tyler was one of many responding to the call for school reform and teacher accountability. Writing about curriculum and instruction, Tyler's model of planning for instruction through the use of behavioral objectives can be traced in any number of curriculum projects in music, in ways that pedagogy is addressed in general and choral/instrumental methods classes, in basal text series, even in the construction of recent national standards endorsed by the Music Educator's National Conference (1994).

Bradford Wing (1992, p. 200) provides a widely agreed on summary of Tyler's principles:

- 1) Decide the aims of the curriculum.
- 2) Express the aims as explicit learner behaviors or objectives.

- 3) Devise and provide experiences likely to enable the learner to behave in the desired way.
- 4) Assess the congruence of pupil performance and objectives.
- 5) Vary the “treatment” until the behavior matches the objective.

Tyler’s approach, originally conceived as an evaluative and assessment vehicle for educational programs, widened to dominate thinking about how students should learn and who was ultimately responsible for directing such learning. Considerations of Tyler’s ideas focused nearly exclusively on his writing on evaluation and assessment though Tyler himself wrote far more broadly about educational issues. The timeliness of writing on evaluation and assessment likely encouraged this bandwagon effect as educational policy makers were increasingly held accountable for ways of “proving” educational products or programs mid-century.

In education, the Competency Based Teacher Education movement culminated in the 1970s, solidifying Tyler’s approach such that instruction was crafted into discrete units which could be observed and measured (Kennedy, 1987, p.134). “Although interest in CBTE peaked in the 1970s, the movement left its mark in the form of an almost universal concern with the importance of competency-based objectives, a legacy of technological innovations in classroom instruction, and an increased emphasis on field experiences” (Verrastro & Leglar, 1992, p. 680).

Elliott (1992) further contextualizes the Tyler approach to music education by describing the “technical rationality” philosophy, which he believes has had

profound influence on teaching during the last several decades. “Technical rationality holds that expertise is a matter of solving well-formed problems by applying theories and techniques based on theoretical (especially “scientific”) knowledge” (p. 8). He goes on to argue that technical rationality fails to recognize key problems teachers must solve that do not present themselves in a generalized way and that practice should inform theory rather than theory dictating specific (highly verbal) instructional strategies in practice.

In music, large scale curriculum projects such as the Aesthetic Education Program (AEP) of the Central Midwestern Regional Education Laboratory (CEMREL) have advanced Tylerian thinking. This is evidenced by a focus on behavioral objectives designed to teach identified elements of music such as melody, rhythm, timbre, harmony, and form. More recently, Discipline Based Art Education (DBAE), funded by the Getty Center for Education in the Arts, has followed suit with a curriculum development project for comprehensive study of the arts emphasizing aesthetics, criticism, history, and art production based on pre-determined learning outcomes. A notable difference in the approaches is the interdisciplinary focus inherent in DBAE curricula.

Pedagogical approaches, such as that espoused by Edwin Gordon, illustrate the Tylerian notion of sequence and concept-building (Gordon, 1989). Perhaps the greatest impact of widespread curricular influence in the school settings are basal text series that dominate elementary general music learning (Bradford Wing, 1992). Regardless of philosophical intent inherent in different basal text series or curriculum projects, the instructional activities in some way

embody Tyler's ideas with particular emphasis on music learning as sequential, based on predetermined musical concepts.

This may explain in part why studies of teacher thinking are largely absent from the music research paradigm. Given the consistency with which university programs prepare students using this framework, researchers are trained to think through the behaviorist lens and it is little surprise that so much extant research reflects this paradigm. Some approaches to curriculum in the latter half of this century have de-emphasized the role of the teacher and significantly diminished teaching by delivering predetermined material often selected by external curriculum experts or set forth as specific lesson plans in basal series textbooks (Apple, 1995). In these instances, the content is static and the teacher's manifest role is to present the material and evaluate whether learning has taken place.

When music learning is viewed as the acquisition of skills based on sequential activities designed to teach particular musical concepts, music teaching is necessarily defined within this paradigm. The "thinking" required to choose concepts to be taught, to construct instructional activities, and even to evaluate musical learning is often determined by persons outside the particular musical classroom. Teachers are de-professionalized in the sense that curricula is externally imposed. Certain curricular materials go as far as specifying step by step, word by word, what the teacher must say to deliver the instructional sequence and how to check for student learning (Apple, 1995). At the university level, novice teachers experiment with the behavioral objectives model of lesson

planning such that objectives are chosen, activities designed, and outcomes evaluated in micro-teaching or in-service experiences.

Central to the behaviorist purpose of music teaching, then, is to teach musical concepts by advancing the knowledge and skills needed to organize sound according to its elements. "All responsible teaching emphasizes the intentional sequencing of activities that lead to pre-established learning results" (Fröelich, 1992, p. 562).

One consequence of this approach may be that novice teachers do not learn what it means to think inside the teaching action, to react to the particulars of situated contexts, and to learn how to readjust the teaching instance in relationship to student needs. Viewed from the expertise paradigm, novice teachers are being taught how to reduce musical problem-setting into specific, observable, replicable concepts, how to teach in direct relationship to a concept, and how to teach in a linear, step by step sequence.

This approach may encourage novices to place their imagination on hold in favor of controlling the teaching act in a general, predetermined, a-contextual manner. Further, effective teaching in this way of thinking requires working out in advance of the teaching instance the specific path of instructional delivery which may or may not be suited to the actual teaching instance.

Research on teacher thinking can contribute significantly to understanding how teachers operationalize their knowledge in the teaching instance and begin to distinguish between personal musical understandings and the generalized body of music teaching knowledge.

Tylerian Thinking and the Choral Music Context: An Examination of Teacher Training

With respect to choral music education, Tylerian thinking is clearly evident in the rehearsal planning component of many choral methods or conducting courses as evidenced in standard textbooks (Brinson, 1996; Collins, 1993; Hylton, 1995). Choral methods or choral pedagogy appears to be modeled after general methods courses where lesson planning follows the basic philosophy articulated by Tyler (1950), whether explicitly cultivated or implicitly implied. In some universities, secondary methods courses absorb the choral component of the curriculum and both are addressed within a single course framework further supporting this trend.

An example of explicit cultivation of the behavioral objectives approach is apparent in a text geared for choral methods and/or conducting classes (Collins, 1993, p. 95-107). The author links the teaching of choral music to theories espoused by Thornburg representative of the Competency Based Teacher Education movement of the 1970's (p. 96-97). This theory includes a curricular focus on well-written behavioral objectives, learning activities, and assessment of learning. Collins introduces the model from the educational realm as a foundation upon which to cultivate mastery of teaching (p. 95). He illustrates ways in which the choral classroom can incorporate Thornburg's instructional model when devising teaching strategies by narrating a fictitious choral rehearsal utilizing Thornburg's structure (p. 104-106).

By layering on the general music methods planning model of behavioral objectives, a choral conductor would select a musical objective or concept within a piece, devise exercises to teach the objective, and evaluate whether the objective was met. Rehearsal plans are frequently written in a step by step, linear fashion and often submitted in advance of the teaching instance to the major professor. Conductor/teachers may be evaluated on whether the plan was executed as written and whether the plan adequately addressed the concept(s) to be taught.

Examples of planning for choral rehearsals with the behavioral objectives mindset is evident in choral methods textbooks. These lesson plans no doubt are constructed with the intention of giving students specific instructional strategies in the quest to best prepare teachers for real-world teaching encounters. The following is a representative account of a choral rehearsal plan (Brinson, 1992, p. 136):

V. Chanson on "Dessus le marché d'Arras" (twelve minutes)

A. pp. 3-4

1. Review notes from the monophonic model (SATB in unison) on "dah" and remind them of breaths.
2. Speak French for them, phrase by phrase, and have them echo.
3. Speak French in unison and in rhythm
4. Sing on French, slowly
5. Sing at a slight faster tempo.

B. pp. 5-6

1. S and T sing S line on "dee"
2. A and B sing A line on "dee"
3. Sing as written (pp. 5-7) on French

This example, even out of the context of the larger rehearsal plan presented by Brinson (1992), demonstrates an emphasis on a linear construction of rehearsal planning. Each step is carefully laid out in advance of rehearsal, the steps are logical and sequential, and if followed by the student, are likely to result in a “well-rounded” rehearsal sequence. While there is arguably value in teaching students to conceive of teaching as progressive sequencing, that form is important to the teaching interaction, there is at the same time little emphasis on teaching novice teachers how to respond when the needs of the students are in obvious conflict with the lesson’s objectives. This example is more implicit than the former in that behavioral objectives are not stated. The shape and form of the behavioral model, however, is apparent in the construction of the rehearsal plan.

Unlike general methods planning, choral conducting planning involves intensive score study, which ideally informs the conductor/teacher of those musical concepts salient to a particular work of music. The behavioral objectives model, however, has a determinant effect not only on how teaching will be approached, but also on the very way in which music is defined.

In this view, music can be deconstructed as a series of musical concepts represented in the behavioral model by identified musical elements such as form, harmony, timbre, rhythm, among others. Perception of these elements would be a central goal for instruction as evidenced and assessed through performance.

A paradox exists at this nexus for the conductor/teacher. The global nature of the behavioral method encourages a sameness of approach to considerations of instructional content and delivery. The music, in this case, serves the instructional paradigm, namely the teaching of musical concepts such as melody, timbre, harmony, form, and rhythm. More importantly, the teaching of choral pieces is regulated by an underlying philosophy that suggests learning in the choral context is sequential, can be layered on idea by idea, and is generalizable across musical practices.

This operating philosophy might be illustrated in the following fictitious vignette:

A conducting student is assigned a Bach motet to teach with a university laboratory chorus. This student knows much about Bach as she is an organ major and plays the Bach repertoire on a regular and sustained basis. Because of her background, she knows both tacitly and explicitly about the musical practice, and in performance demonstrates great sensitivity to style, articulation, tempi, and expressive devices.

Following score study of the motet, which includes playing through and singing as is her custom, the student feels she "knows" the score and would be prepared to play the accompaniment for a choral rehearsal or sing the work as a choral member with ease and understanding.

When preparing for the teaching rehearsal, the student faces a blank page and struggles to identify what to teach and how to teach the motet. She thinks "I'll focus on rhythm as an organizing concept and teach the characteristic motive of the opening movement." She decides to employ rhythmic syllables she learned in the Kodaly approach in her general methods course as a way of teaching the characteristic motive. By the time she teaches, she has constructed other such exercises for the ten minute experience with several extra "in reserve" in case she runs out of things to do.

During the teaching instance, she discovers that the singers execute the rhythmic challenge without problem. In somewhat of a panic, she quickly realizes that the exercises she has worked out to teach are not necessary. With little else to go on, however, she employs the exercises anyway.

She is somewhat aware as she teaches that the primary melodic motive is not quite accurate, especially as it returns with some variation in the tenor and alto sections. She makes a mental note to explain later to the choir that the intervals are incorrect but continues with her plan.

Following her experience, she expresses frustration to a peer after class. "There wasn't time to accomplish much," she complains, "and the choir seemed, well, unengaged. Maybe I need to be more energetic."

This vignette, though fictitious, certainly reflects both my own experiences in learning to teach and the difficulties faced by many of my students. In this case, the student already knew much about the musical practice presented by the Bach motet. Her own rich understandings, however, had little or no involvement in either her planning or rehearsal of the piece. Her score study process was likely far richer than her considerations of potential teaching directions.

This phenomenon is not uncommon. It is as if students are expected to turn off their internal musical understandings in favor of finding ways to teach global, generalizable concepts. These concepts are organizing umbrellas under which teaching strategies are devised. In the Bach example, she mentally thought through musical elements or categories (e.g., Rhythm, Melody, Harmony) and selected the one she believed most appropriate to the work. She was "stuck" at how to organize the teaching possibilities within the category she chose. Why would a student with such rich musical understandings flounder when considering how to present the piece? An obvious answer is that her musical understanding and emerging understanding of teaching are related but not synonymous.

There is yet more to the story. The student went on to teach the motet, discovering that the very exercise she had devised was not needed as the chorus sang the targeted rhythm correctly. Her recourse was to rehearse the strategy anyway as she knew she did not have enough material prepared to fill the ten minutes, and because it was expected that she follow a lesson plan. As she rehearsed, she became aware that the choir was missing a melodic interval and made a note to speak with the choir about it at a later time. Her intuition may have urged her to go to the sounded musical challenge, but her understanding of the teaching experience overruled intuition for the sake of appearing prepared and able to execute her planning ideas.

As she discussed the experience with a peer afterwards, she assumed that her personality (or lack thereof) was responsible for what she intuitively knew was a disconnected experience for all involved. She was left with the impression that her inadequacies overshadowed the experience.

What if, instead, the experience had taken the following form:

After careful score study, she begins to imagine how she might present the Bach motet in an initial teaching experience. These imaginings include thinking about the special qualities of this particular motet: the relationship of text painting to choice of melody, the movement of motive and countermotive from voice to voice, the arched shape of the form which corresponds to the textual climax, the quality of key center and the effect of instrument choice on texture and timbre.

When musing on how she might teach the motet, she considers what might be expected of a first reading and decides her most important goal will be to give the singers a flavor of the work rather than centering in on technical issues from the start. From her understandings of what makes this motet special, she brainstorms ways to introduce these ideas to the ensemble, writing down action words to guide her: *sing* the motive from part to part, *read aloud* the text, *describe* the instrumentation, *conduct* as a class to find the “dance.” She writes not in prescribed steps, but in free-

form with no particular order or structure from thought to thought. She revisits the score, singing each part and noticing how the part “falls” in the voice. She conducts in front of her mirror, imagining and evaluating how she can impart the “dance” of the piece in her gesture.

When she teaches, the ensemble sings the opening ‘A ‘ section without interruption even though several students get lost in the texture along the way. She immediately calls on her mental visioning of the rehearsal and decides that of the possibilities, everyone should sing the primary motive for the best sense of the piece. Once this is accomplished, she asks them to describe how the motive progresses through the various sections, and then has them sing each their own part, standing whenever they sing the motive to highlight its function. Following this, they all conduct and sing their own parts.

The fluency in this example is clearly more evolved: There is active merging of personal musical understandings about the piece and the teaching actions she employs. She considers teaching not solely as instruction to be delivered, but also considers how to involve the singers actively at each point in the rehearsal. She reflects in action, allowing the previous sounding to inform upcoming decisions. She had potential directions to pursue, and made her decisions upon her best judgment of what would benefit the singers following their first sounding of the piece.

In direct comparison of the planning phase of each example, one distinction is critical. Learning in the choral context is situated, complex, and ripe with multiple teaching opportunities that emerge in relationship to the ensemble's collective knowledge, the conductor's artistry and interpretation, and other contextual factors. One is not likely to observe a master choral conductor who approaches teaching a work by the isolated, methodical layering of concept by concept. Expressive considerations such as dynamics, rubato, and articulation can be introduced alongside the sorting out of rhythmic and melodic relationship,

and indeed this may facilitate learning when the musical “whole” is presented. For this reason, the behavioral objectives model runs the risk of decontextualizing the potent learnings that can take place in the music-making.

The second example is obviously more likely to be characteristic of an experienced teacher. The question becomes whether novice conductor/teachers can learn to teach from the sounding, to integrate musicianship which will inform improvising on one’s feet, and to reflect on and around the teaching action.

Summary

In terms of music education programs, the behavioral objectives view is enforced in the name of “comprehensive musicianship.” Demands for accountability for learning in the performance classroom leaves conductor/teachers searching for ways in which to make evident student learning and for ways to increase ownership by choral musicians (Hylton, 1983; 1995). It may well be that the Tyler approach to lesson or rehearsal planning inhibits the growth of teacher knowledge through emphasis on verbal, sequential, and global teaching strategies.

A central justification for this approach of learning to teach is that novice teachers, without real world experience, need to plan in advance of instruction with intentional, elaborate, and specific forethought. Few, if any, would argue that novice conductor/teachers should be put in a position of “thinking on their feet” with no way to prepare for teaching. Research indicates, however, that experienced teachers do not utilize the Tyler model of planning and that teaching actions are instead adjusted during instruction according to the needs of the

classroom (Clark & Peterson, 1986). More significantly, experienced teachers report planning as a form of mental imaging or active imagining whereby visualization of how material will be taught is key to actual presentation of the material (Yinger & Clark, 1982, 1983).

The role of imagination is important both in forethought and the teaching action itself. It is this nexus that suggests improvisation and creative imagining may be central to development of teacher expertise. In light of these ideas, teacher education must rethink the nature of planning to include alternate ways of engaging musical knowledge, helping to grow pedagogical and teacher knowledge, and examination of the role of reflection before, during, and after the teaching instance.

CHAPTER 3

TEACHER THINKING AND MUSIC EDUCATION

As viewed from the larger educational research paradigm, research on music teacher thinking is in its infancy both as a source of information about how music teachers effect their practice and as a way of understanding the complex and rich knowledge required of music teaching. The chapter examines research connections evident in music education relating to music teacher thinking and knowing. Expertise in music teaching is discussed as is knowledge required to effect expert teaching practice. The discussion includes an examination of choral texts influencing conductor teacher training and concludes with identification of current challenges surrounding preparation of choral conductors at the undergraduate level.

Past Research Efforts

Until recently, the scientific paradigm has dominated research efforts in music education as evidenced by numerous studies that can trace focus and method to behaviorist constructs. As it relates to the examination of music teaching, these studies typically include research on teacher competencies or teacher effectiveness. Of central importance in these studies has been identifying behavioral competencies that define good teaching (Taebal, 1992).

Other important strands of research on music teaching include identifying characteristics of outstanding music teachers with particular focus on personality attributes. Studies of teacher classroom performance have led to rating scales

and checklists of observable teacher behaviors and ways of categorizing observable actions of music teachers during teaching (Taebal, 1992).

Other process-product studies evaluate the effect of music teacher behavior on student achievement (Grant & Drafall, 1991). An examination of the contents of the first Handbook of Research on Music Teaching and Learning (1992), the most comprehensive summary of research in music education to date, reveals little attention to the thinking processes of the music teacher. Indeed, studies on the decisions teachers make in the act of teaching, the planning and reflective habits of expert music teachers, the effect of classroom context on teaching, or investigations of relationships between music content knowledge and generalized teacher knowledge are noticeably absent.

Increasingly important to the investigation of music teacher education is the qualitative or interpretive research paradigm. A continuing rift between research and its applicability to practice supports research efforts that are geared to local, rich, and situated understandings of teaching which stem directly from the voice of the teacher. The focus on multiple interpretations in specific teaching contexts and away from wide-scale generalizations may motivate practitioners to come to their own interpretations of their unique teaching situations (Bresler & Stake, 1992, p. 79).

Further, these particularized composite pictures of teaching need investigation at each step of teacher preparation. Research is scarce on how the novice teacher begins to assimilate teacher knowledge as well as target or direct

musicianship in the teaching circumstance. Qualitative or interpretive investigations may be well suited to this research need.

Critical Thinking Studies

The term “critical thinking” is evident in the literature of both educational theory and psychology. In music, Richardson and Whitaker (1992) note that consensus has not been developed in terms of defining critical thinking. Critical thinking is sometimes used synonymously with reflective thinking, musical problem solving, or in the realm of perceptual thinking as associated with art criticism. The authors note that it is yet to be determined whether all critical thinking is reflective in nature, or whether procedural aspects of knowing might also include non-reflective ways of understanding.

Richardson and Whitaker (1992) cite three studies that can serve as a guide to considerations of teacher thinking and potential directions of future research in this area. DeLorenzo (1987) conducted a descriptive study of musical problem solving focusing on the process by which students make musical decisions. Using naturalistic observation techniques, she engaged sixth grade students in group composition activities designed to provide musical problem solving opportunities. Results indicated that students demonstrating a high degree of personal involvement appeared to organize problem solving around expressive qualities of a musical problem. DeLorenzo found that the fewer choices students had before them, the less involved in problem solving they appeared. The idea of restricting musical choices, in this instance, proved a limiting factor in the problem solving ability of the students.

Richardson (1988) investigated the thinking of the music critic engaged in criticism of musical works. Using verbal protocol analysis, she examined the stream of consciousness narrative and subsequent written commentary of a music critic and his criticism of an orchestral concert. Richardson determined that musical judgment involved at least four distinct functions: expectation, comparison, prediction, and evaluation. The verbal protocol analysis would be well suited to investigations of teacher thinking in the act of teacher planning and perhaps suggests a model for examination of the actual teaching instance.

Whitaker (1989) investigated reflective thinking as evidenced in stream of consciousness talk and written commentary of two pianists, two arrangers, and two instrumental conductors. Written commentary was analyzed for problem statements that supported John Dewey's (1933) phases of reflective thinking. Stream of consciousness talk was subjected to verbal protocol analysis while the musicians were engaged in activities such as selecting music, studying the score, and rehearsing. Results indicated that five of the six participants showed reflective thought processes in keeping with Dewey's ideas about reflection. "Reflective thinking did not seem to be tied to any particular type of funded knowledge or problem, but appeared in a variety of forms, in response to the experience each individual brought to the data-gathering settings" (Richardson & Whitaker, 1992, p. 556). Implications from this study towards examination of teacher thinking include the idea that reflection is a key element to problem solving, that reflection is an individual and context specific activity, and that

previous experience, both cognitive and affective, is important to reflective activity.

Boardman (1989) compiled resources from sources outside and within music education to identify dimensions of thinking related specifically to musical content knowledge. Especially important is the editor's acknowledgment that thinking in music is special and apart, schema-dependent, and an ever-changing body of knowledge. Discussions outside music that are applied to musical thinking include metacognition, creative and critical musical thinking, and a composite list of thinking skills drawn from the cognitive science domain. Chapters on musical thinking in the early years, the general music classroom, the choral and instrumental classroom, and teacher education programs are included. This resource is an important first attempt to distinguish between musical thinking and other forms of cognition. Not addressed within the scope of this project is the thinking processes of the music teacher as it pertains to decisions made in the teaching act, of how to develop metacognitive skill required to negotiate teacher knowledge, or a rich description of what it means to know in music.

Studies of Expertise and Music Teacher Thinking

An area of burgeoning research in music teacher education is teacher expertise. Multiple investigations of expertise are evident in the educational and cognitive science domains but only recently emerge as a site of inquiry in music education. Standley and Madsen (1991) used a behavioral approach to differentiate between teaching experience and expertise. Is experience the

same as expertise? This is a useful question as it relates to understanding what is meant by expertise. If not, what distinguishes what Bereiter and Scardamalia (1993) term an *experienced non-expert* with an *expert*? If such a distinction exists, is it possible to teach novice conductor/teachers an *expert-like* mindset that will eventuate in the music teaching expert?

Standley and Madsen (1991) suggest that a global concept of teacher expertise needs to be examined in a systematic and analytical way. The observation task of the study required music professionals of various levels to write extemporaneously about classroom interaction presented by videotape. These writings were then analyzed for accurate factual and inferential statements about the presented interactions. Results indicated that as experience and expertise increased, group means were increasingly differentiated. Further, scores between experienced and expert teachers were apparently not due solely to years of experience indicating other factors might determine distinctions between experts and experienced teachers.

The researchers went on to suggest that the “score on this task was indicative of sensitivity to pedagogical expertise and values and therefore can be used as one component in a battery of assessment measures for screening and selection at various levels of the degree program, from the undergraduate major to the Ph.D. candidate” (Standley & Madsen, 1991, p. 9-10). As noted by Grossman (1990), it is crucial that research on teacher thinking take into account that pedagogical expertise, knowing how to teach specific content, is not synonymous with that content knowledge. Put simply, knowing how to teach

music is not the same as knowing music. Generalized observations of teaching/performing by non-participants may do little to illuminate the decisions teachers make in the act of teaching, describe how such knowledge is generated, or explicate the role reflection plays in the development of teacher expertise.

Dolloff (1994) examined in-service professional development as the continued honing of teacher expertise. In a longitudinal three-year case study, Dolloff traced evidence of reflective thinking by teachers in one school district as they interacted on a regular basis with a master teacher who modeled and demonstrated with representative school children in a choral setting. Rooting her findings in the wider expertise literature, Dolloff concluded that teacher growth was evident when teachers had the opportunity to implement ideas from the master teacher as a form of “cognitive apprenticeship,” when teachers could revisit the professional development or in-service paradigm on a regular basis, when discussion and observation of the master teacher included targeted reflective activities for the teacher, and when ideas were immersed in and around actual teaching practice.

The master teacher sought active participation in rehearsals by both the children and teacher participants. Alongside the master teacher’s rehearsals, Dolloff analyzed modeling/ teaching strategies, noting they were based in action-oriented ways and included observable verbal and non-verbal action requests of children, often resulting in increased musicianship and understanding. Through interviews and written reflections, teachers indicated the three-year experience

yielded increased teaching capabilities and self-esteem. This study of expertise represents the first substantive qualitative inquiry into music teacher expertise with emphasis on the reflective process.

Dolloff's research is important in that it reveals a relationship between self-reflection by the teacher and growing expertise. Her findings suggest important implications with regard to knowledge of teacher thinking and may be an important link in the preparation of novice conductor/teachers between individual musicianship and emerging educatorship.

Expertise vs. Expert Model

It is important when discussing teacher expertise to distinguish between expertise and the "expert model" of conducting that has dominated the field of choral music for decades, if not centuries. Indeed, the propagation of the expert model mode of teaching has significant implications for this study. O'Toole (1994) has closely investigated this paradigm through a feminist poststructural analysis of power relations within the choral setting. According to O'Toole, a web of power relations exist within the ensemble structure that bears directly on our experience as ensemble members.

Consider the traditional role of the conductor in front of the choir, responsible for musical interpretation and decision-making. Applying Foucault's theory of power relations and the lens of poststructuralist feminist deconstruction, O'Toole (1994) makes a strong case that hegemonic power relations have so defined notions of conductor/student as to become "normalized" and as such, accepted conventions of choral pedagogy.

According to O'Toole, the body as a site of power negotiation through choral pedagogy can be viewed through the systematic "disciplining" of the body, as defined by Foucault (1979). Examples might include the privileged position of the conductor architecturally before the rows of singers, the expectation that singers will monitor themselves by raising hands before speaking, various approaches to posture and ways of exercising the voice, and individual conductor expectations of blend, tone, and balance.

It is important to understand that power relations are not always negative in a hegemonic or oppressive sense, but serve to define knowledge in a particular context (Gore, 1993). In the case of choral pedagogy, however, unexamined power relations may contribute to a patriarchal discourse that discourages singers from taking ownership over musical decision-making, problem-setting, and interpretation.

As it relates to development of teacher thinking, power relations imbue implicit theories held by prospective teachers. Lortie (1975) refers to these images as an "apprenticeship of observation" and argues that prospective teachers already have thousands of hours of observations logged prior to undergraduate experience. Prospective novice conductor/teachers will likely have sung for conductors since junior high or perhaps even grade school. The expert model mode of teaching, if experienced as the dominant paradigm, is likely to be re-enacted by the novice.

In her analysis of choral pedagogy through feminist critique, O'Toole examines the way in which power relations are patriarchal in nature, including

traditional assumptions of the conductor as expert. In this sense, the term expert implies the granting of power to the conductor such that ensemble members are expected to carry out their directions with little or no input into the process. This constitutes a product view of expertise where the conductor provides both means and ends towards the musical product through content knowledge.

Aside from the hegemonic implications of the “expert model” and considerations of the teaching of conducting, O’Toole’s study is important for other reasons. Her methodology included writing a narrative representation of her students’ experience, her own thoughts and emotions, and those of her colleagues. Through her narrative, one begins to glimpse the importance of this situated account of conducting and teaching as a way of making sense of the experience of both the conductor and singer. The interpretive approach stands as a model for those seeking new ways to understand the choral setting, the role of the conductor and student, and choral pedagogy.

In this study, the terms *expertise* and *expert-like* refer to a process that encourages growth at the upper level of one’s complexity in the domains of conducting/teaching. The *expert model* of conducting refers to dynamics of power between conductor and ensemble in the choral classroom.

Research on Conducting and Choral Methods

Research in the conducting domain has focused in large part on musical works and historical or descriptive analyses of such works in relationship to conducting considerations as evidenced by a wealth of articles in the *Choral Journal*. Choral methods research includes pedagogical issues pertaining to

conducting technique or strategies such as the effective use of videotape feedback in conducting instruction (Fleming, 1977; Jordan, 1980; Yarbrough, Wapnick, & Kelly, 1979). Other representative studies have taken a behavioral approach examining such areas as effective communication or nonverbal conducting behavior, effectiveness of particular conducting gesture and development of conductor competencies, and effect of intensity behaviors by conductors on the choral ensemble (Byo, 1989; Lewis, 1977; Madsen & Yarbrough, 1985; Osman, 1989; Watkins, 1986; Warner, 1986; Yarbrough, 1975, 1987).

A smaller number of studies of conducting include examination of leadership style and models for the choral leader (Apfelstadt, 1997; Caldwell, 1980; Harris, 1979). Scarce research exists with respect to the role of conducting as choral music education. Similarly, choral methods research is fragmented and narrow at best and represents an area in need of study (Hylton, 1983).

Behavioral Studies

Byo (1989) examined whether beginning conductors could be trained to differentiate and incorporate low or high intensity gestures and whether observers were able to recognize intensity and rate level of intensity. Results indicated, among other things, that nonverbal conducting skills could be taught in term of gestural contrast and could be interpreted by others as low or high intensity gestures. Presumably, the author believes high intensity is a feature of effective teaching. Madsen and Yarbrough (1985), among others, developed a

list of competencies particular to the choral conductor that are observable and desirable. Yarbrough (1975) measured a choral conductor's intensity: vocal inflections, facial expressions, rehearsal pacing, eye contact, and general excitement level. No differences in performance level were observed but student attitudes did change positively as a result of level of intensity.

Watkins (1986) examined the effect of three types of verbal behavior by high school choral conductors on attentiveness of students as well as the ratio of conductor talk to ensemble singing. While the time was divided nearly evenly between conductor verbalization and ensemble performance, less experienced directors talked more than did experienced conductors. The three modes of verbalization: modeling, musical/technical language, and metaphorical language appeared to have no significance to student on-task behavior which was high in each trial.

Osman (1989) devised a Communication Skill Evaluation Instrument to determine whether specific communication skills would be judged as more effective by amateur choral members than a conductor who did not exhibit identified skills. Yarbrough (1987) examined behavioral self-assessment in the acquisition of basic conducting skills.

Leadership Studies

Apfelstadt (1997) addresses issues between effective teacher knowledge (specifically leadership skill) and content area knowledge. Applying a business model of situational leadership, she argues that leadership skills can be deconstructed and taught to students, that fostering leadership is an intentional

and teachable process. Apfelstadt describes leadership in the choral conducting context alongside other rehearsal considerations and within a model of preparation, presentation, and evaluation of rehearsal strategies. Teaching leadership is amorphous and difficult and the author suggests considerations such as “wording directives, tone [of] voice, calling people by name, and acknowledging the accomplishments of individuals and the ensemble” (1997, p. 28). Other suggestions included use of eye contact, moving off the podium to establish closer physical proximity to singers, praise, and acknowledging personal, non-musical efforts.

Other leadership studies have equated leadership with effective teaching techniques or strategies. Caldwell (1980) analyzed proportions of time given selected musical elements in a conductor’s choral rehearsal as well as observable verbal and non-behaviors. Allotted by percentage, the results indicate phrasing and dynamics, diction and text, and vocal production issues were the most consistently addressed elements in the rehearsal. Of actual rehearsal time, 81.2 percent was devoted to exercising vocal parts. The conductor’s verbalizations were to give music instructions, to provide a musical illustration, and to evaluate musical product respectively. The author believes this study might serve as a guide when considering the nature of rehearsing and allotment of rehearsal time to verbal and nonverbal behaviors.

Taken as a whole, this body of research is small in scope and indicates conducting and conducting/choral methods pedagogy are areas ripe for investigation. An extensive review of literature revealed no studies in choral

music that examine conductor thinking in the conducting act, which sheds light on the impact of nonverbal gesture on the development of ensemble musicianship, or about ways to prepare novice conductor/teachers in the teaching act. Further, there has been little research emphasis on the relationship between conducting and the teaching of choral music.

Related Qualitative Studies in Instrumental Music Education

A recent study in instrumental music education examines effective rehearsing in the instrumental music ensemble through case study (Buell, 1996). Three factors were examined: the role of conducting gesture, related movement, and verbal communication in effective teaching; distinctions between teaching for conceptual understanding (broader goals) and technical development (required to produce music); and evidenced student understanding of teaching concepts from the master teacher.

The case study methodology included researcher observations, videotape and audiotape of selected rehearsals, interviews with selected students, and interview of the master teacher. Analysis of data included a moment-by-moment analysis of teaching as represented on video-tape, as well as the coding of interviews and researcher observations.

Among the results of the study was a characteristic application of teaching strategies to instructional goals by the master teacher. The researcher distinguished conceptual goals, broader musical aims, from the technical goals required to carry out playing. The master teacher routinely used verbal instruction to address performance details inherent in technique but reverted to

non-verbal instruction to introduce conceptual goals. The teacher would often sing, conduct, or use the body to illustrate a conceptual goal. Technical goals were often accomplished by quickly pointing out the detail through verbal means. The prominent use of nonverbal behavior was seen by the researcher as a primary characteristic of effective teaching by the master teacher.

The researcher concluded effective teaching was the result of many factors including the establishment of a positive atmosphere for learning, an emphasis on broader, conceptual goals, varied use of nonverbal and verbal strategies, and the musicianship demonstrated by the master teacher as evidenced by time spent in score study and the conductor's mental template of sound against which student performance was constantly compared.

The Choral Music Education Context

Undergraduate training in choral music education typically consists of at least three primary experiences: conducting classes, methods courses (often specifically choral), and choral ensemble experiences. Requirements vary from university to university, as do the content of these courses. Some generalizations may be made, however, by an informal examination of textbooks that typify instruction in these settings.

Conducting study is often sequenced into at least two semesters of study. A cursory glance at the table of contents of seminal conducting texts support the position that many conducting courses focus primarily on the teaching of gesture. Max Rudolf's seminal conducting text *The Grammar of Conducting* (1950),

devotes 30 chapters to conducting gesture before allocating a chapter towards the discussion of rehearsal technique.

Another highly respected text by Elizabeth Green, *The Modern Conductor* (1997) devotes significantly more time to issues of score study, spending the first 11 chapters on conducting technique and the remaining 5 on approaches to the musical score. Missing from the author's discussions, however, are links from score study practices to the rehearsing of such music from the perspective of a conductor/teacher. This is presumably left for methods classes.

Two recent conducting texts include *Basic Techniques of Conducting* (Phillips, 1997) and *Evoking Sound* (Jordan, 1996). Jordan approaches the teaching of gesture in a less sequenced way, focusing instead on understanding the body and its relationship to sound. Issues of score study are addressed, and rehearsal technique comprises the latter third of the text. In *Basic Techniques of Conducting*, Phillips establishes a careful course of study focused on skill-building and musical examples to carry out skill development.

