The ways in which choral and instrumental conductors use singing, speaking, and paralinguistics in rehearsal vary greatly, and are significant in determining learning and performance outcomes. Research by Barresi (1978), Rohwer (1995), and others has highlighted the importance and value of these voice uses for modelling and other pedagogical objectives. The purpose of this paper is to report the initial findings of a study designed to examine the general approaches, strategies, and perceptions of voice use by experienced, successful choral and instrumental teacher/conductors. This study focussed particularly on the relationships between conductor backgrounds (musical and cultural), formal professional preparation, and current practice and contexts.

A useful means to study factors such as these is to investigate the relationship between everyday practice and pertinent educational theory. Knowledge gained from observation and analysis of successful teaching and conducting practice stands to help us understand why things happen, which, in turn, allows us to make appropriate decisions about strategies in teaching. This is an important component of teacher/conductor preparation (Rose, 1994). Accordingly, this research employed a case-study format to study experienced teacher/conductors from genre-distinct ensemble settings. Data was gathered through the analysis of video-taped rehearsals and through interviews of seven choral and instrumental conductors. Our goals were to: 1) strengthen understandings about the ways that singing and other voice uses relate to pedagogy in conducted rehearsal settings; 2) strengthen or dispel notions surrounding the issue of singing in choral and instrumental settings; 3) compare various strategies and perceptions of teacher/conductors in various contexts; and 4) critically analyze current thinking and practice as it pertains to issues such as identity construction and teacher preparation.

The Nature of Rehearsing

The two most predominant means of working from the podium are through movement, i.e., nonverbal communication, and use of the voice. Sometimes these behaviours are in isolation and sometimes they are combined. Whether consciously or unconsciously, they most often are directed toward issues such as conceptual learning, technical development, and preparation for performance.
Harper, Wiens, and Matarazzo's (1978) discussion of nonverbal communication outlines five basic areas of behavioral/experimental research: (a) paralanguage and temporal characteristics of speech, (b) facial expressions, (c) kinesic behavior or body movements, (d) visual behavior, and (e) proxemics (the use of space and distance). Nonlanguage sounds, such as sighing, moaning, and yelling are 'paralinguistic' phenomenon. Conductors frequently use paralinguistics to demonstrate musical concepts to their players. As well, conductors employ variables such as pitch, tempo, and intensity with their speaking voice to enhance or clarify their point. Voice use is often accompanied by a variety of types of nonverbal communication. Early research in this area (Birdwhistell, 1970; Duncan, 1969) point to the existence of linguistic-like relationships between all bodily movements, including facial expression and eye movements. They purport the existence of a nonverbal 'grammar', determined by the context of movement.

Speigel and Machotka (1974) proposed a theory as to how movement and gesture are perceived. They suggest that messages of the body are more like metaphors, and therefore specific coding and interpretation of them is of little value. Movement is considered to be independent of the inner state, not a representation of it. The most significant interaction is between the behaviour and the viewer, and that the viewer is influenced by cultural and social experiences. Behaviours might be related to inner states, but other factors can intervene. In the ensemble setting, a conductor's nonverbal messages are both signals to the players, from whom a response is expected, and an evaluative reaction to the playing of the group. This interpretation speaks to the value of qualitative research, where observed behaviours can be compared to data obtained through the interview of participants who are expected to respond to nonverbal communication.

Verbal Communication

Research has shown the transmission of cognitive information to be efficient and effective when appropriate verbal means are employed in the instruction process. For example, studies by Green and Galway (1986) and Ristad (1982) reveal that the use of analogies and metaphors is an effective technique commonly used by music teachers. Grechesky (1985) concludes, “The focus of any observation of an efficient, effective conductor must be on a balance between the quantity of performance time and the quality of verbal behaviour that occurs during non-performance time” (p. 49).

Studies in Conceptual Learning and Technical Development

Teacher/conductors are faced with the challenges of teaching musical concepts, developing thinking skills, and the skills necessary for successful musical performance. Performance traditions and expectations, and the consequent nature of rehearsal, require that these ends be approached simultaneously. Conductors rarely have the luxury of being able to prepare for performance separately from carrying out fundamental instruction in music and large-group performance.

