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A model of aural instruction examined in a case of fiddle teaching

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A Model of Aural Instruction
Examined in a Case of Fiddle Teaching

by

RAMONA ADELLA HOLMES

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of the requirements for the degree of

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(Chairperson of Supervisory Committee)

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Doctoral Dissertation

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Abstract

A Model of Aural Instruction
Examined in a Case of Fiddle Teaching
by Ramona Adella Holmes

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This study investigates instruction which utilizes primarily aural presentation. It is theorized that accurate replication of music from aural presentation depends, in part, on effective aural instruction. It is hypothesized that research-supported aspects of aural instruction will be observed in the aural instruction of a teacher who is judged to be an exemplary aural instructor by local folk musicians and folk music students.

The study begins with an examination of research concerning aural learning and aural instruction. Information from the reviewed research is used to identify components for a research-based model of events of aural instruction. Next, observation of a case of outstanding aural fiddle instruction is reported. Results of the observation are discussed in terms of correspondence

between the research-based model of events of aural instruction and the observed case of aural fiddle instruction.

Strong correspondence between the model and the observed case of aural instruction supports the hypothesis that research-based aspects of aural instruction will be apparent in the observation of an exemplary teacher using primarily aural instruction. Analysis reveals a strong correspondence between the components of instruction in the model and the case study in terms of: gaining and maintaining attention, pretraining and directing objectives, presenting stimulus, guiding learning during practice, eliciting performance, providing feedback, assessing performance, and enhancing retention and transfer of aural learning. Further evaluation of the data suggests that there are aspects of the model which are especially prominent in this case of effective aural instruction, including: 1) use of frequent and purposeful demonstration, 2) immediate and continual participation, and 3) constant and appropriate guidance.

This study identifies several areas which need further investigation. Among these are: the relation of aural instruction and aural learning, cross-disciplinary use of aural instruction, rank ordering of aural instruction components, and identification and sequence of steps needed to perform from aural presentation.

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Special thanks go to my husband, Ted Hunter, who has provided continual positive advice and support. I would like to dedicate this dissertation to our children, Justin and Brandon.

Preface: An Illustrative Situation

Students with standard classical music training are often curious about "playing by ear" - the performance of music without notation. Sometimes they report that their attempts meet with little success. The following illustrative situation describes one student's difficulty in attempting to play by ear.

> My early exposure to music included listening to local gypsy violin music, even though my formal study was restricted to classical music. I always was fascinated by the gypsy music, but focused on classical music to prepare for a career in music education. After teaching music in the public schools for years, I decided to enroll in graduate school, to supplement my experience with additional training. I saw a sign posted in the School of Music for a violinist to play Rumanian, Hungarian, Bulgarian and Yugoslavian music for a local folk dance group. I soon became a member of the amateur Balkan band.
>
> Sight-reading ability was a required skill for performance of the Balkan music in this group. As a classical violinist, the Balkan repertoire was relatively easy for me to perform from notation. Most of the music was highly arranged and had to be performed over and over, without variation, for the dancers.
>
> The folk dance group began preparation for a European tour in 1981. I was the only violinist planning to go and was asked to play the American fiddle music as well as the Balkan music. The American fiddlers who usually performed that repertoire learned the tunes without notation, but the leader of the string band agreed to write down some tunes for me. He mentioned that the transcription was 'pretty rough', and that I would need to listen to an authentic version to fill in the details. His notation was only meant as an outline for playing this music. He loaned me tapes and records so I could listen to examples of appropriate fiddle styles.

Even though I was clearly a novice with this material, I was expected to rehearse with the dancers the next week as part of the string band. The notation of the tunes revealed no technically difficult passages, but I realized that I might need a little help with stylistic aspects of this unfamiliar repertoire and phoned a local fiddler to ask for a lesson. I selected this fiddler because he was known for his performance of many styles of American fiddle music. He did not generally give lessons, but agreed to help because I was so insistent.

We arranged a time that would allow him to return from his job, eat dinner, and shift from his daily role as a worker into that of a fiddler. When I asked him to give me a lesson, I assumed that he would also take on the role of a teacher, using instructional techniques which would quickly teach me to perform authentic fiddle music. The fiddler, however, may have viewed himself more as an informant who would provide an accurate model, but would leave technical mastery of the material and understanding of the performance style to my own initiative.

I went to the fiddler's house with all the confidence that being a polished classical violinist gave me. He answered the door and smiled as he welcomed me into the dimly lit living room where his fiddle case was on the table. He poured us some tea and without stopping to drink it, took out his violin.

The fiddler sat on the chair next to mine, played a phrase from a tune I had requested and then he abruptly stopped. 'This is going to be tough for you,' he said 'because you read music.' I had heard string band musicians explain the difficulties which classically trained violinists experience when attempting to perform fiddle music by saying 'their problem is that they read music', but I had never believed that proficiency in reading music would hamper my ability to play by ear. I proceeded with confidence.

I took out my violin, tuned carefully and played a bit of a scale to warm up. I looked for a place to set my copies of the music, but after attempting to stand the papers up inside my violin case decided that I did not need the notation since I had carefully memorized the tunes as they were notated. The fiddler started to play again and gestured for me

to play along. After repeated attempts to play along with him during the first hour of the session, I recognized that I was unable to perform the tunes by ear. That is, I could not listen and then play the tunes without referring to notation or a memorized version of the notation. When the fiddler played a tune that I had previously learned from notation, I could play along or play it back, but my performance came out exactly as I had memorized it, even though I knew that it was not the same version as the one the fiddler had just played.

The sounds which the fiddler and I made were quite different. The difference, however, did not appear to be traceable to my inability to hear, the sound production capability of our instruments or differences in our technical skill as performers. The difference in sound seemed more comprehensive than that and appeared to be directly linked with my inability to replicate accurately his aural presentation of the music. There did not appear to be any acoustical problems, since the model was clearly audible in the small living room, yet I seemed to have inadequate resources for recognizing, organizing and remembering the exact tonal, timbral, temporal and technical aspects which were aurally presented at a rapid tempo.

When the fiddler played a tune that was unfamiliar to me, I was unable to join in with him at all, much less produce an accurate replication of his performance. The fiddler did not seem surprised by my inability to replicate the music, nor did he offer any advice as to how to improve my efforts. The only technical advice that he offered was to 'use the shuffle bow' when playing fiddle music.

It was unclear to me why I was able to translate what I saw in the notation into accurate performance of the notated fiddle tunes, yet was not able to translate what I heard from the fiddler's aural presentation into an accurate replication of his fiddle performance. When the tunes were aurally presented without notation, the model seemed to disappear from my mind as soon as I heard it. I had years of music training, yet I was unable to imitate and retain these tunes without notation.

Although I realized that I did not have the skills necessary to play American fiddle music by ear, I was still not convinced that the problem was caused by my sight- reading competence. In

> frustration, I asked the fiddler how he had learned these tunes. He smiled and told a lengthy story about his visits to old fiddlers in Appalachia during his military tour of duty, but gave no specifics as to how he learned or how the old fiddlers taught.
>
> I was grateful that the fiddler lived by himself and nobody observed the situation because I was well aware of the large discrepancy in our performances. I left that evening believing my only choice was to perform the notated form of the tunes with which I had been provided and to hope that nobody would listen carefully to my part in the string band.

The experience described above, referred to hereafter in this study as the "illustrative situation", sparked my interest for investigation of related situations. Similar problems were mentioned in interviews with other members of the Balkan ensemble who were competent sight-readers yet initially unfamiliar with performance from aural presentation. Other musicians described similar situations when they were asked about their attempts at playing from aural presentation. Students in string classes which I taught with the aid of notation, appeared to have analogous problems when they were expected to play from an aural model without notation. The reports of experience and my observation of inaccurate replication of tonal, timbral, temporal and technical aspects of music from aural presentation led to the present study.

1. THE PROBLEM

1.1. Problem Statement

Playing by ear - performing music originally learned without notation - is a skill commonly utilized by musicians in many cultures (Nettl, 1983). One aspect of the competence which a musician must demonstrate in order to play by ear is the ability to replicate tonal, timbral, temporal and technical aspects of music accurately from aural presentation (Gordon, 1971; Schleuter, 1984). When playing by ear, a musician may also demonstrate other general musical competencies, including improvisation ability and instrumental technique. However, such general musical competencies have been studied separately (e.g., Chase, 1988) and will not be the focus of this paper.

A problem arises when a student, with requisite instrumental technique, wishes to play by ear but is unable to do so. The problem addressed in this study is the observed inability of such a student to replicate music accurately from aural presentation.

1.2. Possible Approaches to the Problem

Accurate replication of music from aural presentation may be affected by the interaction of many factors including student characteristics, learning processes, teacher/informant characteristics, attributes of

teacher/informant and student relationships, instruction processes, and socio-cultural context (see Figure 1). An examination of such factors as they affect musical performance from aural presentation and an initial analysis of their interactions suggests many possible theoretical paths for investigation of a student's inability to replicate music accurately from aural presentation. A brief review of some possible theories will help identify the basis for the selection of the theory of this study.

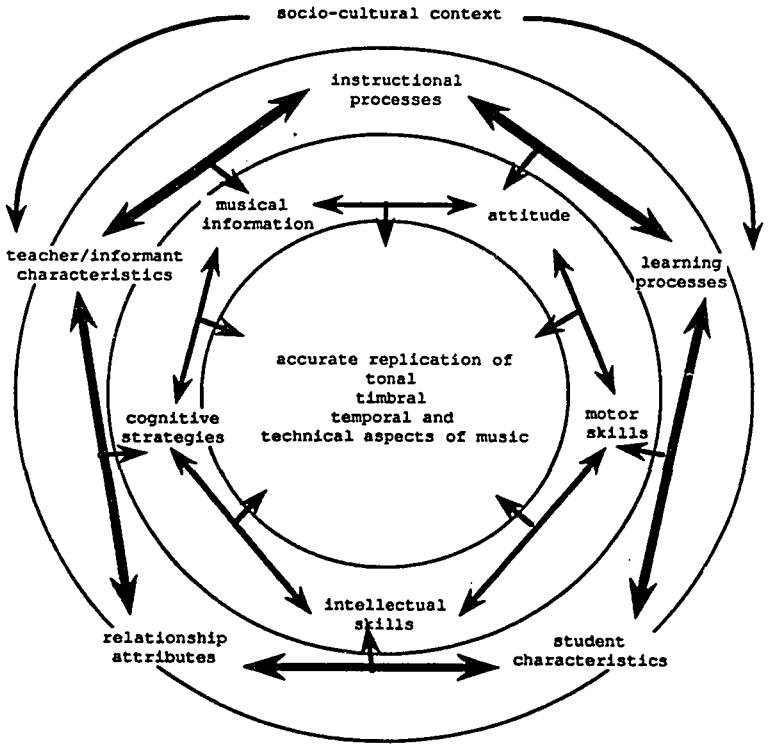

Figure 1: Some Interacting Factors Which May Affect Accurate Performance of Music from Aural Presentation

1.2.1. Student Characteristics

There are many personal characteristics which may affect a student's ability to replicate music accurately from aural presentation. Personality, sex, age, physiology, ethnicity and socio-economic level of the student are important considerations in educational research concerning students' performance (Bruner, 1966:43). However, the extent to which this research is applicable to music performance, as in the case of the specific student in the illustrative situation described in the Preface is unclear. Observation does not indicate that these are major factors since students of similar personality, age, sex, ethnicity and socio-economic level have shown success in accurate performance from aural presentation (Guntharp, 1982; Garrison, 1985). Other student characteristics which are suggested in research (reviewed in recent works by Shipman & Shipman, 1985; Reigeluth, 1983; Sloboda, 1985) include 1) cognitive styles, 2) developmental stage, 3) motivation and anxiety, and 4) technical training and competence. These may be significant influences on the student in the illustrative situation and will be examined in turn.

1.2.1.1. Cognitive styles

Aural competencies, such as demonstrated in aural discrimination tasks, may be essential aspects of accurate replication of music from aural presentation. Gordon

(1977) refers to a critical aspect of aural competence as "audiation" which is the ability to recall previously heard sounds and compare these with subsequent sounds. Radocy and Boyle (1988:315) list audiation as one possible variable in general musical ability so it may be an essential competence for accurate replication of music from aural presentation. There is no known research study which examines this.

There are, however, reports of research which indicate relationships between level of aural competence and specific cognitive styles. Cognitive styles, such as field-dependency or independency, reflectivity or impulsivity, language-boundedness or non-language-boundedness, and modality preference, are "information-processing habits: individually characteristic ways of interpreting and responding to the environment" (Shipman & Shipman, 1985:229).

Field-independent learners are those individuals who tend to have more "competence in analytical functioning combined with an impersonal orientation, while the field-dependent pole reflects correspondingly less competence in analytical functioning combined with greater social orientation and skills" (Shipman & Shipman, 1985:231). Field-independent learners have been observed to perform better than field-dependent learners in aural discrimination tasks (Schmidt, 1984), although no reason

for the difference in abilities has been identified.

Research results suggest that learners who reflect upon the accuracy of ideas and solutions, referred to in the literature as reflective learners, seem to have better aural recognition skills than the opposite type of learner, referred to in the literature as impulsive learners, who take less time to consider the validity of solutions (Schmidt & Sinor, 1986:162). It has also been suggested that language-optional learners (i.e., who can use language or set it aside to use images or numbers) perform better in aural discrimination tasks than language-bound learners who perceive and remember events primarily in terms of language (Schmidt, 1984). Further research in music education is needed to identify the extent to which these characteristics, and possibly additional cognitive style categories such as notation-optional or notation-boundedness, might be linked to the ability to replicate music accurately from aural presentation. Cognitive style studies sometimes refer to "modality preference" (Arter & Jenkins, 1977) which identifies individuals who appear to learn primarily through visual presentation as visual learners while individuals who seem to learn more readily with aural presentation are referred to as aural learners (Olson, 1980). In terms of this study, a student who is a dominantly visual learner might have difficulty

replicating music without visual notation. Cognitive-style characteristics of the specific student in the illustrative situation have not been identified. While cognitive-style theories point to areas for future research, they have not been examined sufficiently in music education research to support further examination within the scope of this paper.

1.2.1.2. Developmental stages

The developmental stage of the student is another individual characteristic which could have significance for accurate replication of music from aural presentation. Between the ages of five and ten, children seem to develop "increasing awareness of the structures and patterns that characterize music" (Sloboda, 1985;210). Awareness of these musical structures and patterns would seem to be essential for accurate replication of music. Research in musical development indicates that learning auditory patterns may be easier for adults than for children (Wohwill, 1971). Correlation of auditory input with tactile feedback has also been found to be related to development (Wohwill, 1971). In the illustrative situation the student was an adult observed to be developmentally ready to be aware of and learn auditory patterns as well as to connect auditory input with tactile feedback in performance for accurate replication of music from aural presentation.

Research concerning language development has identified a critical period for language acquisition (Gleason, 1985:283) and it is possible that a similar critical period could be found in music acquisition. If such a period exists in music development, the student in the illustrative situation may have focused on visually-aided music performance during the critical period and therefore might have missed the critical period for acquiring the aural competence necessary to replicate a musical example accurately from aural presentation. This study does not specifically address issues of development since this is an area in which further research is needed to develop the basis for such a study.

1.2.1.3. Motivation and anxiety

Motivation issues could also explain a student's inability to replicate music accurately from aural presentation. The illustrative situation in this study involved an informal, as opposed to formal, education system. Greenfield and Lave (1982:183) suggest that motivation in informal education is usually based on learner responsibility, close relationship with the teacher, and immediate social contribution by the novice. Motivation in formal education, on the other hand, is characterized less by immediate social contributions than by individual and economic factors.