Choral methods texts often focus on choral techniques designed to aid students in initial teaching experiences. A wide variety of philosophical approaches imbue these texts, but many include issues of choral tone and diction, choral style, selection of repertoire, building a concert program, administrative issues related to managing a choral program, and score study.

In the examination of three texts targeted toward choral methods classes, the spectrum of various philosophies can be examined. *Choral Music: Methods and Materials* by Barbara Brinson (1996) is structured as a "how-to" practical

manual. Topics include recruitment and retention of singers, auditions and placement of singers, development and evaluation of a choral program, repertoire, programming music, score preparation, rehearsal plans, behavior management, vocal techniques, the changing voice, pop ensembles, and the construction of a personal philosophy.

Choral Music Education, by Paul Roe (1983), takes a similar approach but includes a short chapter on conducting. A widely used text, *Choral Techniques* by Gordon Lamb (1988), begins with a section on conducting and score study leaving the “how-to” chapters to flow from a musical focus.

Obviously, no text can address the needs of students completely. It can be noted, however, that approaches to the teaching of conducting have been largely separated into either a gesture-based focus (conducting courses), or a techniques-based focus (choral methods courses). Further, some universities assign conducting instruction to performance area faculty and choral methods classes to music education faculty, fostering little interaction between the faculty toward course content. Course syllabi are as individual as instructors, and many attempt to integrate conducting and teaching by providing concurrent practicum experiences or micro-teaching opportunities (MENC, 1991). Even in these instances, however, it can be noted that the development of educatorship, or thinking-in-teaching, is frequently associated with a “how-to” approach to rehearsal planning. This techniques-based focus often assumes a linear, step by step approach to choral rehearsal planning based on pre-defined objectives.

Objectives-Based Choral Rehearsals

Lesson planning or rehearsal planning figures prominently in developing teacher knowledge or educatorship in novice conductor/teachers, whether experienced in conducting class, methods class, or both. Musical understanding, developed through score study and knowledge of the specific musical practice at hand informs the teaching instance. The critical step for novice conductor/teachers then becomes the integration of one's artistry with the ability to react to the musical sounding as it occurs through the lens of teaching. Applying Kennedy's (1987) earlier construct of teaching as expertise, the conductor/teacher must select a musical focus or set a musical problem in direct relationship to the musical sounding, exercise the focus, and evaluate the action(s) deployed.

By nature, this is a non-linear, spiraling approach that takes into account context: the abilities of the students, the experience of the teacher, the classroom environment, the nature of the repertoire, time and place, among others. A serious dilemma is presented when the novice conductor/teacher employs a pre-conceived, a-contextual lesson plan that bears little or no relationship to the musical sounding in the actual teaching situation.

Secondarily, the focus on meeting pre-determined musical objectives may de-emphasize the potential artistry of the moment such that expressive considerations are artificially layered on once objectives are met. An example from my own experience illustrates this idea:

The training chorus director of a prominent children's chorus had planned a rehearsal around challenging rhythmic patterns in a piece. The text, from Bernstein's *Chichester Psalms*, was in Hebrew. A young Jewish boy raised his hand during the lesson to eagerly make the connection between the text, and his experience of the same text in his synagogue through a cantor. Rather than acknowledging the cultural meaning the boy had ascribed the text, and providing real-world connections for the ensemble members to make meaning collectively towards a more expressive understanding of the music, the conductor nicely but firmly asked the boy to save his comments for another time as the rhythmic challenge at hand had not been executed accurately.

Habitual exercising of this objectives-based approach leads the student down a path of reductionistic thinking that ultimately discourages reflective or critical thinking on the part of the conductor/teacher and away from developing improvisatory skills in the teaching act. Behavioral approaches to lesson-planning have deeply affected ways in which we approach the teaching of music and choral music is no exception (Elliott, p. 244). As with other music education methods courses, an objectives-based approach to the choral rehearsal permeates the profession's consideration of teacher development.

Examples of an objective-based choral plan would include identifying, in advance of rehearsal, specific areas for potential musical challenges and prescribing a solution to exercise the challenge in a step by step, or linear fashion. This prescription, in the case of novice conductor/teachers, necessarily relies on external techniques (often suggested or modeled by the master teacher) as novice teachers do not have a wealth of experience from which to create their own solutions. Often, a specific concept is targeted, and vocal

warm-ups may be fashioned to exercise the concept, or the concept becomes the goal of instruction during the teaching instance.

An example from a recent choral methods textbook publication, in a discussion of short-term rehearsal planning, illustrates how novice conductor/teachers are taught to conceive planning and instruction. In this case, Tyler principles are more implicit than explicit, particularly with regard to construction of objectives. The objectives in the following example are not behavioral, that is, do not focus on explicit student learning outcomes and assessment. Similarities, however, include writing out in a step-by-step fashion anticipated rehearsal strategies executed in a sequential way (Hylton, 1995, p.53-54). Rehearsing a series of steps is evident in the suggested plan *Now / Walk In Beauty* and *O Come Let Us Sing Unto the Lord. Every Valley* describes rehearsal objectives identified by the conductor without prescribing a particular rehearsal progression. There is, however, no identification of strategies to carry out conductor decisions. This is evident in the warm-up plan as well.

Warm-ups (see Chapter 1):

1. Stretching
2. Breathing exercise
3. Vowel-shaping exercise.
4. Resonance-creating exercise.

"O Come Let Us Sing Unto the Lord," Emma Lou Diemer, Carl Fischer,
no. CM7903 (first reading)

1. Read through from beginning to end.
2. Point out large sections of piece (mm. 1-48, mm. 49-65, mm. 96-11, mm. 112-135, mm. 135-167).
3. Work on choral tone in opening unison section.

4. Discuss style of piece: biblical text, contemporary American composer, dramatic accompaniment.

“Every Valley,” John Ness Beck, Beckenhorst Press, no. BP1040 (detailed rehearsal)

1. Work for dynamic contrasts: pianissimo men, piano women, using dynamics to shape phrases in mm. 4-36. Full, sustained sound, mm. 36-end, building from mezzo forte to fortissimo.
2. Diction—vowel unification throughout, ending consonants—exalted (m. 7), straight (m. 16), Lord (m. 24), and so on.
3. Discuss relation of texture and dynamics to text—expressive aspects of the piece.

“Now I Walk in Beauty,” arr. Gregg Smith, G. Shirmer [sic], no. 12374 (review previous work)

1. Sing from beginning to end.
2. Sing the melody together (mm. 1-8)—review shaping of phrase.
3. Work toward maintenance of phrasing when split into four-part canon (mm. 9-end).
4. Discuss the Native American origin of the melody and its modal character.

This example vacillates between highly specific instructions, as in the rehearsal of the last piece, to general instructions as demonstrated in the vocal warmup section. A dilemma occurs when the rehearsal plan is implemented and the musical sounding presents different challenges than previously identified. In the quest to follow the rehearsal plan, actual musical challenges may be ignored. Even more problematic is the ritual of following a rehearsal plan step by step that may ultimately lead the conductor/teacher to “turn the ears off,” in favor of a musical sounding construct that is theoretical in the conductor/teacher’s mind.

A central issue, then, is how to teach novice conductor/teachers to plan for rehearsal with flexibility to monitor and adjust teaching in-the-action of music making.

The Reflective Practicum

A reflective practicum in the context of teaching a conducting course might be defined as a curricular structure that allows the novice conductor/teacher sustained opportunities for reflection both in and around the teaching/musicing actions, interaction with an expert mentor, and the building of a community of reflective practitioners among class members. A central goal of a reflective practicum would be to model and exercise the process for development of expertise so that students are able to transport the expert-like mindset to new teaching instances.

Specific pedagogy or techniques would serve as a means rather than an end, and conducting/teaching would be viewed as an improvisatory process geared towards enlargement of knowledge base rather than one in which problem reduction is emphasized. This would necessarily require redefinition of traditional roles of conductor/student, means of lesson planning, and an explicit emphasis on integration of musicianship and educatorship.

Elliott defines a reflective practicum in relationship to a school music curriculum (1995, p. 270-293). The emphasis is on the induction of students into authentic musical practices by placing productive musical action at the center of the curriculum. Apprenticeship and emphasis on reflective thought likewise are central tenets to Schön's conception of the successful practitioner (1987). In the conducting class context, a reflective practicum would situate teaching and learning around numerous opportunities for conducting/teaching, observation of

the mentor teacher, and multiple ways of thinking critically or reflectively on teaching/musicing actions.

No less important than the novice conductor/teacher's personal interaction with this model is the concomitant emphasis on the reflective practicum as a curricular model for their future teaching. In other words, that conductor/teachers would structure their future choral ensembles as reflective practica, redefining traditional expectations of conductor and ensemble member. In a choral classroom in which the conductor is viewed as facilitator, coach, guide, or mentor rather than dictator, future students then might have the freedom to take ownership over the development of their individual musicianship.

Bennett Reimer (1989) makes a strong case that traditional performance programs in the schools have unfortunately emphasized the performance product (the concert) over the process of music-making and learning. He convincingly argues that the concert should not be the central goal of music curricula. His views support the idea that conductors traditionally assume the central place of power in the classroom, and that students often participate in ensemble experiences with a growing adeptness for following instructions, but little sense of their own musicianship, which is evidenced by a lack of participation in musical activities beyond high school. A reflective practicum, in which shared inquiry is central to the singing experience, might help to transform students' beliefs about the role of the conductor towards more meaningful participation and personal exploration of artistic potential by ensemble members.

Developing Conductor/Teacher Expertise

A closer examination of the development of novice conductor/teacher expertise is warranted in light of current research about ways teachers begin to operationalize their understandings. It has been established that the music education research base has not yet explored the area of teacher thinking or processes such as teacher planning and reflection to any substantial degree. Drawing on writings in music, education, psychology, and philosophy, it is hoped preliminary understandings of what it means to think in the conducting/teaching action will emerge.

The Expert Music Educator: Additional Ways of Knowing

Music teaching requires rich, complex, and fluid forms of understanding in both music and teaching as outlined previously. In addition to the situated, procedural knowledge involved in each of these domains, Elliott (1992) has identified four other kinds of knowing that influence expert music teaching. Following psychologists Carl Bereiter and Marlene Scardamalia (1993), Elliott identifies formal knowledge, informal knowledge, impressionistic knowledge, and supervisory knowledge as essential to the development of music teaching expertise.

Formal Knowledge

Formal knowledge can be thought of as verbal facts and principles about a domain. Textbook knowledge such as performance practice, historical, and theoretical knowledge are examples of formal knowledge in music. In the conducting context, formal knowledge might include an understanding of the

historical genesis of a particular work, the source of text and text meaning, physiological information relating to vocal production, knowledge of notational systems, varieties of score study systems, and performance practices appropriate to the musical work. Formal knowledge is verbal and can often be measured and provides a form of currency for identifying and transmitting accumulated knowledge in a domain. As Elliott (1992, p. 10) notes, formal knowledge by itself is inert and unmusical until it is contextualized through music listening and/or music making.

Informal Musical Knowledge

Informal musical knowledge can be thought of as the practical “savvy” persons develop in a specific domain (Elliott, 1995, p. 62). Informal knowledge is best gained through experience, though experience alone does not equate with informal knowledge. Elliott (p. 63) explains:

Informal musical knowledge involves the ability to reflect *critically* in action. Reflecting critically depends, in turn, on knowing when and how to make musical *judgments*. And knowing how to make musical judgments depends on an understanding of the musical situation or *context*: the standards and traditions of practice that ground and surround a particular kind of music making and music listening.

It is likely that novice conductor/teachers will bring to the initial conducting experience a rich base of informal knowledge in specific, situated conditions. From years of ensemble singing, for example, these students will likely demonstrate a deep understanding of what it means to follow a conductor, the expectations associated with the community music-making experience in the choral art, perhaps a heightened sensitivity to the relationship between text and music, as well as grounded understandings of particular musical practices and

traditions experienced as choral members. These same students, when assuming the conductor side of the podium, may not be able to make transfers between informal knowledge gained as ensemble member to the new situation of conducting.

Elliott (1992, p. 10) believes informal knowledge is gained from two sources: one's personal modifications of the formal knowledge of a practice and one's thinking in and about the musical context in which one makes music. Thus, informal knowledge is closely related to music-making or musical action. This situated condition for knowledge growth points directly toward the importance of multiple, sustained, and meaningful opportunities to exercise in the conducting/teaching context throughout the undergraduate experience.

Impressionistic Musical Knowledge

Referred to as "intuition," impressionistic knowledge is a felt sense of directionality in musical decision making. "Music-makers acquire nonverbal impressions (a "sense of things") while doing, making, and reflecting in musical contexts" (Elliott, 1992, p. 11). Further, this intuition involves "knowledgeable feelings" which acknowledge the role of affect in the music-making process (Elliott, 1995, p. 64). Cognitive scientists now believe thinking and feeling are at least interdependent and likely inseparable (Dennett, 1991). The filtering of experience in relationship to personal understandings, emotions, and feelings give meaning to the music-making process. In the conducting/teaching circumstance, impressionistic knowledge would help guide the student in a rehearsal towards decisions about what to address. Not having a "sense" of

what to rehearse or an inability to choose deliberate action is partially a response to the highly situated condition of conducting/teaching.

Supervisory Knowledge

Supervisory knowledge is a form of metacognition, or the ability to monitor one's actions in situated circumstances. "This form of musical knowing includes the disposition and ability to monitor, adjust, balance, manage, oversee, and otherwise regulate one's musical thinking both in action ("in-the-moment") and over the long-term development of one's musicianship" (Elliott, 1995, p. 66). In the teaching context, this would also involve the ability to monitor oneself in relationship to the specific conditions of the classroom, including the cultural and local considerations of a particular time, location, group of people, and space.

The monitoring of supervisory knowledge has immediate and profound implications for the novice conductor/teacher. Simply standing before a group of people is a form of risk-taking of a highly personal nature. It is difficult to access other ways of knowing when one's senses are filled with concerns about how one might be viewed, or how one is coming across to the choir. Stage fright is an excellent example of how one is paralyzed in the performing action, unable to monitor or access musicianship due to overwhelming nervousness.

Supervisory knowledge in music is complicated due to the deeply revealing nature of music-making. A conductor takes enormous emotional risk as sharing one's musical vision is inextricably bound up in personhood and the world as viewed through the lens of the conductor. It is a sophisticated idea that one remain "open" to an ensemble while at the same time finding a certain

“distance” in which to function. Supervisory knowledge is central to monitoring this delicate balance. The examination of the role of supervisory knowledge in initial conducting/teaching experiences may provide important information about structuring instruction during the undergraduate experience.

Improvisation: The Bridge From Knowledge to Practice

Musicians understand improvisation as a specialized skill involving elements of composing, interpreting, and performing in real-time (Alperson, 1994). Improvisation is an essential skill in the difficult gap between inert teacher knowledge and actual teaching practice. Improvisation connotes an active, constructivist process that may provide important links to developing conductor/teacher expertise. Having provided a basis for understanding the dimensions of thinking in music and teaching, the actions that guide the conducting/teaching circumstance need to be examined. Improvisation is useful in describing a way of thinking that is evidenced in the teaching instance.

As Elliott notes (1995, p. 169), however, misconceptions abound as to the nature of improvisation. Spontaneity is often described as the central feature of the improvising act. It occurs not as free-form creative wanderings, however, but in direct relationship to the performer's rooted musical understandings. Elliott describes jazz great John Coltrane as able to compose in real time at mind-boggling speed, noting in preparation Coltrane spent years studying the improvisations of great musicians before him as well as having an extraordinary understanding of the harmonic language of the bebop jazz tradition.

Improvising, in this sense, is dependent on the formal, informal, impressionistic, and supervisory understandings of the performer in the improvising instance. In music teaching, teaching action will follow from the situated understandings of musical content knowledge, pedagogical content knowledge, general pedagogical knowledge, and knowledge of the context at hand. Ideally, based on these understandings, the conductor/teacher would select a musical focus, set a musical problem, construct opportunities to exercise the challenge, and evaluate in-action the results.

Planning vs. Preparation

It is at this juncture that rehearsal planning becomes critical to the potential for improvising in the conducting/teaching circumstance. When students are encouraged to follow a preconceived lesson plan, with strategies determined in advance of the rehearsal, improvising is not likely to factor into the event.

Yinger (1990, p. 85-86) has written extensively about improvisation in the teaching act. His principles are closely aligned with Elliott's (1995) ideas:

1. Improvisation is a form of action especially suited to situations that discourage or prevent deliberative processes such as planning, analysis, and reflection.
2. Improvisation is a compositional process using as building blocks a set of situationally (contextually) grounded patterns for thought and action.
3. These patterns are holistic configurations of "embodied thought," called upon to be composed and enacted (live) within the special constraints of the context.
4. The working method of improvisation is primarily "retrospective," using patterns from past action to other future action.

5. Skillful improvisation is based on the incorporation of patterns and pathways in a way that is continually responsive to changing exigencies and purposes.
6. Improvisational patterns are structured by action and include constellations of knowledge, beliefs, and goals.
7. Improvisational skill is synthetic and compositional, not analytic.
8. Improvisation is primarily directed toward the establishment and maintenance of relationship: between actor and material, between actor and instrument (tool), between actor and other participants.

Yinger addresses the central paradox between planning in advance of instruction and improvising in the teaching action. He makes a distinction between *planning*, a framework for future action and *preparation*, the “getting ready” or receptivity for future action by focusing on oneself.

According to Yinger (1990, p. 88-89) planning is the deliberate formulation of action toward a future experience. Traditional approaches to rehearsal planning reflect this idea. “The range of possibility is prescribed, choices are made about parameters for action, the future is narrowed. Planning seeks to deal with uncertainty by controlling action and outcomes” (p. 88).

Preparation, however, “acknowledges our limited ability to predict and the constructive nature of life. Preparation expects diversity, surprise, the random, and the wild” (Yinger, 1990, p. 88). Preparation would likely involve musing and imagining of the teaching instance in relationship to personal understanding gleaned through score study, contemplation of previous teaching, or in relationship to informal and formal musical knowledge of the material to be taught. It might involve considering potential directions a rehearsal could take without prescribing the exact steps or sequence in the teaching act.

Yinger believes that both preparation and planning are important to the teaching process. "Every practitioner will both plan and prepare, implement and improvise, reflect and contemplate" (p. 89). He makes a deliberate distinction between planning as the pulling away from thinking-in-action and preparation which draws one towards thinking-in-action.

Yinger's (1990) ideas help frame what teachers must accomplish in the teaching act, valuing both the necessity of planning in advance of instruction as well as identifying the flexibility needed in the teaching instance if one is to respond authentically to the live classroom/ensemble circumstance.

Challenges in Undergraduate Choral Teacher Preparation

There are significant issues surrounding ways in which choral conductors are prepared at the undergraduate level that stem from philosophical, structural, and cultural underpinnings. These barriers are embedded in tradition and practice such that the teaching of conducting and choral methods courses may be uncritically examined in the university setting. My own conducting study, along with choral ensemble experiences, comprised the most exciting component of my undergraduate curriculum and largely influenced my decision to pursue conducting and teaching as a central focus of my career. Exposure to an inspiring master teacher who served as an early mentor no doubt was the seed of my inspiration. Yet, in these experiences and in those of my own students, I remain uncomfortable with the seemingly artificial split suggested between conducting as gesture and methods as teaching.

As I have considered reasons for this, I must conclude that a powerful, tacit philosophical canon colors most of our experiences with conductors and spills over into considerations of teaching conducting, the role of the conductor, and the role of the ensemble member. The “expert” model of the conductor, one in which the conductor is granted authoritative power in the ensemble, has potent textual meaning in the discourse around choral pedagogy (O’Toole, 1994). Ensemble members are accustomed to choral situations in which the role of the singer is to increase musicianship through the conduit of the conductor. It is no surprise, then, that conductors operate from the basis of previous experience and take ownership over the conducting/teaching process.

It is important to reiterate that this situation is not necessarily a negative one. For example, at the doctoral level, my most significant learning towards increasing knowledge as a conductor came through tacit, daily, sustained observation of the choral conductor in whose ensemble I sang. Far from a negative experience, I awaited the choral hour in anticipation of what I knew would be important learnings from a master conductor/teacher. The ratio of non-verbal teaching, his expressive understanding of the music and his ability to communicate it, far outweighed “talking about” the music in any given rehearsal. The give and take between conductor and singers happened in the musical sounding and there was little need for verbalization beyond the sounding. When the conductor functions as the sole keeper of musical decision-making, interpretation, and execution, less experienced musicians are potentially disempowered from ownership over their developing musicianship.

Following Elliott's (1995) views, it is when one has the ability to exercise musical decision-making in relationship to a musical challenge that musicianship can be increased. Bereiter and Scardamalia (1993, p. 21) highlight an important concept when they suggest that groups of people, a choral ensemble as an example, can develop a collective expertise whose knowledge is greater than any of its single members. The choral ensemble, then, could function as a knowledge-building community in which members are encouraged to think and reflect nonverbally and verbally, in which explicit focus is placed on the role of the conductor as facilitator, and in which musical-decision making is at the heart of choral pedagogy. Likewise, the undergraduate novice conductor/teacher can be encouraged to think in this way both to increase their own expert-like knowledge or musicianship, and to consider models of teaching for musical understanding when they take the podium.

Outside these philosophical and cultural considerations, conducting study at the undergraduate level is subject to structural impediments. One of the most obvious is simply that vocal music education majors and vocal performance majors often share requirements for conducting study such that choral methods class is the logical vehicle to teach content more suited to a classroom teacher. If one takes the view, however, that all conducting is teaching, then a focus on mastering physical gesture does not necessarily need to be divorced from the idea that such gesture is nonverbal teaching. Neither does it preclude the recognition that a conductor is always in a teaching role of some form. As such,

it can be acknowledged that all students, regardless of major, might consider conducting inseparable from teaching.

Summary

The preparation of novice conductor/teachers must account for the rich dimensions of musicianship and educatorship necessary to effect practice. Practice depends on this situated knowledge and requires ever-new paths of thinking constructed in relationship to contextual factors, particularly the needs of the learners and the culture of the classroom. Adequate preparation of conductor/teachers for practice necessarily includes an understanding of teacher planning processes and ways in which traditional approaches to conductor/teacher planning have potentially limited teacher thinking. Improvisation appears to be a central feature of the conducting/teaching act and is informed by reflection in and around teaching actions.

CHAPTER 4

TEACHER THINKING AND EDUCATION

The chapter explores research in education related to teacher thinking. Research on teacher thinking is broader in scope than can be documented in music education. Examined in this chapter are studies defining teacher knowledge, current areas of research, studies of teaching expertise, as well as teacher planning processes.

Studies on teacher thinking historically have focused on two primary areas: training, feedback, and field experiences based on observable behaviors, and personality or developmental perspectives that emphasized attitudes, teacher concerns, and motivation. These studies laid the foundation for current research that continues the tradition of examining teacher biography, attitudes and concerns. Current research is examining the nature of teacher knowledge, descriptions of learning processes for beginning and experienced teachers, and identification of ways in which subject matter knowledge is acquired, transmitted, and received (Carter, 1990).

Other areas of current research include examination of teachers' interpretive frames, content knowledge and changes to that knowledge through time, studies of teaching expertise, examination of pre-teaching implicit beliefs, and effect of personal experience or context on teaching knowledge.

According to Carter (1990), there is still a lack of understanding about teacher preparation and learning to teach, in part explained by the

preponderance of descriptive research on teacher characteristics that does little to uncover the process by which teachers learn.

Defining Teacher Knowledge

Teacher knowledge can be thought of as situated understandings that informs the teaching instance. Shulman (1987) has identified the following knowledge base constitutive of teaching:

- 1) content knowledge
- 2) general pedagogical knowledge which transcend subject matter
- 3) curriculum knowledge defined as the ability to grasp the materials, resources, and programs requisite to a domain
- 4) pedagogical content knowledge which is highly specialized to the content area and that reflects pedagogy which relates specifically to the content area
- 5) knowledge of learners
- 6) knowledge of educational contexts from the localized classroom to the larger community and culture
- 7) knowledge of educational ends, purposes, and values and their philosophical and historical grounds (p.8)

This construct of teacher knowledge implies that distinctive bodies of knowledge exist within each domain.

The idea of a knowledge base for teaching has in the past consisted of basic skills, content area knowledge, and general pedagogical skill. As in music education, studies of teacher effectiveness have followed the behaviorist model, which assumes complex forms of situation-specific human performance can be understood on a generic, generalized basis. This research base generalizes observable teaching behaviors in relationship to student performance.

Classroom context, content knowledge, and pedagogical content knowledge have not been carefully examined (Shulman, 1987).

General Pedagogical Knowledge

Grossman (1990) supports Shulman's (1986, 1987) conception of teacher knowledge but condenses such knowledge into four primary areas: general pedagogical knowledge, subject matter knowledge, pedagogical content knowledge; and knowledge of context. According to Grossman, general pedagogical knowledge includes beliefs and skills related to teaching, knowledge and beliefs concerning learning and learners, knowledge of general principles of instruction, knowledge and skills relating to classroom management, and knowledge and beliefs about the aims and purposes of education.

In music education programs, students are likely to encounter instruction in general pedagogical knowledge in foundations and methods classes taught by music faculty and/or by faculty in the education department.

Subject Matter Knowledge

The question of subject matter knowledge (or content knowledge) is of current interest in the educational research community. There is little agreement in the research literature as to the relative importance of content area knowledge on future teaching effectiveness (Evertson, Hawley, & Zlotnik, 1984). For music educators, this question is nearly unthinkable, because the ability to make music is central to our conception of music teaching. Indeed, acceptance into music teacher education programs is dependent on an established level of performing

proficiency. This is not necessarily so in other domains. One might conceive of a science educator who does not practice science on a regular basis beyond the curricular demands of the teaching context or an English educator who does not write poetry, novels, or short stories.

Against this backdrop, music education training can be seen both in terms of its commonalities with general teacher education training as well as for the special circumstances music engenders. For music education majors, content knowledge is likely far richer and more deeply rooted than in their general education counterparts. These students will have studied music for most of their lives and will have participated in a vibrant music-making community while in a university which further situates musical understanding. Many music education majors would have sufficient musicianship to pursue performing as a career, and some universities are accommodating the teaching/performing question by providing five-year majors that combine education and performance degrees. Music education might provide an important site of inquiry in the quest to understand the relationship between content area knowledge and general teaching knowledge.

Pedagogical Content Knowledge

Pedagogical content knowledge is pedagogy specific to a subject matter. This might include understanding the best way to represent such knowledge to others, what makes the content accessible or challenging, and instructional strategies specific to the domain (Grossman, 1990).

Grossman (1990) identifies sources from which teachers develop pedagogical content knowledge. The most influential appears to be what Grossman terms the “apprenticeship of observation” phenomenon that represents the years that novice teachers have spent observing their own teachers. Novice conductor/teachers have likely spent thousands of hours in the choral ensemble or voice studio and have constructed a lore of teaching practices representative of their composite experience.

Another source of pedagogical content knowledge is disciplinary background defined as the larger sense of the collected knowledge in a content area, as well as professional course-work and individual experience. Disciplinary knowledge for choral music students might include ensemble and studio experiences, accumulated listening experiences, observation of conductor/teachers, and tacit cultural understandings of what it means to be a musician in various contexts.

In a case study of three beginning English teachers, Grossman (1990) discovered that all three novice teachers equated subject matter preparation with planning for teaching. These students understood planning to be the extension of their subject matter knowledge and had no awareness of the need to plan for how such knowledge might be transmitted. She concluded that subject matter knowledge and “apprenticeship of observation” played the largest roles in the novices’ conception of what it meant to teach even when students had completed a professional teacher education program.

In music education, pedagogical content knowledge would include exposure to major pedagogies in the field such as the Kodaly, Orff-Schulwerk, Dalcroze, and Gordon approaches. Basal text series provide another kind of model for establishing pedagogical content knowledge particularly in the construction of specific instructional strategies functioning as lesson plans.

In choral music education, this knowledge is not easily defined. There does not seem to be a single approach that is representative of instruction nor are codified instructional strategies available specific to the choral ensemble. It appears, instead, that choral music educators adapt general music educational practices to the choral classroom. The “apprenticeship of observation” phenomenon is readily observable in ways that choral conductors take on teaching characteristics of conductors they encountered in their own experiences (O’Toole, 1994).

Knowledge of Context

Knowledge of context might include the particular classroom, the school in which the classroom functions, as well as the larger community and culture (Grossman, 1990). For novice teachers, knowledge of context may be the most difficult teacher knowledge to acquire as it is heavily dependent on experience and confounding factors such as implicit pre-teaching beliefs may prevent novices from being able to attend adequately to the teaching environment.

As it relates to the ability to improvise in the teaching action, knowledge of context is critical to the authentic perception of the needs of the learners within the particularized culture of the classroom. Considerations of context are

also important in discussions of pre-service teaching opportunities whether on-site at the university or in the field. It may be that transportability of university experiences to real-world teaching situations often fail due to an inability on the part of novice teachers to perceive and adapt to contextual factors.

Current Areas of Research on Teacher Thinking

Interest in teacher thinking is evidenced by increased research attention in areas such as teachers' practical knowledge, personal narrative, classroom knowledge, and teacher expertise. Much of this attention is viewed through the qualitative paradigm and increasing emphasis is being placed on the teacher as researcher. "The ideal situation is when researchers on teacher thinking themselves become practicing teacher educators and learn how to apply their research to their own teaching" (Clark, 1988, p. 6).

Methods of inquiry in these areas include verbal protocol (thinking aloud), stimulated recall of teaching events, policy capturing (presenting teachers with hypothetical situations), journal keeping as it relates to teacher planning, and the repertory grid technique designed to uncover teacher's implicit beliefs (Clark & Peterson, 1986).

Teachers' Practical Knowledge, Personal Narrative, and Classroom Knowledge

Carter (1990) defines practical knowledge as knowledge teachers have of the actual classroom situation and the practical dilemmas teachers face in carrying out teaching action. What understandings and beliefs teachers bring to their teaching as well as their understandings of the setting in which they work

serve to define teaching. Examples of ways in which practical knowledge is being researched include identifying teacher metaphor as a major means of uncovering how teachers identify and solve classroom problems. These metaphors, images of teaching and learning rooted in past experience, serve as powerful tacit organizers of teacher thinking and action.

Research on teacher thinking has documented that teachers hold implicit theories about their students, the teaching art, and the classroom environment (Clark, 1988). Studies of teachers' practical knowledge are trying to answer questions such as the impact implicit theories have on novice's ability to teach, and whether tacit understandings can be made formal to mitigate the impact of implicit theories as teachers go about defining teaching style.

Personal narrative explores teachers' practical knowledge by identifying image and metaphor within the personal, storied life of a teacher. Best exemplified in the work of Clandinin (1985) and Clandinin and Connelley (1986, 1988), narrative unity is the result of life experiences that are meaningful, past and present. Personal practical knowledge is shaped through its expression in practical situations and the researchers maintain that learning to teach can only come as the result of these experiences, not as the simple acquisition of skill. "It furnishes, in other words, a theory of how teachers learn by teaching and how teachers use their knowledge, rather than a generalized conception of what teachers know" (Carter, 1990, p. 302).

Classroom knowledge, according to Carter (1990), is a shift in focus from personal practical knowledge to an ecological perspective. It examines the

demands of the environment, recognizing that a schema-theoretic approach to the organization of knowledge cannot be disassembled from the classroom environment. "Classroom knowledge, therefore, is not a body of propositions or prescriptions derived from external disciplines or process-product studies, but rather it is "situated" and its conceptions ground in the common experience of classroom events" (p. 302). Music education research has yet to vigorously pursue these lines of inquiry.

Expertise

The body of literature on teacher expertise is growing rapidly in educational research. Most studies of expertise focus on expert-novice comparisons (Bereiter & Scardamalia, 1993). As Carter (1990) notes, it is only marginally helpful to know qualitative differences exist between expert and novice teaching if nothing is learned about how expert knowledge is acquired. She draws three implications from these studies that contribute positively to understanding the acquisition of expert knowledge. First, the knowledge is domain specific and specialized. Second, expert knowledge is organized in schema or patterns that reflect the environments in which they operate. Novices do not seem to demonstrate an ability to organize schema with contextual factors in mind. Last, expert knowledge is largely tacit and such knowledge is grown through experience.

Lampert and Clark (1990) argue that expert teaching cannot be taught solely as general tendencies and associations represented by schematic constructs of knowledge. Such schemata, according to the authors, must be

retrieved in contextual, interactive, and speculative ways. They question whether schematas are the most appropriate way to represent the knowledge that teachers use in actual practice and whether novices benefit from an approach that may not be transportable to the situations of actual practice. "Teaching is a complex act requiring the moment-by-moment adjustment of plans to fit continually changing and uncertain conditions" (p. 21).

Lampert and Clark (1990) reference the work of cognitive scientists who assert the nature of knowledge may not be distilled abstract principles, but may in fact develop in relationship to the particulars of a given situation. The literature on situated cognition, that knowledge is the joint construction of the mind and situation in which the mind finds itself, supports the role of context and those complex social interactions that are central to teaching.

Leicester (1990) set up a study to contrast expert and novice teacher's rapid clinical judgments as viewed from an information processing perspective and from a situated cognition perspective. The information processing perspective supported findings suggested by the cognitive expertise literature. Differences between novice and expert thinking processes emerged in areas of metacognition, pattern recognition, automaticity, and generation of causal explanations. When viewed through the situated cognition lens, richer information was gleaned including level of cognitive complexity and flexibility, mode of thinking, as well as clinical and self knowledge and confidence. Expert judgments were made more intuitively and with more nuance than were those of novices. Experts relied on tacit knowledge of classroom events and normative

behavior to make judgments and also were able to root decisions in past experience. Leicester concluded that the situational approach is valuable in elaborating on the cognitive approach to understanding expertise.

Berliner (1986) found that novices hold more literal views of objects and events than do experts. Expert teachers infer more and apply their domain-specific knowledge to make sense of the classroom. Interestingly, novices are often faster than experts at problem-solving. Experts “take longer to examine a problem, to build a problem representation or to think through first strategies” (p. 11).

Like Leicester (1990), Berliner found experts demonstrate an ability to monitor knowledge in a situated context, in a metacognitive way. The researcher identifies a fundamental problem in apprenticeship programs in that experts often lack the ability to talk about or verbalize on their expertise. The hours of observation required of students may have little impact if better ways of deconstructing expertise are not identified. Other implications include the relationship between cooperating teacher and student teacher. A cooperating teacher, even if identified as expert, may not be able to verbalize for the student about their practice or provide needed guidance and direction .