Research focusing on this unique challenge is scarce. The best source of
information regarding pertinent theories and practice exists in the repertory of writings about conceptual learning and technical development in individuals. Various types of information, including interpretive/conceptual, theoretical (music), historical, as well as means of improving generic performance skills, are passed to ensemble members during the course of rehearsal. Madsen (1985) provides a description of this expert-novice relationship, and points out that the process of one-to-one instruction results in totally independent production and performance by the student, and the required musical growth to do so. There are comparable musical-growth outcomes from group instruction. Students acquire skills necessary for cooperative music-making, experience conceptual development in musical understanding, and learn about interpreting music.

Effective teaching/conducting involves both conscious and subconscious strategies on the part of the instructor. Wood, Bruner, and Ross (1976) apply the term "scaffolding" in their description of teacher strategy. This term refers to the manner in which the teacher intervenes in bringing about learning. Their research identified six categories of teacher behaviours which serve as scaffolding strategies. These are recruitment, reduction in degrees of freedom, direction maintenance, marking critical features, frustration control, and demonstration.

Kennell’s (1989) study of applied instruction forwarded the notion that teacher behaviours or strategies reflect the nature of the task at hand. His study of teaching practice in applied university studios revealed that teacher approach is determined largely by whether concepts are to be taught, or performance skills developed. He applied three of Wood, Bruner, and Ross’s six categories of expert behaviour strategies to the applied instrumental setting. The strategies which Kennell centred on were “demonstration,” “reducing degrees of freedom,” and “marking critical features.”

Kennell concluded that the demonstration strategy is used to advance a student’s conceptual understanding of a problem. Reducing degrees of freedom is used to advance a student’s skill mastery required to solve a problem. Marking critical features may be used for either the advancement of conceptual understanding or the development of skills. It is employed to get additional information about a student’s skills and understandings or to highlight a student’s existing skills or understandings. Buell (1990) applied Kennell’s theory of applied instruction in a study of effective instrumental ensemble rehearsing and concluded that the same principles appear to contribute to teacher/conductor effectiveness.

**Dual Trace Hypothesis**

A positive outcome of effective teaching/conducting is the ability of students to remember and apply learned concepts and skills in new situations. One of the primary modes of remembering involves an imaginal system known as “mental imagery.” Memory imagery pertains to how things looked, sounded, felt, or tasted. Conversely, the “verbal-symbolic” mode, which also contributes to remembering, is concerned with what things resembled, what they sounded like, looked like, or felt like (Bower, 1972). According to Hilgard and Bower (1975),

A word . . . that is imaged or a picture that is named has the advantage of having two, redundant copies of the memory trace laid down. The redundancy prolongs memory in comparison to abstract items, since the
second, imaginal trace is likely to survive after the initial verbal trace has decayed. That is, not only are there two traces, but the one in the imaginal system seems more resistant to forgetting (p. 589).

This notion, known as the “dual trace” hypothesis, was relevant in this study because conductors routinely combine voice use (for explanation and description) with various kinds of movement (for visual analogues).

**Methodology**

The design of this study resulted from the need to gather descriptive data of voice use, as well as qualitative data in order to determine why the subjects did what they did. To this end, case study methodology, utilizing both observation and interview, was utilized to obtain information about practice, participants’ backgrounds, reasoning, and interpretations. Each of the broad areas discussed above was examined by employing questions which involved observable phenomenon, pertinent theory, and the understandings, intentions, and identity constructs of the study’s subjects.

**Research Questions**

Several broad questions formed the basis for this study. As mentioned, the purpose was to investigate voice use, and underlying strategies and perceptions, of teacher/conductors in different musical contexts. The methodology for data collection for this study was determined by the following initial research questions:

- How do teacher/conductors use their voices in the process of rehearsing?
- When do they use their voices?
- What factors influence their voice use?

We were interested particularly in determining actual voice uses, as well as the level of consciousness surrounding voice use, e.g., decision-making, perceptions and understandings of general rehearsal strategies, and self-perception and identity regarding being a 'singer'.