Different motives may make a difference between the

effort, performance and consequences expected by the student and those expected by the teacher/informant (Keller, 1983). The student in the illustrative situation took the responsibility to ask for special help to learn the material. Although still considered a novice, the student was expected to perform the next week as part of the string band and therefore felt the need for immediate assistance from a teacher. The teacher/informant was motivated to assist the student out of friendship as well as concern for the authenticity of this type of music. The student, therefore, may have placed more value on rapid performance preparation than did the teacher/informant who may have expected to provide a slow-paced, relaxed learning environment. The student was motivated by immediate individual performance objectives, while the teacher/informant seemed to be more interested in the traditional value placed on long-term social contribution by the student.

It appears that anxiety "blocks our natural awareness and produces tension in our body" (Green, 1986:32). A high level of anxiety has been reported to interfere with musical performance by causing shaky fingers and arms, loss of sensitivity in fingers, tension, stiff body movements, forgetting of music, loss of timing sense and lack of concentration (p.16). The unfamiliar task of playing by ear may have raised the anxiety level of the student in

the illustrative situation. The student may not have had confidence and trust in her ability to play by ear. The high anxiety level may have hampered coordination for such motor skills as bowing, thus making accurate replication of the music even more difficult (Havas, 1973). However, since neither the student nor the teacher/informant reported problems involving either motivation or anxiety in the illustrative situation, they were not observed to be critical as sources for theory.

1.2.1.4. Technical training and competence

Technical training and competence of the student may not have been the most fundamental factors in the illustrative situation, since the student had previously demonstrated aural acuity and instrumental technique adequate for performance of both classical and Balkan violin music from notation. However, both may have contributed to the problem. Bowing technique, for example, has been shown to vary between different fiddle styles (Peila, 1983) and different bowing styles between the teacher and student may have caused confusion. The teacher pointed to this factor in the illustrative situation when he mentioned the need to use the "shuffle bow."

The technical complexity of a genre can also hamper a student's ability to replicate accurately from aural presentation. Research indicates that "how a thing is

learned or perceived depends not only on the past experience of the subject, but also on the demands of the task presented him" (Cole & Scribner, 1974:114). The rhythm, phrasing, melodic contours, ornaments, form and harmony of a music genre, for instance, may present more technical complexities than can be handled when attempting to replicate a musical example accurately from aural presentation, especially in a single session. This is unlikely for the particular music genre presented in the illustrative situation, since this genre is traditionally learned by folk musicians in single sessions by means of aural transmission (Guntharp, 1980; Frisch, 1987). The amount of new material to perceive aurally, however, may have been greater than expected by the teacher/informant due to the student's lack of previous performance experience in this genre.

Although the amount and kind of previous exposure to the genre as a listener may also affect accuracy of replication from aural presentation, the frequency of student exposure to the genre in the illustrative situation was evident. The student had heard the music performed in rehearsal and in performance many times with the original band members performing. It is possible that in the performance setting, the genre may have been too far removed from its cultural context for authentic exposure to the music. However, this is a problematic

biographical issue which will be left for future study.

The extent of the student's exposure may not have allowed a sufficient grasp of generic features within this fiddling style to provide an adequate analytical concept of its structure. The student had heard primarily one fiddler playing the same tunes in the same order without comparable opportunity to hear other fiddlers or other fiddle tunes. Hopkins (1986) notes the importance of a comprehensive analytical concept of structure for what she refers to as "aural thinking" (p.54). Aural thinking is based on elaborate but unspoken rules or norms for internalized structure of the music that are understood by both the performer and the listener (Hopkins, 1986:202). Transmission of music without the use of visual notation is often called oral transmission. Sloboda (1985) notes the importance of "stored structure" (p.246) in such oral transmission. The student in the illustrative situation could have lacked "aural thinking" - or "structure storing" - capabilities needed to perform these tunes from aural presentation.

Student characteristics including learning and cognitive styles; development; motivation and anxiety; and technical training and competence are integral areas of investigation in music education. Further research is needed to address these factors as they relate to student ability to replicate music accurately from aural

presentation. This study, however, will refer to student characteristics only as they relate to other aspects of the problem. Issues concerning learning processes may offer more compelling sources for theory.

1.2.2. Learning Processes

Since the student's inability to replicate the music accurately was discovered in a learning situation, a theory of learning could provide a possible explanation for the problem. The differences in music learning processes based on presence or absence of notation; ineffective use of or absence of organizational and mnemonic strategies; and effect of aural presentation of music on perception and memory may have contributed to the student's difficulty.

The use of written music notation has been discussed by many authors as a possible learning and mnemonic factor in music traditionally transmitted through aural presentation (Nettl, 1983; Small, 1977; Campbell, 1989). For example, the simplified notation of several tunes which was provided to the student in the illustrative situation may have been an interfering factor. Members of the American string band whom the student in the illustrative situation was expected to emulate did not use any notation, nor did the teacher/informant. The student depended heavily on the tunes that were previously memorized from notation. Reportedly, the notation was

intended to provide a rough outline rather than contain a prescription for replication of precise aspects of style. Dependence on the notation may have led to rigidity of rhythmic, melodic, and bowing content resulting from response to specifics within the transcription (Cole, 1974). Previous use of notation by the student may have additionally hampered understanding of the critical aspects of the music by highlighting less important aspects (Judd, 1978). The student, for instance, attempted to join in playing one tune by waiting for a section that she remembered which was notated with an open string double stop. The student was unable to locate that section and play along because in actual performance the teacher/informant did not always use a double stop as in the notated version, since it was not a critical aspect of that section.

The process of memorizing tunes from notation may also have hampered the student's ability to replicate the music by dividing it into inappropriate units (Osburn, 1966). The notation was reported to be more or less incongruent with what was being aurally presented by the teacher. While this and other theories concerning notation are possible, research has indicated that prior training with notation does not necessarily inhibit ability to process aural material (Kendall, 1988), therefore this issue will not assume major importance in

this study.

Some strategies, however, reportedly used by the student in the illustrative situation for organizing and recalling the music to be replicated may have been inadequate or ineffective. The organizational strategies that the student reportedly was accustomed to using, such as visualizing sections of music, may have been inappropriate. The student had little experience using strict observation and immediate imitation as tools in learning music and thus may not have paid close attention to such details as finger patterns and finding a visual focus, both of which might have been helpful (Green, 1986; Ervin, 1989). Exercises for use in learning by ear, such as those recommended by Ervin (1989) including singing the tune first or playing with a partner, were not utilized by the student in the illustrative situation.

Research in cognitive psychology indicates that there are differences in information processing based on aural as opposed to visual presentation of information (Chase, 1969; Bourne et al, 1979). These may be significant variables in learning. These differences in mode of presentation may also affect processing of musical information. However, the effect of aural, as opposed to visual, presentation on perception and memory has been studied in only a few cases of music learning (e.g. Greene and Samuel, 1986; Roberts, 1986).

Differences in learning based on absence or presence of notation; use of organizational and mnemonic strategies and the effect of aural presentation of music on perception and memory may have contributed to the problem in this situation. Additional research is needed which can address these learning process issues as well as the relation among aural presentation, learning and instruction processes. The problem of student inability to replicate music accurately from aural presentation does not appear to be explained with theories dealing only with student characteristics or learning processes. Alternative theories can be based on teacher/informant characteristics.

1.2.3. Teacher/informant characteristics

Individual factors discussed in respect to the student such as cognitive style and motivation could be examined in respect to the teacher/informant in the illustrative situation (Shipman & Shipman, 1985; Keller, 1983). The cognitive style and motivation of the teacher/informant along with ethnic group, sex, personality, and socio-economic level could be the basis of theories explaining the problem of this study. These, however, appear to be of little significance in the illustrative situation. As discussed in the case of student characteristics, cognitive style research has not examined the relation of cognitive style and music

education sufficiently to support this as a source of theory. Teacher motivation was reported to be high, in the illustrative situation, and therefore motivation did not appear to be a problem of major significance. Teacher/informants of similar ethnic group, sex, personality, and socio-economic level have apparently been able to aid the accurate replication of music from aural presentation (Garrison, 1985; Frisch, 1987).

Teacher preparation could affect student ability to replicate music accurately from aural presentation. The teacher in the illustrative situation had no formal training as a teacher. However, Meske (1985) notes that most teachers teach in the same way that they were taught. If accurate, this would indicate that one way to investigate a teacher's characteristics is to study how that teacher was taught. The teacher/informant in the illustrative situation reported that he learned fiddle music in very informal settings with traditional fiddlers, although he also had some formal training as a violinist in public schools. He may have had difficulty transferring the informal teaching techniques which he reported that he associated with fiddle music, to a situation such as the scheduled lesson in the illustrative situation which was informal, but not to the degree to which the teacher may have been accustomed.

Characteristics of individual teachers and teacher

preparation could provide possible theories to explain the problem of this study. However, these theories might be better addressed when appropriate instructional components are identified for use in aural instruction. Research in aural instruction processes is needed in order to test theories concerning characteristics of individual teachers and teacher preparation.

1.2.4. Teacher/informant and student relationship

The student and the teacher function not only as individuals, but also as a dyad - a small group of two. The relationship is affected by group dynamics, such as group size.

1.2.4.1. Group size

Group dynamics, including the factor of group size, may affect a student's ability to replicate music accurately from aural presentation. The illustrative situation involved only one student and the teacher/informant. In traditional transmission of fiddle music, the student often learns in a group while performing for dancers (Guntharp, 1980). This informal context could affect not only the student's motivation but also the ability to focus on significant features of the dance music. In addition, participation as part of a group is an element common in most informal learning situations (Greenfield & Lave, 1982), so it may be important for accurate replication of music from aural

presentation.

1.2.4.2. Level of formality

In a group, the members exhibit behavior, emotions, norms, goals and values that may be different than they would hold simply as individuals (Mills, 1967). These attributes are exhibited in interpersonal relations between the student and the teacher/informant including the level of formality.

As mentioned before, formality and informality have been shown to be important factors in learning situations (Greenfield & Lave, 1982). The interpersonal relationship in the illustrative situation was informal when compared with teacher/student relationships in formal studio violin lessons to which the student was accustomed. Yet the situation was more formal than the typical gathering of folk musicians where the teacher/informant would "stop at little stores and play fiddle with these old geezers all afternoon" (Manning, 1987:3). The level of formality was further affected by the absence of notation in the illustrative situation thereby providing a more informal, communicative tone (Ong, 1982). The use of notation would have created a more formal and less interactive situation (Ong, 1982:45). Different expectations for level of formality between the student and the teacher/informant may have hampered communication in the illustrative situation. The size of the group and the level of

formality could be of importance in accurate replication of music from aural presentation. Both have implications for this study as they relate to instruction, although they will not be heavily emphasized since research is scant.

1.2.5. Instruction processes

While theories have been examined herein concerning student characteristics, learning processes, teacher/informant characteristics, and some attributes of the relationship between the student and teacher, it is possible that a more immediately applicable theory can be identified as a result of an examination of instruction. There are disciplines within instruction which could provide theories useful for investigating the effect of instruction on replication of music from aural presentation (see Figure 2). Possible instruction-based theories could be formulated from instructional design, development, implementation, management and/or evaluation.

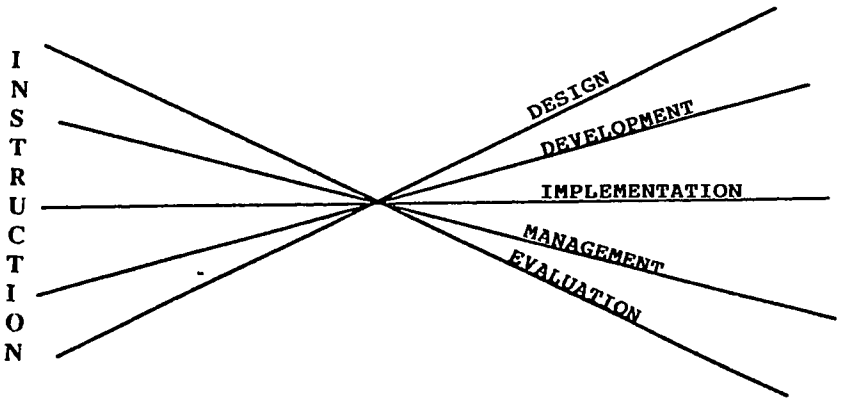

Figure 2. Instructional Disciplines (Reigeluth 1983:7).

Instructional design "is concerned with understanding, improving, and applying methods of instruction" (Reigeluth, 1983:7). It is a "body of knowledge that prescribes instructional actions to optimize desired instructional outcomes" (Reigeluth, 1983:5). As an example, the events of instruction in and types of learning outcomes from Gagne and Briggs' model (1977), discussed later in this study, can provide "direction to the designer in making appropriate instructional prescriptions" (Reigeluth, 1985:89).

The teacher in the illustrative situation reported that he was unaware of techniques that would facilitate aural instruction (Bradley, 1988). Instruction which utilizes primarily aural presentation will hereafter be referred to in this study as **aural instruction.** Other violin instruction received by the student prior to the illustrative situation focused on or assumed sight-reading ability. The ability to replicate music accurately from aural presentation was not developed or expected in these instructional settings. It was utilized only as it demonstrated an aspect of the music relating to accuracy in reading or interpreting music with appropriate stylistic characteristics.

So, instructional design research is needed concerning aural instruction as there is no known research-based model available appropriate to aural

instruction which music teachers can use to aid students' ability to replicate accurately the tonal, timbral, temporal, and technical aspects of music from aural presentation. A model based on an instructional theory could be developed for application in many instructional situations which utilize aural presentation. The effectiveness of such a model could also be subsequently tested. The construction of a research-based model of aural instruction would fall within the area of instructional design in which instructional methods are planned (Reigeluth, 1983:7). Initially, the construction of such a model would not be able to take into consideration other aspects of instructional research such as development, implementation and management, since subsequent research would be necessary. Nonetheless, instructional evaluation could be included in the construction of the model to the extent that some initial observation of aural instruction judged by experts to be successful could be undertaken to evaluate and refine the model.

Instructional evaluation deals with "understanding, improving and applying methods of assessing the effectiveness and efficiency of all of the aforementioned activities: how well an instructional program was designed, how well it was developed, how well it was implemented, and how well it is being managed" (Reigeluth,

1983:8). In this study, a model could be developed from research and evaluated in terms of correspondence with practice using a case study of aural instruction. Since it would not be quantifiably tested, the model would need further evaluation in subsequent research.

Aural instruction has been featured in music education research studies concerned with several musical styles. The use of aural instruction in several Asian cultures, for instance, is reported by Shehan (1987b). Instruction has been studied as an element affecting styles of music in some ethnographies of oral music traditions (Booth, 1986; Adler, 1979). Aspects of aural instruction, such as use of notation and size of group, have been examined in studies of fiddle instruction (Guntharp, 1980; Garrison, 1985; Frisch, 1987). A research-based model of aural instruction, however, has not been located in the research in this area.

1.3. Theory Statement

The theory selected for this study, then, is that accurate replication of music from aural presentation depends, in part, on effective aural instruction. It is assumed that the lack of a model of effective aural instruction is problematic for both research and practice and that researchers and teachers would utilize such an aural instruction model if it were available. It is

hypothesized that research-supported aspects of aural instruction will be apparent in the observation of a teacher, using primarily aural presentation, who is considered to be an exemplary aural instructor by local folk musicians and folk music students.

1.4. Purposes of Study

There are two purposes for this study. The first purpose is to identify aspects of aural instruction which research suggests may facilitate student ability to replicate music accurately from aural presentation. A model of components of aural instruction will be constructed based on that examination. The second purpose is to determine which, if any, components of the research-based model of aural instruction are used by an instructor who is acknowledged as outstanding in an oral music tradition. It is expected that the more exemplary the reports of aural instruction, the greater the use of the components of aural instruction that are supported by research and appear in a research-based model.

1.5. Procedures

This study will be descriptive and ethnographic in nature. It is descriptive in that it will investigate reports of research and undertake an ethnographic study of one case of aural instruction in order to identify,

describe, analyze and refine a model of effective aural instruction. The problem in this study is impacted by a variety of factors (see Figure 1, p. 2). One way of examining the relation of a complex group of factors, such as these, is through the use of ethnographic research (Wolcott, 1987:43). This study is ethnographic in that it describes and interprets what is reported in research concerning aural instruction and empirically examines how a model constructed from this research corresponds with and can be refined in the light of the use of aural instruction in the case of one series of fiddle classes.