Kennedy (1987) identifies various ways in which the question of expertise is functioning in the educational paradigm. Traditional conceptions of expertise (often referred to as teacher competency) generalize necessary skills and are prescriptive in nature. This mimetic knowledge can be handed down and codified by a profession, and stands outside of particular teaching situations. As

Kennedy notes, “ It overlooks the decisions professionals make about whether and when to employ a particular skill” (p. 136). This lack of connection between learned skill and actual practice is of central concern.

In music, an example of mimetic knowledge functioning as prescriptive expertise might be a basal text series in which a teacher guide is provided with complete step by step lesson plans. These lesson plans have been determined to be models of how one might teach the musical concept at hand. Expertise, then, is externalized by curriculum experts.

Another form of expertise development functioning in the educational realm is identified by Kennedy (1987) as critical analysis. This form transforms students into critical analysts and immerses students in particular situations. It requires of the novice teacher content knowledge and the ability to analyze a particular situation. An example of this approach might be to present a hypothetical teaching scenario for role-playing and analytical purposes, especially common in the law and medical fields. As she notes, “It’s disadvantages are that it can fail to provide students with codified knowledge, where such knowledge exists; it can lead students to become so analytic that they are unable to act; and it can narrow the scope of the students’ analytic powers to the point where, as professionals, they are unable to view cases from any perspective other than that of their paradigm” (p. 146-147).

Kennedy’s (1987) conception of expertise takes critical analysis a step further. She views the growth of teacher expertise as a process of deliberate action. Like critical analysis, it requires novice teachers to problem solve. The

distinction is that such action must take into account context, and that such context is inextricably bound up in the analysis. She describes "Successful deliberate action requires a body of experiences on which to draw, the ability to conduct mental experiments, the ability to critically evaluate their outcomes, and the ability to revise one's definition of the situation if not satisfied with the solutions the mental experiment yielded" (p. 149).

Kennedy's (1987) construct resembles Schön's (1987) discussion of reflection in and around teaching practice. For Kennedy, students must have the opportunity to define problems and situations, act on their deliberations, and evaluate their actions against original goals. This differs from the critical analysis approach in that deliberate action analysis leads towards actions to be determined, towards the solution of problems set and defined. In other words, problem-setting weighs goals, means, and ends together. In a choral rehearsal, then, rather than prescribing a specific goal of instruction in advance of the rehearsal, the ensemble might sing a section of the music and, during the sounding, the conductor/teacher might search for ways to set a musical problem for students based on the sounded information.

Kennedy (1987) acknowledges problems are also inherent in this approach. The ultimate validity of any professional decision carried out in the teaching instance is open to question. It is difficult, then, to hold teachers accountable for decisions made in action when each teacher will bring a different experience and set of beliefs to the instructional paradigm. In music education, the problem is compounded by a domain plagued with issues of assessment and

accountability. Layering on additional assessment issues, particularly one so abstract as personal expertise, could certainly prove problematic in terms of measurement and professional standards.

Teacher Planning and Relationship to Teacher Thinking

The study of teacher planning processes offers a critical window of understanding into the ways in which teachers operationalize their thinking. “Psychologically, to understand teacher planning is to understand how teachers transform and interpret knowledge, formulate intentions, and act from that knowledge and those intentions” (Clark, 1988, p. 8). Substantial teacher energy is devoted to structuring for, organizing for, and managing limited classroom time (Clark & Peterson, 1986). Assumptions, however, about how teachers go about their planning and the models they employ are in direct conflict with research findings in the literature. These assumptions include the idea that teachers employ a linear model of lesson planning encountered in professional education programs, that lesson planning is highly specific and verbal in relationship to objectives to be taught, and that identifying objectives is the central motivation in planning efforts (Zahorik, 1975).

The Tyler Model

The most widely prescribed model of teacher planning is the Tyler model, which consists of specifying learning objectives, selecting learning activities, organizing and carrying out learning activities, and evaluating whether learning occurred (Clark & Peterson, 1986). The Tyler model has endured because of its

emphasis on accountability. "Because the model is linear, the sequence of writing the lesson plan may be rigidly taught without ambiguity" (May, 1986, p. 7).

Connelly and Clandinin (1988, p. 138) address the effect this approach to instruction has had on the role of the teacher:

After it was decided what needed "fixing" in the schools, materials were developed as the treatment. Teachers were seen as modifying screens of the purposes built into the materials. Various strategies were undertaken to minimize teacher influence; hence the name, teacher-proof materials. These notions were found in programmed learning textbooks, some versions of computer-assisted instruction, and highly prescriptive textbooks detailing what the teacher should say and do at particular times and giving answers to questions teachers might pose to students. A particularly vivid example of the latter was the teachers' manuals that accompanied publishing houses' basal reading series.

There are widely acknowledged problems with the Tyler approach. Neale, Pace, and Case (1983) found that the Tyler model of planning was neither the choice of novices or experienced teachers. Hypothesizing that inadequate training of teachers in this approach might be responsible for the Tyler model's disuse in teacher planning, they examined knowledge of the model and context in which it would be taught by novice and experienced teachers. Findings included that both novices and experienced teachers understood the Tyler model, but it did not appear to be the model of choice for either group of teachers.

Summarizing studies by McCutcheon (1980), Morine-Derschimer (1977, 1979), and Clark and Peterson (1986) it can be noted that much of teacher planning is never committed to paper, that the function of written lesson plans is often to meet administrator needs or as a guide for substitute teachers, that much planning is mental, and that plans written down tend to occur as an outline

or list of topics to cover rather than a linear instructional sequence as suggested by the Tyler model. The lesson plan is often discarded when the classroom environment is disrupted in some way.

Peterson, Marx, and Clark (1978) determined that the majority of teacher planning efforts were spent on content, with lesser amounts on instructional strategies/activities, and the least on planning objectives. Teacher planning appeared to be general in nature rather than specifically targeting verbal behavior and the plan was apt to transform in the actual teaching instance, which suggests teachers adjust actions according to the classroom demands, perhaps utilizing planning as a frame of reference to be mediated in the teaching moment. Zahorik (1975) concluded that teacher thinking is not only nonlinear, but that objectives frequently do not play an important role in the planning process. Yinger (1977) found that routines are a principal product of teacher planning and that teachers establish procedures to routinize behaviors to control and coordinate within the classroom setting. Such management included activity routines, instructional routines, management routines, and executive planning routines.

The Tyler model, according to May (1986, p. 7), is unrealistic for novice planners for the following reasons:

- 1) students lack subject matter content knowledge and understanding of the specific teaching context.
- 2) Classroom contexts are complex and planning must take into account the specific complexities of a given situation. The Tyler model encourages a uni-dimensional approach and may limit novices ability to reduce

“dissonance” of a particular situation in favor of following the prescribed model.

- 3) Individual student difference in personality and teaching-learning style are not necessarily accounted for.

Overemphasis on planning may contribute to rigidity in lessons or instructional strategies and lead to a lack of responsiveness in pupil feedback (May, 1986). The rational model encourages the novice teacher to think of the discipline as facts, skills or content to be learned. “Never to see or get beyond the factual and procedural level within knowledge forms is to stultify the senses and reduce the choices and experiences person can and should have” (May, p. 10).

May (1986) suggests that novice teacher planning processes should be afforded the idea of flexibility as evidenced through inductive activities, brainstorming, webbing, creativity inventories in visual and verbal thinking, metaphorical thinking, humor, and other simulations that elicit diverse and creative responses.

Some of us may work more inductively than deductively. We may be stimulated more by first brainstorming activities around a loosely conceived framework of content, a single idea, or a potential curriculum resource than identifying and articulating goals and objectives first and then identifying activities and seeking resources which address these goals (p. 7).

Yinger (1977) identifies teacher planning as a cyclical process consisting of three phases. First, teachers mediate goals, personal knowledge, problem setting, and resources to produce the teaching problem. Second, they defined the problem and brainstorm a solution. Third, problem implementation, evaluation, and routinization are emphasized. Yinger and May (1986) seem to

point to a more global approach to planning where brainstorming, the active imagining in relationship to personal understandings, is central to the planning process. Objectives might flow from these musings rather than dictate ways in which teachers consider planning for instruction, or indeed might be decided after the teaching interaction, on reflection of student progress.

Yinger and Clark (1982, 1983) maintain that a mental image is present during both during the teaching act and as a central feature of the planning process. An important question might be whether novices can be encouraged to construct mental images through creative brainstorming or whether experience and time are the agents that bring the mental image of planning and teaching forth.

Summary

When considering how to develop expertise in novice teachers and the role planning has in the process, one necessarily must consider the structure of preparatory experiences for novice teachers. Kennedy (1987) defines the various ways in which students get practical experience: immersion, apprenticeship in the company of a master teacher, laboratory experiences, simulations, clinical experiences, and the teaching internship.

Research on the student teaching experience illustrates a need for further investigation. According to Evertson, Hawley, and Zlotnik (1984), the body of research on student teaching indicates little reason to believe the experience is an effective way to educate teachers. They conclude that the experience may be negative for some students and could undermine learning from university

courses. It is not clear whether the relationship between student and cooperating teacher is responsible, or whether other factors such as the “apprenticeship of observation” phenomenon is in play.

According to Kennedy (1987), these experiences neither transform students into deliberate actors, nor encourage the application of previously learned principles. Kennedy suggests rethinking practical experiences so that it more closely approaches a spiral where the novice teacher can move back and forth between theory, practice, and the cultivation of a sense of deliberate action.

The practical experience component of music education programs differ from university to university and according to state mandates. While it is not within the scope of this study to examine these various manifestations, it is vitally important to consider ways in which choral methods, secondary methods, and conducting study provide initial conducting/teaching interactions for the music student. Field experiences and student teaching experiences likewise need examination especially as they relate to the role of the university in these situations. If one takes Kennedy’s (1987) view, these practical experiences need better coordination, supervision, and involvement from university faculty both before and during the student teaching experience. Choral methods and/or conducting study is a small but central component of a conductor/teacher’s exposure to content knowledge, pedagogical content knowledge, and beginning teaching/conducting experiences.

CHAPTER 5

PILOT STUDY: METHODOLOGY AND RESULTS

Anchored by the expertise literature in education and music education, the study focused on one aspect of teaching: preparation and planning for the choral rehearsal. The chapter establishes the research context and examines data collection, reporting, and analysis procedures related to methodology. Student experience during the project period is narrated as are researcher observations and reactions. Reported results illustrate a need for an alternative model of rehearsal planning and establishes subsequent research parameters for teacher planning processes during the actual project period.

Establishing the Research Context

The pilot study took place over a 15-week period in a conducting course open to students who had completed Conducting I, a prerequisite that served as the introductory course in conducting study. The second term course is recommended at the end of the junior year for undergraduate music education majors. Other prerequisites include a sophomore level proficiency designed to assess whether students are on track in history, theory, and studio instruction.

Several performance majors petitioned the school for admittance to the course to substitute for a conducting course required in the performance curriculum. Other performance majors elected the course as additional instruction in conducting not required of the curriculum. Therefore, a mix of music education and performance majors comprised the class population.

The Setting

A large public university in the Midwest functioned as the research site.

The university draws 24,000 students from a variety of rural and urban environments. The School of Music offers a variety of BM and BA degrees including vocal music performance and vocal music education. Of the 215 undergraduates, approximately 60 are vocal majors, a little over half of which are vocal music education majors.

The conducting class met in the choral rehearsal classroom, a large airy space with a wall length blackboard, rehearsal area seating and risers, and a mirrored wall. Students were responsible each class for setting the room in a semi-circle configuration with stands and chairs, bringing a video to each class session, and securing peer/self evaluation forms to be filled out whenever students conducted.

Profile of Student Participants

The changing environment of the university population was reflected in the enrollment in Conducting II. Of the twelve students enrolled, seven were women. Three students could be defined as non-traditional, one returning to school and the workforce after raising children at home, one returning to complete a second undergraduate degree after discovering music was ultimately the career choice desired, and one delaying undergraduate study in favor of several years experience in the general workforce. The remaining students reflected the greater population in that many are on scholarship, working through school, or receiving financial aid due to difficult financial circumstances. A

central mission of the university was to provide reasonable tuition costs in relationship to benefits ascribed a large university setting. The ethnic diversity of the class did not reflect the greater university population as all were Caucasian.

Ethical Considerations

The issue of consent is critical for any investigation representing the reporting of human experience (Punch, 1994). Students acknowledged willingness to participate in the study by signing a consent form (Appendix A). The consent form was constructed in accordance with the human subject and research protocol set forth by the degree granting institution and was approved by the Michigan State University *University Committee On Research Involving Human Or Animal Subjects*.

Because the course was also the research site, it was vital that students felt no pressure to participate in the study. Students were assured that their classroom grade would not be affected in any way if they chose not to participate. All students voluntarily participated in the study.

After class discussion, students determined that pseudonyms would be the preferred way of representing their voice and experience in narrative profiles. This choice reflected their desire to appear real to future readers rather assignment of sterile identification labels such as “a student” or “a junior music education major.” Students were encouraged to dialogue with me if any concerns arose during the project time. On many occasions, discussions in class involved the checking and rechecking of my perceptions about their experiences in an effort to best represent student voice. Students had a

meaningful impact on the direction of the pilot study as adjustments and refinements were made to the process during the semester.

Through explicit dialogue, the class explored the nature of my dual roles as researcher and teacher. One concern brought forth was that my opinion of students might change as a result of analysis of student work, that I would develop an unnaturally heightened sensitivity to the classroom process which might influence my opinions about their abilities or even personhood. I agreed to remain open to this possibility and encouraged students to speak with me or write anonymously if the issue became problematic.

The Conducting Class: An Overview of Structure

The advanced conducting course was constructed as a reflective practicum, during which students were engaged in self, peer, and teacher-facilitated reflection as it related to the development of conducting/teaching (Appendices B & C). A primary goal of the class was the continued development of the novice teacher's musicianship through the interrelated transactions of conducting and teaching.

The reflective practicum comprised two levels of reflection. Self, peer, and teacher-facilitated reflection targeted the conducting student journeying through class projects, conducting rounds, and assignments. Students constructed portfolios in which self-reflection could take shape and form during the span of the semester. The portfolio, as a work in progress, grew to include all written assignments, self and peer reflections, analyzed scores, videotape record of all conducting rounds, and daily notes.

The second level of reflection, reflection-in-action, was established as part of the conducting/teaching process through which students learned to engage the “choir,” or laboratory chorus, in mutual decision-making and problem-solving opportunities. Critical to this aspect of the class was my modeling of interactive decision-making in both the class context and in Concert Choir, the choral ensemble in which conducting students participate each semester.

Conducting and Conducting/Teaching Projects

The 15-week semester initially emphasized conducting-only projects and later introduced opportunities for rehearsing/teaching. Conducting-only projects focused on gesture as non-verbal teaching and as the reflection of individual musicianship.

Goals for these conducting rounds included awareness of gesture as a teaching tool, comfort with integrating the physicality of conducting with internal musical understandings, and the opportunity to increase conducting vocabulary toward greater expressivity. Videotaping was utilized to capture conducting/teaching instances as students exercised within the reflective practicum parameter.

Conducting/teaching rounds focused on teaching in direct relationship to the musical sounding. It was assumed novice teachers need multiple opportunities to exercise this principle until attention could be consistently directed towards the sounding. Factors preventing such attention might include the distractions associated with coordinating physical gesture, social factors of

vulnerability in front of peers and the risk that entails, and the tension apparent in bridging pedagogical content knowledge and musicianship.

Conducting/teaching rounds emphasized the relationship between personal musical understanding and directing one's attention towards musical challenges in the rehearsal mode. During these rounds, students experimented as "improvisers," deciding on instructional strategies in relationship to musical challenges presented by the laboratory chorus. Students were given permission to stop when they were unable to improvise teaching strategies in-action, and without fear of disapproval. Often, these episodes involved joint problem-solving on the part of the class to move the rehearsal forward.

The central goal for conducting/teaching rounds was that student musicianship ultimately inform teaching strategies rather than the dependence on preconceived, a-contextual techniques that might not be transportable to the unique teaching situation.

Description of Score Analysis System

The class utilized one approach to score study that emphasized structural analysis and a highly visually-oriented score marking process (Decker & Herford, 1988). All students used the model as a means of developing common analytical vocabulary among class members. This particular score analysis process, however, is not central to the researcher's conception of the study. Any number of analytical systems might serve the purpose of increasing student understanding by methodically examining the score.

Two central features to the score study approach used by class members is a method of bar-line analysis and a color-coding system geared towards the conductor's unique perspective (Appendix D). Bar-line analysis involves dividing a score from whole to part such that new musical material is signaled by a bar-line in the score. This system is hierarchical in that bar-lines vary in length according to the conductor's conception of its relative importance in the overall scope of the work. The deciding factor in bar-line placement is that some form of bar-line accompanies any significant change in musical material. This is often driven by considerations of form, but also determined by other musical features important to the conductor such as timbral changes, texture changes, or divisions according to text and poetry.

This system is particularly helpful for young conductors as conducting transitions, identifying structure to organize teaching possibilities, and thinking in both specific and global terms are of central concern.

The other primary feature of this approach is a color-coding system that visually orients a conductor to the score. As represented in Appendix D, hot colors such as red correspond to forte dynamics, increasing speed such as an *accelerando* marking, or are representative of strong articulation markings such as accents or indications of weight in tone. Cool colors such as blue connote the opposite: lesser dynamics and slowing tempi such as *ritardando* markings or slowing *tactus*.

Other uses of color-coding include marking for vocal and instrumental cues, or representing particular conductor decisions about the score such as

breath markings or shorthand notation for tricky conducting patterns. This system seems especially well-suited to visual learners and makes the score “come alive” in a casual glance for the conductor. For beginning conductor/teachers, the approach encourages a deep familiarity with the score. In teaching the system, the order of study is color-coding followed by bar-line analysis so that students know as much as possible about the score before making structural decisions.

Students were required to analyze scores and submit a teaching plan prior to any conducting or conducting/teaching assignment.

Illustrations of Student Work

Examples of student work throughout the project will amplify the experiences students had negotiating the proposed model. Where possible, teaching plans will be in the student’s original handwriting. In some instances, the plans had to be traced for legibility. The work, however, is not altered from original content.

Data Collection

Data sources central to the study included written rehearsal plans, portfolio materials, writing assignments, video footage, and teacher/researcher field notes.

Written rehearsal plans

Students submitted rehearsal plans in advance of any teaching assignment. These plans form the central site of inquiry during the project.

Portfolio materials including written self and peer reflections

Students filled out self and peer reflections on all conducting/teaching rounds. A portfolio of student work throughout the semester comprised the central assessment vehicle for the conducting class.

Written assignments

A variety of written assignments were assigned as a regular part of course-work throughout the project. For example, in examination of beliefs about the role of conductor and singer, a pre and post writing assignment was given at the beginning and end of the semester. Following small group class discussion in the initial week, students were asked to write a one to two page paper reflecting their experiences as singers in a choral ensemble and their associated understandings of the conductor's role. A similar assignment was given near the end of the semester to check whether meanings had changed.

Other examples include writing a philosophy of teaching, constructing vocal warm-ups, identifying nonverbal teaching possibilities, describing what was perceived by the student during a particular teaching moment, writing a poem, and observations of other conductor/rehearsals as well as observation of the teacher/researcher's choral rehearsals.

Videotape as Triangulation

Videotaping was a central site of feedback for both students and the researcher during the pilot study. Students regularly filled out self-evaluation forms after conducting during a designated video feedback time. Peers provided constructive criticism through teacher-guided discussion during class time and

their comments were preserved on tape as well. As a way of validating researcher perceptions, videotaping was a key means of checking against journal notes and field notes.

During the pilot study period, tapes were viewed at the end of particular conducting rounds. The camera ran continuously throughout classes and it was therefore easy to view student's conducting rounds in the order in which they had occurred. As the researcher/teacher, I utilized tapes in two distinct ways. First, the videotape provided a distanced viewing opportunity as a teacher in the classroom. I could step back from the process of monitoring the class to attend more acutely to specific conducting or conducting/teaching issues. Second, I was able to jot impressions or notes about participant's conducting/teaching that could then be compared with field or journal notes.

I kept journal entries and field notes with me during videotape viewing and made notes directly to those entries corresponding with the videotape selection. What I gleaned in post-project analysis that was not evident during the process was ways in which students improved teaching in practice apart from experimentation with the new written model of planning.

Teacher/researcher field notes and personal reflections

Field notes were written at the conclusion of each class interval. Additionally, journal entries documented personal reactions and challenges at various points throughout the project.

Reporting the Data

Narration of the pilot study documents student experimentation with a researcher developed planning model. From the perspective of both the student and teacher/researcher, the narration describes the classroom context, presents interpretive commentary framing data display, and weaves analytic narrative vignette with visual presentation of the data. Both the Dolloff (1994) and O'Toole (1994) studies served as models for this approach to music education research reporting.

In the present study, both confirming and disconfirming evidence is sought to test assertions and linkages identified. Student voice is represented by the construction of narrative vignette both verbatim (identified by pseudonyms) and as composite profiles told as story. Condensing and shaping experience for the reader is a central goal of the reporting process.

Using a qualitative technique known as profiling, the data is sifted through and condensed in order to weave major themes together as narrative. Student writing functions as an important check to the emerging understandings. The goal of profiling is to give the reader the most potent information gleaned and to organize it in a manner that richly illuminates the participant and researcher experiences.

Analysis: Alongside Reporting and Meta-Analysis

The question of analysis and interpretation are managed on two separate levels. Analysis is necessarily interwoven with presentation of the data as it most accurately represents the experience of both the students and the researcher

during the project period. Analysis alongside data informed and guided the project as adjustments were made in relationship to student experience. For this reason, both data and analysis are reported alongside the other. According to Erickson (1986), a central concern is to bring research questions and data collection into a consistent relationship through problem-solving. Analytic attention is redefined and refocused as themes present themselves and allow for readjustment to the research process during the project period.

Meta-analysis is reserved for the final chapter and links analysis back to the theoretical discussion and to the research literature in education and music education.

Evolution of the Planning/Preparation Experiment

As described earlier, the study originated as a means of examining the researcher's teaching practice. From a global perspective, a concern was how to better teach novice conductor/teachers to improvise in the teaching act in direct relationship to the musical sounding. As it related to the specific issue of planning for rehearsal, students often did not appear adequately prepared even after submitting results of score study to the instructor prior to teaching as well as a teaching plan.

It became evident that adequate preparation for rehearsal appeared only partially related to a written rehearsal plan. Students had apparently internalized the idea that teaching success (at least in the classroom situation) was synonymous with successful negotiation of the written plan. Also evident was

that students did not feel, as a whole, they had permission to deviate from the plan or to make adjustments in the teaching action.

Equally perplexing was a small number of students who were, in fact, quite successful in the teaching situation. These students responded authentically to what the ensemble sang and seemed to naturally negotiate the teaching process. Paradoxically, these students did not necessarily write well-constructed rehearsal plans. Upon examination, these plans most often were represented as a series of phrases or reminders, sometimes represented as bullet points. Further, the plans had little in the way of teaching ideas, instead their language functioned like a map that might guide one to a destination (first this, and then this, etc. . .).

Pilot Study: Original Research Question and Subsequent Modifications

An examination of teaching plans for the choral rehearsal was the primary area of consideration for the pilot study. From the literature in educational research on teacher thinking and research in music education, the teacher/researcher operated under the following assumptions:

1. Planning for teaching necessarily involved conductor/teacher understanding of the musical score paired with strategies for teaching these musical understandings to the choir (Dolloff, 1994).
2. Improvisation in the teaching action can be conceived as a platform for developing the condition of expertise, or an expert-like mindset, which encourages expansion of conductor/teacher thinking rather than reduction of imagining for the teaching event (Bereiter & Scardamalia, 1993; Elliott, 1995). According to Grossman (1990), this necessarily involves blending of content knowledge (musicianship) and pedagogical knowledge (educatorship).

Therefore, initial examination of teaching plans would describe their relationship to teaching with an emphasis on whether the plans seemed to mediate the ability to improvise-in-action.

The focus quickly changed from an examination of interactive teaching to the process of constructing teaching plans, however, as early sets of plans were analyzed. For the first conducting/teaching round, no guidance was given by the teacher/researcher about how the rehearsal plan should be structured except to require a thorough score analysis and written plan in advance of rehearsal. It was hoped that an uncoached assignment would produce insights into how students perceived the planning process and relationship to impending teaching.

Consider the examples in Figures 1 and 2 from class members writing their first teaching plan. Melissa's outline appears closely aligned with the objectives-based approach to planning for teaching presented in Chapters 1-3. The ideas contained in the plan are uniquely hers as the class had not yet discussed formal components of a teaching plan.

Melissa identified an objective, "problem to be addressed," which is specific in nature. She conceived of a five-step sequence to exercise her goal of improving a pick-up beat. The steps seem to be linear and logical. Synthesis and evaluation are implied in the last step when she requested singers to perform the improvement noting that she intended to listen for whether the problem was solved. As a music education major, Melissa and other class members would have had exposure to the Tyler approach in a general music methods course.

Rehearsal guide

Problem to address : the pick-up to m.9 which should be syncopated

1. I will have them sing mm 1-11 without telling them what it is they have been doing wrong.
2. I will show them how to ^{conduct} ~~conduct~~ in 2 while counting the subdivisions 1 e + a 2 e + a and ask them to do the same.
3. We will then conduct and count m. 7 + 8 with the hold. Again I will demonstrate.
4. When they have mastered step 3 we will add words back in.
5. Lastly we will go back to the beginning and sing through measure 11 again, with the problem hopefully fixed.

Figure 1. Melissa's first teaching plan: Similarities with the Tyler model of instructional planning.

Rehearsal Guide

2. Read the words - what is the song about?
1. Listen to the piano play the music
- *5. Compare the 1st + last verses
What makes them different?
3. Sing through the 1st verse in order
to get the ~~rest~~ melody in head - on a neutral syllable.
4. Describe the melody - is it happy? sad?
does it tell a story? evoke an emotion?
6. Sing the 1st + 4th verses, w/ dynamic
expression, moving in any way that will
help to get the feel for the differences

Goals

1. To have the singers understand the story, +
how the music fits it.
2. For the singers to be able to feel
the emotion in the music, + be
able to sing it how they feel it.
3. For the singers to be able to support
the legato feeling on the top notes
- gestures, breathing, whole body
4. For the singers to be able to
appreciate the differences between
the 1st + last verses

Figure 2. Michelle's first teaching plan: Inclusion of musical actions by ensemble.

Other student's initial plans resemble Melissa's thinking in terms of structure and perception of planning for teaching. In Figure 2, note Michelle's stepwise progression of activities and subsequent identification of rehearsal goals.

Unlike Melissa's plan, Michelle was more focused on actions by the ensemble than actions on the conductor's behalf: read, listen, compare and contrast, sing, and describe. These actions were guided by her goals and represent an attempt to link conductor interpretation with teaching strategies. Michelle's linking of teaching strategies with actions by ensemble members became important in the refining of the rehearsal planning process. Another feature was Michelle's re-ordering of rehearsal strategies as evidenced by strikeouts of various numbers. Michelle appeared to consider the best order for her teaching ideas.

These plans represented the kind of planning students conceived with no coaching about component structure of a rehearsal plan. From my perspective as teacher, the thinking demonstrated was narrow in scope. I wondered whether students considered a multitude of teaching possibilities, or having settled on one or two ideas, simply considered the planning complete. Further, the teaching of these plans confirmed my experiences with previous classes in this context: students seemed not to "hear" the choir, steps were carried out without apparent on-the-spot assessments of whether the choir had accomplished the rehearsed step, and I remained unconvinced students had taken time to deeply learn the work under study.

Following these submissions, class discussion ensued over the course of several days about the nature and function of a teaching plan, its relationship to actual teaching, and how to make links between score study and the writing of a teaching plan.

The following represented various ideas by class members during the next two class periods:

Jack: I'd like to develop the ability to listen critically while conducting. After conducting, I often think "Gee, what did that sound like?"

Kelsey: Yeah, I was thinking about putting in my left hand for showing a crescendo that last conducting round, and I stopped listening altogether! I was really surprised when we got to the end and I couldn't remember if the choir sang it while I showed it or not.

Teacher: Most of you followed the teaching plans you devised closely. Did you feel your plans worked?

Steve: Not really. I mean, I basically did what I said I would, but it felt strange to be talking about the poetry when the singing wasn't very good. I didn't really know what to say about the singing, especially the guys who didn't have their notes.

Kelsey: Yeah, but how do you KNOW what to pick out to rehearse? I thought the poetry idea was interesting and you have to start somewhere.

Karen: Maybe you should start with the notes first and get to ideas like poetry later.

Teacher: Think about your own experiences in choir. Did you experience learning the notes and rhythms first, and then layering on interpretative ideas? How did you respond to that?

Melissa: I don't like that kind of rehearsal but I guess you have to learn the notes and stuff sometime.

Steve: Well, it can be boring.

Ted: One thing I like about Concert Choir is I hardly ever notice learning the notes. I mean, we sometimes go to sectionals, but mostly we get right to the music.

The class identified several areas to address. First, they expressed discomfort with deciding what to teach from the myriad of possibilities before them. They were unsure of what was expected and particularly concerned with knowing “how” to rehearse an idea. Another concern was remembering gestural goals while trying to teach as many students experienced the combination of conducting and teaching an overwhelming prospect.

It became evident to the teacher/researcher that an examination of students ability to improvise in the teaching act would necessarily require an understanding of the planning process itself. Examination of interactive teaching, would in fact, be better informed if student thinking about planning were better understood. Early in the project, then, the research focus narrowed to considerations of the rehearsal planning issue and away from interactive teaching.

Developing Pedagogical Knowledge

In addressing learning to rehearse, the class had lengthy dialogue about the connection between knowing about music and knowing about teaching. We started with score study:

Teacher: How did you decide what to teach today? Did you use your score analysis?

Michelle: Well, I did my plan after I analyzed the score. I knew what I wanted so I picked out what I thought would be a teachable idea.

John: I'm not sure of what to rehearse. Obviously (*giggles from class*). I tried an idea that didn't work so I need to know what to do next time. I don't really know where to start.

Teacher: John, from your understanding of the score, what is the most salient feature of the piece?

John: I'd say the rhythm which matches the text—a word-painting kind of thing.

Teacher: So if you were to teach the most important idea of the piece to a group, which you just identified as rhythm, how might you do so?

John: (silent, musing)

Don: You could devise a warm-up and teach it first, and then the rhythm would be easy.

Barbara: You might also have everyone clap and count the rhythm everywhere it occurs.

Teacher: Exactly. Let's make explicit a few ideas. First, your own background and score analysis will inform your teaching. You will have your own personal relationship with a piece that will grow over time. If you deliberately seek out what you know about a piece, and use that as a platform for deciding teaching ideas, you will likely identify many things you want to address.

What has been missing from our discussion is what happens between your score analysis and interpretation and the actual teaching. It is not enough to know what you want to teach, but you must have considered multiple ways of getting the idea across.

Following these discussions, the linking of teaching strategies to score study was explored in the classroom setting. In addition to learning the traditional components of a teaching plan as outlined earlier by May (1986), the class brainstormed various alternate ways of heightening sensitivity to the teaching process which eventuated in a visual model. This model for brainstorming, dubbed "the bubble" by students, reflected many possibilities for rehearsing a piece growing directly from connections conductor/teachers were able to make from score study and their own personal experience and background.

The process transformed through the weeks in significant and meaningful ways. A primary theme was uncovering connections between student's musical understanding and ability to devise teaching strategies. Most importantly, students were able to identify a way of expanding thinking in the planning process that potentially serves as a springboard for improvising in the teaching action, an important departure from planning procedures evident in the early phase of the semester.

Confounding Factors

Unspoken during this early phase of mutual analysis was the identification of personal, human concerns: the vulnerability associated with teaching and conducting. More confident and extroverted students seemed to have an easier time regardless of the strength of their teaching plan:

It got me thinking about what we each bring to this experience, and how risky it is to move in front of others. In a culture where the body is basically taboo, and the split between mind and body is still a chasm, it is a tremendous expectation that the conductor's understanding of the music can emanate naturally through the body. It takes much, much work (Field note, Feb. 5, 1997).

Respecting student's personality and comfort level in front of others was as important in facilitating learning as any teaching technique, an issue hopefully addressed by honest but gentle peer evaluations.

Development of the Non-Linear "Bubble" Model

The visual model resulted from classroom discussion about devising teaching strategies to match musical goals. The class had been exploring various means of improving the construction of teaching plans. Several students

suggested writing plans after rehearsing rather than before instruction so that personal reflection would be more related to actual events. Others argued this approach did not anchor upcoming teaching enough that they would feel confident on the podium. Some suggested post-teaching evaluation as critical to future teaching as a means of “tweaking” original teaching ideas.

Confounding Factors

In these initial discussions, an important learning emerged for the teacher/researcher. I had assumed that students were audiating the music while they prepared for rehearsal, comparing what they heard in the teaching act against a “sound ideal” constructed by the student. I was surprised to find out many were not.

In fact, one student described difficulty in hearing the choir at all. Kelsey wrote:

At times it was difficult to know for sure if the choir was responding to me. I have a tendency, [sic] when nervous, to introvert myself inwards. However, when I was aware of the choir-I heard them responding to what I felt inside. With the more confidence I had, the more aware I was (self-evaluation).

This might pose a partial explanation as to why some students appeared to ignore what the choir produced in favor of exercising a sequence of teaching activities.

Other students described the phenomenon of listening for their internal construct of the musical sounding in lieu of listening to actual production. Ted related “Sometimes, I feel I’m hearing what I know is right, not what they’re

actually performing. It is difficult to keep all those lines of communication open and working all at the same time (self-evaluation).”

Additional Student-Directed Suggestions for Planning

Students had multiple suggestions for improvement of planning including observations of choral rehearsals; looking for and listing teaching strategies by conductors. Once listed, these were evaluated in several ways. First, class members identified whether the strategy was teacher-centered or student centered. Teacher-centered was defined as actions, usually verbal, that required little involvement by ensemble members. For example, a teacher-centered action might be to tell an ensemble where to breathe, or explain historical context about a work. Student-centered actions would involve students in some form of musical decision-making such as singing, describing, conducting, or chanting.

Wrote one student, “I have modified my viewpoint somewhat and come to believe that the conductor serves his/her role best when they encourage all the ensemble members to think—not like them, but like their own best conductor” (written assignment).

Class members agreed a balance should exist between teacher and student-centered actions. The expert model was identified as a normalized paradigm for choral conductors (O’Toole, 1994) and class members expressed sensitivity to increasing ownership of learning on the part of ensemble members.

Non-linear Imagining

As the teacher, I wanted to make more connections between what students already knew and how to teach such knowledge. I began to experiment on the board with floating circles that represented the most salient features about one piece, Britten's *The Sally Garden*. After analyzing the work together, students came to the board and identified various musical decisions about the work, such as working for legato line, tone (minimal vibrato), and phrasing (symmetrical four-bar phrases requiring even crescendo-decrescendo).