**Subjects**

This study used a convenience sample to supply data. Seven experienced choral and instrumental teacher/conductors were identified and asked to take part in this study by: 1) allowing uninterrupted video-taping of one of their regular rehearsals, and 2) participating in a one-hour post-rehearsal interview. All the subjects were taped working with established ensembles that are considered 'successful' in the community in terms of the quality of their performance. Some of the subjects were experienced in both choral and instrumental conducting. The various ensembles were at different stages in regard to their preparation for upcoming performances. The use of a variety of ensemble types allowed between-group comparisons of teaching/conducting behaviours and contexts. The classifications of conductors were as follows:
1) Choral (C-1) choir, non-auditioned university-based adult
2) Choral (C-2) choir, auditioned community adult
3) Choral (C-3) choir, auditioned community youth
4) Instrumental (I-1) band, auditioned junior high/high school
5) Instrumental (I-2) band, non-auditioned elementary/junior high
6) Instrumental (I-3) band, non-auditioned high school
7) Instrumental (I-4) orchestra (string), non-auditioned university

Video-Taping Procedures

Each subject was video-taped carrying out normal rehearsals as part of their regular rehearsal schedules. A standard VHS camera with remote microphoning capabilities and zoom lens was used. A directional microphone was placed near the subject to capture all verbal instruction as well as the playing of the ensembles. Each video-taped session provided numerous and varied examples of teaching/conducting behaviors and, particularly, uses of the voice.

Categories for Analysis

Based on our interest in closely examining voice use and context in rehearsals, a data form was designed for recording what was observed during the review of the video-tapes. Data was gathered pertaining to four broad categories: 1) Voice Use; 2) Gesture and Movement; 3) Instructional Strategy; and 4) Instructional Goals. Information for each of these categories was recorded for every instructional moment captured on tape during an uninterrupted 30-minute rehearsal segment. This format allowed us to ascertain general and overall voice-use data, and to determine correlations between the categories (for each participant). Subdivisions for each category were determined by previous research and the interests of this investigation.

Voice Use: Voice use was divided into three subcategories; singing, speaking, and paralinguistics. Further subdivision was based on Buell's (1990) study of effective rehearsing which revealed that teacher/conductors most often focus their instruction on five general musical areas:

- Precision (including rhythm, notes, playing together)
- Balance/blend
- Articulation (including bowing styles)
- Expression/phrasing
- Sound (including tone, intonation, and diction)

Summarily, our voice-use data indicated both the 'use' (i.e., singing, speaking, paralinguistics) and the 'area' to which it was directed.

Gesture and Movement: Because gesture and other types of movement characterize so much of the work done by professional teacher/conductors, we decided to examine its relationship to uses of the voice by our subjects. Particularly, we were interested in knowing to what extent Paivio's (1975) notion of 'dual tracing' involved singing, speaking, and paralinguistics. The types of gesture and movement recorded were: patterned conducting, arm and hand movement, and body movement.
Instructional Strategy: An initial viewing of the video tapes revealed that nearly all instructional moments appeared to be in agreement with several of the strategies put forward in the research of Wood, Bruner, and Ross (1976), Kennell (1989), and Buell (1990). Accordingly, 'demonstration', 'reducing degrees of freedom', and 'marking critical features' were the terms used to classify the instructional strategies of the subjects.

Instructional Goals: Instructional goals ranged from immediate to long-term issues, tasks, and problems. Some of the instruction focussed on fixing problems, and some was directed toward developing musical understandings, providing affective experiences, developing technical and thinking skills, and nurturing the growth of students. Some instruction centred clearly on getting pieces ready for performance. Accordingly, the goals in this study were identified as:

- Conceptual Understanding
- Technical Development
- Reflective and Critical Thinking Skills
- Ensemble Performance Skills
- Musicianship Skills
- Performance Readiness
- Other

Participant Interviews

It was necessary to talk with participants about the rehearsal experience to determine relevant perceptions, understandings, intentions and notions of identity. It was possible then to link this firsthand knowledge with data gathered through the analysis of the video-taped rehearsing. This methodology allowed a closeness to the data which facilitated the development of categories, the recognition of theoretically-based behaviours, and an examination of the 'whys' and 'hows' underlying observable practice. Each subject participated in a one-hour interview during which only the researchers and subject were present. The interviews were guided by a list of predetermined, open-ended questions. Discussion focussed on the subjects' background, philosophies, conscious methodologies, perceptions of instructional strategies, performance and educational goals, and suggestions for teacher preparation.