The model of appropriate aural instruction will be developed based on relevant research literature in educational psychology, music education, and ethnomusicology. In order to examine the relation of this research-based model to existing practice, an outstanding aural instructor will be located whom local musicians and students identify as an exemplary teacher in an oral tradition. Among the criteria for selecting an outstanding aural instructor are: 1) identification and judgement by local musicians and students as exemplary in ability to teach students utilizing aural presentation without the aid of notation and 2) observed competence to facilitate effectively the ability of students to play by ear as judged by local musicians and students. Studies of existing practice, such as this, are used in education

to show how "education was accomplished or stymied by particular teachers and students in a particular place" (Shulman, 1986:27).

Information about aural instruction in relation to the research-based model will be provided through description of the field and qualitative methods including observation, interviewing and data analysis (Loflund & Loflund, 1984) The data consist primarily of words and music that have been transcribed as opposed to the numbers that would be found in quantitative research (Miles & Huberman, 1984). This form of qualitative study has been shown to be especially useful for examining questions in education (Spindler, 1987), in ethnomusicology (Merriam, 1964; Nettl, 1983), and in music education (Krueger, 1987; Casper, 1989).

Classes of the selected teacher will be observed, audio-taped and transcribed. Then, notes and transcriptions from these classes will be scanned using analytic induction (Goetz and LeCompte, 1981) to locate which observed components do or do not correspond to the research-based model of aural instruction. Descriptions of researcher, teacher, students, and setting will be given in Chapter III. The teacher will be interviewed before and after the class observations (see Appendix 7.1). Students will fill out a questionnaire (see Appendix 7.2) and will participate in post-class interviews (see

Appendix 7.1.). Further discussion of procedures will be undertaken later in this study.

Data from transcriptions, observations and interviews (see Appendix) will be compared with the research-based aural instruction model to determine correspondence with research-supported aural instruction, and to further refine the model.

1.7. Limitations

The model of aural instruction components identified in this study will be modified as indicated by observation, questionnaires and interviews, but not experimentally tested. That will await future experimental research. Questions of the applicability of the model to particular settings, rank ordering of most important aspects of model, and utilization of model with instruments other than the violin will not be addressed. These areas will also require further research and are beyond the scope of this paper.

2. REVIEW OF LITERATURE

A review of research is necessary in order to provide a background of support for the development of a model of components of aural instruction. To begin, this chapter investigates reports of research concerning aural learning and aural instruction as discussed in the literature of cognitive psychology, educational psychology, ethnomusicology, and music education. In order to structure this investigation, literature related to aural learning is examined first beginning with definitions of rote and aural learning. Literature in psychology and educational psychology is then surveyed as to the impact of aural mode of presentation on human information processing systems including perception, sensory memory, short-term memory, and long-term memory. This includes a discussion of stages of aural learning reported by ethnomusicologists and expected outcomes of aural learning in the areas of cognitive strategies, motor skills, attitude, musical information and intellectual skills which appear to be components of musical performance from aural presentation (see Figure 1, p.2). Second, an overview of research regarding aural instruction is presented, including definitions of rote teaching and aural instruction, reports of instruction in which aural presentation is utilized, studies which discuss the need

for appropriate aural instruction and research concerning the process of aural instruction. Finally, this chapter concludes with the proposal of a research-based model of aural instruction formulated in terms of and summarizing the research reviewed.

2.1. Rote and Aural Learning

While music educators often refer to performance of music from aural presentation as "learning by rote", psychologists and educational psychologists refer to learning that lacks meaning or organization as rote learning. The term "rote learning" has historically carried negative implications in educational psychology. Drever (1952) defines rote learning as "learning by pure repetition, regardless of meaning and without any attempt at organization"(p.249). Koivukari (1982) views rote learning as simple imitation of the input where "each connection has to be learned anew; no adaptive transfer occurs because there is no unifying schema, which would structure the perception and guide the response"(p.15). Cole and Scribner (1974) describe rote learning as "memorizing specific instances"(p.113) as opposed to using classification. Bateson (1972) notes that "educators have strong opinions about the value (positive or negative) of training in rote learning. 'Progressive' educators insist on training in 'insight' while the more

conservative insist on rote and drilled recall"(p.295).

Rote learning is differentiated from concept learning in studies of artificial intelligence. In describing machine learning, Chabris (1987) states that "the simplest of all forms of learning is rote learning, which essentially boils down to memorization"(p.204) as opposed to concept learning which uses classification systems.

The separation of rote learning from concept learning or use of classification is questioned by Bjorgen (1964) who suggests that there may not be any fundamentally different way to learn. His research indicates that meaning is an element used to aid memory in cases of so-called rote learning, though the meaning may be imposed through past uses of concepts and classification. Thus, the rote learning of nonsense words such as " 'twas brillig and the slithy tove did gyre and gimble in the wabe" (from "Jabberwocky" by Lewis Carroll) may be aided by the use of concepts and classification based on meaning from past language learning. Research by Hull (1940) suggests that there may be improvement in rote learning over time and thus a skill of learning to learn by rote may be identifiable. This improvement in rote learning may be based on refined use of past concepts and classifications in new situations.

Learning without notation, playing by ear, what music educators refer to as 'rote learning' and some

aspects of what is termed 'oral transmission' in ethnomusicological literature all require learning from aural presentation without the use of visual notation and will hereafter be referred to as **aural learning.** Aural learning is investigated next in light of the effect of aural presentation on information processing.

2.1.1. Impact of aural mode of presentation

People receive information through all of the sensory modes; that is, a person may hear, see, taste, smell, feel, or combine senses to obtain information. The primary sources of information are visual (iconic) and aural (echoic) perception (Bourne et al., 1979). While aural information is important in all music learning, it is the primary source of information in aural learning.

Psychologists refer to the difference in cognitive activity caused by presenting information through different sensory modes as the effect of "presentation mode "(e.g. Margrain, 1967; Penney, 1975). Such differences in cognitive activity based on mode of presentation have been studied in psychology for many years (Henman, 1912; Washburn, 1916). In the case of aural learning, "mode of presentation" signifies the use of primary presentation in the aural sensory mode. The instructional choice of aural presentation impacts learning through effects on perception and memory as well as the transition from aural presentation to performance.

One theoretical perspective in cognitive psychology describes the acquisition of new information as an information processing system (Bourne et al, 1979). This system is fed by perception and perceptual information which is then stored in sensory memory, short-term memory, and long-term memory (Bourne, 1979, based on Atkinson and Shiffrin, 1968). Mode of presentation is being researched by cognitive psychologists in terms of each of these aspects of the human information processing system. Research regarding presentation mode and its relevance for aural learning and aural instruction will be reviewed next in terms of information processing components of perception, sensory memory, short-term memory, and long-term memory.

2.1.1.1. Perception

Perception is defined as "the extraction of information contained in the structure of a stimulus in the perceptual field" (Carlsen, 1981:2). Music is an aural phenomenon and both playing by ear and using notation require auditory perception as noted in Carlsen's (1981) list of some auditory perception skills needed by all Western musicians including aural perception of intonation, melodic sequence and pattern, theme and variation, polyphony, chords and their sequence through time, tonality, mode, tempo change, rhythm pattern, ensemble, and meter. While all musical performance

requires the use of aural perception, replication of musical material without the use of notation employs aural perception for the primary information input.

The initial perception of information from visual and auditory inputs appears to be processed in different areas of the brain (Deutsch and Deutsch, 1973). Research in brain-damaged subjects indicates that visual and auditory perception areas may also be used differently (Judd, 1983).

Amos (1986) studied differences in rhythm pattern perception in aural, kinesthetic and visual modalities. He found that rhythm patterns can be detected in all of these modalities, but that "hearing is the best modality for rhythm pattern perception" (p.122). Rhythm patterns were perceived with differing degrees of accuracy across modalities with perception in aural mode being the strongest, followed by kinesthetic and then visual. Order of difficulty for the patterns was the same in each modality.

There appear then to be differences in perception that can be attributed to mode of presentation. In spite of the fact that research is needed to relate these differences in initial perception to learning and instruction, the importance to music perception of the aural mode of presentation lends support and has implications for the proposed model of aural instruction

of this study. Another aspect of information processing for investigation is the effect of aural presentation on sensory memory.

2.1.1.2. Sensory memory

The initial entry areas for information are referred to as sensory memories (Bourne et al, 1979:8). Sensory memory may be more important for aural learning than for visual learning because:

> Whereas meaningful visual patterns occur all at once, spread out in space, meaningful auditory patterns occur piecemeal, spread out in time. For an auditory event to be perceived as a unit the early portion of that event must be held while the later portions unfold (Crowder, 1976:45).

Sensory memory has been found to be different for visual and aural input. Evidence for this difference is obtained from recognition, sampling and masking tasks (Crowder, 1976). Iconic decay (visual) is shorter at about one second and echoic decay (aural) is longer (Darwin, 1972).

Studies show that "when a stimulus is first presented and information is available in sensory memory, a person can attend to whichever aspects are desired" (Bourne et al, 1979:38). Sensory memory may transfer to short-term memory when attention is focused on something.

When more than one modality is used "selection allocation of attention to sensory modalities does not affect the early stages of perceptual processing"

(Shiffrin, 1974:460). Research concerning attention has studied the possibility of divided and/or selective attention. It appears that attention can be split between ears for aural attention, but the dividing requires time (Broadbent, 1954). Shiffrin and Gardner (1972) theorize that selective attention during perceptual processing of visual information is not possible, but that attention determines what can be done with the information once it is moved to short-term memory.

Aural instruction today is greatly impacted by the use of visual presentation due to the increased use of notation. There are assorted uses of notation even in primarily oral traditions, and the degrees to which a culture is impacted by notation varies. Many cultures use some type of basic written notation for coordination and communication of music. Some cultures have notation systems that are not used for learning or performance, but are used primarily for preservation and occasional reference or as a way of standardizing music (Nettl, 1985:64). Western culture, and some cultures emulating Western culture, use notation for copyright, education, composition, and analysis (Nettl, 1983; 1985).

The effect of notation use is discussed in the case of Indian music (Wade 1979), in popular music (Bennett, 1983), in Western music (Cole, 1974; Wishart, 1977), in psychomusicology (Sloboda, 1985) and in cross-cultural

music studies (Nettl, 1983). The impact on various cultures has been discussed by Nettl (1985) while specific case studies of notational impact include North Indian music (Booth, 1984), Cape Breton fiddling (Garrison, 1985), and Asian music (Archer, 1961). The use of materials from many primarily oral music cultures as part of multi-cultural music education requires consideration of the impact of notation. The large variety of notation systems and the uses and drawbacks of these systems need further research before recommendations can be made as to possible appropriate use(s) of notation for music from primarily oral traditions. The most appropriate presentation of music from aural traditions, however, appears to be in primarily aural mode.

Whether or not dual attention is possible in music is still not clear. In the case of reciting prose while sight-reading piano music, Allport, Antonis and Reynolds (1972) reported that dual attention may be possible. Reineke (1978) found little interference in dichotic presentation of digits and music, but found interference when either digits or music were presented dichotically. Dowling (1973) showed that subjects can recognize melodies that overlap, but, in terms of attention, tend to select one or the other stream. Further research is needed to determine whether dual attention with aural and visual stimuli or aural and aural stimuli can be used in aural

presentation or whether aural instruction should avoid dual attention draws. Such research is beyond the scope of this paper, but information from these sources suggest that, in the proposed model of aural instruction, an aural mode of presentation which does not utilize dual attention draws may be effective in sensory memory.

2.1.1.3. Short-term memory

Information from sensory memory appears to transfer with attention selection to short-term memory. This memory is described as "a working memory, a place where conscious mental processes are performed" (Bourne et al, 1979:30). Differences between aural and visual modes of presentation in terms of transfer from sensory memory to short-term memory, storage and organization in short-term memory, and retrieval of information from short-term memory have direct implications for the model of this study and will be discussed below.

Transfer from sensory memory to short-term memory may involve either intersensory change (i.e. aural to visual) or intrasensory change (i.e. aural to aural). Studies report differences in transfer of intersensory and intrasensory information. It appears that adding aural input to visual input helps, but that adding visual input to aural interferes with the processing of the aural information (Sperling, 1960). It has also been suggested that immediate recall in short-term memory is easiest

going from aural information in sensory memory to aural short-term memory recall, while going from aural information to visual recall or from visual information to aural recall appear to be equally difficult (Olson, 1978). Intersensory transfer is of special importance in the teaching of notation reading in music (White, 1983). Aural presentation requires the intrasensory transfer of aural to aural which research suggests is the easiest transfer to make (Olson, 1978). Such research implies that aural instruction which uses aural intrasensory transfer may be possible at an earlier developmental stage than instruction which utilizes intersensory transfer as in the performance of music from visual notation, although there is no known research which directly examines this theory.

The storage of auditory short-term memory and visual short-term memory appears to be separate in that "two tasks performed simultaneously in differing sensory modalities do not necessarily interfere with each other" (Frick, 1984:507). Auditory short-term memory has a consistently stronger storage demonstrated by superior recall at recency position for auditory as compared to visual memory (Penney, 1975 and Murdock, 1969). This difference in short-term recall for items at the end of presentation based on mode of presentation is known as the **modality effect.**

Recent studies have used musical material to investigate the modality effect using different auditory stimuli. One study using musical material showed stronger recall for auditory presentation than for visual, but without the strong difference at the recency position, or "modality effect" (Roberts, 1986). This appears to indicate a difference in recall patterns for music information as opposed to semantic information in auditory presentation, because the modality effect did not appear to be as prominent in memory for musical material in this case as it did in previous memory research with semantic material. Another study, however, did show strong differences in recency position, or modality effect, for musical material, indicating a similarity in storage of all auditory material (Greene & Samuel, 1986:521). Further study is needed to provide a model of differences between aural and visual short-term memory for musical material, but based on this research it appears that research on modality effect of the proposed model of aural instruction may be an important area of future research on information processing in aural learning.

Differences in organization of information have been compared in auditory and visual short-term memory. The sequential presentation of auditory information as opposed to the simultaneous presentation of visual information affects retrieval from short-term memory

(Margrain, 1967) and order of recall (Murdock, 1969). Auditory sequences are sometimes experienced as co-occurring "streams" so that "HLHLHL" sounds like "H H H or L L L" (Jones, 1978:248). Dowling (1973) found that rhythmic grouping determines subjective chunking in short-term memory. Sequential presentation and rhythmic groupings which characterize auditory short-term memory may explain the usefulness of additive, aggregative and formulaic forms used in oral traditions which will be described below. The organization of information in auditory short-term memory needs to be considered in the organization of presentation in aural instruction. The use of small sections that are linked, after practice, as part of aural presentation and the retention of rhythm patterns used in guiding aural learning are organizational components of aural instruction which take into consideration these aspects of organization in auditory short-term memory. These will be included in the model of aural instruction of this study.

Retrieval of information from short-term memory has shown slower search rate when presentation and test modalities that differ from one another are employed (Chase, 1969). This difference indicates an advantage in evaluation of aural short-term learning through aural testing. So, it appears that short-term learning from aural presentation may be more effectively evaluated with

assessment which utilizes aural presentation of assessment information. This will also appear in the model for aural instruction proposed by this study.

2.1.1.4. Long-term memory

Long-term memory is described as the final memory bank which "holds the vast amount of information we have learned in the past, along with rules for processing that information" (Bourne et al, 1979:30). While there has been research which supports the use of overt response for transfer of learning to long-term memory (Weinstein and Meyers, 1986), specific modalities have not been studied in terms of their transfer of information from short-term to long-term memory. There is, however, considerable research concerning the retention, retrieval and coding of information which reaches long-term memory from different modes of presentation.