From these floating circles, students had to brainstorm several ways to teach the ideas that were represented by spokes. Once each circle had teaching ideas, I suggested students teach a circle each for the class to demonstrate rehearsing can emanate from many departure points. Figure 3 represents this early thinking.

Students had several opportunities over class periods to experiment with this approach and referred to these floating circles as pods, orbs, or bubbles. The class eventually settled on the term "bubble" as it seemed to represent cartoon-like depictions of day-dreaming or musing which was closely aligned with the kind of thinking involved in the corporate brain-storming activity.

Student Experimentation with the Model

Class members experimented with the model for the remainder of the semester. The examples in Figures 4 and 5 illustrate the thinking evidenced in these early models.

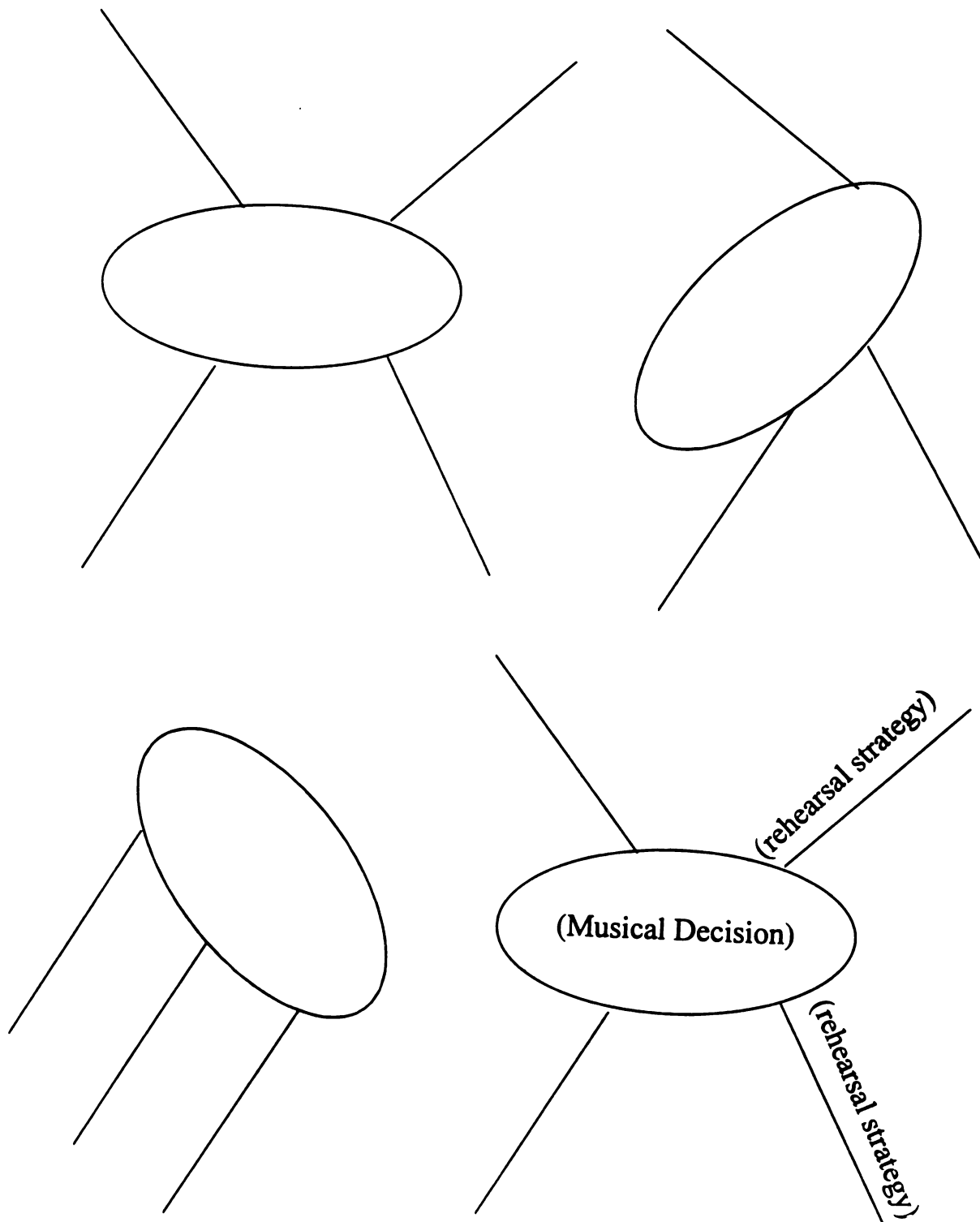
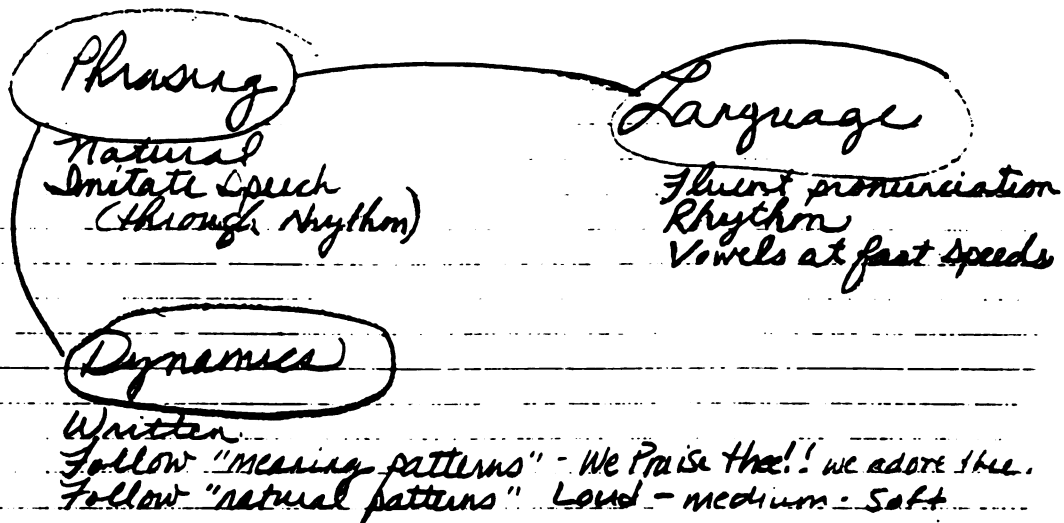


Figure 3. Earliest version of class-constructed brainstorming model.

Britten's Gloria Rehearsal Guide



1st phrase Gloria in excelsis Deo

Figure 4. Karen's plan: Teacher decisions implicit; few teaching strategies represented.

Rehearsal Guide

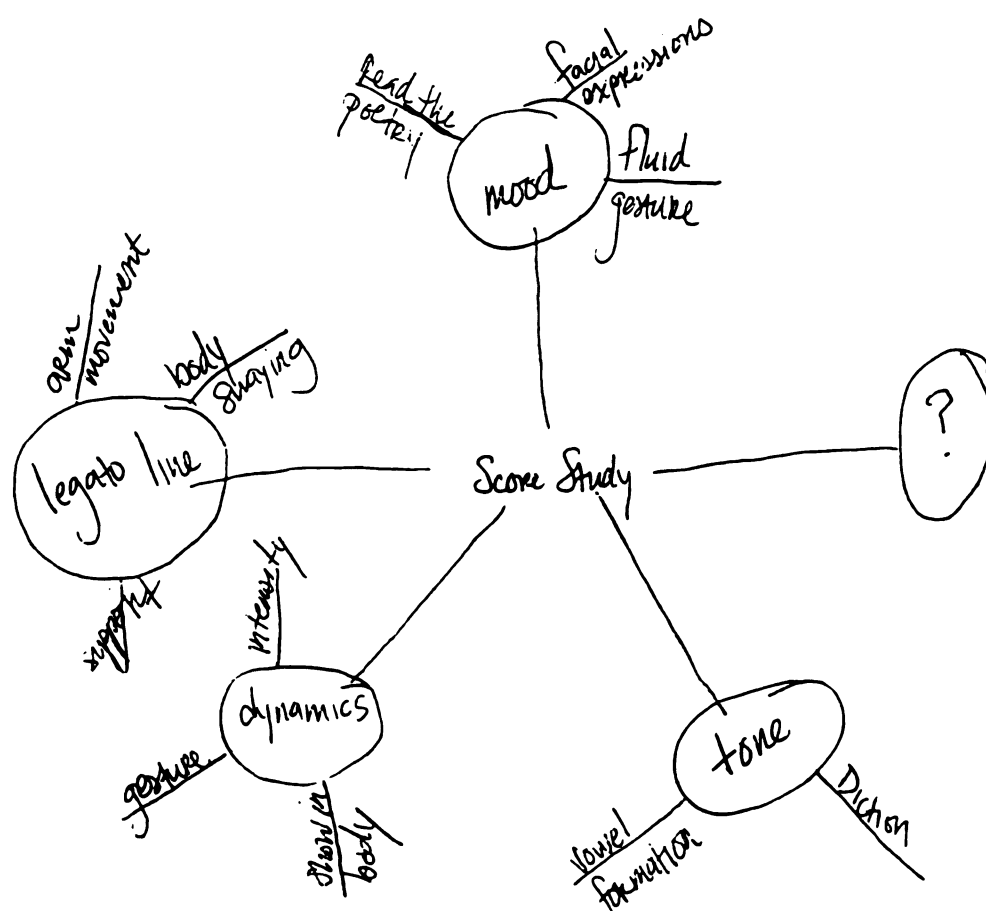


Figure 5. Michelle's plan: Conductor/teacher decisions and teaching strategies vague and undefined.

Early experimentation was paired with the traditional writing of teaching plans. The bubbles were used as a way of identifying possible teaching strategies which were then incorporated in a written plan. In the first iterations of this approach, students seemed to focus on one of two aspects: either they described musical decisions about the music or they outlined teaching strategies with only implied information about their personal decision-making in relationship to the score.

In Figure 4, Karen has prepared for a short five-minute conducting/teaching round. She identified three areas that shaped her rehearsal as evidenced by the floating circles. Under the circles she listed what appeared to represent her decisions about her musical goals in each category. For example, under phrasing she wrote “natural” and “imitate” speech (through rhythm). The Latin text is indeed chant-like and fast. Karen seemed to indicate phrasing should flow from this organizing idea.

What is absent from this plan is any documentation of teaching strategies. This was typical of early plans and the class re-visited the need to represent both musical decisions and ways of approaching instruction. Also interesting is the blend of listing and circles, suggesting she is perhaps not yet comfortable with the brainstorming format.

Michelle’s plan, Figure 5, represents the most difficult aspect of learning to imagine for teaching in this format: the plan is vague and functioned not as a road-map of thinking, but as blurred signposts along the journey. Even with class discussion, many students continued to write plans that gave only brief

indications of conductor/teacher decisions. As the teacher, I began to question whether the process had merit, as such little information was not likely to be helpful either to the student or to me as evaluator. Unlike Karen's plan, Michelle did include teaching strategies though they are non-specific.

Analysis of videotape and teaching was yielding positive results, even though the visual plans were uneven and often appeared incomplete. The teaching, however, was clearly becoming more fluent and teaching actions seemed to be more cohesive:

I am encouraged by the improvement in teaching after today's class. Students had more teaching ideas, and they were sound ones. Pacing has improved as has their ability to listen-in-action. I was particularly pleased when Ted stopped his rehearsal to indicate what he heard needing improvement, but admitting he had not thought of an effective way to solve the problem. The class was great about problem-solving with Ted and had several good ideas (Notes to file, March 12, 1997).

The class appeared to gain increasing understanding that there are multiple ways of organizing teaching and that it was within their abilities to find ways to teach musical ideas. There seemed to be a gradual orientation and focus on teaching that was evidenced in some cases by a greater number of teaching activities within a conducting round. Other students appeared more at ease with the teaching component and taught for more musical and expressive considerations than purely technical:

Today I noticed the quality of activities Kelsey chose in her teaching round. Gone was a focus on "where to put the final consonant," instead she was intent on the choir singing the opening phrase of *Path to the Moon* with direction and line. She tried several ways of advancing her ideas, the most effective of which was when her gesture clearly showed the idea. She still needs to work on getting out of a technical beat pattern and show more line.

Her submitted teaching plan showed the general nature of her thoughts but could have been more explicit (Notes to file, March 10, 1997).

Observations from videotape analysis indicated conducting gesture often suffered when the teaching portion of a rehearsal commenced. In other words, students would conduct more successfully before the rehearsal than during the rehearsal. This supported my intuitive understanding that learning to teach requires additional operational knowledge. It is likely the mind is so occupied with rehearsing that conducting cannot receive the mind's attention. Most interesting was that this often remained true when students had singers "perform" the previously rehearsed section. In this case, the conductor would be free to revert attention back to conducting gesture. This didn't always happen:

How interesting! Ted conducted so well last week and this same piece today looks completely different. I remember having Ted demonstrate for the class his use of horizontal space to achieve the kind of legato appropriate to the Britten. This is Ted's first rehearsal segment and during his teaching round his gesture looks pattern-like—not at all how he looked during the conducting only round! (Note to file, Feb. 14, 1997)

Adjustments to the Written Plan

By mid-semester the class again re-visited the planning process. We made adaptations to the visual model so that both conductor/teacher decisions and teaching strategies were represented. Students were asked not to write traditionally formatted lesson plans and to instead include all information in the visual model. I hypothesized that students might be using the visual model as a means of shorthand, saving more complete explication for the written plan. I

hoped this directive would produce a more comprehensive visual plan from which to make evaluations.

The refinements are represented by Figure 6. The central floating circles continue to represent the area of focus. Sub-circles identify conductor/teacher decisions about the score. Spokes from the sub-circles represent teaching strategies.

Figure 7 is an example of the experiments with the refined model by class members. Since students did not write a concomitant written plan, I encouraged them to structure their rehearsal based off the bubble most closely associated with their personal strengths. By examining Figure 7, one could envision a student organizing a rehearsal or portion of a rehearsal on tone as the bubble is the most developed. A variety of student actions represent teacher decisions, a marked improvement in the planning process.

At one point near the end of the term, I asked students to analyze a work. They were then asked to “tag-team” teach in groups of three such that one student began a rehearsal based on her score study, and students two and three taught in direct relationship to what happened in the previous student’s rehearsal. Of all the class activities over the course of the term, I observed this improvisatory exercise as the most helpful in drawing attention to what the choir sang and away from a-contextual rehearsing. When students were unable to evaluate the sounding in-action or suggest ways of rehearsing identified problems, the class brainstormed solutions together.

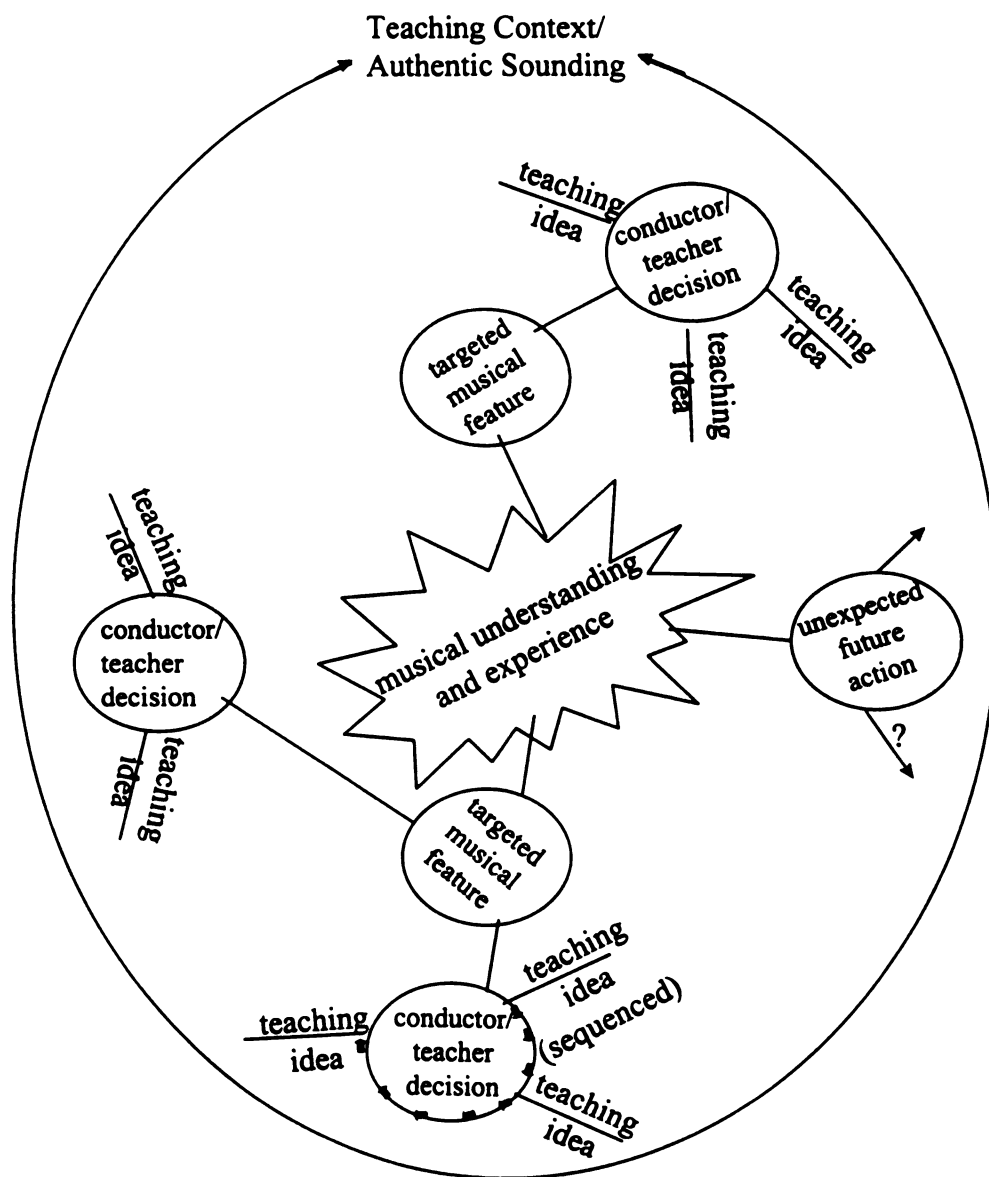


Figure 6. Suggested refinements of bubble model linking teacher decisions and teaching strategies.

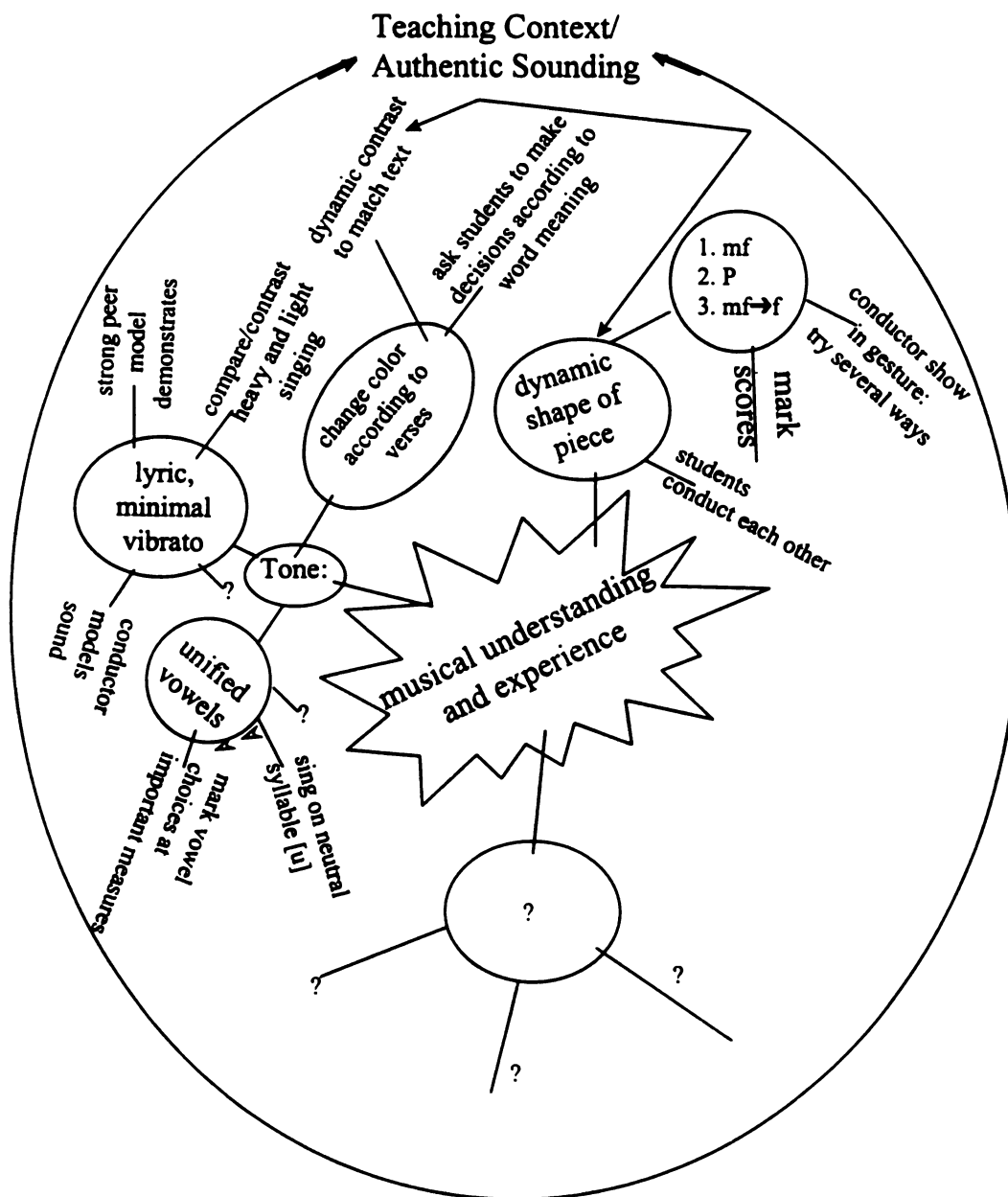


Figure 7. Example of student work utilizing refined model.

Evaluation of the Pilot Study: Implications for the Upcoming Project

The conducting class experimentation with preparation for teaching yielded rich information for all participants. Students contributed greatly to the adjustments evident in the process over the span of the 15-week trial. Their thoughts represented by class dialogue, written assignments, and self and peer evaluations were invaluable in assessment of the experience.

In evaluation of the project at the conclusion of the term, I grouped themes into three areas: positive results from the process, limitations of the brainstorming model, and areas for improvement when structuring the impending research project.

Positive Results

In contrast with previous classes I had taught, there was a change in student's perception of the role of teaching as a conductor. Students became more sensitized to conducting as a form of teaching, and their rehearsing reflected a commitment to developing both conducting gesture and teaching skill.

Kelsey addressed the overlap of these areas:

Preparing yourself and planning are important (know the score!), but just as important is the ability to be flexible and "in the moment." Don't work problems that don't exist and don't assume the problem is the ensembles, you could be creating it through your gesture (written assignment).

Another noticeable change in this particular class were perceptions of the power inherent in the conductor/teacher's role. Karen described how experimenting with the non-linear approach to rehearsal planning is related to the ability to improvise in the teaching act and the establishment of a different dynamic between conductor and ensemble:

This plan took awhile to warm up to. I had to change my concept of what I thought a rehearsal should entail—i.e., GIVE UP CONTROL!!! This was not easy in the beginning. However, I soon discovered that having to create “bubbles” called upon my musicianship in a new way. Now, instead of planning out a rehearsal step by step, I was free to use my score study to determine what the important musical characteristics of the piece were.

These became my main bubbles, and caused me to think about different ways I could accomplish these musical goals. If one way did not work, I had another option ready to try. When that goal had been accomplished, then I could move on to another musical idea. It is really a good idea, because it allows you to get a “global” view of your composition. And, if used properly, your choir will be taking more responsibility for their musicianship and performance capabilities, thus freeing you from THE NEED TO CONTROL EVERYTHING (written assignment).

An area of marked improvement showed in student’s emerging understanding that any one rehearsal might take a number of potential directions in direct relationship to what the conductor hears. Such flexibility was not evident in early plans or in previous classes I had taught. This learning was important, in my view, for it encourages the expert-like mindset in which thinking is expansive and experimental rather than reductionistic and inflexible (Bereiter and Scardamalia, 1993).

Challenging students to grow pedagogical knowledge had been impeded by the objectives-based approach to lesson planning which establishes a single approach to achieving goals or objectives. In the non-linear exercises, students were called upon to think of multiple ways of addressing musical goals. Further, these potential rehearsal directions were chosen based on the conductor’s assessment, in-action, of the musical sounding by the choir. Melissa explained:

Bubbles are helpful because they represent the unstructuredness [sic] of the teaching-in-action. I generally like things to be very linear and

organized but the point of the bubbles is that there is no set order or schedule.

I teach by first listening and then going to my bubbles and deciding which is most appropriate to work with. The listening first is so important because without it you don't know where to begin. Depending on the nature and length of the rehearsal I may use one bubble or many.

A related issue is the easing of fear that novice conductor/teachers express when trying to decide what and how to rehearse. Music education is different from other educational fields in that content knowledge is more highly developed and skillful. The bridging of content knowledge to pedagogical knowledge appeared to be improved by this approach to planning.

One student, Jeffrey, made an analogy to a set of scales. In the beginning, the scales are weighted towards musical knowledge with little pedagogical knowledge to balance. As one learns to brainstorm, the scales even out little by little. It is possible that music students have an advantage in the development of pedagogical knowledge: they have likely observed teaching in the choral context over a period of years as participants in choral ensembles. I could note students choosing rehearsal strategies that mirrored what they experienced in Concert Choir, for example. As their confidence grew, so did their ability to adapt and assimilate the ideas of other conductor/teachers or generate ideas of their own.

Limitations

The approach clearly had limitations. In many instances, the teaching plans were vague and non-specific. They neither demonstrated student thinking nor provided a map to guide the teaching process. Though refinements were

continually made throughout the project to address this concern, certain students did not respond well to this method of planning. For linear thinkers, the process was difficult and perhaps even frightening. I had to acknowledge to myself and class members that the planning model was closely associated with my own way of thinking and that the ideas might not be effective for everyone. David wrote:

This approach just doesn't work for me. I need to map out very specifically what I will rehearse and when I don't, I fall flat on my face. I got better at it, but found that I would secretly jot out a traditional-looking plan before I taught to use while teaching. I don't think I will use this approach in the future (written assignment, April, 1997).

Many students, in fact, found having the non-linear plan on the podium was not particularly helpful. Most reported that knowing the score and conceiving multiple teaching actions to meet musical goals and objectives meant they did not need a word by word written plan in the teaching action. This supports research that teachers use planning as a form of preparation, but do not necessarily follow a verbatim plan while teaching (Neale, Pace, & Case, 1983). When some students did attempt to read from the bubble plan it occasionally caused pacing issues and distracted the conductor from the overall process.

Areas for Improvement

Upon reflection, several areas emerged that might be improved upon when implementing the project study. There needed to be an explicit expectation that students should balance their musical decisions with multiple ways of rehearsing their musical goals. In evaluating the teaching plans, some students emphasized one or the other without adequately representing both

realms. Even though the ideas were often implicit (as previously noted in Figure 4), they were not established on paper and therefore difficult to evaluate. As the teacher, I did not want students to misunderstand the role of non-linear planning: The approach should be just as rigorous, if not more so, than the objectives-based approach. Further, a better balance in the teaching act is needed between teacher-centered actions such as telling, and student-centered actions requiring active involvement in musical decision-making by ensemble members.

Two areas require attention that were not addressed by pilot study class members. First, the non-linear model should include ways of structuring internal sequencing such that teaching ideas have form and shape. Once the brainstorming process has taken place, teaching might improve by the organization of teaching ideas. This was not an emphasis in the pilot study.

Second, assessment and evaluation need to be better represented in the non-linear planning model. One might argue listening is a primary assessment tool as is performing by ensemble members. In each instance, these assessment activities can be represented in the bubble format and might serve to keep the importance of assessing-in-action at the foreground of student thinking.

Lastly, defining the relationship between verbal and non-verbal rehearsing strategies would likely improve the upcoming project. Any process of planning that involves written description of teaching activities runs the risk of teaching with a heightened sensitivity to verbalization. When novice conductor/teachers wish ensemble members to make musical decisions, for example, they often

assume these must be verbalized decisions. This would include asking questions about the music and entertaining dialogue from ensemble members as to preferences. Non-verbal decision-making occurs in the musical action and is guided by personal, active music-making such as chanting, singing, conducting, and incorporation of the body (such as drawing phrases with the arms), among others (Rao, 1993).

Summary

The pilot study provided valuable information towards defining the research project. The inclusion of student participants throughout the project was central to the development of a non-linear model of rehearsal planning in the choral context. The model underwent ongoing assessment and revision as students progressed through the class. Chapter Six describes the research project by establishing the unique research context and presentation of the project experience through the eyes of class members.

CHAPTER 6

THE RESEARCH SETTING AND METHOD

Based on assessment of the pilot study, the research project was implemented with some modification to the researcher's original intentions, primarily in the structure and function of the visual "bubble" model and its relationship to the planning process. In addition to the recommendations outlined in the previous chapter, a significant change was that the researcher moved to a new university, altering the research site.

Overview of Reporting and Analysis

The remaining chapters examine the unique research context at the new university site as well as present a dual approach to the reporting and analysis of the project. Chapter Six includes a description of the methodology used to examine the teaching plans along with a framework representing the analytic attention given to the data. The first level of reporting and analysis, in Chapter Seven, highlights three students who form the basis of within-case analysis in which themes emerge in relationship to the student's work over the course of the 15-week period.

Chapter Eight presents analysis of teaching plans of a single piece, Mozart's *Ave Verum Corpus*, examined across-cases such that themes and patterns are identified and described within the class as a whole. The final chapter is a meta-analysis that synthesizes results from the project and provides suggestions for future teaching and research.

The Setting

During the pilot study project in the spring of 1997, I accepted a faculty position in the areas of choral music education and conducting at a large mid-western university. The research project took place in the spring of 1998 in the new location. My duties at the university included conducting two choirs as well as teaching undergraduate conducting, secondary choral methods, student teaching seminar, and coordination and supervision of the student teaching program.

Secondary choral methods met in January of 1998 for 15 weeks and was comprised of six female music education students in their junior or senior year of study. Though the course title (Secondary Choral Methods) was different from that in the original pilot study (Conducting II), the course content was largely the same (Appendix E). The curriculum provided for a Conducting II course at the university, but the course content did not include teaching and rehearsing as a primary curricular focus. I determined, therefore, that the choral methods course should address these areas. Student participants enrolled in Conducting II alongside Secondary Choral Methods. The same pre-requisite, beginning conducting, was required before students could enroll in either Secondary Choral Methods or Conducting II.

Further, conducting courses are required for all undergraduate performance and music education majors and had been traditionally taught by performance faculty. It was my determination that the content in choral methods should reflect a focus on teaching and conducting, which mirrored the course

under investigation during the pilot study. Readers are encouraged to refer to Chapter Five for a complete description of course content and score analysis procedures.

The university is a nationally recognized School of Music, housing both conservatory and academic programs. The school offers a Bachelor of Music degree in performance areas, music education, composition, music and technology, music history, and music theory. Additional programs are available as Bachelor of Fine Arts or Bachelor of Musical Arts programs. The school enrolls approximately 645 undergraduates, of which 22 are choral music education majors with either voice or piano as principal instruments. Due to strong conservatory and academic programs, the university draws students domestically and internationally comprising a richly diverse student body.

Profile of Student Participants

All six of the students enrolled in secondary choral methods can be described as traditional students with no prior teaching experience and whose average age was 20. One of the six was African American, the balance Caucasian and all were female. The class met in the music education room, a spacious older facility with a piano, chalkboards on several walls, wooden desks, and a view of the pond. Students were responsible for bringing a videotape to class as well as adhering to assignments listed on the syllabus.

As in the pilot study, students were not required to participate in the research project and were assured classroom grades would not be adversely affected if they chose not to join the study. All chose to participate and signed

forms indicating consent (Appendix A). Students had an important role in checking researcher perceptions about the class experience, including ongoing in-class dialogue and reading by several students of narrative manuscript for feedback on the accuracy of portrayal of class members.

One difference in the new research site was that I did not have the benefit of prior knowledge of these students as it was my first year at the university. Five of six students sang in one or more of the ensembles I conducted, while the sixth sang for the advanced chamber choir under the direction of a performance area conducting professor. Despite the new relationship, an atmosphere of trust seemed to be established early, perhaps due in part to the small number of students enrolled in the course or the like-gender environment.

Methodology

The research strategies included examination of the conductor/teacher teaching plans as well as the supporting data representing student and teacher/researcher experience during the project. Data collected included score analyses, conductor/teacher rehearsal plans, written assignments throughout the semester, self and peer reflections on conducting and conducting/teaching rounds, and teacher/researcher field notes and personal reflections.

The collection of data was ongoing throughout the project. When students submitted assignments in writing, they were photocopied and organized by student in a chronological portfolio. As the teacher/researcher, I also kept a portfolio of events, which included my own reflections and observations about the experience. On occasion I would return assignments to students to ask for

clarification about their writing or to confirm my perceptions about meaning I had ascribed to their narrative.

Rehearsal Plans: Initial View of Data

The methodology and concurrent analysis were implemented at various intervals throughout the project. The initial process was similar to the open coding strategy found in grounded research theory (Strauss & Corbin, 1990). The study, taken as a whole, does not meet the criteria for grounded theory but borrows the open coding feature of the theory as a means of establishing analytic attention and focus (p. 31).

Open coding as an initial research strategy is a means of grouping data such that data are broken down into parts, examined for similarities and differences, and questions are asked about the phenomena discovered (Strauss & Corbin, 1990, p. 62). Related data particles are conceptualizations of the phenomena, and as such, are labeled as concepts. Concepts are later grouped into categories to further establish relationships between similar data. These categories can be examined for their properties which describe the related ideas.

In the context of written teaching plans, properties might include such groupings as the mode of imagined instruction: suggested teaching actions were student centered or teacher centered, verbal or non-verbal as an example. The properties can then be described for apparent dimensions such as breadth, depth, or fluency. In examining the property of student-centered instruction for dimensionality, breadth might be represented by the number of teaching actions generated, depth by the meaningful relationship between suggested teaching

actions and the musical concept taught, or fluency by the relatedness of teaching actions to be organized together into a given rehearsal. Dimensions are therefore fluid and occur along an imaginary continuum (Strauss & Corbin, 1990),

Using the coding framework described above, the teaching plans were analyzed through an open-coding procedure established to recognize similarities and differences with regard to content of the plans. Rather than use a traditional coding memo to document my impressions, I constructed my notes in the same “bubble” model format used to create student teaching plans. Each new idea observed (related data particle) became a floating circle. These circles were developed by adding related ideas represented by key phrases or statements across plans. Like the student plans, related ideas were illustrated by spokes emanating from the original circle.