Analysis of Video-Tape Data

General Characteristics

For the purposes of this paper, only the data which indicates general characteristics and the most notable features of the data is presented.

There were very few protracted instructional moments in all the rehearsing captured on video-tape. The instruction that took place during moments when the ensembles were not playing was delivered in fairly short, succinct manners. Some of the instruction took place while the groups were playing. Accordingly, it appeared as if an overall summation and comparison of 'instances' of voice use, as opposed to 'duration' statistics, would be helpful in establishing a normative base for a further look at the data. The following percentages indicate the breakdown of all the voice use examined in this study: Singing - 13.8%; Speaking - 77.1%; Paralinguistics - 9.1%.
The fact that there was more than five times as much speaking as singing did not come as a surprise. However, we did find there to be more paralinguistic use than we had anticipated...almost 10% of the total voice use.

The data was analyzed to see if there were any strong correlations between gesture and movement and voice use. Of the movement that accompanied singing, 64% was arm and hand movement and 33% was patterned conducting. Body movement was extremely rare. Similar percentages existed for speaking and paralinguistic use.

We also were interested in the general correlations between voice use and other facets of the rehearsal process. In other words, we wanted to determine what 'ends' were being served when the voice was being used. Data revealed how singing and speaking were used in association with, or in support of, the various strategies and goals implicit or explicit in rehearsal settings. For, example, when our subjects sang, 82.6% of its use was for the purpose of demonstration. When they spoke, 86.6% of its use was to mark critical features. In terms of how the voice was used in relation to general rehearsal goals, 84.3% of the use of singing and 71.3% of speaking was toward performance readiness. It is interesting to note that minimal use of the voice was geared toward goals of conceptual understanding (0% singing; 2.1% speaking), reflective and critical thinking skills (0% singing; 6% speaking, and musicianship skills (1% singing; 1.9% speaking).

That singing was used for demonstrating and speaking used for marking critical features is consistent with research discussed above. What was interesting was the extent to which the subjects focussed on the goal of performance readiness. In essence, there was less generic or broadly-applicable teaching evidenced than we had anticipated.

Individual Data

A comparison of the subjects, in terms of their overall voice use, revealed some fairly substantial differences in all the voice-use categories.

<table>
<thead>
<tr>
<th></th>
<th>Singing</th>
<th>Speaking</th>
<th>Paralinguistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>17%</td>
<td>75%</td>
<td>8%</td>
</tr>
<tr>
<td>C-2</td>
<td>14%</td>
<td>81%</td>
<td>5%</td>
</tr>
<tr>
<td>C-3</td>
<td>24%</td>
<td>69%</td>
<td>7%</td>
</tr>
<tr>
<td>I-1</td>
<td>17%</td>
<td>59%</td>
<td>24%</td>
</tr>
<tr>
<td>I-2</td>
<td>17%</td>
<td>80%</td>
<td>3%</td>
</tr>
<tr>
<td>I-3</td>
<td>2%</td>
<td>86%</td>
<td>12%</td>
</tr>
<tr>
<td>I-4</td>
<td>5%</td>
<td>90%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Table 1. General Rehearsal Voice Use

This data revealed that, when averaged together, the choir conductors sang about 8% more than the instrumental conductors (choir 18.3%, instrumental 10.25%). Conversely, the instrumental conductors used more speaking and paralinguistics in their instruction. Some of this difference might be attributable to
dissimilarities in rehearsal agendas, i.e., some ensembles being closer to performance dates than others.

Data was collected which revealed how the subjects differed in their voice use when dealing strictly with musical issues, and with other issues such as 'recruitment' and 'feedback'. One of the most notable features of this data was a consistent emphasis given to 'precision' (ave. 29.1%) through singing, speaking, and to a lesser degree, paralinguistics. As well, 'expression/phrasing' appeared to be an important focal point for many of the subjects. Analysis revealed that the instrumental conductors frequently dealt with articulation through both singing and speaking (ave. 25.7%). Paralinguistics appeared to be useful in the instrumental settings for improving precision (ave. 48.0%). The use of paralinguistics for precision in the choral settings averaged only 16.6%.