There are many types of information stored in long-term memory. The primary types seem to be semantic information, that is, information about meaning, and visual information, which appears to involve picture-like codes of information (Bourne et al., 1979:59). There is evidence that long-term memory may also include codes corresponding to taste, smell, motor and acoustic information. Studies of memory in reading and listening to discourse suggest that an "acoustic-phonetic" memory may play a role in storage of auditorily presented

material (Sach, 1974:95). Research comparing semantic and acoustic information indicates that semantic information is more readily available than acoustic information (Bruce & Crowley, 1970), which could indicate that inclusion of semantic information could aid in the recall of aural presentations. The instructional technique of "naming," which will be discussed below, is a guidance tool which provides semantic information to aid aural recall.

The coding of information in long-term memory may happen through an imagery system as opposed to a verbal system. Research in imagery is based on the notion that "units abstracted and interpreted during perception are stored in long-term memory in an abstract format and must be acted on by processes that serve to generate or to produce an experience of an image" (Kosslyn, 1975:341). The imagery system is a specialized means of encoding, storing, organizing, transforming and retrieving information concerning concrete objects and events, while the verbal system is specialized for discrete linguistic units and structures (Paivo, 1975:635). It appears that the two systems are accessible independently by relevant stimuli and that they are interconnected so that non-verbal information can be transferred to the verbal system and vice versa (Paivo, 1975). It has been shown that use of imagery can interfere with perception of both visual and auditory signals (Segal, 1970). The interference

seems to be most evident when the imagery and signal are in the same modality, that is, visual images block visual signals and auditory images block auditory signals more profoundly than visual images block auditory signals or auditory images block visual signals (Segal, 1970). This has implications for this study, suggesting possible perceptual interference in auditory processing by the student in the illustrative situation. However, research is needed to study the effect of aural presentation on imagery systems as opposed to verbal systems in long-term memory before this can be applied to the practice of aural instruction.

Research in mode of presentation shows that there are aspects of information processing - perception, sensory memory, short-term memory, and long-term memory - that may be processed differently with aural as opposed to visual presentation. These differences support the need for attention to specialized components of aural instruction. This investigation of aural instruction may provide a field setting for this research.

2.1.2. Learning stages

While studies have indicated that there are impacts from mode of presentation that may affect all levels of aural learning, it also appears not only that aural learning may involve a series of learning stages; but also that aural learning may be a necessary stage in all music

learning.

Several studies have investigated the possibility of identifying stages of music learning (Davidson, McKernon & Gardner, 1981; Funk & Whiteside, 1981). Lord (1960) found that music learning progressed in three stages in epic song style in the oral tradition of Serbo-Croatian bards. First, the bard must listen and absorb, then practice and apply, and finally perform for an audience.

Similar, but more detailed stages for learning to play by ear in oral traditions are suggested by Adler (1979) in the case of traditional oral transmission of banjo music. The stages outlined by Adler include: 1) unmarked stage in which an individual has his initial encounter with the music; 2) minimally marked stage in which the individual has a more affecting encounter; 3) active stage in which the individual becomes a more competent listener; 4) intentional stage where interest to learn instrument begins and is the trigger for beginning to play; 5) liminal performance where individual is playing, but not improvising; 6) authentic performance stage of beginning banjoist; 7) playing with a band; and 8) competent banjoist who is adaptive and improvisatory. Music learning stages, proposed by studies such as this, may indicate that an effective aural instruction model could progress in several steps reflecting appropriate learning stages.

Three stages of aural fiddle learning are isolated in a study by Guntharp (1980). He suggests that the steps followed in learning to play fiddle by ear are:

> 1. Initial introduction to and acquaintance with the instrument.
> 2. The development of specific bowing techniques and patterns to effect rhythmic punctuation.
> 3. The incorporation of ornamentation into simple tune lines to vary and enliven basic melodies (p.39).

He further notes that steps one and two are necessary to being a fiddler, while step three is more advanced and is for continued growth.

Scholars have also applied the idea of stages of learning to the study of music learning in general. Dobbins (1980) views aural learning as an early learning stage necessary when learning any music. The four music learning stages which he proposes begin with exposure to music resulting in recognition of common melodic and rhythmic prototypes. Next, he notes that "formal study usually begins with simple rote imitation of the teacher and mastery of elementary principles of notation and music reading" (p.37). His third stage includes expanded and spontaneous music, and the final stage is improvisation.

Each of these studies by Lord, Adler, Guntharp and Dobbins suggests that aural learning does not happen instantly, but is developed in several stages or steps. Although the exact number of stages and descriptions of these stages may vary, all of these studies seem to agree

in referring to stage(s) in which the student is introduced and exposed to the music, stage(s) in which technical study is undertaken, and stage(s) where the student returns to the original music to exhibit personal mastery, improvisation and performance of the material. A model of aural instruction may also need to reflect these three stages or groups of stages.

It appears that aural learning may include several learning stages. Aural learning may also produce several expected learning outcomes.

2.1.3. Expected learning outcomes

Gagne and Briggs (1979) discuss five types of learning outcomes: cognitive strategies, verbal (in this case, musical) information, attitudes, motor skills, and intellectual skills. Aural learning outcomes can be extrapolated within each of these areas.

Cognitive strategy learning involves "utilizing various means for controlling one's thinking/learning processes" (Aronson & Briggs, 1983:81). The cognitive strategies listed by Michaelis & Hannah (1977) for imitative learning that are among the expected learning outcomes in aural learning include "noting steps and details presented in the model (observing); recalling how to perform previously learned skills which are needed (remembering); copying the individual steps as they are demonstrated; and reproducing details presented in model"

(p.124). Several "learning to learn skills" which are expected cognitive strategies of aural learning listed by Thomas (1972:26) include: attending and orienting, auditory discrimination and recognition, auditory memorization, memory span and mnemonics, and listening and communication skills. Students playing by ear would, according to Thomas, demonstrate that they have developed cognitive strategies for accurately replicating music from aural presentation each time they accurately replicate a new tune from aural presentation.

Verbal information learning is acquisition of the capability to state information (Gagne & Briggs, 1979). Information in aural music instruction is stated musically, not verbally. Evidence of musical information learning might include capability to perform the correct pitch and rhythm patterns as well as demonstrated aspects of musicality such as, the ability to phrase correctly or to provide appropriate dynamic levels.

Attitude learning is shown by a decision to behave in a particular way. Attitude learning in aural instruction might be evidenced by the decision to continue to learn by ear and to persist in the performance of music learned in this manner.

Intellectual skill demonstrates that a student has learned a concept. In aural music instruction, advanced intellectual learning may be evidenced by the ability to

ornament, play a back-up accompaniment, and improvise or create new compositions appropriately (as suggested in Sloboda, 1985:138).

Motor skills include bodily movements executed smoothly and in proper sequence (Gagne & Briggs, 1979). Motor skill learning is particularly important in instrumental music (Hedden, 1981; Sidnell, 1981). Evidence of motor skill learning in aural instruction could be seen in correct kinesthetic response, such as fingerings and bowings, in relation to the aural stimuli.

The expected learning outcomes for aural instruction include a variety of skills within the categories of cognitive strategies, musical information, attitudes, intellectual skills and motor skills. These expected aural learning outcomes, as well as the impact from aural mode of presentation on human information processing systems and stages of aural learning, are among the factors for consideration in development of the proposed model for aural instruction. First, however, a review of aural instruction issues is necessary.

Although research has not directly addressed aural instruction, studies reviewed here consider aural instruction in light of related literature. This overview includes definitions of aural instruction, reports aural instruction cases, and proposes an outline of the aural instruction process.

2.2. Aural Instruction

Instruction is defined by Merrill (1971) as "the process where by the environment of an individual is deliberately manipulated to enable him (sic) to learn to emit or engage in specified behavior under specified conditions or as responses to specified situations" (p.1). Aural instruction can thus be defined as the process of manipulation of the environment to enable a student to learn to replicate music accurately as a response to aural presentation; that is, learning music "by ear" without the aid of notation.

Aural instruction is often known as "rote teaching" or "oral transmission". Instruction used to facilitate replication of music from aural presentation is referred to as "rote teaching" by music educators. The use of aural versus visual approaches in music education is often discussed in terms of "rote versus note" (Shehan, 1987; Gordon, 1984; Keene, 1982; Booth, 1986). Ethnomusicologists and anthropologists, on the other hand, refer to orality and oral transmission within cultures that utilize primarily aural presentation without the aid of writing and/or notation. Clarification of these and other uses of terminology is necessary to research regarding aural instruction.

2.2.1. Reports of rote teaching

Authors often refer to rote teaching in discussions concerning music education. Keene (1982) excerpts a discussion of music teaching from a lecture by Samuel Hall (1832) and notes that it discusses the "values of teaching music by rote, a system that appeared to have it's roots in the Pestalozzian concept of anschauung"(p.143). This concept emphasizes an intuitive or natural approach to learning through experiences before formal instruction begins. Lowell Mason, also a Pestalozzian, believed in the use of rote teaching, but only until reading of notation could be established (Keene, 1982:188). The techniques of rote teaching are still undefined in these writings. Luther Whiting Mason (1870) was one early music educator who advocated the use of rote teaching and attempted to define the techniques, stating that:

> This kind of singing (singing as it happens) is not altogether useless, as in many cases there is a freshness and energy about it that serves to awaken a love for singing, and to furnish a basis on which to build a subsequent course of musical instruction. But there is wide distinction between this haphazard singing and genuine 'rote singing.' The latter is the most important part of instruction, in vocal music. Genuine rote singing implants at the beginning true musical impressions. It leads to a discrimination between a musical and unmusical style. A child will learn more easily, and enjoy better singing in a good rather than a bad style, if he has the right examples at the start (quoted in Keene, 1982:193).

Music educators continue to define rote teaching in terms of aural presentation. In her Experiences in Music, Gelineau (1970) includes a section concerning "Rote

Songs." She defines learning a song by rote as "much like learning anything else by rote - that is, in effect, learning 'by ear.' If a teacher sings or plays a song on an instrument or from a record and the children sing back the words and tune they have heard, they are learning the song by rote. All songs taught in this manner are referred to as 'rote songs'"(p.16).

Instrumental music education research uses "rote teaching" to refer to aural instruction. Kendall (1978) describes the Suzuki method of presenting music without the aid of notation as "a rote approach similar to the way the young child develops language ability"(p. 8). In a review of research concerning rote pre-study for piano sight-reading (Fincher, 1983), Noble (1984) describes rote learning where "the student plays (or sings) through imitation of what he/she hears and sees"(p. 86).

Rote music teaching is not without critics. In his chapter on sight-reading, Roe (1970:137) states that "teaching of music by rote is an extremely slow and laborious process. Students cannot accumulate the necessary knowledge of music from such a teaching method, for it does not provide for learning with increasing perception in the future." Schleuter (1984:23) notes that "some instrumental music instructors speak negatively about rote training and believe that students fail to learn music reading when rote taught. These instructors

do not understand or recognize the importance of initial rote training of songs and pattern vocabularies and the process of verbal association which then leads to music reading." Music education literature in the United States has traditionally used the term "rote teaching" to indicate that a musical example is to be presented aurally without the aid of notation, although the word "rote" is not defined by standard sources in this manner. Webster's (1953) definition for rote is "a fixed, mechanical way of doing something; routine" (p.1267). Among music dictionaries, rote is usually defined only as "a medieval instrument" (Apel, 1969:741). There are no immediately available dictionary definitions of rote which specify the use of aural as opposed to visual presentation. It is unknown how "rote learning" and "rote teaching" came to be used to specify aural presentation as they are used today in the terminology of music education, although drill which often is used to reinforce aural learning may have seemed similar to rote drills traditionally used in memorization. Instruction utilizing primarily aural presentation which is referred to by music educators as rote teaching will hereafter be referred to as **aural instruction** in this paper. In ethnomusicology, aural instruction is known as "oral transmission" which will be discussed below.

2.2.2. Orality and oral transmission

Research in orality and literacy is primarily concerned with the differences among cultures that use strictly oral communication and those that also use written language. Literature concerning orality and literacy has been reviewed by Finnegan (1988) and by Foley (1988). Learning from primarily aural presentation as found within oral traditions is often referred to as "oral transmission" by anthropologists and ethnomusicologists (e.g. Ong, 1982; Nettl, 1985; Booth, 1986).

Ethnomusicological research concerning aural music learning is found in the reports of music studies from various oral traditions. Considering ethnomusicological research in this area, Nettl (1977) lists four recurring models of oral transmission including: 1) instruction with oral learning regularly checked by teacher on specific songs and pieces; 2) exposure to repeated live performance as the main instruction; 3) teaching, primarily in improvisational music traditions, of fundamental material, such as a radif in Iranian traditional classical music, and not actual pieces; and 4) music theoretically learned in only one hearing. The second and fourth models represent informal learning by imitation and observation. These two models do not necessarily include the use of direct instruction and so may or may not be examples of aural instruction, although they certainly involve aural learning. The third type is

an advanced aural instruction approach designed for teaching excerpts specifically for use in an improvisational form which is a competence level beyond the scope of this paper. The first model seems to refer directly to what is known as rote teaching in American music education and is referred to here as "aural instruction".

2.2.3. Reports of aural instruction

When aural instruction is used to enhance aural learning, it does not need to be devoid of meaning and organization as the term "rote teaching" might imply. Examples of aural instruction and aural learning have been observed in oral as well as notated music traditions. A review of formal and informal music education using aural instruction in world music cultural settings (e.g., Nettl, 1985) as well as Western music education (e.g., Scheulter, 1984) suggests that meaning and organization can be exhibited in music teaching which does not utilize notation, at least in the initial stages of music learning (e.g., Suzuki violin instruction).

It has been shown that a great deal of information in traditional world music cultures is learned "by rote", meaning it is learned through oral drill (Hirsch, 1987:30-31). Studies of oral traditions show that aural learning is often facilitated by aural instruction that use memory aids and formulas that characteristically are "highly

rhythmic, additive rather than subordinative, aggregative rather than analytic, and redundant or 'copius'" (Ong, 1982:33-39). Formulas in oral traditions form patterns of words or music, especially common in traditional cultures, from which conventional or ceremonial expression is composed. Formulas were traditionally part of oral transmission because "in an oral culture, knowledge, once acquired, had to be constantly repeated or it would be lost: fixed, formulaic thought patterns were essential for wisdom and effective administration" (Ong, 1982:24). Formulas have been studied in epic singing by Lord (1960) and in epic poetry by Goody (1977) and Havelock (1979). In each study, they found oral poets used fixed formulaic structures or groups of words that deal with traditional material in set patterns (Ong, 1982:60-67). Brown (1965) demonstrates how formulas are used in South Indian mridanga performance in that "it is desirable to get certain formulations of strokes kinesthetically regularized before proceeding to the additional exigencies of the tala framework"(p. 112). In the oral transmission of North Indian tala performance, Booth (1986) shows how the gaida system is a formulaic device and notes that " the formula is crucial for establishing meaning and context in a non-referential system of communication"(p.337). Similar musical formulas used in African-American blues songs are examined by Jarrett

(1984). Thereby, Lord (1964) notes one can "see that although this process should not be described as haphazard, which it is not, it does not fit our own conceptions of learning a fixed text of a fixed song"(p.24).

Aural instruction found in oral traditions often involves directed learning with guidance provided by the teacher (Merriam, 1964:146). Aural learning does not require literacy, but it does utilize meaning and organization which is or can be aided by instruction in either formal or informal schooling (Scribner & Cole, 1978).

There are numerous ethnomusicological accounts of music traditions which document the use of aural instruction (e.g., Garrison, 1985; Booth, 1986). Berliner's (1978) discussion of mbira instruction and Nketia's (1974) examination of music instruction both discuss the use of aural instruction in African cultures. Several studies of Indian music contain information on indigenous aural instruction (Booth,1986; Brown,1965; Howard,1977). Descriptions of aural instruction in Japanese traditional music are provided by Stockton (1987) and Archer (1961). Shehan (1987b) surveys aural instruction in several Asian cultures. The impact of Western formal music education on instruction in oral traditions is presented in several studies (Van Khe, 1961;

Schuyler, 1975; Nettl, 1985). Learning the fiddle in American aural tradition is examined, with brief reference to instructional assistance, by Thede (1962), Peila (1983) and Guntharp (1980). These reports suggest that there are world music cultures in which instruction is used to aid aural learning.