Concepts, originating as floating circles, could later become the basis for categorizations or grouping of related circles. These categories of grouped data could then be examined for properties exhibited and described for their dimensionality.

This model of coding was chosen for two reasons: it mirrored the process students were using in constructing teaching plans, and it suited the researcher’s ability to conceptually relate particles of data. By using a coding procedure that mirrored the brainstorming activities in which students were engaged, it was hoped the researcher would better understand the nature of brainstorming and imagining, creating possible symmetry in the conceptual processes. Such

symmetry, it was hypothesized, might lead to a more informed understanding of student thinking as they imagined for teaching events.

Once individual plans were coded, the same process was used to link ideas between plans. The open coding also encouraged refinements to the research process. It uncovered, for example, a continuing problem with teaching sequence in this planning format. Adjustments were made such that the issue was addressed more explicitly in class and with concrete examples to help students understand the necessity for structuring instruction.

Post-Project Analysis

Appendix F is an example of a later coding exercise wherein previously coded concepts and categories from across plans are grouped in relationship to five possibilities of post-project analysis. These analytic possibilities were trial umbrellas which ultimately shaped the final analytic process. In deciding possible analytic frameworks, this coding exercise developed as a result of observations of student plans in the pilot study: thinking appeared to be more expansive and experimental in the visual web format than in the linear listing approach associated with traditional lesson plans.

Like the earlier coding process, this exercise borrowed from grounded theory the assignment of data particles to categories of related thought. Once grouped, analytic possibilities could be brainstormed and linked with particular categories for consideration. Another benefit of the coding exercise was the ability to synthesize proposed analytic frameworks in a visual format, which

provided the researcher opportunities for relationship-making between categories and analytic possibilities.

In Appendix F, the examination of teaching as improvisation was discounted because the data, as grouped in open coding, did not relate easily to this particular analytic possibility. Exploring teaching as improvisation is of deep interest to the researcher yet this exercise illustrated that the project did not lend itself naturally to the examination of teaching as improvisation. Viewing the data at another time or in a different manner might have yielded different analytic possibilities. The analytic attention, therefore, was narrowed in relationship to the data rather than making the data “fit” a pre-conceived analytical tool or technique. Once the analytical framework was chosen, the rehearsal plans were examined as described in the next section.

Rehearsal Plans: End of Project Analysis

Following the project, all teaching plans were sorted and grouped by student in chronological order. In ordering the post-project analysis, teaching plans were first examined, followed by triangulating evidence such as teacher/researcher field notes and student written assignments.

Three students were selected for examination of all teaching plans submitted during the project. Their stories will be reported in Chapter Seven along with analysis of their experiences with the planning model. Based on evaluation during the project, each of the three seemed to represent varying profiles in the approach to rehearsal planning as demonstrated in teaching rounds and written assignments. These differences appeared to span a

continuum of thinking from highly pragmatic and literal (Lindsay) to improvisatory and spontaneous (Denise). A blending of these qualities, careful preparation for teaching alongside flexibility to make adjustments in planning and instructional delivery, was evidenced by a third student (Sarah).

Other members of the class could also be generally grouped along the imaginary continuum described above. Two of the remaining three members appeared closer to Sarah's representation of thinking. The decision to choose Sarah from among these three possibilities was a pragmatic one: Sarah missed no class and had the most complete written reflections available. Both of the other members were out of class due to illness at one time or another.

The remaining member of the class appeared to think in more literal terms and seemed to align most closely with Lindsay. The decision to examine Lindsay was qualitative: the other class member did not express thought as clearly in writing. Because their written responses contributed considerably to the project, Lindsay was chosen to represent the pragmatic thinker.

The analysis will include tracing the development of thinking inside the teaching plans, describing the relationship to preparation for rehearsal as noted by the student and teacher/researcher, and drawing a comparative profile of the plans over the course of the project.

Based on results of alongside analysis from the preceding project period, the plans were then coded for key phrases and statements, with a focus towards refining analytic attention. In earlier exploration of the data, any idea generated

was documented. In this phase, a deliberate attempt was made to codify observations such that recurring and salient features could be identified.

Data Observation Form: Three Identified Categories Grouping Researcher Observations

A data observation form (Appendix G) organized the results of the coding such that categories were established and described in a form that was more manageable than the visual “bubble” model. The categories identified are an attempt to group similar key phrases, statements, or research observations into common areas of intersection. Three central categories are: characteristics of the teaching plan, teaching ideas incorporated into student visioning, and apparent relationship to impending teaching. Each category is represented by concepts that function as sub-categories.

Characteristics of Teaching Plan

Three primary concepts characteristic of the written plans include dimensions, mode, and imaginings. Dimensions refer to the degree of breadth, depth, or fluency demonstrated by the student in the construction of the plan. Breadth is represented by multiple departures for teaching and targets central features of the musical work. These features represent interpretive musical decisions made by the student in the score analysis process. Depth includes the extent to which each identified feature is addressed through potential teaching actions. These teaching ideas might be related, forming a teaching sequence, or unrelated as free-form possibilities. Fluency describes whether the plan appears

organized, the language specific, and whether teaching ideas grow logically from identified musical goals.

Mode describes how students weigh decisions and prescribe instructional delivery in the written plan: Were teaching ideas student-centered or teacher-centered, verbal or non-verbal, the language technically-oriented or imagery-oriented? Decisions can be dominated by a particular mode or appear in combination in a single teaching plan.

Imaginings describe qualities or impressions about the brainstorming process. This includes whether thinking appeared linear or spiral and what relationship, if any, was apparent between these two ideas. Linear thinkers, for example, may write highly structured sequences of instruction and organize teaching ideas in a hierarchical manner. Spiral thinkers appear more improvisatory or spontaneous and teaching ideas may appear voluminous. Teaching sequence often appears weak or absent.

Teaching Ideas Incorporated in Student Visioning

This category describes ideas contained within each plan as a way of uncovering pedagogical knowledge demonstrated by the students. Did students develop a deepening repertoire of teaching ideas across the project, and if so, how were they represented? Were many areas addressed or were patterns evident within the plans?

Relationship to Impending Teaching

This category examines whether assessment of student learning is embedded in the plan and whether the planning process seems to relate to the upcoming teaching event. Are described actions relevant to the music? Do students consider contextual factors, particularly whether teaching ideas are linked to score analysis? Finally, additional features or impressions are noted when applicable.

Triangulating Data

The analysis threaded narrative from teacher/researcher field notes and student written assignments. As in the pilot study, profiling was utilized to identify the most significant ideas and to clarify the planning process. It was hoped that the narrative would provide an expanded view of the experience and help the reader compose a rich picture of student involvement in the project.

Reporting Procedure of Within-Case Analysis

The within-case analysis of three participants was constructed as a narrative followed by interpretive commentary. To crystallize the experience for the reader, key phrases and statements from the coding procedures as well as first-hand narrative accounts by the students and teacher/researcher are reported as story.

Key phrases and statements were culled from coded data observation forms of all teaching plans. These assignments spanned the project period and included planning for conducting-only teaching assignments to more complex conducting/teaching assignments. (Refer to Chapter Five for a complete

description of assignments, score analysis processes, and the nature of conducting and conducting/teaching assignments.)

First-hand narrative accounts were taken from student written assignments including reflections on assigned topics, writings associated with submitted teaching plans (self-reflections), a mid-term examination, and short papers. An example of an assigned topic was a description of the role of the conductor/teacher in public school secondary setting. Students were required to fill out self-reflections (Appendices B and C) on conducting and conducting/teaching events. Distinguishing between teacher-centered and student-centered instruction characterized the nature of short answer topics. The mid-term examination included a section documenting personal decisions made in a written teaching plan. Short papers included such topics as articulating a personal philosophy in the choral teaching context.

The researcher recognizes that any attempt at story-telling necessarily reconstructs events in an artificial and a-contextual way. Misinterpretation or selective attention might obscure important information. Any analysis, however, ultimately factors in the interpretive lens of the researcher. The narrative construction is as close an approximation to researcher understanding of the process as possible. As a means of checking researcher perceptions, student participants were invited to read the manuscript and react to the portrayal presented. Two students, Sarah and Rebecca, chose to read in this manner and were helpful in confirming the perceptions as presented.

Across-Case Analysis

In addition to the in-depth analysis of three students' planning processes, one piece was chosen for comparative purposes among all participants. By viewing both depth and breadth of participant experience, it was hoped that a more complete representation of the class experience could be constructed.

The methodology mirrored the examination of within-case analysis, including coding of written teaching plans through the data observation form (Appendix G). Reporting of across-case analysis also included interpretive commentary drawn from researcher observations and written assignments. Teaching plans from Mozart's *Ave Verum Corpus* were examined for themes or patterns that are apparent within the class as a whole. The piece was chosen as it represented student work slightly past mid-point in the semester. Students would have had time to make adjustments and refinements from earlier plans and from classroom discussions.

End of project plans were ruled out because final assignments were time-bound and conducting rounds were shorter. The time constraint likely affected how carefully students planned. The chosen plan, however, should have provided ample opportunity for student thinking to be fully represented.

Discordant or conflicting information was also sought and described to give variation and add complexity to the discussion. One student, for example, continually wrote about her experience with the planning model in glowing terms. Her teaching, however, did not demonstrate the very qualities she identified as important in her planning process.

A possible explanation was that the student wished to write “what the teacher wanted to hear” when reflecting on her planning. Another possibility was that her internal thinking for teaching was more developed than her ability to monitor her decisions in the actual teaching episode. Yet another possibility was that the planning model was not appropriate to the learning style of this particular student, regardless of her apparent endorsement of the procedures. Throughout the project, then, I made annotations in field notes to glean as much information possible about her experience throughout the project period to help clarify my perceptions.

CHAPTER 7

WITHIN-CASE ANALYSES: SARAH, LINDSAY, AND DENISE

The purpose of this chapter is to describe and interpret three students' experiences with a teacher planning process best described as brainstorming or imagining for teaching as documented by a visual web. This model emphasizes connections with knowledge gained in score study and attempts to link musical understandings about the work to a variety of teaching strategies. The goal of stimulating imagination is two-fold; providing a means of uncovering student knowledge, and generating as expansive a repertoire of student created teaching strategies as possible.

Organization of the chapter includes an initial narrative designed to introduce the reader to the special and unique thinking demonstrated by each of the three students. The narrative was constructed from various written data as described in earlier chapters and is a distillation of primary themes and statements identified by the researcher in analysis during and post-ceding the project period. The narrative is followed by interpretive commentary summarizing each of the three students and is supported by written examples of teaching plans across the 15-week semester.

The narrative form is constructed as three vignettes, represented as study sessions, at the home of one student. This form was chosen to reflect actual practice by the students; they often reported evening study sessions, especially in preparation for conducting/teaching assignments.

Study Session #1 (at Sarah's house, first week of classes):

Sarah: Wow. I didn't realize it would take so long to analyze that score. I thought we'd be done an hour ago!

Denise: Yeah, it does take awhile. I'm glad you have a keyboard here with earphones. I needed to play through and sing those parts before I marked bar-lines.

Sarah: This is the first time we've had to really analyze a score if you think about it. It didn't come up in other music ed. classes and conducting class hasn't involved teaching yet. I'm really glad to have a system to use, even if I am uncertain about where those bar-lines should be placed.

Lindsay: I just don't understand where to put the bar-lines. We were told to put them when a new musical idea emerges. In my piece, it isn't very clear-cut. I mean, the harmony changes, but the vocal lines overlap.

Denise: I marked mine in pencil first and did it at the keyboard. It was easier to hear than look at. Do you want the earphones for awhile?

Lindsay: Sure. I think I know how the piece sounds, though. We did it in high school.

Sarah: OK. We have to try out the new planning model. I thought it would be great if we tried teaching them on each other. I'm not really sure what she wants, are you?

Lindsay: I think we have lots of freedom. It seems as if we can do most anything if it works.

Denise: Well, I don't think she means just winging it. It's more like writing down as many ways to teach an idea as we can think of, and then to apply it in our teaching demonstration.

Sarah: The thing is, I don't really know how to plan when I don't know what the choir will sound like. What if I choose something that doesn't work? Until we get a real choir, how do we really know where consistent trouble spots might be?

Lindsay: Maybe you could just start by listing everything you can think of that might need rehearsing.

Denise: Let's just go work on these and see what happens.

(30 minutes later)

Denise (from the keyboard): OK. Here's my first shot. This was fun! What does your plan look like? Mine's a mess!

Lindsay: Mine isn't nearly as long. Really, when you think about it, these plans are pretty much going to be the same. We've got to get down notes and rhythms, introduce the text, and give them markings like where to breathe and how to place cutoffs.

Sarah: I don't know. My plan seems pretty specific and I could probably come up with more if there was time to teach it.

Lindsay (looking at Sarah's plan): Wow. I guess so! Those look like interesting teaching ideas but how do you really know what order you can teach until you hear the choir? At least, that is what we talked about in class today.

Denise: I took it to mean we should plan as much as possible and just sort out what comes when once the choir sings through a section.

Sarah: Yeah, but I think it is important to know the order of your ideas. I'm not going to remember all these things off the top of my head. Besides, I had a lot to put on paper once I started looking at my bar-line analysis and playing through the piece.

Denise: Hey, guys. It's late. Let's resume this tomorrow. Same time, same place?

Study Session #2 (*next night*):

Denise: Me first! Lindsay, will you play from the keyboard? Sarah, you are going to be the choir. Why don't you sing first soprano. This is middle school, so think like a 13-year old!

(sing through of A section of piece)

Great! I loved the way you followed my conducting. What did you learn about the piece from the first singing?

Sarah: Well, Ms. Teacher. You showed really smooth conducting and it helped me sing the line legato. It seems like a lullaby.

Denise: Yes, it is a lullaby. Would you sing from bar 5 and draw the phrase with your arm as you sing? I want you to show me where you think the peak of that phrase is.

(rehearsal continues in similar fashion)

Lindsay: That was good, Denise. You were very confident. I have your plan in front of me. You did a few things listed here, but you got off-track. Maybe you could bring your plan up with you when you teach tomorrow so that you have it in front of your eyes.

Sarah: Yeah, Denise. That's a good idea. You wouldn't want to miss something important you had thought of to teach. Besides, you should have your lesson plan with you just in case.

Denise: Maybe. I kind of liked what I ended up doing. I mean, it wasn't written down, but it just popped in my head and it was so cool to hear Sarah sing it after we tried the idea. But, maybe you are right. I tend to get off track! You're up Lindsay.

Lindsay: OK. We have ten minutes to do this teaching round so I want to be efficient. Here's the music.

Lindsay: Start from the beginning. Sarah, you sing alto, Denise, you sing soprano. Would you mark a breath at bar 5, and put all the "t" consonants on the following rests. Also, would you cross the "r" out of words on page 1. You need to be careful of the rhythm in measure eight. It is a dotted quarter note and all the other similar places are straight quarters (*sings rhythm for them*).

(choir sings four measures into the piece)

Thanks class. In measure one, there is a piano dynamic. I think it sounded louder than that. Remember when sight-reading to use your best vocal production. Let's try it again (*singers perform the correction*).

Now. Repeat the text after me. *Do-na no-bis pa-cem*. Good. Would you please mark a crescendo through the peak in bar four and diminuendo back over the next four bars? Great.

Sarah: Ms Teacher, what's a crescendo?

Lindsay: Good question. A crescendo is a marking to get louder and it looks like this (*draws in air*).

(choir sings through piece)

Denise: Hey, what'd you think, Lindsay?

Lindsay: You guys are great. You do everything I say. I bet a real middle school choir wouldn't be so perfect! Hey, Sarah, you better go before we all fall asleep.

Sarah (brings out teaching plan): Measure five please.

(shows preparatory breath, choir performs the 'A' section)

Well done, class. Please sing the first idea in the soprano line.

(all sing)

Can you tell me where that idea occurs again? Yes, Denise, bar six in the baritone line. Where else? Good. Do you think the motive is dance-like or more sedate? Hmm. . . , let's see. Would you snap this time and sing on the syllable "doot."

(perform instruction)

Much better. I could tell by your performance that you liked the motive sung in that dance-like style. This is, in fact, a Baroque-inspired dance. Does anybody know. . .*(rehearsal continues)*.

Lindsay: Great job, Sarah. You had a lot of ideas and they were well-organized.

Denise: I loved how we got to make decisions about our sound. You'll be fine tomorrow.

Sarah: I hope so. I want to go back and re-work some of these ideas. In the rehearsal, you did some things I wasn't expecting. I need to mull over why that happened.

Study Session #3 *(near the end of term):*

Denise: My teaching yesterday in class was a blast. You guys were great not to laugh when I asked you to get up and dance!

Sarah: Anything for you, my friend. I don't know how you do that. You just get ideas and take off.

Lindsay: It seems like you've been at this forever, Denise. I think your high school teacher was awesome to let you have some experience teaching when you were an upperclassman.

Denise: I thought my teaching was better, too. At least I felt pretty good about it. I definitely have more ideas than I did when we first started this stuff. I think you get to the point where you don't have to depend so much on a plan. For now, I need to put these things on paper.

Sarah: You know the thing I keep realizing is how much I took for granted before I really learned how to analyze a score and think about teaching the ideas I come up with. I thought it was enough to be able to sing parts and play through the accompaniment.

Lindsay: What do you mean?

Sarah: Just that I could fake my way through stuff, though I wouldn't have characterized it that way. I know enough now to get a feel for a piece. But really learning the piece is a different matter much less thinking about how to teach it to a particular group of singers.

Denise: It's been good for me to have to put this down on paper. If I skip that part, I don't have as many ideas as when I try to wing it. Plus, I find I learn more about the music when I think about having to teach it.

Lindsay: I wonder how teachers have time to do all this preparation?

Sarah: For sure.

Summary Analysis: Sarah

Sarah's thinking represents the blending of rich imagination with practical and situated understandings about planning for upcoming teaching. As one begins to know Sarah in the story, a profile emerges that suggests the expert-like mindset (Bereiter & Scardamalia, 1993) is taking root in both her approach to planning as well as in her conception of what constitutes an "ideal" choral rehearsal.

This expert-like mindset is evidenced by the wealth of ideas for teaching generated by Sarah in each of her teaching plans and was reflected in the quality of her teaching before peers during the semester. The scope and variety of

activities mirrors Bereiter and Scardamalia's contention that experts must work at the edge of their knowledge and continually aspire to expand thinking (1993). An important feature of Sarah's teaching was her willingness to discard teaching actions that were ineffective for other options she had considered prior to the teaching event. Implicit in this phenomena is the ability to assess-in-action, set problems, and select an avenue for exercising the problem from a repertoire of possibilities. According to Kennedy (1987), this closely mirrors the process expert teachers employ in the act of teaching. In a self-reflection following a teaching round she noted:

I felt the ordering of my ideas was better this time around. I really thought we'd get to rehearse phrasing, which is what I planned the most time on for today's rehearsal. Instead we spent almost the entire time on text inflection, and the different qualities associated with each text statement. I thought it would come faster but I realized I needed to back up and get it right before going on. Most of my ideas worked but I ended up expanding on my idea of "whispering" and chanting because they really weren't exaggerating as much as I imagined they should. I wonder if I wasn't showing it clearly in my conducting? In any case, I hope the balance of time was ok., and not too lengthy on that idea.

Another dimension of Sarah's teaching was the confidence with which she approached teaching during the project. Her questions were often managerial in nature about structuring instructional time, seeking opinions about whether a proposed teaching idea might work, or musical concerns about the score she was to present. Generating pedagogical content, however, did not seem to be a concern for Sarah. As she noted "I feel very prepared to teach my piece. This model led me to explore every option I might want to rehearse that I could think of prior to hearing a choir (written assignment, April 1998)." Pedagogical

knowledge seemed to grow directly from her musical knowledge about the piece she was to present.

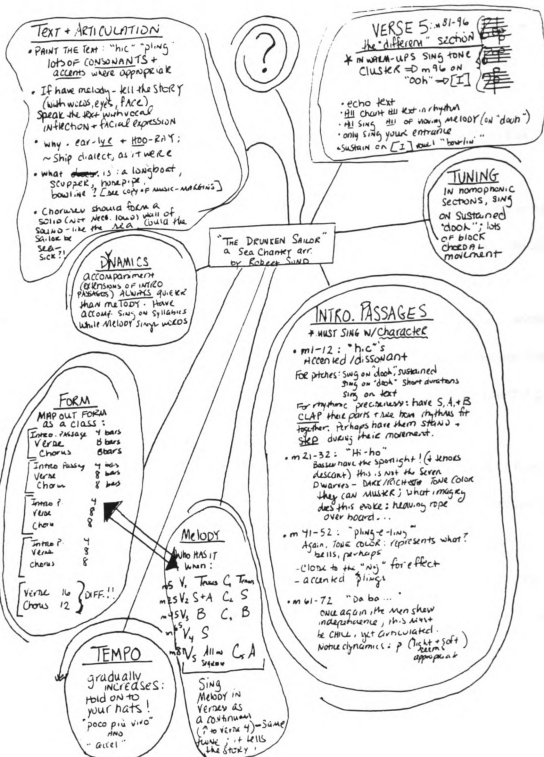
Examination of Teaching Plans

Five plans were submitted by each student during the research project. In constructing the visual web, students were instructed to render a thorough score analysis according to the system described early in the semester. The teaching plans were evenly assigned across the project period at intervals of two or three weeks and in conjunction with class assignments for conducting/teaching.

Depth, Breadth, and Fluency

Depth of thinking was evident in Sarah's planning process and grew over time. Across all plans was an emphasis on teaching activities that involved ensemble members in meaningful ways. In Figure 8, Sarah's first written plan, student actions included singing, chanting, drawing phrases with the arms, and echoing after the teacher. Verbal actions included reciting text for meaning, and responding to a question about balance between sections. By including a balance of verbal and non-verbal teaching strategies, each identified circle demonstrates multiple ways of teaching her represented musical ideas. This appears to situate Sarah's imagining for teaching alongside her identified musical goals.

Of all her submissions, her first teaching plan (Figure 8) most closely resembled the objectives-based approach to lesson planning as evidenced in the visual structure of the web. Each identified rehearsal path is developed by the



listing of activities. Sarah's musical decisions (objectives) are implicit in the activities generated for teaching, but her ideas are consistently expressed as a series of activities. The plan is highly sequenced, both inside a suggested activity and between activities.

The careful sequencing of ideas was Sarah's greatest strength in the actual teaching rounds. In this plan, sequencing was evident following an explicitly expressed musical goal. In the dynamic circle, for example, she wrote "accompaniment (extensions of intro passages) ALWAYS quieter than melody. Have accomp. sing on syllables while melody sings words." The direct relationship between a musical goal and subsequent teaching strategy is evident in other circles as well and may reflect the emphasis by the teacher/researcher on the inclusion of both teacher decisions about the score as well as teaching ideas.

Because students were free to notate the visual plans in whatever form could best represent their ideas, it was interesting to note changes to the layout of plans over the course of the project. Sarah began to include separate paragraphs at the bottom of some plans indicating a growing awareness that her role as teacher extends beyond instructional strategies to include the particular context in which she will teach. In one plan, she noted a special concern for changing voice needs and evaluated the piece as acceptable for middle school choirs. She questioned the worthiness of the edition noting the score was heavily marked, wondering whether the markings were original.

The breadth of Sarah's imagination was evident across all plans though the construction of the plans took on different forms along the way. From the very first plan, six to eight organizing circles representing potential rehearsal directions were identified (See Figure 9). In this plan she identified diction/word stress, articulation, form, tone color, text, balance, phrasing, and dynamics as departures for teaching. Her circles seem to relate directly to her musical understanding as the content of the organizing circles changed from piece to piece.

Subsequent plans also demonstrated breadth of thinking though the relationship of the organizing circles changed through time. As Sarah progressed through the project, her circles were occasionally connected by dotted lines such that a reciprocal relationship was established. By visually connecting circles, the resulting relationships might be grouped together in the sequencing of instruction.

An example is evident in Figure 9, Sarah's teaching plan based on a traditional arrangement of a well-known sea chanty. Each of the circles were developed towards differing rehearsal goals, but the arrow linking considerations of musical form to variations evident in the melody suggests her understanding that the ideas are co-dependent. This awareness indicates Sarah was thinking inside the particular work and making connections between related musical ideas. It also suggests a relationship between her musical understanding and pedagogical decision-making: Sarah understands form and variations in melody are important for the choir to know in the learning of the work. Connections

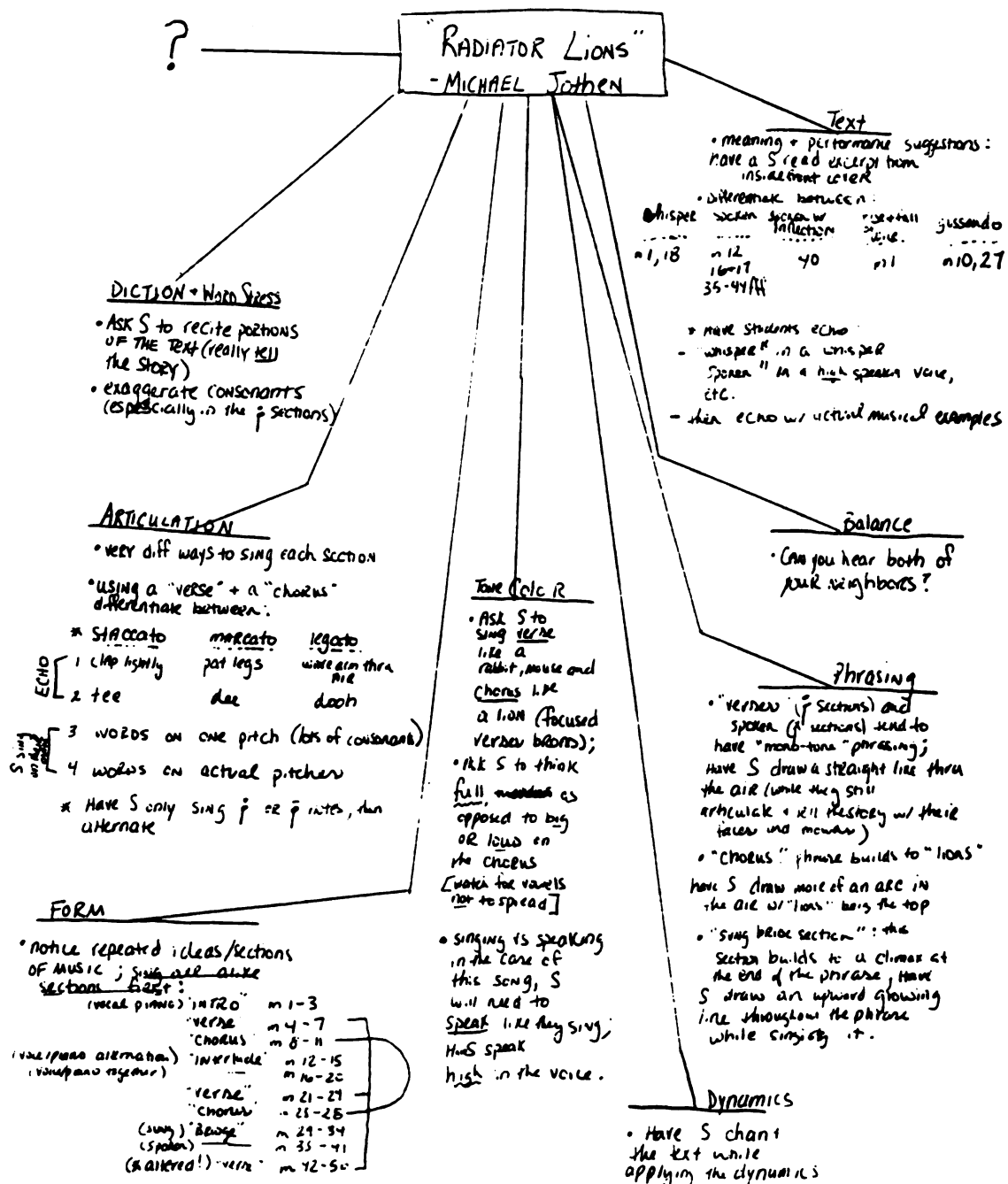


Figure 9. Sarah's plan: Linking of musical knowledge and pedagogical knowledge.

between circles, or related musical ideas, may be more easily documented in a visual web as a global view of student understanding and decision-making is evident.

Fluency is evident in Sarah's ability to prepare mentally for rehearsal as demonstrated in both Figures 8 and 9. The pedagogical techniques chosen to represent musical learning are well-suited to the musical goals and the relationship between teaching activities are logical. The variety of teaching ideas from plan to plan were also of importance.

From the perspective of an experienced teacher, the pedagogical strength of each teaching idea was occasionally uneven. Referring to a middle school choral rehearsal of a piece in French, she suggested experimenting with extreme dynamics, singing as loud and as quietly as possible. This is likely not to be successful in a middle school classroom as one might not recover focus in the group after "bellowing" the targeted phrase. Such an example illustrates teaching for the "empty" classroom cannot substitute for real-world teaching experience.

In terms of the mode in which Sarah represented her ideas, her language includes both technical description and evocations of images to match tonal conceptions of sound. In Figure 8, she used phrases such as "wall of sound like the sea," "heaving rope overboard," and "bell-like" alongside directives to map out the form as a class. She included a substantial number of non-verbal teaching activities that involved ensemble members in production-oriented ways of accomplishing the musical objectives set forth.

As depicted in the narrative, Sarah's conception of planning for teaching changed as a result of her experiments with the model. She describes an awareness that her musical knowledge is at a high level such that the possibility exists that she can learn music at a superficial level and "wing" it in the teaching process:

I think it would be easy to just learn the notes, (or even get a feel for the piece and wing it) and not the music, if I do not force myself to study the music meticulously (written assignment, April 1998).

Finally, Sarah's visioning for teaching seems to suggest her ideas are regulated by a need to organize her thoughts toward the teaching event. She made interpretive decisions about the work and developed teaching actions to carry out her decisions with demonstrated concern for learning on the part of the ensemble. Her teaching rounds consistently reflected this level of preparation as they regularly involved decision-making by ensemble members at many points during rehearsals.

The linking of her musical knowledge to growing pedagogical knowledge was threaded throughout the teaching plans and reflected in her writing about her experiences. It remains to be seen how such learning can transport to the student teaching or first year teaching environment, particularly in light of research which suggests teachers revert to teaching models encountered in their personal background when making the transfer from university teaching to professional teaching (Grossman, 1990).

Summary Analysis: Lindsay

As can be surmised from the narrative (pp. 150-154), Lindsay was a pragmatist. Her personal practical knowledge about teaching reflected an interest in the acquisition of techniques and tools to aid the teaching process. Lindsay appreciated literal instructions and preferred clear cut answers to her questions. She had strong opinions and was confident about voicing them in the company of peers. Lindsay was well-liked by class members.

Lindsay was the only class member gaining real-world teaching experience alongside university study. She was hired by a school district during the term to coach an after-school vocal ensemble at a local high school. She worked regularly with the students during the term, preparing them for various concerts. She also volunteered to organize the boys from the choir to visit class for a vocal demonstration of the high school male voice. She was eager for her peers to meet the boys and enthusiastic about teaching in general.

Lindsay also submitted five teaching plans over the course of the project period in two or three week intervals. In addition to analysis of the written plans, she submitted narrative in the form of self-reflections, short paper assignments, and a mid-term examination. Her progress through assignments and teaching rounds sparked considerable reflection during the project. Her narratives, upbeat and positive about her experience with the planning model, did not translate in observation of teaching or in early teaching plans. Lindsay made

progress in the writing of plans through the project but her teaching did not necessarily reflect the noted improvements.

Aspects of Lindsay's teaching that improved included better energy and pacing in front of the lab chorus and taking more care with preparation for teaching as the semester progressed. The teaching events themselves, however, were often marked by a perceived disconnection from her planning ideas:

Lindsay taught John Rutter's *The Lord Bless You and Keep You* for the lab chorus today. The rehearsal did not go particularly well and seemed to jolt along. The pacing was uneven and she seemed easily distracted from her focus. In comparison with her teaching plan, she seems not to utilize thinking evidenced in the plan as she did not rehearse much of what she wrote on paper.

Perhaps I have confused the class about the idea of reacting authentically in the musical sounding. Perhaps she interprets this as not having thought through a particular rehearsal in advance of teaching. In any case, her teaching seems activity-oriented and not well matched to the needs of the score. Most significantly, her score analysis is weak. She continues to place bar-lines in the middle of measures and not in the most structurally sound places. I have asked her to come see me about the score analysis process (Field note, March 1998).

As the teacher/researcher, I questioned whether the planning model was helpful to students with weaker pedagogical inclinations. Was the model better suited to students with natural inclinations towards teaching? I also had to question whether her content knowledge factored into the issue fueled by score analysis submissions which appeared weak.

Examination of Teaching Plans

Lindsay did make improvements in her experiments with the planning model over the course of the project. Her earliest plan, Figure 10, is reminiscent

of plans submitted during the pilot study. The content is lacking in both teacher decisions as well as a variety of student actions to carry out the rehearsal. There is a lack of pedagogical depth to suggested activities. In the pitch circle, for example, she suggested students “sing parts so they know how it is supposed to sound.” The impression is an inability to devise teaching strategies, perhaps due in part to absence of her own musical understanding about the score outside of generic ideas such as learning pitch and rhythm.

Another related characteristic of this plan is a lack of fluency between ideas, particularly in relationship to the larger identified circles. These circles suggest potential directions for rehearsal but lack connection with the music under study. Citing cutoffs as a central goal, for example, is perhaps a subsidiary consideration in light of the features of the piece that make the work interesting. The circles appear instead to have a technical orientation with the goal of accuracy which is likely transportable to most repertoire and rehearsals. The specific musical goals and concomitant teaching decisions are weak.

One of the circles on the plan is better conceived than the counterpart circles. Referring to style, she suggested a light tone and identified two ways of addressing the issue: having the singers chant in the light head-voice mechanism, and teacher-directed call and response of appropriate syllabic stress.

The mode of communication within the plan is a form of verbal shorthand with little representation of teacher decision-making. It is as if she mentally skipped her musical understanding of the score and went directly to



Figure 10. Lindsay's earliest teaching plan: Few teacher decisions or teaching strategies represented.

considerations of teaching activities. This supports Yinger's contention that planning and preparation are not synonymous. Planning, in his view, should be the outgrowth of a rich preparatory process and is a narrowing of focus based on a well-established mental construct (1990).