Table 2 reveals significant differences between the subjects in their use of gesture and movement combined with the voice. There were strong preferences (or habits) that leaned heavily toward movement which was not close to traditional conducting. Most of this was presentation of visual models of the sound, phrasing, and note lengths, and appeared to be successful applications of 'dual tracing'. Conversely, some of the subjects conducted while they provided some form of instruction. It should be noted that one of the choral conductors used a piano to provide aural models for the ensemble. In general, the inconsistency of this data suggests that there is not correlation between conductor type (i.e., choral or instrumental) and the balance between patterned conducting and other types of movement.

<table>
<thead>
<tr>
<th>Gesture/Movement</th>
<th>C-1</th>
<th>C-2</th>
<th>C-3</th>
<th>I-1</th>
<th>I-2</th>
<th>I-3</th>
<th>I-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patterned Conducting</td>
<td>38%</td>
<td>60%</td>
<td>13%</td>
<td>56%</td>
<td>36%</td>
<td>22%</td>
<td>62%</td>
</tr>
<tr>
<td>Arm/Hand Movement</td>
<td>62%</td>
<td>25%</td>
<td>80%</td>
<td>40%</td>
<td>59%</td>
<td>72%</td>
<td>34%</td>
</tr>
<tr>
<td>Body Movement</td>
<td>-</td>
<td>2%</td>
<td>7%</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Table 2. Individual Gesture and Movement

The data regarding instructional strategy (Table 3) also revealed some differences between individual subjects. One notable statistic is the significantly wide range in the use of demonstration as a strategy between two of the choral conductors (C-2, 7%; C-3, 49%). However, there was noticeable uniformity in the employment of demonstration, reducing degrees of freedom, and marking critical features when the pool of subjects is viewed as a whole. This seems to be in agreement with the fact that our subjects, in general, focussed a large percentage of their work toward performance readiness. The relatively low figures for 'reducing degrees of freedom' indicates that there was not much "drill and practice" going on in the rehearsals we observed.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>C-1</th>
<th>C-2</th>
<th>C-3</th>
<th>I-1</th>
<th>I-2</th>
<th>I-3</th>
<th>I-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstration</td>
<td>28%</td>
<td>7%</td>
<td>49%</td>
<td>29%</td>
<td>23%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Reducing Degrees</td>
<td>4%</td>
<td>6%</td>
<td>3%</td>
<td>0</td>
<td>4%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>Marking Features</td>
<td>68%</td>
<td>87%</td>
<td>48%</td>
<td>71%</td>
<td>73%</td>
<td>78%</td>
<td>87%</td>
</tr>
</tbody>
</table>

Table 3. Individual Strategies
Table 4 highlights individual differences pertaining to rehearsal goals. As mentioned earlier, and as underscored below, each subject appeared to be intent on getting pieces ready for performance. To a lesser degree, each subject focussed also on the development of ensemble performance skills, and all but one subject on technical development. It is interesting to note that all three choral conductors did devote some time to the development of reflective and critical thinking skills, as opposed to only one instrumental conductor. As well, there was slightly more evidence of the development of musicianship skills in the choral settings. Two of the three choral conductors and only one instrumental conductor devoted time to the development of conceptual understandings. These figures might be attributable to a number of factors that emerged from interview data. These include the timing of the video-taped rehearsals in relation to pending performances, the differences between the general nature of instrumental and choral rehearsing, and perceived time constraints in school rehearsal settings.

<table>
<thead>
<tr>
<th>Goal</th>
<th>C-1</th>
<th>C-2</th>
<th>C-3</th>
<th>I-1</th>
<th>I-2</th>
<th>I-3</th>
<th>I-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual Understanding</td>
<td>3%</td>
<td>2%</td>
<td>-</td>
<td>6%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Technical Development</td>
<td>8%</td>
<td>2%</td>
<td>21%</td>
<td>-</td>
<td>10%</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>Critical Thinking Skills</td>
<td>8%</td>
<td>6%</td>
<td>10%</td>
<td>-</td>
<td>9%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ens. Performance Skills</td>
<td>13%</td>
<td>2%</td>
<td>13%</td>
<td>17%</td>
<td>16%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Musicianship Skills</td>
<td>-</td>
<td>7%</td>
<td>3%</td>
<td>1%</td>
<td>1%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Performance Readiness</td>
<td>68%</td>
<td>78%</td>
<td>51%</td>
<td>74%</td>
<td>64%</td>
<td>94%</td>
<td>87%</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>-</td>
<td>-</td>
<td>1%</td>
</tr>
</tbody>
</table>