Historical reports suggest that aural instruction played a minor role in the development of American music education. The earliest formal music instruction in America emphasized teaching of sight-reading skills in tune books by singing school masters (Hitchcock, 1974). This early emphasis on notation was modified by the Pestalozzian influence in the early 1800's that "believed in the thing before the sign, or rote before note" (Keene, 1982:188). This was followed by a period from 1885 to 1905 in which "how to teach music reading became a paramount question of the age" (Birge, 1928:113). The popular instruction returned to the "song method" at the turn of the century which featured "rote songs as a basis for primary music reading" (Birge, 1982:145). The question did not seem to be whether aural or visual presentation could be equally valid, but rather the assumption was that visual presentation was best. The only question seemed to be whether to go from aural to visual or straight to the visual.

The Orff and Dalcroze methods were introduced in

America in 1930 and with them the philosophy that aural instruction should come before notation was renewed (Landis and Carter, 1972). The introduction of the Kodaly method in 1958 and the Suzuki violin method in 1959 further emphasized going from "sound to sign." The introduction of eclectic methodology did not include specific instructional techniques for primarily aural instruction although many instructional techniques used in these methods might be appropriate in aural instruction. The Orff and Kodaly methods include songs from various oral traditions, although they are not necessarily introduced with aural presentation. Orff and Dalcroze methods include training in improvisation that may be effectively presented utilizing aural instruction techniques. The Kodaly method is aimed at the development of literacy. The Suzuki method does emphasize aural learning skills at a beginning level, but is more specifically directed toward the development of the student's performance competence as a route to a positive self-concept. So, although there has been interest in aural learning, little has been done to provide a model of how instruction can aid aural learning.

2.2.4. Proposed aural instruction components

The theory of this study has proposed that an appropriate model for aural instruction can be identified which facilitates students' ability to replicate music

accurately from aural presentation. There are many factors involved in performing music from aural presentation (see Figure 1, p.2) which need to be considered in developing appropriate aural instruction. This section presents further instructional psychology research bearing on the development of a model of aural instruction and summarizes research reviewed in this chapter concerning learning and instruction processes which may direct appropriate aural instruction.

As mentioned before, instructional design considers events of instruction and the relation of these events to learning outcomes (Gagne & Dick, 1983). Bruner (1966) explains that "the events of instruction provide the external conditions of learning that are required to activate the support for internal processes of learning" (p.41). The events of instruction described by Gagne et al. (Gagne & Rohwer, 1969; Gagne & Briggs; 1979; Gagne & Dick, 1983) will serve as a framework for the continuing discussion and summary of components for effective aural instruction in terms of: gaining and maintaining attention, pretraining and directing objectives, presenting stimulus, guiding learning, eliciting performance, providing feedback, assessing performance, and enhancing retention and transfer of learning. Proposed aural instruction components placed within the framework of these events of instruction are summarized in

a proposed research-based model of aural instruction (see Figure 3).

2.2.4.1. Gaining and maintaining attention

The first event of instruction discussed by Gagne et al. is gaining and maintaining the attention of the learner so that other instructional events can proceed. As mentioned before, in terms of short-term memory, the focus of attention may help to transfer the stimulus from sensory to short-term memory where attention may determine what can be done with information (Shiffrin & Gardner, 1972).

Music educators have indicated interest in the gaining and maintaining of attention in aural instruction (Ernst & Fargo, 1978; Garretson, 1976; Gelineau, 1970). There is, however, no known music education research focused directly on gaining and maintaining attention during the course of aural instruction.

Effective aural instruction is observable in many cultures. One means of gaining and maintaining attention reportedly utilized by many oral traditions is the use of immediate student participation with mnemonics (Shehan, 1987b) and/or with actual musical material (Kelly, 1985; Guntharp, 1980; Frisch, 1987; Garrison, 1985). Hence, the model of aural instruction proposed in this chapter reflects the traditional oral transmission practice of immediate participation with mnemonics and/or musical

material.

2.2.4.2. Pretraining and directing objectives

Effective instruction begins with a short review of previous, prerequisite material and a short statement of goals (Rosenshine & Stevens, 1986). Expected learning outcomes from aural instruction include performance of psychomotor skills, thus an effective method of pretraining and directing psychomotor skills entails "a demonstration of the usefulness of the knowledge or skill described in an objective" (Reisner & Gagne, 1982). Review of prerequisite material and display of the new material may be given in separate demonstrations or the same presentation.

The demonstration of an objective requires that the instructor present the best possible model of the proposed musical product as suggested by many music educators (Swanson, 1969; Garretson, 1976). This may help to provide the schema necessary to structure perception and guide response (Chabris, 1987; Koivukari, 1982) mentioned earlier in this chapter. The urgency for the best possible aural model is tied to issues raised by Amos (1986), reported above, regarding pattern perception.

2.2.4.3. Presenting stimulus

As mentioned before, research has shown that the way in which stimulus material is presented can effect learning outcomes (Gagne and Rohwer, 1969). Factors which

effect learning outcomes in aural instruction, including mode of presentation, amount and combining of material presented (i.e., chunk and link presentation), and context will be discussed below.

Presentation mode of the stimulus in aural instruction is, by definition, aural. As previously discussed, this is particularly important in the aural instruction of music because, as it has been found by Reisner and Gagne (1982), "instructional stimuli should be similar to the stimuli involved in the performance to be learned" (p.500) in that it should be in the same modality. Aural presentation may also assist recall as previously indicated, due to strength of storage of auditory short-term memory as compared with visual. The utilization of a single modality at any one time helps in avoiding dual attention draws since, as mentioned earlier in discussion of sensory memory and mode of instruction, research is not clear on this issue. As long as the material is presented in an aural mode, however, there does not appear to be any difference based on the use of recorded as opposed to live stimuli (Reisner and Gagne, 1982).

Amount and sequence of material presented need to be considered because small steps with student practice after each step appear to be effective in structured instruction (Rosenshine & Stevens, 1986). This appears to be

especially important in aural instruction because of sequential presentation and rhythmic groupings which characterize auditory short-term memory as discussed previously. Effective aural instruction seems to use small sections that are linked after practice. This is similar to the mnemonic device of grouping knowledge into units, followed by narrative chaining, or "chunk and link" (Bourne et al, 1979:47; Travers, 1982:112).

In music education this technique is used in the "phrase" method in rote teaching as opposed to the "whole song" method (Ernst, 1978; Bush, 1985), although the "chunk" or step may need to be smaller than a phrase depending on the complexity and amount of new material the music contains. Two procedures for teaching "rote songs" are compared by Bush (1985). She refers to the phrase method as the parrot technique which she describes as "a method in which the teacher sings a line, phrase or small section of a song and the children as a group repeat it immediately" (p.4). The technique of reverse chaining is defined as "a method in which the teacher models the whole song while students listen. After several presentations, the children are allowed to sing the last word of a phrase or section, then at later presentations, students sing one or two words continuing until the entire song has been learned" (p.4). The parrot technique was found to be the more effective technique in the

comparison.

Context of the stimuli presentation has been shown to be a particularly potent aspect of instruction (Gagne and Rohwer, 1969). The appropriate context can lend strength to learning through meaning. Bradley (1989) notes the problems associated with learning music away from the appropriate context since "a good many of the active ingredients of the music are filtered out in transmission. This filtering is augmented by the removal of the tune from the functional category" (p.26). In aural instruction, it is particularly important to learn new material in its' appropriate musical context, such as new melodic or rhythmic patterns learned in the context of an appropriate tune. The context of the music itself adds meaning and structure to aural learning so that it does not become the type of meaningless learning referred to by psychologists as rote learning.

2.2.4.4. Guiding learning during practice

Learning guidance refers to the aid provided by the instructor during initial practice that facilitates the acquisition of "particular capabilities specified in the objectives" (Aronson & Briggs, 1983:92). Techniques of guidance vary with the type of learning objective as well as the developmental level of the student (Aronson and Briggs, 1983).

As mentioned before, there are various ways in which

different musical traditions build meaning and organization in aural learning and instruction. The process of understanding structure of aural input is referred to as "aural thinking" by Hopkins (1986) in her research in the oral fiddle tradition of Norwegian hardingfele. Hopkins (1986) explains that "aural perception (like visual perception) involves the grasping of structural features; in applying these ideas to cross-cultural study, this abstraction of cognitive elements is influenced by concepts of appropriateness that are themselves determined by previous knowledge"(p.208). Aural instruction can provide for aural thinking by the means of learning guidance using structural features which utilize naming, rhythm patterns, imagery and verbal, onomatopoeic and/or kinesthetic mnemonics.

Semantic information has been shown to be useful in the recall of acoustic information (Bruce and Crowley, 1970). Naming provides learning guidance by providing semantic information to which students may pin their new learning (Loftus, 1980:183). Naming can be as simple as telling the name of the piece to be learned or as complex as naming various parts (Rubin, 1977).

Rhythmic structure can be a useful learning guide in aural instruction. The rhythmic structure may build a formulaic structure similar to the formulas used in oral traditions (Ong, 1982; Foley, 1988). It is suggested that

the aural presentation retain the rhythm even if the melody is removed for teaching the text (Rubin, 1977).

Imagery may provide mnemonic aid for long-term memory (Crowder, 1976). Imagery can be used in aural learning to remind the student of a sound that is like the new music or how a part sounds like another tune (Paivo, 1977 and Sheikh, 1985).

Devices specifically designed to aid memory are known a mnemonics (Loftus, 1980). Verbal mnemonics in music are vocal sounds used to aid memory of vocal and instrumental pitches or patterns. Verbal mnemonics are used in many cultures such as the solmization systems used in western music education (Landis and Carter, 1972) and in China, Korea and Japan (Kaufman, 1967) and rhythmic systems used in North and South India (Wade, 1979; Brown, 1965).

Onomatopoeic mnemonics, in music, are vocal patterns which sound like important aspects of the corresponding instrumental patterns which they help to recall. The use of onomatopoeic mnemonics which utilize vocal sounds to represent drumming patterns are discussed in Van Khe (1967), Jones (1959) and Carrington (1949). Onomatopoeic mnemonics utilizing vocal sounds to represent bagpipe patterns are studied in Grant (1925), Collinson (1966), Weiss (1979) and MacNeill, (1987). Kinesthetic mnemonics can also be added, as in the case of finger motions used along with Samavedic chants (Howard, 1977).

Verbal, onomatopeic and kinesthetic mnemonics serve several important mnemonic functions by providing retrieval plans, imagery, focus of attention, organization and rehearsal (Loftus, 1980). As an example, a clear focus of attention is critical to memory (Bourne, 1979) which may be provided for with use of verbal and onomatopoeic mnemonics that focus on specific musical attributes. The onomatopoeic nature of these syllables also seems to provide appropriate imagery much like the use of words that "sound like" another applied to learning a foreign language (Atkinson and Raugh, 1975). Verbal, onomatopoeic and kinesthetic mnemonics can organize material by means of chunks which represent patterns or by narrative chaining (Loftus, 1980). Verbal, onomatopoeic and kinesthetic mnemonics also add additional rehearsal in recitation which can aid in transferring material to long-term memory (Bourne, 1979). In addition, onomatopoeic mnemonics provide a retrieval plan by associating a word with a sound for "peg word association" (Loftus, 1980:183). These onomatopeic mnemonics are much more than "nonsense syllables", as they are frequently referred to in music research, but are useful learning aids which assist memory by providing focus of attention, imagery, organization, rehearsal, and retrieval plans. Teachers may, therefore, guide aural learning by presenting verbal or kinesthetic mnemonics, or by helping student to devise

their own mnemonic system.

2.2.4.5. Eliciting performance

An overt response and/or a process which helps to produce an image may aid in transfer of learning into long-term memory, although this has not been researched concerning specific modalities (Weinstein & Mayer, 1986; Kosslyn, 1975). A high level of active participation for all students has been suggested without reference to modality (Rosenshine & Stevens, 1986). It appears that the response needs to be directly related to the objective, which may be determined partly by the modality (Aronson & Briggs, 1983). In the case of aural instruction, it is important for storage (Green and Samuel, 1986) and recall (Olson, 1978) that the response be musical performance, not a verbal or written response.

2.2.3.6. Providing feedback

Feedback is "formulative evaluation" (Gronlund, 1981:18) during instruction to provide continuous feedback to both student and teacher. Providing feedback is an integral part of the instructional process (Gagne & Dick, 1986). Feedback should be related to the type of expected learning outcomes (Gronlund, 1981). Expected outcomes for aural learning include the aspects of musical information, cognitive strategies, intellectual skills, motor skills and attitudes discussed previously. Feedback in aural

instruction requires a variety of techniques to relate to these diverse learning outcomes.

Gagne and Briggs (1979) point out that feedback for motor skill learning should provide specific teacher comments containing information on the degree of accuracy and timing of performance. It has been shown that objective learning, such as learning musical information and cognitive strategies, is best aided through specific teacher comments, with the next best approach being general comments, and the lowest results coming with no comments (Page, 1968). Objective learning outcomes, such as particular pitches or rhythms, in aural learning require specific teacher comments.

In oral traditions and in informal learning situations, feedback is provided by participation and social contribution (Greenfield & Lave, 1982). It would appear, then, that subjective learning outcomes, such as attitudes toward aural instruction, can benefit from feedback through performance with peers.

2.2.4.7. Assessing performance

Assessing, or evaluating is "the process of determining the extent to which instructional objectives are achieved by pupils" (Gronlund, 1981:22). It has been shown that assessment needs to be congruent with the objective (Gagne & Briggs, 1977).

Expected learning outcomes for effective aural

instruction may serve as objectives for assessment design. Learning outcomes that are based on cognitive strategies, motor skills and musical information can be assessed through student performance. Aspects of attitude and intellectual skills can be assessed through student improvisation and creation of new musical material. Attitude can be assessed with both performance and improvisation/creation.

2.2.4.8. Enhancing retention and transfer of learning

It should not be assumed that a skill will transfer to another situation (Aronson & Briggs, 1983). Instruction needs to focus on how the transfer can be made. In aural learning, the skill learned is the ability to replicate music accurately from aural presentation. This skill needs to be practiced in a variety of examples in the same, as well as different, musical styles.

2.3. Research-based Model of Events of Aural Instruction

Appropriate components for effective aural instruction are proposed in the Research-Based Model of Events of Aural Instruction (see Figure 3). These components are framed by the events of instruction (Gagne & Rohwer, 1969; Gagne & Dick, 1983), although they may or may not necessarily appear in this order in actual aural instruction. There is not sufficient research to rank order these components at this time and some may later

prove to be more critical to effective aural instruction than others.

The seven events of instruction are separated into three groups in the model using terminology associated with the musical sonata-allegro form. Gaining and maintaining attention, pretraining and directing objectives, and presenting stimulus are listed under "exposition" because they present initial musical information in aural instruction somewhat analogously to the way in which a "theme" is presented in the first movement of a sonata. Guiding learning, eliciting performance, and providing feedback are grouped under "development" since they structurally promote and elaborate on aural instruction in ways analogous to the development of the theme in a sonata. The recapitulation section includes assessing performance, and enhancing retention and transfer of learning since students and musician-teacher use these events in the restatement of the objective of aural instruction in a manner analogous to the restatement of the theme in sonata-allegro form.

Having proposed this research-based model of events of aural instruction, it is now possible to observe aurally presented group fiddle instruction to evaluate the empirical appearance of these components in order to refine the model for later testing.