Her imagining for teaching appears limited. When a teaching strategy is defined, it lacks teaching the idea in favor of telling the concept. To teach dynamic form, for example, she wrote "listen to the accompaniment paying close attention to dynamic contrast." Lindsay received feedback on these issues with a special note to include her musical decisions along with rehearsal ideas.

Improvements During the Project Period

Subsequent plans showed improvements in observable ways. In her mid-term submission, Lindsay identified three to five different teaching ideas for each circle identified. Both breadth and depth, therefore, are improved and the relationship between the teaching ideas and her musical decisions are better defined. In tracing the development of the melodic line through various vocal entrances in a French folk song, for example, she sequenced instruction:

Organizing Circle: movement of melody line

Teaching Idea: Sing through piece, have everybody sing whenever part has melody in unison.

Teaching Idea: Have only those with the melody line sing while others "think" their part.

Teaching Idea: Sing all the parts, have them point to section singing melody "important line" (mid-term written project).

Lindsay's teaching also showed improvement, though not to the degree reflected in the teaching plans. She appeared to have more ideas and, therefore, more confidence in later teaching rounds. The ability to shape a rehearsal on both a global and specific level remained problematic throughout the project. In rehearsals, she was largely verbal, preferring to instruct singers in a series of verbalizations prior to singing the ideas. Her written reflections suggest an orientation towards technical accuracy.

I continued to perceive her discomfort with choosing teaching strategies, though she clearly was experimenting with more ideas per plan, increasing the dimensionality of her thinking. Describing how she approached planning a particular rehearsal, she notes:

I flipped through the score looking for specific ideas that were not too "deep" since this is only the second time they will have worked on the piece. Dynamics, rhythm, and melody are hopefully ideas that they are accustomed to focusing on (mid-term written project).

Another disconnection between the teaching plans and teaching rounds was an orientation towards teacher-directed instruction giving, even when the teaching plan had generated ideas that would involve ensemble members in some aspect of musical production. Lindsay's preferred mode of instruction was to leave nothing to chance by addressing as many potential upcoming issues as possible, such as where to breathe, what difficult intervals to listen for, or how to pronounce the text. It was apparent in her work ethic and written reflections that she wanted to be successful in the teaching situation, and it appeared to me her conception of excellence was bound up with notions of technical execution.

The other striking aspect of this disconnection between her improving planning and actual teaching is the issue of trust. On paper, Lindsay demonstrated trust by constructing activities that did not always require her verbalizations and involved in-action decision making on the part of the ensemble. In teaching, however, she had a difficult time relinquishing control to allow for mistakes by the ensemble. I began to understand that the teaching model I was advocating required a great deal of trust on the part of the conductor, an issue unrelated to knowledge-building. Yielding control to allow for greater participation by ensemble members might require a level of confidence in the novice conductor/teacher that not every student is ready to embrace.

In terms of her imagining for teaching, Lindsay began to relate ideas by constructing an internal sequence to meet her musical objectives. In a late semester teaching plan (Figure 11), she consistently identifies a goal, and then conceives two or three ways to exercise her mental conception. In the circle “text,” she noted that proper syllabic stress on the word “amen” is important. She thought to model for the choir, have them repeat using correct stress, and then put into context by singing. Her later plans evidenced this internal sequencing and clearly improved her ability to mentally imagine for teaching.

Lindsay needed many opportunities to imagine for teaching and to imagine for different teaching possibilities. She may have gained her new-found pedagogical ideas from observation of peers or of conductors. Perhaps the orientation towards brainstorming elicited a better variety of pedagogical ideas simply from the implicit suggestion that she was ultimately the source of teaching

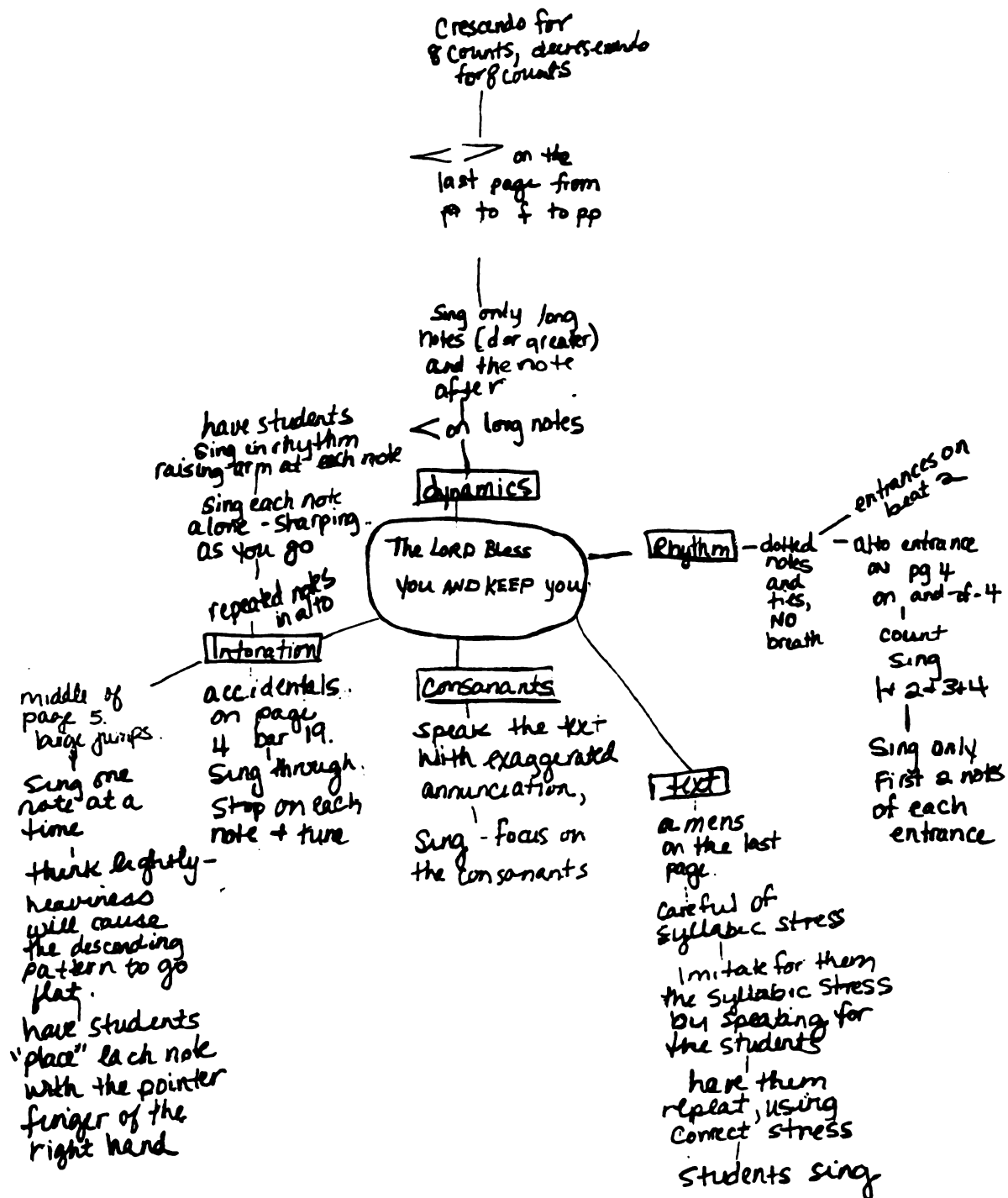


Figure 11: Lindsay's improved teaching plans: Sequence evident.

knowledge. Put another way, that her internal musical understandings might have acted to define her teaching.

Lindsay indicated the planning model was useful. Having read and re-read her words about the model, my intuitive sense as a teacher is that her experiments with the planning model came more easily than did transferring the ideas to teaching practice. It was encouraging, however, to see the growth in plans over time. She wrote:

I really liked this model of lesson planning. I thought that it allowed me to organize something that I consider to be rather abstract. There is so much to a piece of music that I have found it difficult in the past to lay-out a plan for teaching . It seems wrong to write a step-by-step procedure, a list of possible things to attend to, because there is no way to follow that type of list in a rehearsal (or at least to do so would seem forced and possibly counterproductive.) (written reflection, Feb. 1998).

Analysis of this and other narrative led me to wonder whether Lindsay liked the model because the unstructured approach might hide pedagogical weakness. It is interesting to observe the language she used to describe the organizing of teaching as “abstract.” She used the word “difficult” to describe the laying-out of a teaching plan in past efforts. It would seem that the proposed model would, in fact, be more abstract than the objectives-based Tyler model of planning. This supposition is best supported by the observation that her teaching did not improve in the same way as her ability to generate the written plan improved.

In summary, Lindsay's experience provided the teacher/researcher with the most challenging issues during the course of the project. In the final analysis, one could note consistent progress in her conception of teaching and what was required to prepare for conducting/teaching. Her pedagogical

knowledge grew from a generic overlay of teaching ideas applied to any teaching situation (learn pitches, rhythm, cutoffs, etc. . .) to a mental construct that elicited particular teaching strategies in relationship to the repertoire under study.

A central question I had as teacher/researcher had to do with the objectives-based Tyler model described in earlier chapters. Because sequence is critical to the Tyler model and a student such as Lindsay was struggling with the idea of sequencing, I questioned whether the Tyler model be a better vehicle for her learning needs. After much consideration and evaluation of the plans as a whole, I determined that the Tyler model, even for a student with weak pedagogical inclinations, was likely to enforce the very thinking I wanted to discourage. While Lindsay might have come to the idea of sequencing faster through the Tyler approach, I suggest she would not have learned to brainstorm multiple teaching strategies to carry out musical objectives. In fact, it is likely this student would not have been able to identify multiple musical objectives per piece unless there was a concomitant emphasis on score study and preparation.

Lindsay's teaching did not reflect the degree of growth noted in the teaching plans but did reflect improvement in important ways. Most significantly, she appeared to prepare more consistently and with greater thoughtfulness for upcoming teaching. She became more confident in the teaching rounds and seemed pleased with her progress.

It should be noted that I experienced discomfort in writing about Lindsay's experience during the project. As a teacher, one who wants to build students' self-esteem and courage, I wanted to report Lindsay's journey through the

progress as successful, focusing on the improvements evident. As a researcher, I needed to be true to the research questions in an authentic search for the experience students had with the model. Knowing the student, I felt certain my representation of her teaching and planning for teaching would be considerably different than her representation, as she seemed to regard her progress with pride. Ultimately, I had to go back to field notes and initial analyses to confirm my profile of Lindsay as she journeyed through the project.

Summary Analysis: Denise

Denise might be described as one who comes “naturally” to teaching. One might argue whether this is talent or the result of years of informal induction into teaching and music-making (Elliott, 1995). Regardless, it was evident from the first teaching round that Denise already had a sophisticated repertoire of teaching ideas coupled with a deeply musical approach to conducting and score analysis.

In selecting Denise as a participant to examine on an in-depth basis, it was hoped that her approach to teaching would yield valuable information in the quest to understand the relationship between her imagining for teaching and her success in the act of teaching. Did Denise appear to think differently about preparation and planning for teaching, and if so, what might be useful in presenting the preparation/planning process to future students?

Several observations can be made on examination of her first teaching submission, Figure 12. The scope of the plan yields both breadth and depth of thinking. She identified six areas to address, noting multiple decisions about the

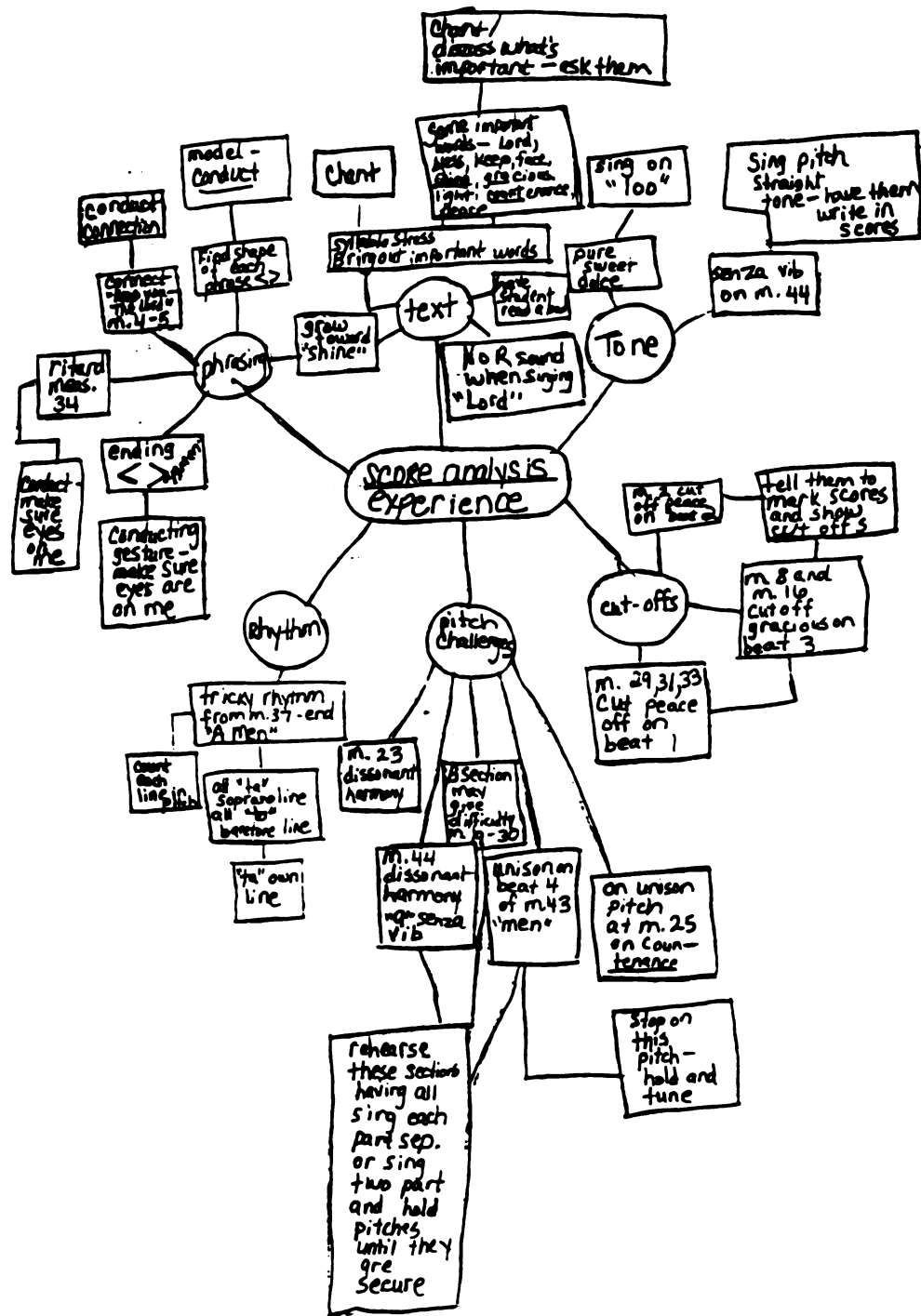


Figure 12: Denise's early teaching plan.

score in each category. Under each organizing circle, varied rehearsal strategies link directly to identified musical decisions. Under text, for example, she noted syllabic stress and the bringing out of important words textually as significant. To rehearse, she suggested students read text aloud, chant the text, identify important words, and utilize questioning technique: “discuss what’s important-ask them”).

The fluency is well developed in this teaching plan. She connected the text and phrasing circles indicating the close relationship between the two musical features. She also grouped musical features visually on the plan. Text, tone, and phrasing appear at the top of the plan while rhythm, pitch challenges, and cut-offs are grouped at the bottom of the plan. The latter seem to be focused on imagined challenges specific to the piece while the former seem to represent interpretive decisions by the teacher as to the sound she wants to elicit from the ensemble.

This points to an integration between Denise’s conception of the repertoire and her considerations for student learning challenges in the upcoming teaching event. She is specific in describing her mental construct of the work and aligning teaching strategies to carry out her conception. Under anticipated pitch challenges, as an example, she noted a dissonant harmony at measure 44 and suggests using straight tone on the particular chord. This is likely so singers can hear the dissonance and listeners can make sense of the discordant sound.

The mode of representation in the plan is the use of verbal shorthand describing a variety of teacher decisions and subsequent student actions. The shorthand appears suited to Denise's style of representation as her teaching reflected little struggle to recall her teaching plan suggestions. There is a balance of production-oriented non-verbal actions by students with verbalizations about the music. In her teaching plan of a French folk song, for example, non-verbal strategies include: chanting in rhythm, singing staccato on a neutral syllable to sort out rhythmic figures, exaggeration of dynamics by whispering piano dynamics and using full voice forte dynamics, "freezing" chords for listening, and a sung warm-up exercise serving as an advance organizer for an upcoming tri-tone interval. Verbal teaching strategies included marking scores to identify melody in various parts, identifying breath marks, and notating consonant cutoffs.

Sequence was not a major consideration in Denise's imagining for teaching. While multiple teaching strategies are represented and connections between ideas apparent in her visual imaging, she rarely noted activities in a linear fashion. Her teaching rounds, however, were well-organized in terms of sequence and flowed naturally from the sounding produced by the lab chorus. It is possible Denise was able to keep her global mental conception of the work in mind along with specific ways of addressing musical challenges when they arise. I noted in field notes that while Denise's teaching plans were rich with teaching strategies, she frequently departed from ideas represented on the plan and made up new or altered strategies in the act of teaching.

Indeed, Denise expressed discomfort with writing sequence into a traditional objectives-based plan. In an informal pre-class discussion about secondary general methods class (which she was taking alongside secondary choral methods) she expressed frustration at receiving a low grade on a teaching assignment due to the fact that she did not follow her plan as written. She argued to class members that her teaching went well, that the students seemed to enjoy the experience, and that she felt positively her teaching. She was deeply surprised and frustrated by the low grade (Field note, April 1998).

Constraints of Linear Planning for Improvisatory Thinkers

For students like Denise, writing linear teaching activities may be potentially limiting and stifling. If one takes the view that Denise already improvises in the teaching act, then following a pre-written a-contextual plan likely produces anxiety and frustration. In her words about using the non-linear model:

It basically helped me to analyze the piece. It allowed me to look more deeply into the music—deeper than I had looked when just doing the score analysis. I had to look at every detail, and I really had to decide exactly what I wanted to hear. This helped me to organize my rehearsal because I really explored the music and discovered exactly what I wanted to hear from the choir. I didn't need to write an order of things to do—I simply could rely on my ears in rehearsal. I could just listen to the choir, and then improvise in action. By simply using my ears, I could work on the different ideas which I had brainstormed—but in no specific order (written assignment, March 1998).

Her comments were supported by the teaching she did in various assignments throughout the project. My impressions during her teaching included the idea that Denise regularly implemented new ideas not reflected in her plan. As in

Kennedy's view of teaching (1987), Denise was adjusting, in-action, in relationship to a rich conception of the material to be taught.

By the time Denise had thought through teaching strategies and committed them to paper, her internal construct had grown such that she was able to make new connections in the teaching act. In a discussion of improvisation and great jazz musicians, Elliott (1995) reminds the reader that improvisation is built on a rich base of procedural knowledge rather than arbitrary spontaneity. This may explain, in part, Denise's success in the teaching act.

Several learnings emerged from observing Denise throughout the course of the project. First, not every student will come to teaching with the ease demonstrated by Denise from the outset. For those students, expectations for improvisation in the teaching act are potentially beyond that which is reasonable or even desirable. Students need to learn to shape and structure rehearsals which require defining goals, ordering ideas, and assessing in-action whether learning has occurred. The brainstorming model can serve as a valuable stimulant to make explicit one's internal musical understanding toward a mental image of a work and as a means of linking the musical image to pedagogical knowledge.

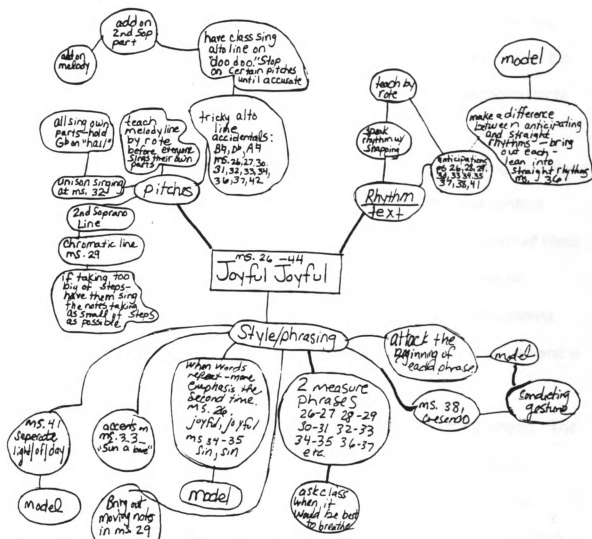
In the case of this particular student, a deep level of preparation had taken place in spite of the seeming freedom from the teaching plan demonstrated in the teaching act. Denise's score analysis and teaching plans were rich with decisions and it was evident she spent time preparing both score analysis and teaching plans for upcoming teaching. The balance of time, then,

was spent in preparation. Planning for rehearsal was likely a far less time-intensive endeavor.

Denise, in fact, organized a way of managing these two processes that ultimately brought into balance the relationship between preparation and planning for the choral rehearsal. In her last plan, Figure 13, she documented both her imagining for teaching in the visual model, then jotted on paper a “tentative rehearsal order.” When questioned about this decision, Denise indicated that the tentative rehearsal order was necessary as a means of organizing her ideas about upcoming teaching and gave her a bridge to rehearsal. She noted the suggested order was a place to begin a rehearsal and that it functioned as a safety net if she was unable to decide the next teaching strategy in-action. Denise generally completed two or three steps into her proposed order before altering the rehearsal to some other aspect of her planning.

In her process, then, she would analyze a score, vision or imagine for teaching decisions about the score, devise teaching strategies to carry out her decisions, and finally, order her thoughts into a particular rehearsal order. Viewed another way, the objectives-based traditional way of planning for instruction served as the endpoint of a much richer process of preparation and immersion into the music.

Finally, Denise’s visioning for teaching yields important information with respect to the teaching strategies she devised for various rehearsals. Many of the actions were highly related to teaching strategies that she observed as a



tentative rehearsal order

- speak text; have class learn rhythm by rote
- sing melody line - have them learn melody by rote
 - model whole
 - model 2 measure phrasing
 - model accents and ensembles
 - model initial attack
 - model syllabic stress
 - ask difference between ms. 33-35 and 36 (anticipation/straight)
 - model lean of ms. 36
- Take out score - all sight read alto line
- Add Sop + alto line together
- all read own parts

Figure 13. Denise's conception of preparation and planning.

member of the ensemble that I conducted. Denise seemed to be functioning both as a member of the choir and as an informal observer looking through the eyes of a conductor. She was able to assimilate a wealth of pedagogical tools and make applications to her unique teaching situation.

Assimilation is an important aspect of informal musical knowing as defined by Elliott (1995). It may function as a valuable bridge from musical content knowledge to pedagogical knowledge and, in a sense, serves as a form of silent apprenticeship. This apprenticeship may encourage students to take on characteristics of their teacher models. It is possible to imagine this cloaking phenomenon as a means of protection or cover until experience is gained and a unique teaching voice established.

An analogy might be made with fitting a bicycle with training wheels. The young child is ready to learn to ride, but does not have the experience or confidence to hurtle into biking without the benefit of training wheels. The training wheels, at some point, become unnecessary. Until that time, however, the wheels give the child the experience of biking without requiring a full spectrum of biking skill.

Silent apprenticeship for novice conductor/teachers points to a need for close integration between ensemble and/or studio experiences and the development of pedagogical knowledge. The teacher might facilitate these connections by requiring observation of various conductors with a focused eye towards teaching strategies utilized. Further, students might be encouraged to

“try on” teaching ideas observed in teacher or peer models without fear of embarrassment or recrimination.

Concluding Thoughts

Sarah, Lindsay, and Denise each interacted with the planning model in different and significant ways. As a teacher/researcher, some observations can be made as a result of their experimentation with the visual web. From a teacher’s perspective, the visual web might be a stronger vehicle for assessment of student thinking and planning than is the Tyler model. In the visual webs created by the three students, teaching ideas and their relationship to musical decisions are prominent. The web can quite literally function as a “picture” of composite thought.

The traditional linear plan, as a series of listed activities, lacks opportunity for connections to be made between ideas, or for musical decisions by the conductor/teacher to be explicitly stated. In the bubble model, these students often drew lines between important categories of thought. Decisions were weighted visually that enabled a better evaluation of how a student was conceptualizing the score.

In this light, it was increasingly evident that Lindsay had a weak base of pedagogical knowledge. Her “picture” was not well developed and she needed guidance to stimulate thinking about possible ways of teaching her musical ideas. The value of the model for Lindsay appeared to be an insistence on increasing pedagogical tools for teaching. As the semester progressed, she did improve in the writing of teaching plans. As the teacher/researcher, I improved

my ability to respond to Lindsay's needs as I had a clearer vision of her deficiencies.

In the Tyler model, it is likely I would have instead focused on the relationship of her ideas, sequencing in particular, as I evaluated her written teaching plans. I would not have had any information about the myriad ways she had thought to teach an idea or whether she had multiple ideas at all. It led me to wonder whether the Tyler model might obscure pedagogical weakness as only the final thinking, or product, is presented. The web, in contrast, presents a global view of student thinking and functions as a kind of road-map or inventory of student thought.

A central difference between the three was the degree to which instruction was sequenced in the visual web. Denise was the least sequenced and most improvisatory. Sarah was highly sequenced inside the visual web and taught well-structured lessons. Lindsay fell somewhere in the middle and had a verbally-oriented approach to teaching. This indicates a need for flexibility in the construction of visual webs for different kinds of learners. As the teacher, I might identify weaknesses in conducting/teaching that can be directly addressed in the webbing process as well as have different expectations for different learners.

CHAPTER 8

AMONG-CASE ANALYSIS: MOZART'S *AVE VERUM CORPUS*

The among-case analysis features an examination of a single teaching plan submitted by all participants. The plans represent student work at mid-semester and is the third submission of five plans required during the project period. The chapter examines breadth, depth, and fluency evident in the plans as well as uncovers ways in which students represent their ideas in the visual format. A listing of composite teaching strategies are compared and contrasted and accompanied by interpretive commentary.

Six students submitted teaching plans in preparation for a conducting/teaching round on Mozart's *Ave Verum Corpus*. The analysis draws comparisons between plans as well as culls major themes from the plans as a whole. Teaching ideas are described and analyzed for relationships between ideas and the music at hand, the degree of teacher-centered versus student-centered instruction, and the role of verbal and non-verbal strategies in the visioning efforts by student participants. The six teaching plans appear as a group in Appendix H so that the reader can view the plans side by side.

Dimensions of the Teaching Plans: Breadth, Depth, and Fluency

The dimensions of individual plans as well as the composite profile help illustrate the variety of thinking involved in the conception of the musical work and in cultivated teaching strategies by students. In describing the breadth,

depth, and fluency represented by these teaching plans, comparisons can be made and interpretations drawn about the nature of the planning process.

Breadth

One might assume that studying the same piece of music, both inside and outside the classroom, would elicit similar teaching plans by students. Indeed, similarities are evident in the scope of musical features identified by students. Table 1 describes, by individual plan, the various musical features that become the basis for instruction.

Areas such as tone, phrasing, dynamics, and rhythm were organizing features for most students. These salient features represented the first step in the brainstorming process from which teacher decisions and instructional strategies were cultivated. In terms of breadth, then, the plans could be noted for a cohesiveness among participants. One plan identified nine areas of interest while no plan had less than five central organizing ideas:

Table 1

Identified Musical Features In Mozart's Ave Verum Corpus By Individual Plan

Jennifer	Denise	Lindsay	Karen	Sarah	Rebecca
Tone	Tone		Tone		Tone
Phrasing		Phrasing	Style	Phrasing	Phrasing
Line				Articulation	
Syllabic Stress	Text	Text	Text	Text	Text
Rhythm	Rhythm		Rhythm	Rhythm	Rhythm
Pitches	Intonation/ Tonality	Intonation	Pitches		
Diction		Vowel Production			
Melody				Melody	
Dynamics	Dynamics	Dynamics	Dynamics	Dynamics	
		Tempo			Tempo
					Mood

Depth

Plans differentiated by the depth to which students developed the organizing features. In the theoretical model cultivated by the class and teacher/researcher, each organizing feature was constructed so that both teacher decisions about the score and instructional strategies were represented.

Some plans weighted visual information toward teaching ideas or strategies. In others, conductor/teacher decisions about the musical work were a focus and teaching strategies were either implicit or absent. Some plans balanced both identified conductor/teacher interpretive decisions and potential teaching strategies representing the most complete profiles of student thinking.

Rebecca represented student thinking that is weighted towards interpretative decisions about the score. The wording described such ideas as “straight, little vibrato,” “somber,” “crescendo and decrescendo help shape piece,” and “talk to choir about what kind of pp vs. ff they want,” Other interpretative decisions were highly specific: “rallentando m. 28”, “a tempo m. 30”, or “watch cutoffs (m. 18, m. 29, m. 43),”

In general, the wording in her plan implied consideration of potential challenges in the rehearsing of the work but reflected few actual teaching strategies. The pattern was to list several interpretive decisions followed by one possible teaching strategy.

Jennifer and Lindsay illustrated a blending of teacher decisions and student actions and might be described as linear and bounded in nature. The pattern was to establish an interpretive decision through one or more statements, to be followed by one or two instructional strategies. The difference in these plans and Rebecca’s is a better balance between teacher decisions and instructional strategies though the content of the plans can be described as thin. The thinking appears to be linear in the sense that a decision is made and a way of exercising the decision is sought. There does not seem to be a

preponderance of brainstorming for many possible teaching strategies. Instead, teaching strategies are cultivated in direct line with teacher decisions about the score.

Jennifer's plan represented thinking that was weighted toward cultivation of teaching strategies. Teacher decisions about the score were made implicit through extensive brainstorming about potential teaching strategies. Some organizing circles had as many as seven suggestions for exercising the feature. The reader can imply, through examination of the suggested actions, the musical decision by the teacher. In her discussion of tone, for example, she suggested: posture/breath, play recording, model, warm-up with each vowel and find good lip position, sing on a vowel first, movement-lifting, throwing, spinning, warm-ups top down for lighter tone, and singing piano. These pointed towards a pure tone sung in the light mechanism. Sequence was evident inside the organizing circles as evidenced by the above example. Reading clockwise, one might imagine a rehearsal emanating logically from the statements. Each category was well-developed and conceived.

The remaining two plans, by Denise and Sarah, represented the most complete thinking in terms of depth of preparation. Multiple statements were made in relationship to both teacher decisions about the score and potential teaching strategies. The plans differ from each other in that Denise utilized verbal shorthand while Sarah represented thoughts in complete sentences, even preparing additional material in parenthesis or as footnotes at the bottom of the

plan. In both cases, however, the thinking was expansive and afforded various departures for teaching.

Fluency

Fluency describes the overall impression of the plan in relationship to upcoming teaching. Did the teaching actions suit the musical goals? Did the ideas, as expressed, demonstrate a rich conception of the musical work? Did the chosen form of representation point to a deep connection with the music and considerations of upcoming teaching?

The plans varied widely with respect to fluency. To the researcher's eye, Jennifer and Sarah represented the most fluid thinking though the visual representation between the plans differed as described above. In each plan, however, imagining or visioning for teaching was evident in the wealth of instructional strategies suggested. Also important was the nature of the strategies in relationship to the musical ideas. These ideas were rich in pedagogical content knowledge and would likely be successful in the teaching situation. Indeed, the two students authoring the plans were consistently successful in conducting/teaching rounds throughout the semester.

There is a blending of specific information with wider musical objectives. Sarah, for example, noted specific measure numbers with particular phrasing shapes under the organizing feature dynamics. Alongside the specific was a more global strategy: "Experiment with singing the text on one pitch or chanting to keep energy in the phrase, while always keeping the piano dynamic in mind." The student was making both specific and global decisions about the music.

Jennifer demonstrated this as well. In the organizing rhythm circle, the student suggested three highly specific ways of addressing the feature. When conceiving ideas about sustaining line, however, the strategies became more global: spin finger around lips to keep sound moving, move arm with line, or count sing to feel underlying beats.

Fluency is least evident when students conceived only one or two teaching ideas per interpretive decision. In these instances, the thinking as represented on paper, did not allow for connections between musical ideas or for various opportunities in the teaching action. The actions appeared less related and one had the impression that the student might not have sufficient pedagogical knowledge to advance teaching if a targeted idea did not work.

Mode: Presentation of Teaching Ideas

The mode is the way in which students represent teaching ideas in the plans. Three categories of interest were whether the ideas were teacher-centered or student-centered, verbal or non-verbal, and whether the language reflected a technically oriented or imagery oriented approach. Teacher-centered actions focus on understandings by the novice conductor/teacher represented by statements about the music at hand. The emphasis is on telling the idea to the ensemble as a means of representing conductor/teacher thinking. Teacher-centered actions may function as a means of delivering instruction more suited to verbal description such as cut-offs or breath marks. Teacher-centered actions may also characterize a philosophical emphasis by the conductor/teacher as defined by traditional expert model (O'Toole, 1994). The expert, or

conductor/teacher, is responsible for primary musical decisions and imparting information to ensemble members.

Student-centered actions require novice conductor/teachers to internalize personal understandings about the score. The focus is altered so that increasing learning and musicianship on the part of the ensemble members becomes a goal of instruction. Student-centered actions represent a blending of musical content knowledge, pedagogical knowledge, and the ability to monitor one's thinking in the teaching act. Put another way, the conductor teacher must react authentically to the sounding presented by the chorus and devise ways, on-the-spot, to involve ensemble members in problem assessment, problem-solving, and evaluation of whether the exercised challenge accomplished the corporate goal.

Verbal and non-verbal statements represented on the plans are further descriptions of teacher thinking. Verbal statements involve teaching outside musical production as a means of clarifying expectations, giving instructions, or eliciting student response about the rehearsal. Verbal statements necessarily interrupt the music-making. Non-verbal statements include actions designed to teach inside the music-making: sing, chant, count-sing, solfege, conduct, listen, or deployment of reinforcing kinesthetic activities.

Technical language can be thought of as characteristic formal labels or agreed upon formal language within particular musical practices. Technical language may refer to the Western music system of notation, to attributes of

vocal production, to the vocal instrument itself, or to various musical concepts agreed upon by the musicians.

Imagery may be described as evocations of the imagination which are frequently represented by analogy. The use of imagery might start with phrases such as “Make it sound like. . .Pretend you are Imagine for a moment. . . . or What if we could. . .” Imagery is a way of describing music by encouraging visioning or imagination on the part of the student. It is the making of connections to real-world common experiences. Imagery may also include imagining vowel shape or constructing mental images of tone and color. Conducting gesture functions as image, providing a picture of musical intention.