Table 4. Individual Goals

Analysis of Interviews
Subjects' Backgrounds

All seven subjects had substantial backgrounds in music, music education, conducting, and informal singing. One subject held a conjoint Bachelor of Music/Bachelor of Music Education degree; four had Masters degrees and two held Doctoral degrees. All indicated that they felt comfortable using their voices, particularly singing, in their respective rehearsal settings. The fact that these were acknowledged successful teacher/conductors suggested that it was worth examining the correlations between the extent or quality of their formal education, formal and informal exposure to singing, and perceived and real abilities to use the voice for rehearsal strategies.

Many of the subjects talked about significant influences in their pasts which contributed to, or influenced, their current practice. For example, this choral conductor stated,

My high school teacher combined intellectual, theory, musicality, approach to people, love of her students. Her gestures were not very good...verbalizing was her primary means of communication...but she had a passion for music...she would sing, play and describe the historical context of the piece...she often had us in tears. She had high expectations and we knew what they were. I realized that
nothing is cut and dried, there are many different approaches that work. (C-2)

Analysis of this conductor’s rehearsing revealed strong tendencies to speak (the highest of all the choral conductors, 81% of voice use) about all issues dealt with in the course of rehearsing choral music. However, it is interesting to note that this subject stated that her primary means of communication was, indeed, gesture. “I’ve learned that gesture works best for me, it is best for me to keep my mouth shut. I use some verbal instructions for quick explanations.” (C-2)

The following conductor used the most balanced blend of singing, speaking, and paralinguistics in her interaction with her students. In regard to past experiences, she stated,

I was loved through singing. I still hear my father’s singing voice. It was always interactive, I was expected to sing back. I do the same now with my kids and I married someone with a love of singing. The most important thing with me is my relationship with the children. It is most important to know my people, those who I am teaching. Then the circuitry [of learning] is more likely to happen. I see children as my peers...and I am still very childlike. (C-3)

This same choral conductor also expressed that her face, body, and voice were her primary means of communication. She stated, “My voice is who I am. Your intelligence is carried by your voice...my voice carries a lot of messages”. (C-3)

One instrumental conductor delivered almost all instruction, through speaking, while the ensemble was playing. In this instance, there clearly was a focus on the music, i.e., the role of ‘conductor’ as one of musical interpreter and leader. Regarding a former conductor, this subject stated,

One conductor was very charismatic and engaging and well-organized...with an incredible sense of trust for the musicianship of the orchestra. They are there to guide it [the music], with no need to control it. For the great conductors, the music is bigger than they are. (I-4)

In relation to current practice, this same subject stated, “I like to instruct while conducting.” (I-4) Analysis of the video-tape data revealed that 62% of voice use was, indeed, combined with patterned conducting, and 34% with arm/hand movement.

Planning and Decision-Making

Without exception, all subjects said they did not plan specifically how they would use their voice in regard to rehearsal strategies. In general, they noted that they responded to the needs of the group in whatever way they felt was necessary or appropriate at the time and for that instance. Also, subjects decided upon their specific strategy based upon previous experiences with trial and error. A typical comment illustrates this point. Sometimes [when I sing] it is conscious, most of the time it’s just from experience.” (I-2) In other words, subjects were not generally conscious of utilizing a particular strategy associated with a specific goal, e.g., singing or modelling to aid conceptual understanding.

This following subject provided a statement which summarizes much of what the other subjects said about planning and decision-making. “I do whatever works
best ... What I do is mostly spontaneous. I have very little time to plan.” (C-2)

**Strategies, Goals and Voice Use**

Many statements made by the subjects revealed general understandings about the relationships between voice use and basic rehearsal strategies and goals. Both perceptions and practice appeared to corroborate the research of Wood, Bruner, and Ross (1976), Kennell (1989) and Buell (1990). The following quotes support this previous research regarding strategies and goals in music instruction and rehearsing.