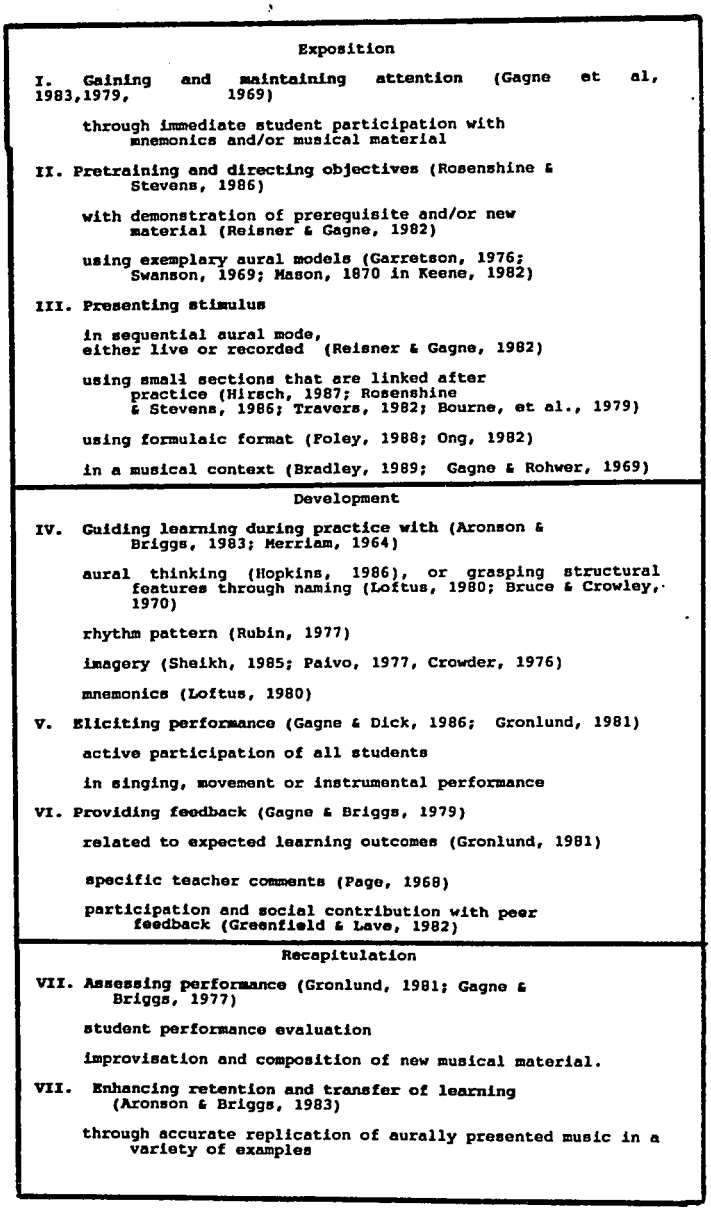

Figure 3. Research-Based Model of Events of Aural Instruction

3. APPLICATION OF RESEARCH-BASED MODEL OF AURAL INSTRUCTION IN OBSERVATION OF ONE CASE OF FIDDLE TEACHING

This study has a dual purpose. The first task was to identify components and construct a model of aural instruction which existing research suggested would facilitate students' ability to replicate music accurately from aural presentation. The second task is to examine the correspondence between the proposed research-based model of events of aural instruction and one case of aural instruction. This examination will be accomplished by comparing components of each instructional event within the research-based model of events of aural instruction with those utilized in the group aural instruction of an outstanding fiddle instructor. This chapter will describe the field of the observed case, and report procedures used and analysis undertaken.

3.1. Context of the Case Study

Fiddle music is prevalent in Washington State where this research site is located. The city of Seattle, alone, hosts hundreds of fiddle performers at the Northwest Folklife Festival during each Memorial Day weekend. Every July, thousands of fiddlers go to the Port Townsend "Fiddle Festival." Many of these and other fiddlers throughout the state learned to play by ear on

their own, yet others have had guidance or direct instruction by fiddle teachers (Oien, 1988; Williams, 1988).

Many ethnic and cultural groups in the area have fiddlers, groups of fiddlers, and classes or workshops available. The fiddlers in the Irish community play primarily by ear and learn their tunes in the "Northwest Irish Pipers Club" which meets weekly and holds workshops (Boyle, 1984). Scandinavian fiddlers learn primarily by ear through classes and workshops.

Many fiddle contests are held in the area. These contests emphasize flashy performance of novel material and hence contestants are more likely to use notation (Oien, 1988). Most fiddle contests "tend to force defensive recitations of pre-composed hot variations of 'contest' tunes, kept short to minimize vulnerability to the judges' relentless thirst for a mistake" (Bradley, 1989:28). Some fiddle contests are supposed to direct the participants to emphasize "old time fiddling" and "dance tunes", but the move toward show pieces and notation is overwhelming in most contests (Williams, 1988).

The public school instrumental music programs in the area emphasize European art music, particularly from common practice period 1700-1850. From the beginning of their instruction, students are expected to play primarily from notation. Several aspects of sight-reading are

listed as student learning objectives, while accurate replication of music from aural presentation or playing by ear are not mentioned (Shoreline School District, 1983).

Suzuki violin training which begins with aural presentation is available locally, but it is not directed toward the ability to play by ear. The use of aural presentation is most prominent in the initial stage of Suzuki training and students do not continue to practice the skill of replicating music accurately from aural presentation. Suzuki aural instruction employs exact pitch and rhythm reproduction, in contrast to expected fiddle norms that emphasize improvisation and ornamentation (Japan-Seattle Suzuki Institute, 1988).

Although many local fiddle teachers report that they prefer to teach aurally, most also utilize other presentation modes, especially when students request notation. Some fiddle teachers are not willing to work with groups. But it was decided that for the purposes of this study, group fiddle instruction would be more comparable to class music instruction in schools. Hence, that became the field within which observation was undertaken.

3.2. Procedures of the Case Study

From the beginning of this study efforts have been made to keep in mind problems of external reliability, or

ability of the data to be replicated from descriptive procedures. Five areas of information necessary to assist external reliability are listed by LeCompte and Goetz (1982) and are addressed in this study: the status of the researcher, selection and background of informants, description of social situations and conditions, identification of analytic constructs, and explanation of methods and data collection and analysis. A brief discussion of each of these follows.

3.2.1. Status of the researcher

A fiddle teacher was chosen for observation because the researcher, as a classical violinist, fiddle performer and music teacher in the community, is able to analyze techniques of fiddling and fiddling instruction more effectively than performance techniques and instruction of other instruments. Fiddle, rather than classical violin, music was chosen because it is traditionally taught through aural instruction.

The researcher in this study was not participating as a student in the observation classes. Ability level of the researcher was not appropriate for participation as a student. Observations also required more attention than possible while participating as a fiddle student. The researcher did participate in fiddle workshops which were taught by teachers other than the fiddle teacher in the case study.

3.2.2. Selection and background of informants

The primary informant in this study was the fiddle teacher. In initial attempts at observation of aural instruction in 1987, one group fiddle teacher was frequently mentioned as an outstanding teacher who utilized primarily aural presentation without the aid of visual notation in fiddle instruction. Pilot observations were undertaken in several of her classes in Fall, 1987.

Among the pilot observations which were used to identify the teacher for this study was the beginning fiddle group which met on the University of Washington campus as part of a continuing education program. Not only did the teacher present all instruction aurally, but also she had students sitting in a circle and maintained an informal traditional folk fiddling atmosphere even though the class met in a university classroom. These observations showed that she used aural presentation effectively and that students in her classes learned a great deal about replicating music accurately from aural presentation and thereby developed their ability to play fiddle by ear. The case study project was described to the fiddle teacher. She agreed to participate and showed interest in knowing the final results. This agreement allowed the study to proceed.

Nine students served as secondary informants in this study. Information from the questionnaire showed that

they were adults whose ages ranged from 26 to 50, with high education levels. Students heard about the class through the local university and all reported at least some college training. Three had masters degrees and two had doctorates. There was a great deal of interest by the students in the results of the study when they understood that it would be part of a dissertation. Five of the students were teachers or professors in fields other than music and may have had a bias and special interest in questions pertaining to instruction. The class they signed up for was an intermediate class. It was decided that in order to observe the results of aural instruction in the scope of this study, an intermediate class would allow a wider range of performance activities through which to assess the model of aural instruction events.

3.2.3. Description of social situation and conditions

There are three social situations under which information was gathered. These included the class observations, the workshop and interviews.

Formal observations were arranged to tape and observe the teacher's Winter, 1988 intermediate fiddle classes. Once scheduled, it was arranged that data would be collected from observations of a series of classes, a pre-interview questionnaire given to both teacher and students, interviews with the teacher and students, as well as informal interviews and observations in related

situations. Analysis was to be undertaken in terms of the class observations. While the observations provided the main source of information for discussion of correspondence of the research-based model with aural instruction observed, the other data help to describe the context of the observations.

When using observation, the researcher considers what, where, how to record, how many observations and what the researchers role should be (Whiting, 1970). As mentioned above, observations were undertaken in the intermediate class of a well-regarded fiddle teacher in Seattle. The class consisted of nine students ranging in age from twenty-six to fifty. All had some experience playing fiddle and were interested in developing the ability to play fiddle music by ear. The observations focused primarily on the instructor's use of aural instruction to promote student ability to replicate music accurately from aural presentation.

The formal observations were made in the Winter, 1988 intermediate fiddle class which met in the instructor's home near the University. The classes had an even more informal character than the initially observed University class, with the intermediate students sitting in a circle of chairs in the living room. Although the group was sometimes broken into smaller groups, all could still hear the others when that occurred. No other grouping was

observed.

Each two and one-half hour class was audio-recorded with the researcher observing and taking notes concerning description of some visual features such as seating arrangement, bowing, use of student tape recorders and some facial expression. Tapes of the verbal interchanges from the seven classes were transcribed with observer's notes integrated with the transcription.

One student solo was also transcribed (see Appendix 7.4.1.), as was the teacher's presentation of the same tune, (see Appendix 7.4.2.), an exercise (see Appendix 7.4.3.) and the chunk and link pattern for one tune (see Appendix 7.4.4.).

As mentioned above, the researcher explained the project to the fiddle teacher before observing the Winter, 1988 classes. The fiddle teacher introduced the researcher to the students as an observer from the University. When the questionnaire was presented at the third class, the project was identified to the students as a study of how instructors can aid student ability to learn to play by ear. Again, the researcher did not participate as a student in the regular fiddle classes, but did participate as a student in fiddle workshops by other teachers in which students from the observation class also participated.

3.2.4. Identification of analytic constructs

The analytic constructs which were examined in the observational case study were discussed in Chapter 2 and appear in the proposed model of events of aural instruction (see Figure 3).

3.2.5. Explanation of methods and data collection

3.2.5.1. Questionnaire

The written questionnaire completed by students at the third class session was designed to aid in the observations and to provide some information to facilitate interviews. Students were asked to give name, age, occupation, education, fiddle experience, family musical experience, other instrument experience, other classes in which currently enrolled, previous fiddling experience and self-appraisal of progress. Students were also asked if they could come to an interview session or if other interview times could be arranged. A copy of the questionnaire is in Appendix 7.2.

3.2.5.2. Interviews

Ethnographic interviews are important tools for discovering information about specific cultures (Spradley, 1979). Interviews in this study were used to support the observations of instruction. Interview questions were designed to bring out information about performance from aural presentation, including factors shown in Figure 1. Students and teachers in this study were asked questions about their initial and current fiddling in

terms of socio-cultural context and learning process, characteristics of their past and current teachers, instruction processes used by their teachers or that they would recommend, and goals in terms of their own motivation and self-esteem as a student. Personal data regarding socio-cultural context and student characteristics had been previously supplied in the questionnaire. An outline of questions used in the interviews is in Appendix 7.1.

The outline of questions was used to frame questions in student interviews. Three students were individually interviewed in the researcher's home at a meeting one week after the last regular class session. Three students were unable to attend the interview session and were interviewed on the phone. Two students were interviewed in their offices. One student moved and was unable to be interviewed in person. The researcher mailed a copy of the interview questions, which the student answered and mailed to the researcher. Written, phone and in-person interviews were similar in amount and type of information that the students provided.

The instructor was interviewed before the classes were observed. Questions at the initial interview related to her training as a fiddler and teacher. The instructor was interviewed again after the classes were observed using the same student interview questions as a guide.

3.2.5.3. Related observations and interviews

The fiddle teacher observed in this study took part in some other fiddle workshops as a student. One of these workshops was held in conjunction with a dance camp. The researcher also participated in this workshop as a fiddle student and took observational notes.

An expert foreign fiddle teacher was brought to Seattle for a series of workshops. The researcher participated in one of these workshops at the home of the fiddle teacher observed in the case study. The workshop was audio-recorded and observational notes were taken.

The fiddle teacher in the case study grew up and was trained in the area. Several of her fiddle performance associates and former teachers were interviewed to obtain information about fiddling and instruction in the area as well as to discuss their views concerning aural instruction.

3.2.6. Analysis

A general research-based model of events of aural instruction was developed prior to pilot observation of the classes (see headings in Figure 3, p. 76). Each week the class notes were reviewed and initial scanning began to identify correspondence between the model and the case study.

Analytic induction is a technique for "scanning the data for categories of phenomena and for relationships

among such categories, developing working typologies and hypotheses upon an examination of initial cases" (Goetz and LeCompte, 1981:57). This strategy was used to locate items relevant to aural instruction. Information from the initial observations was used to develop codes, based on the model along with new information, to frame the class observations.

Codes are "retrieval and organizing devices that allow the analyst to spot quickly, pull out, then cluster all the segments relating to the particular question, hypothesis, concept, or theme" (Miles and Huberman, 1984). Information from analytic induction in this study was coded with initials corresponding to the instructional events for aural instruction. The coding chart is included in Appendix 7.3.

The aural instruction model which was developed prior to the class observations served as a typological frame for the formal observations. As discussed before, the observations of these classes were audio-taped and transcribed and some initial coding was made. This material was analyzed by typological analysis (Goetz and LeCompte, 1981) using categories from the theoretical frame provided by the aural instruction model. Adjustments were made as more specific coding seemed appropriate. Further adjustments were made in the model after observations were completed.

The analysis of effectiveness for this case study is based on a comparison of the fiddle teacher's performance with the research-based model of aural instruction. In normative research, such as this, "a given exemplar of instruction is compared to a model or conception of good teaching derived from a theory or ideology. The criterion of effectiveness uses correspondence rather than correlation as its test" (Shulman, 1986:28).

In concluding this section on analysis it is necessary to discuss the question of internal reliability and validity. Internal reliability is "the question of whether, within a single study, multiple observers will agree" (LeCompte and Goetz, 1982:41). This study addresses the issue of internal reliability through peer examination of the model and review by the informants. The model of aural instruction has been presented at clinics which are reported in Appendices 7.6 and 7.7. Music teachers at these clinics showed agreement with the theoretical frame. In an attempt at reflexive analysis, the results of the study were reviewed by the fiddle teacher, the teacher/informant from the illustrative situation described in the preface and by selected student informants in order to confirm the accuracy of description and appropriateness of the interpretation of the data.

Internal validity is the degree to which the researcher actually observed and measured what was thought

to be observed and measured. This study addresses this issue in several ways. The researcher has studied the situation over many years of participation as a fiddler and teacher. Informant interviewing is used to validate the data. The observations were made in the natural class setting. The model was constantly questioned and reevaluated. As an example, the researcher observed an effective teaching technique for eliciting a response used by the fiddle teacher in the study was class singing. Singing response was then added to the model and the coding chart for future observations.

External validity, the question of ability to generalize findings across groups, is affected by factors of selection, setting, history and construct (LeCompte and Goetz, 1982). The selection of the fiddle teacher observed in this study was limited for this study by locale, and expertise of the researcher. The researcher selected the teacher based on local comments and therefore the informant was limited to a local teacher. The researcher is a violinist and fiddler and chose a fiddle teacher so that analysis of techniques would be more accurate. Other studies could use instructors from other locations or in other instruments or styles of music.