Spectrum of Teaching Ideas

Table 2 presents the spectrum of teaching ideas generated for *Ave Verum Corpus*. Alongside the teaching ideas are labels representing the mode of representation by the plan: teacher-centered or student-centered, imagery or technical language chosen, and verbal or non-verbal instructions.

Table 2

Composite Teaching Strategies Represented in Mozart's *Ave Verum Corpus*

Potential Teaching Strategies (action words in boldface)	Mode of Representation
conduct phrase in legato fashion	<u>Non-verbal/ Student-directed</u>
spin finger to keep sound moving	imagery/kinesthetic
practice " sucking in air "	imagery/kinesthetic
move arm with line	imagery/kinesthetic
lifting, throwing, and spinning tone	imagery/kinesthetic
have students draw the phrase in the air as they chant the phrase, placing the stressed words in an emphasized manner in the air	imagery/kinesthetic
have students snap in places where they should breathe	technical language/ kinesthetic
have students direct their arms in a circular motion to bring a chant like feel to the piece	imagery/kinesthetic
chant text	technical language
sing piano sections forte; then piano with same intensity	technical language
sing through call and response section; ask students who has call/response?	technical language
Have students sing through on "doo", only re- articulating the "d" when they have a rhythmic change in pitch.	technical language
count sing	technical language
sing crescendo/decrescendo over 12 beats	technical language

Table 2, con't.

section models for peers (sing)	imagery
student model (sing)	imagery
warm-ups constructed to match phrasing ideas	imagery/kinesthetic
piano serves as model (play)	imagery
clap rhythm	technical language
students conduct while singing	kinesthetic
sing senza vibrato for tone	technical language
sing on "loo" to establish pure tone; apply to text	technical language
sing scale with raised 4 th degree	technical language
sing repeated note; sharpening on "di" in quarter note pulses	technical language
sing "oo" to establish sound; change to "o"	technical language
sing on vowels only	technical language
deliberately sharp notes as you sing	technical language
isolate measures: fix vowel and balance (sing)	technical language
teacher model singing	imagery
chant on "ta"	technical language
count sing on numbers	technical language
isolate m. 14 and 15 for sopranos/ sing change Have pedal point sections sing on neutral syllable to point out function	technical language
have students sing melody on text; other sections on "doo"	technical language

Table 2, con't.

sing , pulsing eighth notes to keep energy in phrase	technical language
solfege	imagery
chant diction by phrase	technical language
warm-up to establish desired Latin vowels	technical language
warm-up: sustained chords on pp dynamic	technical language
warm-up: controlled crescendo/diminuendo over 12 counts	technical language
warm-up: sol, fi, mi, re, do to isolate altered fourth	imagery
warm-up: sharp pitch over 8 counts to increase pitch awareness	imagery
top-down warm-ups to encourage light tone	technical language
warm-ups on solfege to isolate intervals	imagery
mark syllabic stress in scores	<u>Verbal/Teacher-Directed</u>
mark breaths	technical language
circle accents	technical language
mark important melody line with fuller dynamic	technical language
talk to choir about what kind of pp vs. ff they want	technical language
keep eyes on conductor for slowing tempo (watch)	imagery
make sure all dynamics are marked	technical language
do rhythm/conducting warm-up where students have to keep their eye on conductor (watch)	<u>Verbal/Student-directed</u>
listen to recording	imagery

Table 2, con't.

analogy: passing car to describe crescendo/diminuendo phenomenon/ contextualize by trying on "oo" vowel/apply to phrase in piece	imagery
question about form	technical language
speak translation	technical language
speak text with dynamic inflection	technical language
speak text	technical language
have students identify key words in a phrase to sing to	technical language
ask students how it is possible to keep intensity	technical language or imagery

A wealth of teaching strategies are evident in Table 2 reflecting a wide variety of participant thinking. When viewed in relationship to early submissions of traditional objectives-based teaching plans in the pilot study, the scope of imagining and visioning represented in these plans are striking. There are multiple ways of rehearsing represented which provide a conductor/teacher a pedagogical base to sort, define, or prioritize teaching strategies. This is critical to novice conductor/teachers who do not have a reservoir of pedagogical tools and who may depend on the generation of multiple ideas to define what works and what fails in the actual teaching event.

When conductor/teachers are taught to select only one or two teaching strategies in relationship to a musical objective, they may narrow thinking to fit the perceived challenge by devising an activity or set of activities to teach the

behavioral objective. Thinking is narrowed in two respects: First, in the selection of a small set of objectives representing conductor thinking and second, the cultivation of teaching strategies to meet the objective(s). In contrast, the brainstorming model encourages multiple decisions about a score based on the music. Objectives, as such, are context-specific to the particular work and may be fluid according to the conductor's growing relationship with the music over time. Teaching strategies are brainstormed by stimulating imagination of myriad ways of exercising an identified objective.

In this respect, students may be increasing pedagogical knowledge by assimilating previous knowledge towards the construction of new information. This closely resembles the improvisatory process described by Alpers (1984). A central outcome of the experiment with the new planning model is that students grew to understand that pedagogy is internally conceived rather than externally imposed.

Further, teaching strategies are weighted towards decision-making, in-action by ensemble members and away from the conductor as the central vehicle for information. The production based strategies involve ensemble members in the rehearsal in meaningful and sustained ways. Verbal telling is reserved primarily for score-marking, text reading, and asking questions. It is significant that the asking of questions is not seen as the primary means of involving ensemble members in rehearsals, as participants focused instead on non-verbal production-based actions. Similar results were found by Buell (1996) in the examination of a master instrumental teacher. Speaking was reserved for

technical instruction and the majority of instructional time was characterized by non-verbal instruction such as conducting, singing, or demonstrating musical ideas through the body.

Imagining for Teaching

When students view their internal understandings as the source of teaching knowledge, a paradigm shift is apparent in several respects. First, students seem to reflect on past experience and make connections between these experiences and potential future teaching actions. As recounted in field notes, they were more likely to incorporate ideas observed in other rehearsals or classes and more willing to experiment with new ideas generated as a result of targeted reflection towards the teaching moment. Self reflection, then, was an important feature of the preparatory process.

Second, techniques or tools observed in teacher models or peer models began to be assimilated by students not as pedagogical ends, but as means toward achieving larger learning goals. This was reflected by ongoing integration of teacher decisions and potential teaching strategies. This integration can be noted in the group of Mozart plans, even inside plans that matched a single teacher decision with a single instructional strategy with no further brainstorming. The result was teaching rounds that were contextual to the music at hand. This was a significant shift in thinking for some students who previously viewed teaching in a non-specific way. Karen wrote:

This approach differs from my other education classes in that it allows for further exploration of many possible solutions (instead of just one or two),

and allows you to see the entire composition globally so that you can envision what your musical goals will be (written assignment, April 1998).

Third, a culture of improvisation was established which encouraged students to experiment with many ideas and strategies without fear of disapproval. One could note in teaching plans and teaching rounds increasing comfort with experimentation. In the Mozart plans, for example, the teaching strategies between plans evidence a wide variety of ideas even though the original organizing ideas were similar. The teaching ideas were increasingly differentiated throughout the project rather than narrowing towards a sameness of approach.

Imagining for teaching could be characterized as spiral or linear. Spiral imagining can be thought of as an inside-out approach to brainstorming. Reflection is characterized by the generation of a host of decisions about the music as well as myriad ways of presenting the material in a teaching context. The ordering of ideas or sequencing of instruction is not important to the spiral thinker, or perhaps takes place later in the planning process than does the free-form brainstorming. Spiral thinking is represented by instructional strategies evident in the teaching plans of Jennifer and Karen.

Linear thinking reflected an outside-in approach to brainstorming. The linear thinker selects from myriad possibilities generated to order ideas prior to the teaching act. Linear thinkers tend to emphasize sequence as can be noted in Sarah's plan. Connections are made in the construction of sequence to help anchor impending teaching. Linearity differs in this approach in that it derives from brainstorming. Put another way, possibilities are narrowed as the result of

experimentation with multiple ideas. In experiences with plans submitted in the objectives-based model format, students were likely to narrow teaching possibilities as soon as an activity was imagined without exploring various options.

Summary

One additional dimension was observed of the participants over the course of the project. The connections between musical understanding and upcoming teaching were the primary lens during the project and analysis. Another means of viewing the process, however, is to characterize the shift in student thinking whereby conducting is regarded as the expressive and artistic representation of musical thought. These plans and their teaching content evidence deeply musical thinking that arguably establishes the platform for the cultivation of artistry both on the part of the conductor/teacher and the ensemble. Viewing teaching as artistry is central to my personal interest in teacher training. I was surprised by the almost palpable shift to expressive considerations when students experimented with this mode of planning.

It is significant that many of the suggested teaching activities are generated in relationship to expressive goals in the learning and performance of the piece. Rather than learn the work for the musical concepts it can teach, then, one would identify the special characteristics of the masterpiece and teach in relationship to those qualities which make the piece expressive and artful. Critical to this precept, however, is that the works under study are exemplars of

composition. Weak pieces will likely produce weak teaching ideas and points to a need to teach novice conductor/teachers to differentiate quality repertoire.

CHAPTER 9

THE META-ANALYSIS

Given the nature of the analytic attention to both within-case and across-case analyses, a rich portrait emerges of the experience in the project setting. As a teacher/researcher conducting formative research in the classroom setting, the results from the project have direct and meaningful implications for the improvement of classroom practice.

The concluding chapter summarizes findings in a meta-analysis, links pertinent conceptual information from the study of related literature, draws implications for the teacher/researcher classroom practice, and broadens the discussion to the preparation and training of teachers in undergraduate choral music education.

Summary of Findings of Within-Case and Across-Case Participants

Themes and patterns of student and teacher/researcher experience emerged through the course of the project that provided important learnings for all participants. The research question, whether an alternative process for rehearsal planning in the choral teaching context would yield improved planning practices by novice conductor/teachers, was anchored by experimentation with a visual webbing model.

The co-created visual model, which might be characterized as a brainstorming inventory, developed out of concern about the perceived limitations of traditional models of lesson-planning in music education.

Specifically, the Tyler model of planning was discarded and a new model created emphasizing imagining for teaching through extensive brainstorming. The model was developed in classroom interaction during both the pilot study and project periods.

Other models of brainstorming are in use in educational settings. In literature and writing, for example, semantic webs are a “graphic representation or visual display of categories of information and their relationships” (Bromley, 1991, p.2). Webbing is considered a pre-writing technique that organizes ideas prior to writing:

The web is a nonlinear form of outline, and information, can be recorded by the author on the web as it occurs. One makes a web by starting with a main idea in the center of a piece of paper, then branching off from the main idea into categories of information (Zipprich, 1995, p. 4).

Webbing is thought to both organize ideas for writing and to encourage relationship-making among concepts generated in the webbing format.

Features of the Co-Created Model

The alternative form of planning for choral rehearsal underwent ongoing revisions and adjustments as students experimented with the visual model. Primary changes in conception of the model included a better balance of conductor/teacher musical and interpretive decisions in relationship to imagined teaching strategies and an emphasis on sequence and order as it pertained to teaching inside an identified strategy.

Based on analysis during the project period, the following global observations can be made of the research study. Discussion of each item will be expanded in the sections that follow:

- 1) The visual model encouraged expansion of novice conductor/teacher thinking in the preparation for teaching.
- 2) The explicit cultivation of imagining for teaching appeared to reinforce the expert-like mindset in which novices take on the learning orientation of experts (Bereiter & Scardamalia, 1993).
- 3) The thinking represented in the visual model suggests novice conductor/teachers are capable of developing rich mental constructs of both music and the pedagogical knowledge required to carry out the mental conception. The model may help provide a bridge between musical knowledge and pedagogical knowledge.
- 4) The brainstorming efforts appear to take on two forms: linear thinking, spiral thinking, or a combination of both linear and spiral thinking.
- 5) Changes in student representation of thinking in the visual model over time included:
 - a) teaching for contextual goals
 - b) increased breadth, depth, and fluency as noted in plans over time
 - c) improved focus on internal sequencing and ordering of teaching strategies
 - d) expansion of teaching strategies
- 6) Changes in student conception of preparation for teaching included:
 - a) the role of teacher model as a facilitator for student learning
 - b) pedagogy as internally conceived rather than externally imposed
 - c) role of self-reflection increasingly evident in score analysis and experiments with visual model
 - d) increased comfort with experimentation, a hallmark of improvisation

Expansion of Novice Conductor/Teacher Thinking and the “Expert-Like” Mindset

In contrast to Tyler-modeled teaching plans submitted during the pilot project period, conductor/teacher experiences with the brainstorming model appeared to effect a paradigm shift with regard to preparation for teaching. Rather than reducing potential teaching possibilities to a single set of activities, as required by the Tyler model (May, 1986), students spent preparatory time brainstorming multiple teaching strategies for a variety of identified musical goals.

This expansion of thinking seems to reflect the expert-like mindset as defined by Bereiter and Scardamalia (1993). According to the researchers, an expert-like mindset would mirror processes utilized by experts in a field that includes working at the upper level of complexity in a domain. The thinking is characterized by continual expansion of ideas and openness to continued learning. Experiments with the visual model of brainstorming yielded far richer imagining and visioning for teaching than did previous plans conceived through the Tyler model of preparation.

Mental Conception of Music and Teaching

Another noticeable dimension of the plans was the linking of musical content knowledge to growing pedagogical knowledge. The planning process emphasized conductor/teacher decisions about the repertoire based on a rich process of score analysis and study. Score analysis informed the brainstorming process such that teaching strategies were constructed in direct relationship to

conductor/teacher decisions about the music. Students became more adept at linking these dependent but different ways of thinking (Elliott, 1995), and the process seemed to encourage personal interpretation of the music under study.

According to Grossman (1990), students frequently assume area content knowledge is constitutive of preparation for teaching. Experiments with this form of visual mapping differentiates content knowledge and pedagogical knowledge and may provide a critical link between these forms of knowledge as students plan and prepare for teaching.

Linear and Spiral Thinking as Generative Thought

As noted in the among-case analysis, students appeared to think in linear or spiral terms, depending on the individual profile of the student. In distinguishing between these profiles, linear thinkers appear to order thoughts from the outset. If a specific teaching strategy is identified, the linear thinker devises ordered activities to carry out the instructional objective. A single plan may evidence potential for multiple lesson plans, depending on which organizing feature(s) are chosen as the curricular focus. Linear thinkers were more successful at incorporating structure and sequence into proposed teaching actions than were spiral thinkers. As a result, the linear model most resembled the Tyler model of planning with a critical difference: brainstorming and imagining for teaching appear more intensive and can be represented visually as a way of tracking student thinking.

Spiral thinkers were more adept at constructing multiple ideas about both the music and possible teaching strategies. The blending of the ideas was more

amorphous than in linear plans. Spiral thinking might be represented by any number of proposed instructional strategies though proposed teaching sequence is not clear or necessarily important in the construction of the plan. Certain students weighted brainstorming toward musical decisions and spent less time on envisioning instructional strategies.

From the perspective of the teacher/researcher, linear thinkers controlled for the teaching act in more direct ways than did spiral thinkers. They were more likely to bring the teaching plan to the podium and to rehearse groups of related teaching ideas indicated on the plans. A central distinction between linearity in the Tyler model and in the visual model is that linearity is conceived in relationship to brainstorming rather than early narrowing of planning for impending teaching as expected in the Tyler model.

Spiral thinkers appeared more at ease improvising in the teaching act. The teaching was marked by an ability to respond to the authentic musical sounding by the chorus and to organize teaching ideas, on-the-spot, as a form of improvisation. These thinkers spent much time studying the score and planning for rehearsal but did not reflect an ordering of ideas or sequence for teaching in either the visual mapping or in the teaching situation.

As improvisers, these students were able to reflect, in-action, on the musical sounding, select problem setting activities based on the sounding, exercise the identified challenge, and assess whether the challenge was accomplished. According to Kennedy (1987), this thinking reflects a form of deliberate action that can be observed by expert teachers. Indeed, students who

were able to brainstorm extensively (reflecting on-action) and improvise in the teaching act (reflecting in-action) demonstrated the strongest teaching/conducting rounds of class participants. The dual approach to reflection mirrors Schön's (1983) conception of how professionals successfully work within a domain.

Representation of Thinking Over Time and Student Conception of Preparation for Teaching

Increased attention to teaching for contextual goals related to the music under study was evident as the plans progressed. As traced through both the pilot study and research project, a shift gradually occurred as students taught in relationship to their particularized understandings of the musical score. In early plans, students tended toward a global, transportable, concept-based approach to devising teaching strategies which is central to the way music instruction has been conceived in music education (Elliott, 1995). In this paradigm, the musical concept to be taught defines the instructional strategy and materials chosen. The visual model, however, seemed to draw attention to the score and generate situated instructional strategies particular to the work at hand.

The monitoring of contextual factors includes wider concerns than the material to be taught (Grossman, 1990). Other considerations are the classroom, the larger teaching context such as school and community, and personal practical knowledge required to carry out teaching. Aligning content goals with the needs of the ensemble is but one form of contextual

consideration. Others will likely develop only when students enter the professional world of teaching/conducting.

Improved breadth, depth, and fluency are likely the result of continual refinements and adjustments to the research process during the project. The increased awareness of ordering teaching ideas for teaching was likely due to the explicit emphasis placed on sequence during the project. Even so, some students continued to struggle with how to sequence ideas for instruction. While improvements were clearly evident in the wealth of ideas generated for upcoming teaching, more attention was needed in how these ideas would be structured for teaching.

A central observation during the project was that students were able to generate ever-increasing numbers of potential teaching strategies as well as expanded articulation of musical understandings represented as teacher decisions. The class began to think of the brainstorming process as a form of improvisation, improvisation-in-thinking, as distinguished from improvisation in the teaching act. The condition of improvisation was mediated by students' willingness to experiment. Not all students embraced the brainstorming model as noted in earlier analysis. Regardless, the overall experience of the class yielded growth in this area.

Role of the Conductor

Student perception of the role of the conductor changed as a result of the experiments with preparation for teaching. The plans began to shift focus from teacher-directed instructions toward ways of increasing learning on the part of

the ensemble. This was demonstrated by a growing emphasis on student-directed teaching strategies including nonverbal action-oriented activities as well as verbal questioning targeted as student reflection. When students conceived rehearsal in this way, they appeared to shift the responsibility of learning from teacher-directed “telling” about the music to student-oriented “discovery” inside the music.

This re-definition is likely the result of experimentation with the planning model as well as explicit emphasis in the class toward a more democratic relationship between conductor and ensemble. The deconstruction of the expert model as defined by O'Toole (1994) led the class to careful analysis of the impact a conductor/teacher will have on an ensemble. Sensitivity to this issue was heightened throughout the project. One student wrote:

My most significant learning has probably been the way I perceive the role of the conductor after putting myself in that situation with a group of singers. In the beginning, I felt kind of separated from the group when I was conducting and I just tried to get through the conducting rounds by telling them how to sing. I think after becoming more familiar with the other students, I felt a lot better and it was easier to practice being an interactive conductor. Continuing challenges seem to be the ones that involve explaining myself nonverbally rather than always needing to verbalize about my musical goals (written assignment, April, 1998).

Analysis of the Methodology

Conducted as formative research that is local and specific to one teacher/researcher's classroom, the methodology was well suited to the investigation of a curricular program. The investigation was concerned with improvement of classroom practice both in terms of the curricular vehicle, the

visual mapping model, and the teacher's understanding of student perception and experience in relationship to the emerging model.

The choice of a qualitative paradigm allowed the teacher/researcher to investigate shared experience through multiple methods including content analysis of the teaching plans as well as the expressions of thought as generated by students and the teacher/researcher throughout the course of the project in various writing forums.

The construction of narrative, both verbatim and fictional, allowed the teacher/researcher many opportunities to code for various patterns or themes that emerged as a result of the class experiment. Alongside analysis of writing assignments and plans allowed for adjustments and refinements to the brainstorming model throughout the course of the project. The weaving of analysis and data collection brought the researcher closer to the experience students were negotiating and brought the teacher closer to the research process. The blending of roles in this project was a continuing challenge and required much self-reflection and analysis.

Challenges with the methodology included the continual cycle of stepping outside the role of teacher to best represent the experience in the research process. While the researcher was not distanced from the project there was a necessary focus on accurately representing the experience as teacher-driven or researcher-driven. Because of the tension between these two roles, perceptions were regularly checked with participants including participant reading of narrative designed to reflect student experience.

Implications for Classroom Practice

Based on the findings described above, the teacher/researcher can draw implications for improvement of classroom practice. The single greatest learning by the teacher/researcher was the realization that planning for rehearsal and preparation for rehearsal are not synonymous.

A central distinction can be noted between planning for rehearsal and preparing for teaching (Yinger, 1990). Planning is geared toward specific instructional strategies to employ, identification of resources and materials, ordering of content to be taught, and considerations of teaching time frame.

Preparation precedes planning and is the widening of personal knowledge by imagining, visioning, or musing in the quest to blend previous knowledge and experience with new mental constructions. These constructions are the result of an expert-like mindset wherein the conductor/teacher works at the upper level of understanding in relationship to deep knowledge of the score gained through immersion in the music. Preparation involves maintaining a heuristic image (Howard, 1982) against expectations for unplanned exigencies.

The weight of these two processes favors preparation. Much time will be spent learning music and developing personal interpretations of the repertoire. Planning is more concerned with the meta-cognitive monitoring of those issues surrounding the act of teaching. As expressed by Yinger (1990), teaching requires both preparation and planning.

Model for Teaching

From the perspective of the teacher/researcher, the strongest relationship between preparation and planning were expressed by students who spent the balance of time imagining for teaching. For these students, teaching involved three primary considerations: score study and analysis, brainstorming for teaching (preparation), and a tentative ordering of rehearsal ideas (planning). This tri-fold approach appeared to help students in a way that previous planning models had not: They felt empowered in their knowledge of the music and increasingly adept at the generation of teaching strategies for the choral rehearsal.

In terms of the classroom, this suggests a focus on score study and analysis as well as explicit focus on both preparation and planning. For the teacher/researcher, this means re-definition of content in undergraduate conducting and choral methods. Conducting needs to include a more consistent focus on teaching, even in the early stages of learning gesture. Score analysis needs to be introduced alongside basic conducting so that analytical skill can grow and mature alongside technical gesture. Choral methods should immerse the student in preparation and planning for teaching, and remain a primary thrust of the methods curriculum through meaningful field experiences and practicum.

Cultivation of the Expert-Like Mindset

A related issue is the cultivation of the expert-like mindset as defined by Bereiter and Scardamalia (1993). When expertise is viewed as a process rather than a product, an explicit emphasis can be placed cultivation of an expert-like

mindset which emphasizes working at the upper level of one's ability. As described by students during the project, it was not until they experimented with brainstorming as a preparatory process for teaching that their content knowledge was sufficiently developed to link teaching strategies with personal decision-making about the musical work. In the earlier model of planning, they described the ability to skim the music and teach from a superficial understanding. Once they realized the depth of possibility in relationship to their own musical understandings, they were able to prepare for teaching with a far richer base of knowledge. Establishing the expectation for this kind of preparation, then, will be central to the improvement of the teacher/researcher's classroom.

Research Application and Limitations of the Project

The research project was designed in direct relationship to the teacher/researcher's questions about classroom practice. The study is not intended to be generalized to all undergraduate choral programs. In keeping with qualitative standards of generalizability, readers will make their own inferences in relationship to their situation and contextual factors. Recommendations, then, are the result of one researcher's experience.

Several limitations are apparent as a result of the research experience. The question remains whether preparing/planning for the "empty" classroom" will translate to real-world teaching experiences following undergraduate study. Longitudinal studies could document the transfer from undergraduate teaching to professional teaching. Research on teacher image and personal practical knowledge is important in the quest to understand how professional knowledge

is developed and implemented. It remains to be seen whether experiments with the planning approach outlined in this project will have been formative in the construction of a teaching image that can influence the participants' teaching as they enter the professional world.

A central area of concern remains assessment and evaluation. Though the participants experimented at length with assessing-in-action, many did not reflect concern for assessment in the brainstorming inventories. In a profession that continues to struggle with issues of evaluation and assessment, this remained a weak link in the overall experience. The teacher/researcher will be searching for ways of representing assessment both in the model and as an educational priority for students.

Finally, it is appropriate to question the extent to which the research project itself influenced the depth and quality of work in the webbing model. The richness of imagination for teaching will no doubt have a direct impact on the ultimate effectiveness of the planning paradigm. It is surely possible to write thinly-conceived webs just as it is possible to write richly detailed plans from the objectives-based planning model. The quality of thinking may have, in part, been driven by students' desire to help the teacher/researcher in the research effort.

Concluding Thoughts and Recommendations

Future research is warranted about the nature of interactive teaching and the role of improvisation in the teaching act. The preparation/planning question is only one issue in the larger quest to understand what it means to think in

teaching. It would be valuable to research the link between this model of planning and the ability to improvise in teaching. Case study of master teachers, such as the studies conducted by Buell and Dolloff (1996, 1994), will be critical to understanding dimensions of expert teaching.

In addition to addressing issues of assessment and evaluation, this model might be revised in several ways for future research. In the present project, all of the participants were women. It is valid and appropriate to question the degree to which gender influenced results. A larger participant pool, or groups of participants, could provide more deeply rooted knowledge about the planning process. A longitudinal view of a single group of participants through beginning years of conducting/teaching might also provide insights not possible in a short research period.

A related issue is to question what kind of student best responds to this model. Are certain students able to benefit from the model while others are more suited to traditional methods of planning for instruction? The visual planning model might be implemented in new settings, perhaps subject to both qualitative and/or quantitative investigation, to answer these questions.

In summary, the experience of the teacher/researcher fostered deep reflection about teaching practice and significantly impacted her perceptions of students in relationship to their experiences with the curriculum. Music education can and should support investigation of teaching whether in partnership between researcher and teacher or when those two roles blend together in action research.

APPENDICES

APPENDIX A
PROJECT CONSENT FORM

January 1998

Dear Students:

As you may know, I am currently a doctoral student at Michigan State University where I am working on a Ph.D. in music education with a choral cognate. For my dissertation, I have chosen to study aspects of undergraduate choral teacher preparation as it specifically relates to conducting study.

For this project, I would like to utilize your conducting class as a site of my data collection process. I will examine information that you complete in fulfillment of class requirements including your rehearsal plans, questionnaires, classroom discussion, and other possible sources of qualitative information as the data process emerges.

I would very much like your permission to pursue this project. You will not be required to complete additional work outside the syllabus requirements, and your names will be changed to protect your identity in the study. Your ideas, as only you can express them, will be central to the study and form the basis for my eventual analysis. It is important that you understand that though your names will be changed, your personal views will very much be a part of the final dissertation, and you will have an important role in the final analysis.

You are not required to participate in this study. If you choose to participate, and at any time during the project wish to withdraw as a research participant, you will be free to do so. Your class grade will not be affected in any way by participation or non-participation in this study.

Thank you for your willingness to contribute to this study. Please don't hesitate to contact me if you have any concerns or comments.

I am willing to participate in this project voluntarily, and indicate my acceptance below:

Professor Sandra Snow/The University of Michigan

APPENDIX B

SELF OR PEER EVALUATION FORM CONDUCTING/TEACHING ROUNDS

Write your reflections in as constructive a manner as possible!

Gesture:

Does it reflect the musical idea?

Does the conductor have a clear understanding of the piece as demonstrated by gesture?

Communication:

Does the face communicate ideas in tandem with conducting?

Teaching:

If a teaching round, identify one non-verbal and one verbal teaching instance:

Identify two teaching ideas. Were they effective? Why or why not?

What I liked best about your conducting/teaching:

What you might improve (be specific):

END OF SEMESTER REFLECTIONS

- 220

- Do you feel more prepared or less prepared to teach using this approach?
- How does this differ from your experiences in other education classes at the university?
- Can you envision using this approach in the future?

APPENDIX D

SCORE STUDY AND ANALYSIS¹

Principles:

The score is the written embodiment of the work of art.

The understood score becomes the lesson plan.

The process of score-study/score-marking internalizes the piece in the conductor, enabling him/her to lead (*con-* (with) -*duct* (lead)) musicians along the path of artistry and understanding.

No one method of study is appropriate for every piece of music. Each piece of music yields its own organic method.

In analysis, work large to small – composers do.

Score analysis will call upon you to retrieve critical parts of your knowledge of musical form, harmony, rhythm, style, and history.

Score Marking:

Color coding: Dynamics and Tempi

Materials: Berol Prismacolor pencils

Red:			accel. new tempo-piu quarter note = 104 - 200
Blue:			new tempo-meno quarter note = 40 - 78
Green:			quarter note = 80 - 100
Brown:			reinforce accent/stress markings
Possible:	use the <u>color of destination</u> for changes in dynamic or tempo.		

¹ From "Score Study and Analysis," by L. R. Kesselman, 1991, Course materials available upon request, College of Dupage: Glen Ellyn, IL. Adapted with permission.

Text:

Highlight text with yellow marker. If the text is written in more than one language, highlight the language you plan to use for performance.

Thematic Markings:

Use highlighter pens (Sanford MAJOR ACCENT) for music which is highly thematic or contrapuntal. A different color can be used for each major theme. Sometimes, the same process can be used for motivic material in complex textures (blue, green, purple, pink, brown).

Highlighter pens can also be used for:

1. major changes of instrumentation or voicing
2. movement titles in multi-movement works
3. changes from pizz. to arco. , flute to piccolo, mutes, humming, etc. . .
4. expressive markings

Barline Analysis:

Use black pencil to mark structure (divisions, sections, phrases, changes, contrasts). The following marks (reinforcing bar-lines with black pencil) indicate changes ranging from largest to smallest contrasts:



largest sections: development, recapitulation, coda . . .



new sections: not as major a change as above



major changes in key, tempo, possibly periods



contrasting ideas, possibly phrases

Black pencil may also be used for rehearsal letters/numbers, fermatas, etc. . .

Standard (erasable) pencil:

May be used for breaths, conducting gesture marks, cut-offs, pronunciations, specific word-meanings, interpretive ideas, dynamic modifications, numbers to indicate bar counts, etc. . .

APPENDIX E
SYLLABUS: MUSIC 340

Secondary Choral Methods ♦

APPENDIX E

Music 340/Spring 1998

Instructor:	Prof. Sandra Snow 1066 Moore Building 647-9438 snows@umich.edu														
Office Hours:	by appointment														
Textbook:	Don S. Collins, <i>Teaching Choral Music</i> . Prentice Hall														
Intern Visits:	Intern visits will be arranged with area schools on a once/ week basis spanning an eight-week period. A report detailing your experiences must be submitted for credit in this area.														
Final Project:	A notebook containing classroom notes, quizzes and exams, and all assignments will be submitted by the last class of the semester.														
Grading Procedure:	Your final grade for this course will be based on the following: <table> <tr> <td>Mid-term exam</td><td>20%</td></tr> <tr> <td>Notebook/Final Project.....</td><td>20%</td></tr> <tr> <td>Intern Visits/Report</td><td>20%</td></tr> <tr> <td>Program Assignment</td><td>10%</td></tr> <tr> <td>Handbook Assignment</td><td>10%</td></tr> <tr> <td>Class Assignments/Supplemental Reading</td><td>10%</td></tr> <tr> <td>Professionalism.....</td><td>10%</td></tr> </table>	Mid-term exam	20%	Notebook/Final Project.....	20%	Intern Visits/Report	20%	Program Assignment	10%	Handbook Assignment	10%	Class Assignments/Supplemental Reading	10%	Professionalism.....	10%
Mid-term exam	20%														
Notebook/Final Project.....	20%														
Intern Visits/Report	20%														
Program Assignment	10%														
Handbook Assignment	10%														
Class Assignments/Supplemental Reading	10%														
Professionalism.....	10%														
Professionalism:	Students are expected to attend and be prompt for all sessions and intern experiences. Grades will be adversely affected by unsatisfactory attendance, tardiness, and failure to meet deadlines and professional standards for assignments.														

Course Outline

Winter Term 1998

Month	Day	Topic	*Indicates Supplementary Reading Assignment	Text Assignment
JAN	7	Introduction: Student Expectations, Course Requirements Successful Choral Programs—What are they like?		
	12	Developing a Philosophical Basis for Teaching Choral Music.		Ch. 3
	14	Intern Assignments: Goals and Objectives Choral music as choral curriculum		Ch. 15 *Rao
	19	Choral Diction Spoken Language versus Singing: Teaching the differences		Ch. 12
	21	Diction and rehearsal considerations: Unifying vowels, enunciating consonants Video: <i>Group Vocal Techniques</i> , James Jordan, Frauke Haasemann *Voice Building for Choirs, Ehmann and Haasemann (for perusal—know what kinds of things can be found there.)		
	26	Effective Warm-ups and Building Choral Tone Using recordings to develop an image of good tone: pros and cons Video: <i>Daily Workout for a Beautiful Voice</i> Charlene Archibeque/Charlotte Adams		Ch. 10
	28	Choral Tone: Developing a tonal concept * <i>Choral Conducting: A Symposium</i> by Harold Decker Read Chapter 1 by contributing author Howard Swan * Warm-up assignment due		Decker 1
FEB	2	Middle School: Vocal Issues related to the adolescent voice		Ch. 13
	4	Middle School: Appropriate repertoire Editing/Arranging/Adapting music for the changing voice		
	9	Middle School: Teaching Round 1 Choose a piece Score analysis to submit Lesson plan Create two plans based on assigned case study which will reflect varying teaching circumstances		
	11	Audition Procedures: The importance of the audition Voice placement: Systems and philosophies. Addressing vocal problems through placement. * Assignment: Develop your own audition procedures/audition card		
	16	Repertoire: Evaluation and Selection *An Annotated Inventory of Distinctive Choral Literature for Performance at the High School Level: ACDA Monograph no. 2 *MSVMA Jr. High Choral Repertoire *MSVMA Sr. High Choral Repertoire *Collins Appendices Finding new literature: Building a concert program *Choral Music in Print *MSVMA Handbook *Catalogues/Programs *Conventions		
	18	The First Rehearsal: Developing a Rehearsal Plan *Concert Program Written Project Due		
	23	The Art of Rehearsing: Balancing improvisation with planning The lesson plan Improvising-in-action Pacing and discipline The development of corporate expertise or artistry *Programming assignment		
	25	Midterm		

MAR	9	Daily Rehearsals: Warm-ups, Sequencing, Contextual Factors	*handouts to be distributed remainder of term	
	11	Sight-Reading, Balancing New Literature and Material for Review Sight-Reading: A review of methods *Sight-reading folder on reserve		
	16	Teaching Round II Sight-reading lab experiences (each student to lead sight-reading exercise)		
	18	Concert Preparation: Establishing a Support Network High School: Vocal Issues		
	23	High School: Appropriate repertoire What is "good" repertoire? Multicultural or multiethnic musics		
	25	High School: Teaching Round III Choose a piece per assigned scenario Score analysis Lesson Plan: Two plans per assigned scenario		
APR	30	Organization and Management: The Choir Handbook		
	1	Professional Development: Resume/Teaching Portfolio Administrator's View of Music Education		
	6	Clinic/Festival/Contest Management of a Choral Dept: Maintaining the library Formulation of a budget, ordering new music, facility maintenance, facility requests *Choir Handbook Written Project Due	Ch. 18	
	8	Student Teaching: Securing a position/maintaining professional stature Professional Ethics and Teacher Relationships	Ch. 17	
	13	Technology in the Choral Classroom		
	15	The National Standards and the Choral Classroom inclusion of improvisation and composition		
	20	Review *Intern Assignments Due		
	22	Final Examination: Notebook/Final Project Due		
	ALL SUPPLEMENTARY READINGS/ASSIGNMENTS ARE DUE ON THE DATE LISTED			
	Professor: Sandra Snow E-Mail: snows@umich.edu Office Hours: by appointment			
I. Course Objectives				
As a prospective music teacher in the secondary schools you will need the ability to reflect critically about your teaching. A reflective practitioner intentionally examines method, materials, and personal resources related to the teaching transaction and to learning by students. This course will provide a framework for reflection, provide resources and materials to support first-year teaching, and establish a dialogue for examination of pertinent educational and personal issues related to the teaching profession.				
Specific objectives include:				
⇒ Developing a philosophical basis for teaching in the choral classroom				
⇒ Construction of a tonal image towards development of choral tone including diction, vowels, and voice-building techniques				
⇒ Function of warmups in the choral classroom				
⇒ Examination of middle school vocal issues relevant to the changing voice and adolescent development				
⇒ Examination of high school vocal issues				
⇒ Selection of repertoire and function of repertoire as the choral curriculum				
⇒ Rehearsing and lesson-planning as a teacher/conductor				
⇒ Development of sight-reading program in the secondary school context				
⇒ Management issues such as budgeting, establishing expectations for behavior, constructing a choir handbook, ordering music				
II. Written Project Guidelines				
A. Concert Program Design				
This project combines several facets of program administration. You should choose literature for 3 distinctly different choirs. 1. A training ensemble, perhaps a freshman choir or a freshman women's ensemble; 2. A concert choir of perhaps 70-80 students with a 3 to 1 ratio of women to men; 3. A select ensemble of 20 students with equal numbers on all voice parts.				