**Demonstration through singing**

When I sing, I might sing to show line or to model (echo) fragments or endings... with younger choirs to demonstrate diphthongs... (C-2)

I sing for phrasing (always with much gesture), pronunciation of words, vowel sounds, tone (model - echo), word stress and phrasing. (C-3)

I will sing for stylistic purposes. (I-1)

I sing a lot to show shape, phrasing, direction, dynamics, colour... (I-4)

**Marking critical features through speaking**

When I speak, it’s to provide a historical context, perspective on style... or perhaps to point out the need to audiate. (C-2)

I speak on technical points, and for basic precision. (I-4)

**Demonstration through speaking**

I would talk about the emotions in the music, for example, to find a comparison or analogy with their lives... (I-3)

**Recruitment through singing**

Singing has to do with affirmation and connection - I am always building on this. (C-3)

**Recruitment through speaking**

I will ask them questions. I try to inspire them to be alongside my own conception of the piece. (I-4)

**Dual tracing**

I often combine the voice with conducting, but also often with no gesture at all in order to focus their listening skills. (I-1)
Goals

Critical thinking

I question as a way to get them to think and to be more involved in the rehearsal. To just tell them would be easier and take less time. (I-2)

Technical development

When I sing, I might sing to show line, or to model fragments or endings. And, with younger choirs, to demonstrate diphthongs. (C-2)

Performance readiness

I will sing for phrasing, dynamics, accents, balance issues...shaping and length of notes. (I-2)

Multiple goals

My voice use has been quite successful. I use it for praise, dynamics, imagery. I explain imagery a lot. (C-3)

I will speak to ask questions and to give verbal feedback and ask about technical things, such as precision, misprints. (I-2)

Identity and Comfort in Voice Use

Underpinning all professional practice are factors relating to self-concept and identity. The formation of self-concept and professional identity is inextricably linked with both the contextual nature of one's practice, as well as professional preparation. This was an important factor in our study because it relates directly to teacher/conductors' feelings of comfort on the podium and perceptions of ability.

In our analysis, we integrated descriptive data from rehearsal observations with qualitative data from interviews in our attempt to search for understandings of how these teacher/conductors might view themselves and their own practice. Of particular interest was the acquisition of information about personal and professional orientations (philosophies) of teaching, conducting, and rehearsing, as well as perceptions regarding teacher/conductor preparation and subsequent self-concept.

There was some diversity in the subjects' self-perceptions and comfort of voice use. Most felt comfortable singing in front of the groups despite sometimes not considering themselves to be good singers. As examples, three of the conductors stated,

In large part, I am a good singer. I am comfortable singing in front of a group because singing is me, a part of me. I sing as easily and comfortably as I speak. (C-1)

Generally, I feel comfortable as a singer. I don't necessarily plan to sing, it just comes out...I'm not a very good singer. I have had very little experience. (I-1)

I'm not a good singer, I'm a sectional singer. I'm fine with the school band, I
It is interesting to note that subjects’ perceptions did not always match observed practice. For example, the following instrumental conductor, despite being "...not hesitant to sing", used singing for only 5% of her total voice use.

I'm not a singer - one who sings, a professional - but I'm not hesitant to sing. (I-4)

The following choral conductor, who felt “ashamed” and “uncomfortable”, sang more than any of the other conductors (24% of total voice use).

I'm so ashamed of my voice I could die! I feel so uncomfortable. I am completely ashamed of the instrument. I sing with the children because I feel protected. (C-3)

Teacher Preparation

One of the purposes of this study was to examine the thinking and practice of experienced teacher/conductors relationship to professional preparation. Accordingly, we asked the subjects to provide background information on his or her own professional education, and for specific thoughts and suggestions for the future preparation of teacher/conductors. A number of interesting issues surfaced as a result of this inquiry.

Most subjects had fairly extensive backgrounds in singing, both formal and informal. As discussed earlier, many of the subjects discussed people from their pasts who had significant influence on their present practices. Without exception, the factor influencing current practice the most was personal experience. The following statements from our subjects are indicative of this phenomenon.