The setting for this study is described (see section 3.1.) as closely as possible to facilitate comparison. The history of music educational research has typically

ignored situations outside of formal educational institutions, such as that studied in this case. It is hoped, however, that further research can be done in this area to verify the correspondence of aural instruction in formal and informal class instruction. The constructs of instructional events used in this study are strongly documented in educational literature (Gagne and Briggs, 1979). The use of instructional events as a frame for the research-based model of appropriate aural instruction may enhance the generalizability of the model of the study for testing in other aural instruction settings.

3.3. Summary

This chapter has described the setting and procedures of the aural instruction observational case study the results of which will be examined next for correspondence with the research-based model of aural instruction.

4. CORRESPONDENCE BETWEEN OBSERVATIONAL CASE STUDY AND RESEARCH-BASED MODEL

The theory proposed in this study is that accurate replication of music from aural presentation depends, in part, on appropriate instruction. It is hypothesized that components of aural instruction similar to those in a research-based model will be apparent in observation of a teacher using primarily aural presentation who is considered to be an exemplary teacher by performers in the folk music community and folk music students. The proposed model of events of aural instruction (see Figure 3) presents instructional components based on existing research in relevant fields. The observational case study, whose contents and procedures were described in Chapter 3, was intended to examine the aural instruction of an exemplary fiddle teacher for use in comparison with the research-based model of aural instruction. This chapter reports the results of that comparison.

Results indicate a strong correspondence between the research-based model and this particular case of aural instruction. Comparison of instructional components will be discussed within the events of instruction framework. The sections that follow examine components within gaining and maintaining attention, pretraining and directing objectives, presenting stimulus, guiding learning,

eliciting performance, providing feedback, assessing performance, and enhancing retention and transfer. All areas suggest a strong correspondence between the aural instruction used by the fiddle teacher and the aural instruction outlined in the research-based model. Throughout this chapter, dates of observations cited will provide reference necessary to locating the information presented on audio-tape recordings and in transcriptions.

4.1. Gaining and Maintaining Attention

The research-based model of aural instruction suggests gaining and maintaining attention through the use of immediate student participation. Class observations revealed that the fiddle teacher in this study did gain and maintain attention through immediate participation using familiar tunes, exercises and new tunes.

The fiddle teacher frequently used tunes learned previously to gain attention of the students in the opening minutes of the class. An example of this instructional technique is found in the class opening on the first meeting of the Winter, 1988 sessions. Even as the students were still arriving, she began class on January 26, saying "So, why don't we play something like 'Soldier's Joy'; you all know that" and the group joined immediately with her in playing the tune. As more students arrived she maintained the attention of the early

arriving students and gained attention of the newly arriving students, saying "I just want to do something that you can all warm up on. Do you know 'Tennessee Waltz?". The use of immediate participation using old tunes became such a standard way to start class, that on March 8, the class began a jig before the teacher arrived and she joined in as they continued to play.

Immediate participation through finger, bowing, and stretching exercises was also used in several classes to gain and maintain attention. At the first class of beginners observed in Fall, 1987, the teacher had each student say their name and then play it on their fiddle. Even though most students had never made a sound on their instrument before, they were able to immediately participate in this exercise. The teacher started the February 2 intermediate class with a new exercise, stating "ok, let's play a little. Use just four inches at the top of the bow. Play an A scale use four inches, that's all." The exercise quickly focused the attention of the students on fiddle technique. Class on February 16 began with a structured finger pattern exercise which she called the "Big Train" (see Appendix 7.4.3.). On February 23rd, the class began with "Let's start with some stretching" and proceeded through a series of stretching, fingering and bowing exercises.

New tunes were typically presented after review of

familiar tunes and the occasional use of exercises in the intermediate class. It should be noted that during the beginning class in Fall, 1987, new material was occasionally used to start the class as there were few tunes that they knew in common.

Following review and exercises in the intermediate class, initial presentation of new tunes involved immediate participation to maintain attention. On February 9, for example, the class began by performing a tune they had learned previously. Attention was maintained during the change to a new tune. When the teacher asked "Yeah, how many of you have listened to it fifty times or more? Or at least a lot? OK, so let's try taking the whole A part slow and then we can break it up." The use of participation instead of lengthy explanation or demonstration seemed to help maintain student focus.

Students noticed the relationship between immediate participation and attention. In one interview session, a student commented:

> I was really dependent on really paying attention. When we would play in class I'd just have to force myself to play and not to be afraid that I'd be hitting the wrong notes and go with my instincts, like when I think I know where a note is; just go for it and sometimes I'm right.

The use of immediate participation was an ubiquitous and emphasized factor in the gaining and maintaining of attention in these fiddle classes. Other techniques may

have been employed, but patterns of use were not evident. For this study, therefore, they were not part of this report.

4.2. Pretraining and Directing Objectives

The model of aural instruction suggests the use of demonstration to pretrain and direct objectives for aural learning. The fiddle teacher in this study did use demonstration, almost exclusively, as the means for pretraining and directing the objectives. Some of the demonstrations were of entire tunes in the desired final form. Other demonstration were of phrases or small sections that demonstrated an aspect of style, such as double stops or turns.

4.2.1. Full demonstration

Each new tune was demonstrated in its finished version by the teacher thereby setting the performance objective for the students and giving them a chance to consider which previously learned techniques would need to be used. Each student came with a tape recorder and it was expected that they would tape the demonstration and listen to it many times during the coming weeks. The first new tune was demonstrated near the beginning of the first class session. The teacher suggested on January 26, that the students "just listen and see if you can find out something about the rhythm and the feeling of it."

Many more tunes were learned in the classes from

teacher demonstrations which each student tape-recorded. An example of a complete demonstration tune can be found in the transcription of the teacher presentation of "Waltz in A" (see Appendix 7.4.2.). This demonstration was similar to the other full tune demonstrations in the classes observed for this study, in that it showed the entire version of the tune with the desired repeats and ornamentation.

At the February 9th session, the teacher went beyond playing one version of the tune for demonstration, stating "I will play this tune a couple of times for your tape recorders with some little variations." The advanced objective of learning variations was a bit beyond the ability level of most of the students. One student asked for a slow version of the A section and the teacher said "OK, I'll play the whole thing slow with some little variations." Even at a slow tempo, she insisted on demonstrating the correct finished product.

4.2.2. Section demonstration

When the objective was to learn a particular ornament, bowing, or finger pattern, the fiddle teacher demonstrated the objective in a small section of a tune. As an example, on February 2, when the objective was to learn double stops, the teacher demonstrated with the B section of one tune, saying "So, why don't you listen to me play it and I'll put in double stops where I think they

might go." Bowing objectives were demonstrated on February 9 the same way, using small sections of a tune noting "I'm doing that same old basic thing of slurs and separate [plays excerpt] yeah, [plays more] same thing there [plays more]." Sometimes, as on March 8, the demonstration included a negative example as well as a positive example as in "So, what can we do in this part so that it comes out, [plays section correctly] and not [plays section incorrect way]."

Students often mentioned the example that the teacher set in her demonstrations. One student interviewed stated that the fiddle teacher was effective because "by example one has a standard to shoot for." The use of demonstrations to pretrain and direct objectives was an effective instructional technique used by the fiddle teacher in this study. This use of demonstration exemplifies the proposed component of pretraining and directing objectives in the proposed model of events of aural instruction.

4.3. Presenting Stimulus

Presentation by the fiddle teacher closely resembled the proposed presentation in the research-based aural instruction model. Presenting used the aural mode, was sequential, used small segments that were linked after practice, and provided a musical context to present the

material.

4.3.1. Aural mode

Aural instruction is based on the use of aural presentation. While all music classes use some aural presentation, it is difficult to find a classroom music teacher using primarily aural presentation in music without the use of notation. The fiddle teacher in this study was chosen as an example of an instructor who used primarily aural presentation and avoided notation. Both pilot and formal observations showed that her main mode of presentation was aural. She expected students to learn from her aural demonstration and tape recordings of her demonstrations, without the aid of any notation.

As mentioned before, the research (Reisner & Gagne, 1982) indicates that aural presentation can be either live performance by the teacher or a recorded example. The tunes for the class in this study were performed by the teacher, although sometimes she used records and tapes of the desired musical outcome to provide another example. In the solo performances at the end of the series of classes, only one student played a solo learned from a class presentation. Others chose tunes learned from phonograph records, or tape recordings of other fiddlers.

The aural presentation by the fiddle teacher was not always as clear as desirable. The transcribed example of the teacher's version of "Waltz in A" (see Appendix

7.4.2.) shows the presentation of section B and how the model was interrupted when the beginning of this section was temporarily forgotten. One student played the "Waltz in A" as a solo at the last session. The transcription of this student performance of the "Waltz in A" (see Appendix 7.4.1.) shows there are several mistakes in the beginning of the B section which are similar to the teacher's presentation of the B section. It appears that, in this case at least, the unclear presentation may have hampered the student's ability to replicate the tune in that section accurately in musical terms.

The students were acutely aware of the impact of the primarily aural presentation. At the final class session on March 8, the teacher asked the students to say something they liked and something they did not like about the class. Each student mentioned that they liked not using notation, but several students mentioned that it was also something that they were bothered by. One student mentioned that:

> I have a conflict 'cause what I like is also what I don't like. That's the learning things by ear is really good. I've developed; my ear has improved a lot. But, I also find it very difficult to practice after I get home by playing it on the tape. It usually doesn't stick in my head so I don't develop the speed that I need. So, I guess what I'm saying is that I'd like to have some music also, but that may be a crutch.

Another student answered:

> I'd use it. I used to play the french horn so I read music. But I never could do anything on my own on

> the french horn without music. So, I'm glad that we're learning without the music.

Students were concerned that the tape was difficult to use for study purposes. The fiddle teacher suggested that in the future a high quality study tape could be provided with the tunes presented in a predictable order so that time would not be wasted trying to find a particular tune.

Interviews with students provided more comments about the use of primarily aural presentation. When asked what the teacher did to help their playing, quite often students' answers reflected the impact of aural presentation. They made comments such as: "she makes you do it without music," "she has a goal of no sheet music" and "not providing music helped." One student admitted going home and writing the notes out for later reference. Another student had so much difficulty learning the tunes from aural presentation in class and on audio-tape, that he had his wife help him write the notes out and then learned the tune using the notation and the tape at the same time. One student noted that it was easier to learn in class than from the tape because "listening is easier with a person, it's more human."

In summary, the fiddle teacher did use primarily aural presentation as proposed in the aural instruction model. In some cases, however, students had difficulty with it. This needs to be researched further. Where her

presentation was not clear, provision of a high quality pre-recorded tape of the tunes, was proposed by the teacher in the final class. This may be an effective aid in aural instruction whatever the quality of the live model presented by the teacher.

4.3.2. Chunk and link presentation

The proposed model of events of aural instruction recommends that presentation be in small segments, or chunks, that are practiced and then linked together. The fiddle teacher in this study frequently used this presentation sequence to teach the tune, as well as aspects of fiddle technique.

The appropriate size of the segment, or chunk, used to teach a tune varies with the ability level of the students. The pilot observations in Autumn, 1987 were made in a beginning class where the students required very small segments to master before linking them. The transcription of "Shottish from Skona" (see Appendix 7.4.4.) illustrates the size of chunks used by this teacher with a beginning group. The class learned a two-measure chunk first and then learned the next measure. These three measures were linked before the next measure was learned. After the linking of the first phrase, the second ending was learned for that phrase and then linked. The first two measures of the next phrase was presented next. The next two measures were taught separately and

then linked. The second ending for that phrase was taught and linked. Finally the whole tune was linked for this beginning class.

Segments, or chunks, used in the intermediate class were usually four or eight measures long. Aspects of fiddle technique were sometimes taught as separate segments. After learning the sequence of pitches in a tune, the teacher presented several ways to ornament and phrase the tune, adding slurred and separate bowings made it necessary to decrease the size of the chunk and the speed of the tune. This occurred on March 8 as follows:

> "So, as I look around there are a few slurs, but there's still lot of just back and forth. Well, let's do this sort of thing. Let's take the first part and let's [plays showing slurs]. Take it slowly [all play five note chunk]."

Students appreciated the use of chunk and link presentation in the fiddle class. One student mentioned that the fiddle teacher helped by "going through slowly, step by step." Another referred to "the opportunity to use phrases or chunks" as a major aid in a class situation.

So, in summary, the fiddle teacher used chunk and link presentation productively in the classes to aid the students as they replicated music from aural presentation. The size of the chunk and the type of information, such as playing the pitches or aspects of ornamentation and style characteristics, varied, but the process was used

efficiently to aid the students. The sequence of chunk and link presentation has been noted and corresponds with the proposed model. Other sequential issues involved in presenting the stimulus were not substantively covered in this study and will need further research.

4.3.3. Presentation in context

Presentation in context is another aspect of the proposed aural instruction model which was capably illustrated by the fiddle teacher observed in this study. Historically, these tunes are from oral traditions which would be learned at dances with fiddle students learning while the music is played for dancers. The fiddle teacher in this study filled in the missing dance context by verbally explaining the appropriate setting and by providing opportunities for the students to perform with dancers regularly.

The tunes taught in these classes are typically performed for Swedish and Contra dancing. On January 26, as an example, the fiddle teacher made the context of the music clear by briefly describing the setting such as:

> "This tune is a sling polska from the area of Skona in Sweden. I don't really know much about thisexcept I heard it on a tape by a group called Fielar Folka. They do a lot of kind of radical music, so, it sounds like one of them might have written it. It just came into my head the other day and, so, if you don't know what a sling polska is, just listen and see if you can find out something about the rhythm and the feeling of it [plays polska]. It's actually in 3/4. They're all pretty equal. It's a polska and if you haven't heard of a polska before, it's a generic name for a lot of

> Swedish dances that are in 3/4 and a lot of them have a real strong ONE, two, three."

Performance opportunities made the context of the music much more clear. The fiddle teacher strongly encouraged students to form groups of three to play the tunes they learned for dancers at the monthly Swedish and Contra dances held locally. Students mentioned that these performances helped them to understand the context of the tunes. Most students cited the performance at these dances as a major incentive and goal for themselves as fiddlers.

Presentation in context, as listed in the model of aural instruction, was competently demonstrated by the fiddle teacher in this study considering the limitations of a class setting. The descriptions and performance opportunities seemed to provide necessary context for her musical presentations.

4.4. Guiding Learning Through Practice

The model of events of aural instruction suggests that learning guidance for accurate replication of music from aural presentation can be provided through the use of naming, rhythm patterns, imagery and mnemonics. The fiddle teacher in this study used naming, rhythm patterns, and imagery, but not mnemonics as she guided the students.

4.4.1. Naming

Naming is the strategy of providing a verbal reference on which to tie new information. The fiddle teacher in this study used naming to identify dance styles and to label specific pitches.

Swedish and Contra dance tunes are the repertoire learned by the fiddle students in this study. Each dance type has specific rhythmic characteristics that are critical to accurate musical performance. The fiddle teacher always named the dance type, thereby giving the students a verbal reference for the new rhythmic information. The first tune learned was a polska which she identified as "a Swedish dance in 3/4 with a real strong ONE, two, three". On January 26, she further identified the song name by defining "sling" saying:

> "Sling? What does it mean? I'll look it up [gets Norwegian dictionary]. I'll give you the whole idea here. I think swing is the one we want: 'touch, as in touch of the flu; sling, as in gulp down your food, throw ones clothes on, dangle or swing.' That's the one that we want; swing, dangle, but mostly it means swing."

The names of dance types were often referred to in order to stimulate students' recall of the rhythmic characteristics. On January 26, for instance, the fiddle teacher, for example, asked "What do you want to think about to make it Schottishy instead of just a bunch of notes?" when she wanted to bring the characteristic rhythm of a schottish to the students' minds.