Your assignment is to provide:

- ⇒ A typewritten repertoire list for each choir including title, composer, publisher and octavo number, current price, and length in minutes and seconds. You should plan 30 minutes for each choir including applause.
- ⇒ A camera-ready cover. Include clip-art, name of Concert (i.e. Fall, Holiday, Spring, etc.), High School, Name of Choirs, Name of Director, Name of Accompanist, date, time and location.

B. Choral Program Handbook

The Handbook should include:

- ⇒ An overview of the program/opening letter to parents and students: What kinds of things you do, what kinds of optional activities are available to the students, information on voice lessons, etc. .

A Performance Policy: Which activities on your calendar are optional and which are required; when is an absence considered excused; when is an absence considered inexcused; Is there a make-up procedure for an excused absence.

Calendar of events: Optional and required activities. Include Fall, Winter, and Spring Concerts; MSVMA Choral Festival Dates, MSVMA Solo and Ensemble activities, Spring Musical, and other things that you would like to include in your active music program!

- ⇒ Rehearsal procedures: State a policy on assigned seating, pencils, tardiness, posture, sickness and participation in rehearsals.

- ⇒ Grading system: Will you have quizzes? Will you grade daily rehearsals, required performances, involvement beyond the classroom? Develop a point system which will account for these and other factors which you may wish to include.

C. Class Notebook/Final Project

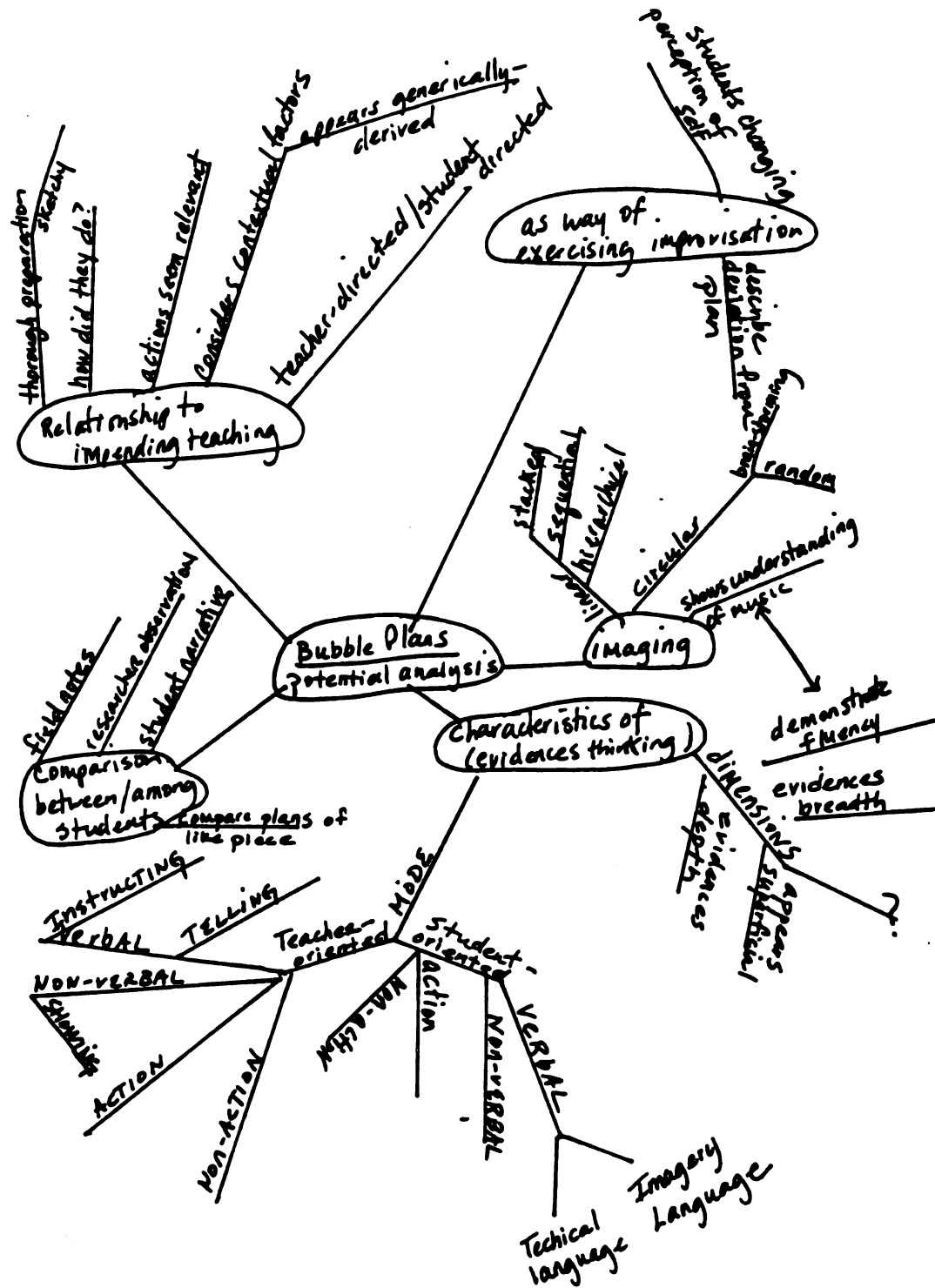
The Class Notebook should function as a resource guide for you as you begin your teaching career. It should include sections for:

- ⇒ Classroom notes.
- ⇒ All Assignments
- ⇒ Resource Materials: (Copies of repertoire requirements for MSVMA, warm-up materials, Bibliographic citations for supplemental readings.)
- ⇒ In-class Handouts
- ⇒ photostatic copies of all supplementary reading assignments.
- ⇒ Score analyses and lesson plans.

D. Intern experiences: A detailed description of this project will be handed out separately.

APPENDIX F

TEACHER/RESEARCHER CODING EXERCISE: ORGANIZING ANALYTIC POSSIBILITIES



APPENDIX G
DATA OBSERVATION FORM

Date:

Bubble plan:

Characteristics:

Dimensions

- breadth
of potential rehearsal paths in relationship to score analysis

- depth
extent to which each identified path addressed

- fluency
plan appears organized/random
wording specific/vague
teaching ideas grow logically from identified musical goal

Mode

- teaching ideas involve student action/teacher action
- teaching ideas largely verbal/non-verbal
- verbiage technically oriented/imagery oriented

Imaginings

- evidence of brainstorming and experimentation (circular)
 - evidence of stacked, sequential, or hierarchical thinking (linear)
 - relationship, if any, between circular and linear thinking
-
- points of teacher decision-making in relationship to score analysis
 - points for student learning resulting in increased musicianship by ensemble
 - clear relationship between teacher decision-making and student learning
-
- visual presentation seems to give picture of the music
 - salient characteristics of work
 - likely rehearsal paths as result of understanding
 - visual impact
 - content sufficient to guide forthcoming teaching episode

Teaching ideas (describe)

Relationship to impending teaching

- actions seem relevant to music
- evidences thinking of contextual factors
student needs considered
appears generically derived
- learning evident
teacher understanding: content (musical)
teacher understanding: evidence of growing teacher
knowledge
will result in increased student musical understanding
- evidences preparation/planning
- assessment of student learning embedded in plan

Additional features or impressions:

APPENDIX H

ACROSS-CASE ANALYSIS: TEACHING PLANS

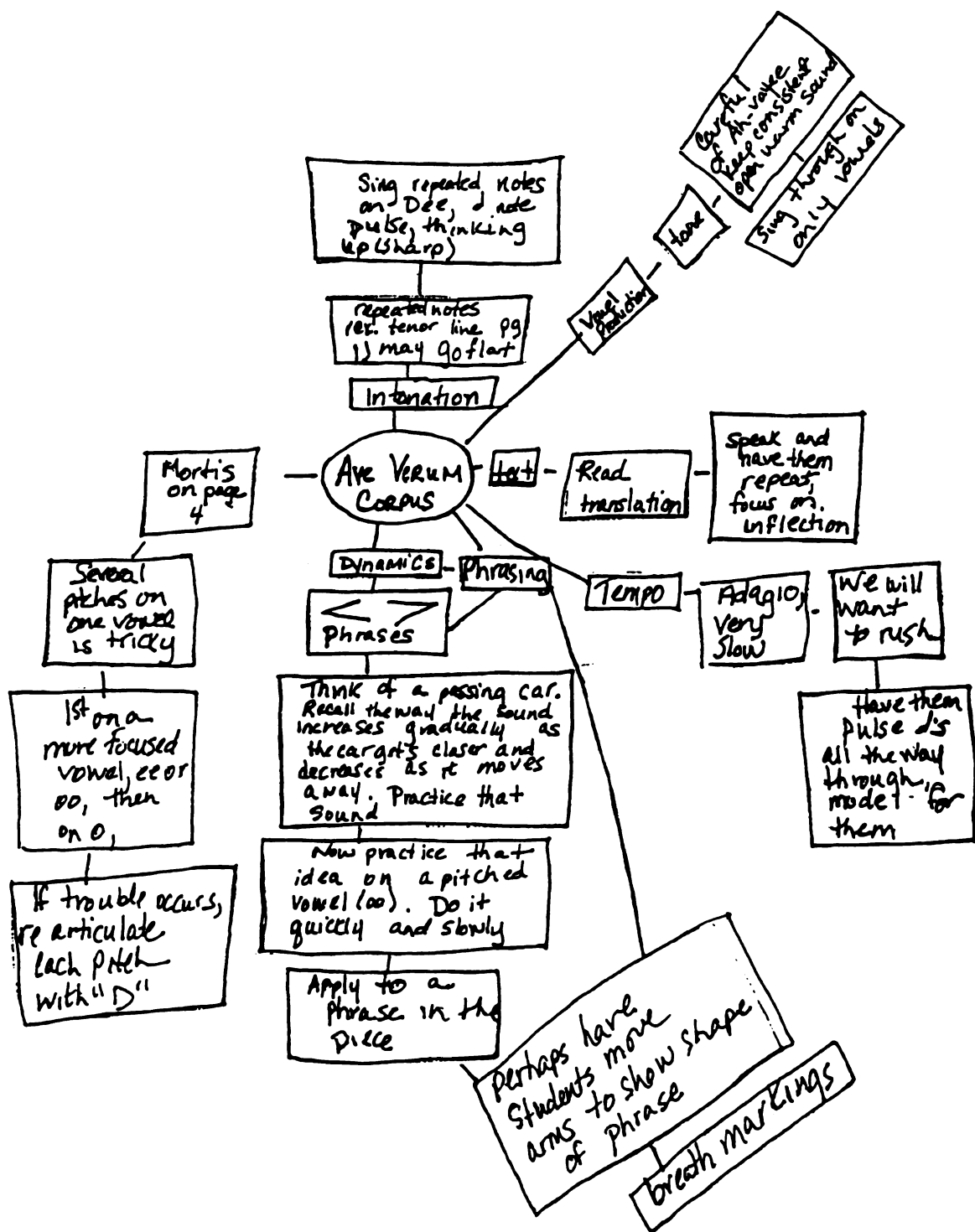
PLAN ONE



PLAN TWO



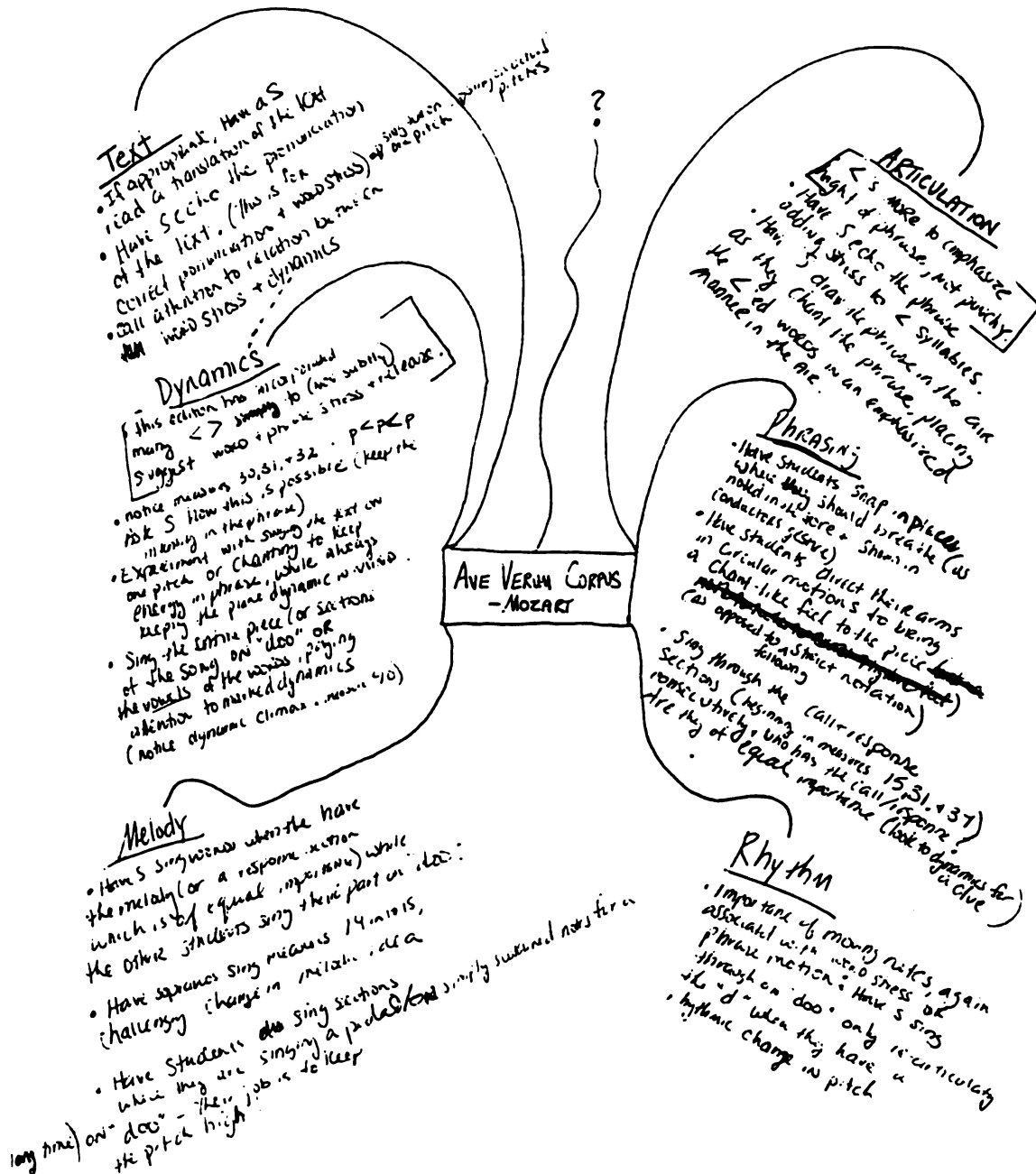
PLAN THREE



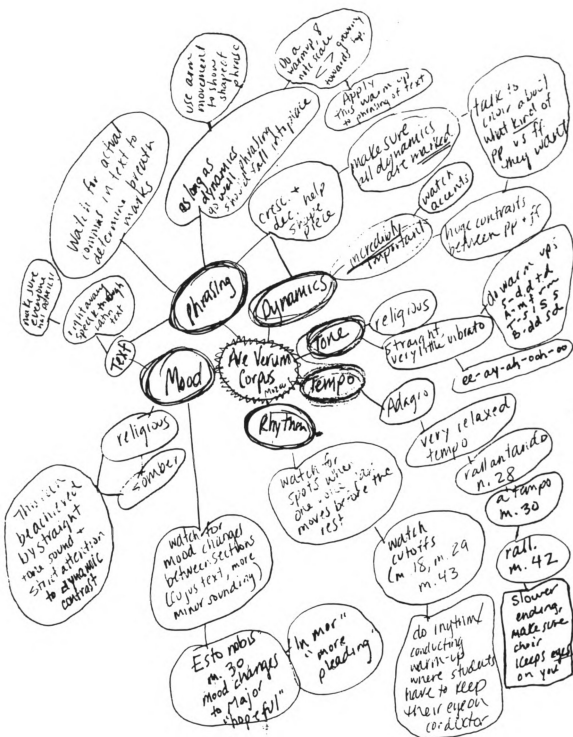
PLAN FOUR



PLAN FIVE



PLAN SIX



REFERENCES

References

- Alperson, P. A. (1984). On musical improvisation. Journal of Aesthetics and Art Criticism, 43 (1), 17-29.
- Apfelstadt, H. (1997). Applying leadership models in teaching choral conductors. Choral Journal, 37 (8), 23-30.
- Apple, M. (1993). Official knowledge: Democratic education in a conservative age. New York: Routledge.
- Apple, M. (1995). Education and power (2nd ed.). New York: Routledge.
- Bereiter, C., & Scardamalia, M. (1993). Surpassing ourselves: An inquiry into the nature and implications of expertise. Chicago: Open Court.
- Berliner, D. C. (1986). In pursuit of the expert pedagogue. Educational Researcher, 15 (7), 5-13.
- Boardman, E. B. (Ed.). (1989). Dimensions of musical thinking. Reston, VA: Music Educator's National Conference.
- Bowman, W. D. (1998). Philosophical perspectives on music. New York: Oxford University Press.
- Bradford Wing, L. (1992). Curriculum and its study. In R. Colwell (Ed.), Handbook of research on music teaching and learning (pp. 196-217). New York: Schirmer.
- Bresler, L. (1994). What formative research can do for music education: A tool for informed change. The Quarterly Journal of Music Teaching and Learning, 5 (3), 11-24.

Bresler, L., & Stake, R. (1992). Qualitative research methodology in music education. In R. Colwell (Ed.), Handbook of research on music teaching and learning (pp.75-89). New York: Schirmer.

Brinson, B. (1996). Choral music methods and materials: Developing successful choral programs (grades 5-12). New York: Schirmer.

Bromley, K. D. (1991). Webbing with literature. Boston: Allyn and Bacon.

Buell, D. S. (1996). Effective rehearsing with the instrumental music ensemble: A case study. Dialogue in Instrumental Music Education, 20 (1), 1-25.

Busch, B. (1984). The complete conductor. New York: Schirmer.

Byo, J. L. (1989). Recognition of intensity contrasts in the gestures of beginning conductors. Journal of Research in Music Education, 38 (3), 157-163.

Carter, K. (1990). Teacher's knowledge and learning to teach. In M. Haberman and J. Sikula (Eds.), Handbook of research on teacher education (pp. 291-310). New York: Macmillan.

Carter, K. (1993). The place of story in the study of teaching and teacher education. Educational Researcher, 22 (1), 5-12, 18.

Caldwell, W. M. (1980). A time analysis of selected musical elements and leadership behaviors of successful high school choral conductors (Doctoral dissertation, The Florida State University, 1980). Dissertation Abstracts International, 41(03), 976.

Clandinin, D. J. (1985). Personal practical knowledge: A study of teacher's classroom images. Curriculum Inquiry, 15 (4), 361-385.

Clandinin, D. J., & Connelly, F. M. (1986). The reflective practitioner and practitioners' narrative unities. Canadian Journal of Education, 11(2), 184-198.

Clandinin, D. J., & Connelly, F. M. (1988). Teachers as curriculum planners: Narratives of experience. New York: Teacher's College Press.

Clark, C. M., & Peterson, P. L. (1986). Teacher's thought processes. In Wittrick, M.C. (Ed.), Handbook of research on teaching (3rd ed., pp. 255-296). New York: Macmillan.

Clark, C. M. (1988). Asking the right questions about teacher preparation: Contributions of research on teacher thinking. Educational Researcher 17(2), 5-12.

Cochran-Smith, M., & Lytle, S. L. (1990). Research on teaching and teacher research: The issues that divide. Educational Researcher 19 (2), 2-11.

Collins, D. L. (1993). Teaching choral music. Englewood Cliffs, NJ: Prentice-Hall.

Colwell, R. (Ed.). (1992). Handbook of research on music teaching and learning. New York: Schirmer.

Davidson, L., & Scripp, L. (1992). Surveying the coordinates of cognitive skills in music. In R. Colwell (Ed.), Handbook of research on music teaching and learning (pp. 392-413). New York: Schirmer.

Day, R. S. (1980). Teaching from notes: Some cognitive consequences. New Directions for Teaching and Learning 2, pp. 95-111.

- Decker, H. A., & Herford, J. (1988). Choral conducting: A symposium. Englewood Cliffs, NJ: Prentice-Hall.
- DeLorenzo, L. C. (1987). An exploratory field study of sixth grade students' creative musical problem solving processes in the general music class (Unpublished doctoral dissertation, University of Madison, Wisconsin, 1987). Dissertation Abstracts International, 48 (07A), 1689.
- Dennett, D. C. (1991). Consciousness explained. Boston: Little Brown.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). Handbook of qualitative research. Newbury Park, CA: Sage.
- Dolloff, L. A. (1994). Expertise in choral music education: Implications for musicianship (Unpublished doctoral dissertation, University of Toronto, Ontario, 1994). Dissertation Abstracts International, 56 (07A), 2600.
- Eisner, E. W. (1991). The enlightened eye: Qualitative inquiry and the enhancement of educational practice. New York: Macmillan.
- Eisner, E. W. (1993). Forms of understanding and the future of educational research. Educational Researcher 22 (7), 5-11.
- Elliott, D. (1992). Rethinking music teacher education. Journal of Music Teacher Education, 2 (1), 6-11.
- Elliott, D. (1995). Music matters: A new philosophy of music education. New York: Oxford.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 119-161). New York: Macmillan.

Evertson, C., Hawley, W., & Zlotnik, M. (1984). The characteristics of effective teacher preparation programs: A review of research. Nashville, TN: Vanderbilt University, Peabody Center for Effective Teaching.

Fleming, R. (1977). The effect of guided practice materials used with the videotape recorder in developing choral conducting skill. Dissertation Abstracts International, 38, 2637A. (University Microfilms No. 77-24759)

Foucault, M. (1979). Discipline and punish. New York: Viking Books.

Froehlich, H. (1992). Issues and characteristics common to research on teaching in instructional settings. In R. Colwell (Ed.), Handbook of research on music teaching and learning (pp. 561-567). New York: Schirmer.

Gardner, H. (1993). Frames of mind: The theory of multiple intelligences. New York: Basic Books.

Gordon, E. (1989). Learning sequences in music: Skill, content, and patterns. Chicago: GIA.

Gore, J. (1993). The struggle for pedagogies. New York: Routledge.

Grant, J. W., & Drafall, L. E. (1991). Teacher effectiveness research: A review and comparison. Bulletin of the Council for Research in Music Education, 108, 31-48.

Green, E. (1997). The modern conductor (Rev. ed.). New York: Prentice-Hall.

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

Harris, W. (1979). The applicability of selected principles of Management by Objectives to the leadership/management styles of choral Conductors. Dissertation Abstracts International, 40, 4946A. (University Microfilms No. 8006125)

Hoffman, R. R. (1992). The psychology of expertise: Cognitive research and empirical AI. New York: Springer-Verlag.

Howard, V. A. (1982). Artistry: The work of artists. Indianapolis: Hackett Publishing.

Hylton, J. (1983). A survey of choral music education research: 1972-1981. Bulletin of the Council for Research in Music Education, 76, 1-29.

Hylton, J. (1995). Comprehensive choral music education. Englewood Cliffs, NJ: Prentice-Hall.

Janesick, V. J. (1994). The dance of qualitative research design: Metaphor, methodolarty, and meaning. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 209-219). Newbury Park, CA: Sage.

Jordan, G. (1980). Videotape supplementary instruction in beginning conducting. Dissertation Abstracts International 41, 580A. (University Microfilms No. 8017958)

Jordan, J. (1996). Evoking sound. New York: Schirmer.

Kennedy, M. (1987). Inexact sciences: Professional education and the development of expertise. In E. Rothkopf (Ed.), Review of Research in Education (vol. 14, pp.133-167). Washington, DC: American Educational Research Association.

Kesselman, L. (1991). Score study and analysis. (Course materials available upon request, Dept. of Music, College of Dupage, Glen Ellyn, IL).

Lanier, J. E., & Little, J. W. (1986). Research on teacher education. In M.C. Wittrock (Ed.), Handbook of research on teaching. (3rd ed, pp. 527-569). New York: Macmillan.

Lamb, G. (1988). Choral techniques. New York: William Brown.

Lampert, M., & Clark, C. M. (1990). Expert knowledge and expert thinking in teaching: A response to Floden and Klinzing. Educational Researcher 19(5), 21-23.

Lee, O., & Yarger, S. J. (1996). Modes of inquiry in research on teacher education. In J. Sikula (Ed.), Handbook of research on teacher education (2nd ed., pp. 14-37). New York: Macmillan.

Leicester, J. E. (1990). The teachable moment: Expert-novice differences in teachers' clinical judgments (Doctoral dissertation, University of Colorado at Boulder, 1990). Dissertation Abstracts International, 52(03), 851.

Lewis, K. (1977). The development and validation of a system for the observation and analysis of choral conductor gestures. Dissertation Abstracts International, 38, 4647A-4648A. (University Microfilms No. 7732171)

Lortie, D. C. (1975). Schoolteacher: A sociological study. Chicago: University of Chicago Press.

Madsen, C. K., & Yarbrough, C. (1985). Competency-based music education. Englewood Cliffs: Prentice-Hall.

May, W. T. (1986). Teaching students how to plan: The dominant model and alternatives. Journal of Teacher Education 37(6), 6-12.

McCutcheon, G. (1980). How do elementary school teachers plan? The nature of planning and influences on it. Elementary School Journal, 81, 4-23.

Morine-Dershimer, G. (1977, April). What's in a plan? Stated and unstated plans for lessons. Paper presented at the annual meeting of the American Educational Research Association, New York.

Morine-Dershimer, G. (1979). Teacher plan and classroom reality: The South Bay study: Part 4 (Research Series No. 60). East Lansing: Michigan State University, Institute for Research on Teaching.

Music Educators National Conference (1991). Syllabi for music methods courses (Society for Music Teacher Education). Reston, VA: Music Educators National Conference.

Music Educators National Conference (1994). National Standards for Arts Education. Reston, VA: Music Educators National Conference.

Neale, D. C., Pace, A. J., & Case, A. B. (1983, April). The influence of training, experience, and organizational environment on teachers' use of the systematic planning model. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

O'Toole, P. A. (1994). Redirecting the choral classroom: A feminist postructural analysis of power relations within three choral settings (Doctoral dissertation, University of Wisconsin-Madison, 1994). Dissertation Abstracts International, 55 (07A), 1864.

Osman, N. E. (1989). The development of the Communication Skill Evaluation Instrument: An instrument designed to assess the communication skill of the conductor in the choral rehearsal (Doctoral dissertation, University of Missouri, 1989). Dissertation Abstracts International, 50 (01), 2419B.

Peterson, P. L., Marx, R.W., & Clark, C.M. (1978). Teacher planning, teacher behavior, and student achievement. American Educational Research Journal, 15, 417-432.

Phillips, K. (1997). Basic techniques of conducting. New York: Oxford. Publication Manual of the American Psychological Association (4th ed). (1994). Washington, D.C.: American Psychological Association.

Punch, M. (1994). Politics and ethics in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 83-97). Newbury Park, CA: Sage.

Rao, D. (1993). We will sing. New York: Boosey & Hawkes.

Rao, D. (1988). Craft, singing craft, and musical experience: A philosophical study with implications for vocal music education as aesthetic education (Unpublished doctoral dissertation, Northwestern University, Evanston, 1988). Dissertation Abstracts International, 49 (11A), 3296.

Rao, D. (1987). Artistry in music education. New York: Boosey & Hawkes.

Reimer, B. (1989). A philosophy of music education (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Rubin, H. J., & Rubin, I. S. (1995). Qualitative interviewing: The art of hearing data. Thousand Oaks, CA: Sage.

Richardson, C., & Whittaker, N. (1992). Critical thinking and music education. In R. Colwell (Ed.), Handbook of research on music teaching and learning (pp. 546-557). New York: Schirmer.

Richardson, C. (1988). Musical thinking as exemplified in music criticism (Unpublished doctoral dissertation, University of Illinois, Urbana, 1988). Dissertation Abstracts International, 49 (09A), 2576.

Roe, P. (1983). Choral music education. Englewood Cliffs, NJ: Prentice-Hall.

Rudolph, M. (1950). The grammar of conducting. New York: Schirmer.

Ryle, G. (1949). The concept of mind. New York: Penguin Books.

Schön, D. (1983). The reflective practitioner: How professionals think in action. New York: Basic Books.

Schön, D. (1987). Educating the reflective practitioner. London: Jossey-Bass.

Schön, D. A. (1992). The theory of inquiry: Dewey's legacy to education. Curriculum Inquiry, 22 (2), 119-139.

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

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

Standley, J. M., & Madsen, C. K. (1991). An observation procedure to differentiate teaching experience and expertise in music education. Journal of Research in Music Education, 39 (1), 5-11.

Sternberg, R. J. (1988). The triarchic mind: A new theory of human intelligence. New York: Viking.

Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory, procedures, and techniques. Newbury Park, CA: Sage.

Stubley, E. (1998). Thinking critically or thinking musically? Defining musical performance as subject matter. Studies in Music, 17, 157-173.

Taebel, D. K. (1992). The evaluation of music teachers and teaching. In R. Colwell (Ed.), Handbook of research on music teaching and learning (pp. 310-329). New York: Schirmer.

Tyler, R. W. (1950). Basic principles of curriculum and instruction. Chicago: The University of Chicago Press.

Verrastro, R. E., & Leglar, M. (1992). Music teacher education. In R. Colwell (Ed.), Handbook of research on music teaching and learning (pp. 676-696). New York: Schirmer.

Watkins, R. E. (1986). A descriptive study of high school choral directors' use of modeling, metaphorical language, and musical/technical language related to student attentiveness (Doctoral dissertation, University of Texas at Austin, 1986). Dissertation Abstracts International, 47 (05A), 1644.

Warner, D. L. (1986). An investigation of patterns of motivation in rehearsal construction of selected high school choral conductors (Doctoral dissertation, University of Northern Colorado, 1989). Dissertation Abstracts International, 47 (09), 3352.

Whitaker, N. (1989). Reflective thinking as exemplified in musical decision making (Unpublished doctoral dissertation, University of Illinois, Urbana, 1989). Dissertation Abstracts International, 50 (11A), 3510.

Yarbrough, C. (1975). Effect of magnitude of conductor behaviors on students in selected mixed choruses. Journal of Research in Music Education, 23, 134-136.

Yarbrough, C. (1987). The relationship of behavioral self-assessment to the achievement of basic conducting skills. Journal of Research in Music Education, 35, 183-189.

Yarbrough, D., Wapnick, J., & Kelly, R. (1979). Effect of videotape feedback techniques on performance, verbalization, and attitudes of beginning conductors. Journal of Research in Music Education, 27, 103-112.

Yin, R. K. (1993). Applications of case study research (Applied Social Research Methods Series, Vol. 34). Newbury Park, CA: Sage Publications.

Yin, R. K. (1994). Case study research: Design and methods (2nd ed.) (Applied Social Research Methods Series, Vol. 5). Thousand Oaks, CA: Sage Publications.

Yinger, R. J. (1977). A study of teacher planning: Description and theory using developmental ethnographic and information processing methods (Unpublished doctoral dissertation, Michigan State University, East Lansing, 1977). Dissertation Abstracts International, 39 (01A), 207.

Yinger, R. J. (1986). Examining thought in action: A theoretical and methodological critique of research on interactive teaching. Teaching & Teacher Education, 2(3), 263-282.

Yinger, R. J. (1990). The conversation of practice. In Clift, R. T., Houston, W. R., & Pugach, M. C. (Eds), Encouraging reflective practice in education: An analysis of issues and programs (pp. 73-94). New York: Teacher's College Press.

Yinger, R. J., & Clark, C. M. (1982). Understanding teachers' judgments about instruction: The task, the method, and the meaning (Research Series No. 121). East Lansing: Michigan State University, Institute for Research on Teaching.

Yinger, R. J., & Clark, C. M. (1983). Self-reports of teacher judgment (Research Series No. 134). East Lansing: Michigan State University, Institute for Research on Teaching.

Zahorik, J. A. (1975). Teachers' planning models. Educational Leadership, 33, 134-139.

Zipprich, M. A. (1995). Teaching web making as a guided planning tool to improve student narrative writing. Remedial and Special Education 16 (1), 3-15, 52.