I have conducted so much...I make decisions at the moment. My own stuff comes from my own experience...We learn conducting by doing it, along with the theory and conceptual work. (C-1)

I don't stop to consider whether I will sing to them. It is more for the moment. Whatever I feel is needed, and this is intuitive, I decide on the spot. This is all informed by my experience. (C-3)

I am responsive and experiential, as opposed to a planner. I have learned mostly by trial and error. (I-1)

Nothing beats experience...I always feel you can never stop learning, so I continue to ask for help, input, and feedback. (I-2)

Given the significance of personal experience in informing thinking and practice, it might be important to consider further the dichotomy that potentially exists regarding the role and value of experience and the time constraints inherent in formal teacher/conductor preparation.

In response to questions concerning suggestions for the preparation of future teacher/conductors, most subjects stressed the importance of students having
sufficient time to fuse theory and practice. This included longer internships and more podium time.

One semester internship is still not enough. I have often heard interns say at the end of the semester that “I felt like I'm just starting”. Interns feel self-conscious and don't use their voice enough...they might not model or sing or even realize that they can do this. (I-3)

[Students] have to work from the podium, the energy, the way you show, determine the outcomes. They need more hands-on podium time. That's reality. (C-2)

There [should be] more chances to fuse theory and practice early on, in the form of mentored time. (C-3)

This choral conductor also highlighted the need for directed observation, as well as vocal training and more in-depth understanding of the voice.

There also needs to be more emphasis on observation, [the students] need to be taught how to observe youth, contexts etc. There needs to be more facilitation of children who cannot sing, for vocal exploration. And, there needs to be more vocal training and understanding of the voice so there is a comfort level and good demonstrations. (C-3)

The following quote speaks powerfully to the need for time, as well as for the nurturing of reflective and critical thinking skills and practice as part of the general internalization process of learning.

There is not enough time on visually portraying and describing the music and lines gesturally and facially. You see tension and angular movement for legato and spaghetti for precision...like they don’t know any better, even after conducting classes. I don't know why that is. There is little internalization of what conducting is. They [the students] don’t realize that what they show, or not, will be reflected back. Conducting classes need a more long term process and more varied ensemble work.

Summary and Conclusions

Given the suggestions made by subjects, as well as our previous examination of the nature of voice use in these ensemble settings, we are urged to consider the following questions regarding the preparation of future teacher/conductors:

- Should there be better understandings of the general goals of rehearsing (e.g., conceptual understanding, technical development, and reflective and critical thinking skills)?

- Should what we know about the relationships between strategies and goals be more highly considered in our teacher preparation classes?

- Are the techniques of vocal production being considered adequately
for contextual use from the podium?

- Do our students understand that appropriate voice use (singing, speaking, and paralinguistics) is powerful in all conducted ensemble settings?

- Should internships be longer?

- Should we consider more the development of students' identities as part of the undergraduate experience? (e.g., as singers)

In this study we set out to explore the ways in which choral and instrumental teacher/conductors use their voices in the rehearsal setting. We focussed on three voice uses or strategies - singing, speaking and paralinguistics. Given the range of rehearsal contexts that we selected to sample, it is not surprising that there existed a wide range of both thinking and practice pertaining to voice use in the ensemble setting. From the many observed instances of instructional moments involving the voice, as well as the many hours of discussion with our subjects, some interesting and significant issues arose pertaining to the thinking and practice of current, experienced teacher/conductors. As mentioned earlier, the purpose of this paper was to report the initial findings of our study. Some basic findings are:

- Successful teacher/conductors vary significantly in thinking and practice.

- Successful teacher/conductors do not necessarily plan their voice use in regard to strategies and goals.

- Both general singing experience and formal voice education contribute to the formation of positive self-concept and effective voice use.

- When personal and professional identities, general comfort levels, appropriate voice uses, strategies and goals are 'aligned', rehearsing is more efficient and effective.

Pertinent also to the phenomenon of voice use in ensemble settings are issues surrounding cultural identity, and the power of affective experience, that we have not addressed in this paper. We felt, however, it is important not to underestimate the influence of these factors. We were powerfully reminded of this when one of the subjects stated,

I sing when I'm alone, walking or driving. It feels like the most personal thing. It is often hard to sing, it is so real. There is no violin, it's really me. It's about as close as you can get to your soul. (1-4)
Reference List