Naming was also provided in the use of letter names for specific pitches. To guide students on February 9, in one difficult section she said, "F sharp is the second note [plays passage] and then down the scale skipping the C [plays again], and then C [plays whole section saying each letter name as she goes]." When asked how the fiddle teacher helped, students mentioned this type of naming. One student commented that "she helps by saying sharps and naturals and special trills."

4.4.2. Rhythm pattern

The aural instruction model includes guiding learning through use of rhythm patterns because aural learning is more easily structured when the rhythm pattern is retained. Music naturally contains rhythm patterns, but they are often removed to work slowly on problematic passages. The fiddle teacher in this study recognized this problem and, for instance, on February 9, she suggested "Shall we try it slower? Even though we go slow, keep the sense of where the accents are and where the phrases are." She consistently retained the rhythm patterns, thereby providing a rhythmic structure for the aural learning.

4.4.3. Imagery

Imagery can be used to guide learning by relating something to be learned aurally to something that the student already can imagine. The fiddle teacher in this

case used imagery to promote a feeling of mood and to provide kinesthetic images.

The fiddle teacher frequently used imagery to create a desired mood for a piece. Sometimes, as with beginners on October 20 and 27, the image was referred to only briefly. She used phrases such as, "play it like you're in love with a waltz king", or "play it like you had a really terrible day and you want to show the world", "try to sound like drunk elephants dancing." With intermediate students on March 8, she said, "if you chop it off, it sounds like the A got slashed in the throat. Let it die of natural causes."

Other uses of imagery set the full scene. On January 26, after a rather straight forward version of a tune called "Belknapp's March", the teacher suggested that they play it again and this time:

> "pretend that those of us who are not playing are the kings and queens of the realm and you are the Belknapps of Belknappville and you've come all the way here from Belknappville to play your march. So, make us want to give large portions of our royal wealth to Belknapp, or at least show some civic pride. So, with pride, even if you're not too sure of the notes you'd better make us think that you are."

In each case the student performance appeared to the observer to be more accurate as well as more spirited after the imagery was used.

The fiddle teacher also used imagery to suggest kinesthetic responses. One bowing rebound pattern on

February 2 was imagined to be "like dribbling a ball" or "a lot like racquetball." Another bowing pattern on February 16 was referred to when she said, "to me it feels like I'm playing the fiddle, but there's a little button over here that I have to push to start the operation." Finger exercises on February 23 had imagery in their names, such as "squeezing a grapefruit", "picking up bugs", and "ants walking." The fiddle teacher described a fingering problem on March 8 by saying "I think a lot of times your finger is not sure it's going to land in the right place. It oozes onto the string."

Students made no mention of imagery in their interviews concerning the fiddle classes. The degree of improvement in their performance after the use of imagery, at least apparent to the researcher, suggests that the technique was effective.

4.4.4. Mnemonics

Again, mnemonics are devices to aid memorization. These mnemonics can be presented by a teacher as a form of learning guidance. As mentioned before, many styles of music that are transmitted aurally use some form of mnemonics to help students remember tonal, timbral, temporal and technical patterns. Visual mnemonics include standard notation and tablature with varying degrees of specificity. Sometimes, visual mnemonics such as tablature or written solfege symbols are used in

transmitting fiddle music to aid in memory of music that has been learned originally from aural presentation. Verbal mnemonics are aural symbols which aid memory of the music. Examples of verbal mnemonics are found in Asian music (Kauffman, 1967), African drumming (Jones 1959), and bagpipe music (MacNeill, 1987). It seems that fiddle music has not traditionally used verbal mnemonics. The fiddle teacher in this study followed the most traditional method of fiddle instruction by not providing any mnemonic guidance.

The task of remembering a large number of tunes was a problem mentioned by most students. Many students devised their own mnemonic systems. Some students resorted to writing out the tunes, or at least the first few notes. One student reportedly memorized tunes by learning the "transition places". Another student thought of a "chord pattern for each tune". A third student wished that the teacher had mentioned the chord sequences more because "I'm real good in math. If I could just see the patterns, I'd remember it". As indicated in the report of research, some form of mnemonic system to remember patterns in fiddle tunes may be an effective guidance tool for aural instruction.

So, the fiddle teacher in this study was observed to use several techniques to provide learning guidance. She used terms for dance types and letter referents for

pitches to give naming guidance. In demonstrations and group practice, she consistently retained the rhythm pattern even when playing slowly or modeling small segments of the tune. She used imagery both to create a mood and to provide kinesthetic cues. Guidance of learning might be further enhanced had she used mnemonic systems.

4.5. Eliciting Performance

Eliciting a high level of active performance was reported in the research to be effective in aural instruction. The fiddle teacher observed in this case regularly employed singing, movement and fiddle performance involving the students.

4.5.1. Singing

There are many physical barriers, such as bow and finger technique, that can hamper the performance of students in fiddle classes. The fiddle teacher in this study often had the students sing the song first before attempting to play it on the fiddle. Sometimes the singing was combined with a kinesthetic performance. For instance, on January 26, when the intermediate class needed to work on a bowing pattern, for instance, the fiddle teacher suggested "let's sing it and do it in the air. This way maybe the bow will do what the brain wants to do."

Students all participated in the singing. Several mentioned the singing as a special aid. One student commented in an interview that "the singing really helped and I would not have done it in a million years if she had not suggested it."

4.5.2. Movement

As stated before, the tunes taught in the classes were primarily for Swedish and Contra dancing. Often when teaching a Swedish dance tune, the fiddle teacher would begin, as she did with the beginners on October 20, by having the class "stand up and get some rhythm in our bodies." The teacher encouraged students to enroll in dance classes if possible. Three of the students were enrolled in Swedish or Contra dance classes as well as the fiddle class. Three other students mentioned in interviews that they wanted to sign up for a Swedish dance class because they felt it would improve their fiddle performance.

4.5.3. Fiddle performance

The fiddle teacher elicited fiddle performance from the students from the very start. There were students of many ability levels in the beginning class. The teacher encouraged those who had trouble finding all of the notes by suggesting several things to do. On October 12, she said that if they didn't know the tune, they could 1) play the rhythm, 2) try to get a note now and then, 3)

listen for where phrases start, 4) fill in more each time, and 5) find the "notes you like" in the tune. With more advanced students, she expected use of ornaments and bowing variations. Beyond the class time, further performance at local dances was encouraged for those who believed they were ready to perform for dancers.

While the constant expectation of performance seemed to be helpful to most students, one student, on March 8, expressed concern, saying:

> sometimes I don't get the tune straight because I don't catch on by ear as fast as some of the other people do. And so I really need to go slow. Sometimes I think, am I doing something wrong with technique because we don't get any individual attention, or not that we notice.

Most students reported that they were helped by the constant elicitation of response. One student noted that "lots of repetition helps. It usually comes to me if I just sit back and let it."

In sum then, the fiddle teacher used singing, movement and fiddle performance to elicit continual response. The class seemed comfortable with performance expectations and were willing to perform solos at the last class session.

4.6. Providing Feedback

The aural instruction model proposes feedback both from the teacher and from peers. The fiddle teacher in

this study both offered specific feedback for the students and provided opportunities for feedback from peers. This was observed to happen in each class period.

4.6.1. Specific teacher comments

The fiddle teacher provided continual feedback. Many comments seemed to be aimed at being positive, such as "great" or "you're doing real well." Lots of specific comments were also made such as those on February 16, including "You're doing a couple of bows in there that I never... yeah, there" and "you need another note there; play what you have here; yeah, you just come back up." Specific comments were often directed to individuals. Students asked questions about specific pitches and the teacher provided the comment on March 8 that "you're hitting it a little low." When the class broke into small groups, the teacher offered specific comments to individuals who needed extra help. For example, on February 16 she said, "play it a bit at the beginning... [student plays]. Yeah, and then back to G. You need another note there. Play what you have here [student plays more]. You go to G here...[teacher plays] and then back up here...[student plays]. Yeah, not a very good one [reference to finger choice] to do that with. OK?" Students noticed the high level of specific comments. They credited the source of these comments to her auditory perception. One student said, "She has a very good ear

for what one is doing wrong. She knows what sounds good."

4.6.2. Peer feedback

Research suggests that participation in small groups with peers may provide another avenue for feedback. The fiddle teacher in this study provided opportunities for the students both to work and to perform in small groups. As noted earlier, however, the small groups stayed within aural range of each other. On February 2, in the intermediate class, the teacher explained how the groups should function saying:

> Let's do one more thing and that's playing in little groups for each other. So, what we're going to do now is go in little groups of two or three and put your heads together and think especially about phrasing and about dynamics. So, you can put in double stops and things if you have time. Talk together about where does the phrase begin and how to make a really big deal out of it...which one of the little tricks is useful. So, take like fifteen minutes to work on it and come back for show and tell, or show, or tell.

The teacher further directed the students to "talk together", which they all did. The students provided each other with a great deal of feedback while working in the groups. After working in groups the teacher re-assembled the class and asked for each group to perform. After the performances on February 2, the teacher elicited positive peer feedback by saying:

> Say anything you thought was cool and then after that we'll talk about what you did that you thought was cool. OK, so you've had many years of practice saying what's bad about your fiddling, but we're not

going to do that now, just things that are good. The students proceeded to provide each other with a great deal of feedback such as "well, these guys got some trills", "I thought the kitchen group really stayed together", and "I think both groups worked on dynamics." The feedback was all positive and most was specific. Many comments referred to the concepts of phrasing and dynamics that were discussed earlier in the class session.

Peer feedback was also used in the beginning class. In one exercise, the students were instructed to work in pairs to match pitches. One student would play a tone and the other student would attempt to match it with feedback from the first student; then they would reverse roles. The students used aural and visual cues, as well as the feedback from a peer, to find the correct pitch.

In summary, the fiddle teacher gave many specific comments. She also provided the opportunity for peer feedback. The feedback techniques used by the fiddle teacher correspond positively with the feedback components proposed in the research-based aural instruction model.

4.7. Assessing Performance

The aural instruction model proposes assessment through performance, as well as through improvisation and composition of new material. These musical processes are important in determining the extent to which students have

attained the objectives of aural instruction because the objectives include student learning outcomes of several types. Performance is useful for assessing achievement of required motor skills in fiddle technique, and comprehension of musical information that includes the recognition and recall of specific fiddle tunes. Improvisation and composition can be used to evaluate the students' intellectual skills in mastering concepts within such categories as bowing, ornamentation, and phrasing. Both performance and improvisation/composition can be used in assessment of attitudes toward and cognitive strategies employed in learning to learn by ear.

The fiddle teacher in this study used both performance and improvisation/composition to assess the students' achievements. Performance assessment was made in the large group, in small groups, individually with the teacher and individually in solos for the class. The assessment of improvisation/composition was made both within the large group using class materials and in individual performance from other sources. At the last session, the teacher also assessed attitude by asking what they liked and did not like about the class.

4.7.1. Performance evaluation

The fiddle teacher made some performance assessment in class as students played the tunes. She usually played along with the students, but when they were reaching a

level of performance where she felt they could continue without her as a model, she would stop playing and listen more closely to the students. Then, she would assess the students' comprehension of tonal information, such as whether or not the students had learned the correct order of pitches, and aspects of motor skill, such as whether or not they could make the correct bow changes. She often referred to the results of this assessment. On January 16, she told her students that their performance "sounds good, basically. There's a little problem in the endings." Such assessment comments were usually followed by some information or exercises to remedy problems.

To assess the progress from a previous class, the teacher sometimes used large group performance. For example on January 26, after working on a new tune, the teacher said "All right, let's let it mellow a little. So, we will now have a concert of people who were here last time of Bellknapp's March." She made several remarks when they had concluded and then she asked the group to play it again, standing up. The group performance sounded much stronger the second time, and she moved on to some exercises.

The size of the group of ten students made it difficult to evaluate anything beyond gross errors at the large group level. Therefore, the teacher often had the class break into small groups for concentrated work and

performance. The students were quite aware that the teacher was using the smaller grouping for evaluation purposes. On February 2, one student commented while working in a group, that, "I think we should do some of the trills or something. And she'll think we learned one thing at least today."

The teacher also used the small group work time to give individual help. Often this started with assessment of individual performance, as on February 16, when the teacher suggested that a student "play it a little at the beginning" to identify spots that needed remedial help. Other times she would move among the groups finding students that needed remedial help.

As she did on February 9, the teacher sometimes expected the students to evaluate their own performance, saying "why, don't you take it by yourself a few times. Work on whatever part you need work on. If you're missing anything let me know." She would then go around to individuals and listen to how they were progressing.

The last two class sessions included solo performances by each of the students. This allowed the teacher to evaluate their progress in utilizing musical information (e.g., correct pitches and rhythms), motor skills (e.g., bowing and fingering), and cognitive strategies as evidenced by their ability to learn music from aural presentation, as well as their attitude (e.g.,

willingness to play in front of a group). The teacher asked each student to state a goal for improving performance. She then gave each one ideas about how to make that improvement. For example, on March 8, when one student commented "I'd like to get faster and not hit strings that I don't want to hit", the teacher showed the class an exercise to help find the correct strings. A transcription of the student solo version of the "Waltz in A" (see Appendix 7.4.1.) documents a typical performance during these evaluations.

4.7.2. Improvisation/composition

Research indicates that the degree to which students have developed intellectual skills and cognitive strategies can be assessed in their utilization of new concepts and strategies in the processes of improvisation/composition The teacher listened to the group to find instances where, in improvisation, the students used the concept of ornamentation, saying, for example on February 9, "I hear you filling in the holes, which is great." She made it clear that they were expected to make up new variations for the tunes and always commented "good" when she could identify the use of concepts she had presented.

The students showed that they could use new cognitive strategies employed in learning to play by ear when they performed solos learned outside of class. Six students

chose to play solos based on tunes that they learned outside of class either from other fiddlers or from tape recordings. The teacher questioned and discussed with each one the process used to learn the new tunes and congratulated them on their ability to learn a new tune by ear.

The teacher assessed student progress in groups and individually, using performance of class tunes and exhibition of improvisation/composition. The assessment seemed to help her pace the class to meet the needs of the students. Some students noted with concern that there was not much opportunity for individual evaluation. However, given the size of the class of ten students and the time available in light of eight, 2 and 1/2 hour sessions, the teacher was observed to do a remarkable amount of assessment.

4.8. Enhancing Retention and Transfer of Learning

The retention and transfer of aural learning is addressed in the model of aural instruction through practice in a variety of examples in the same, as well as different styles of music. The fiddle teacher in this study provided substantial practice in aural learning, using two musical styles.

4.8.1. Practice

Motor skills of fingering and bowing to facilitate

fiddle performance were practiced regularly in class and the teacher explained ways in which the students could use the exercises in practice sessions at home. During one bowing exercise on February 16, she encouraged further practice saying:

> Gert Ohlsson [famous Swedish fiddler] says if you practice this five minutes a day you won't be a good fiddler, you'll be the best fiddler; but there are days when you won't practice this exercise, so you won't be the best fiddler in the world. I know, he says, and I am not the best fiddler in the world, but really good.

Most students agreed that the exercises were important and commented in interviews that they used them regularly.

Retention of the musical information contained in tunes was promoted primarily by repetition. As the class played each tune, the teacher frequently exhorted "one more time" or "let's play that section again."

Students had trouble remembering the tunes after the class was over. When asked if they remembered a specific tune, students would ask the interviewer to sing a bit of it. Retention of the large amount of musical information contained in the six tunes and several exercises used in class appeared to require more than just the use of repetition. Retention could have been facilitated by some form of mnemonic system, as mentioned in the learning guidance section, or a high quality recording of fiddle tunes to be learned in class, in a predictable order, as suggested in the presentation section.

The cognitive strategies needed to replicate music accurately from aural presentation, which are important in the ability to play by ear, were practiced in every class session. The students also used the skills in their practice at home. Those students that remembered the tunes seemed to utilize some designated portion that they used to bring the rest of the tune to mind. One student, for example, remembered the "Waltz in A" by knowing that it started in the third position on the E string. From there he said "the rest would just come." Three students said that they would like to have musical notation of the first few measures of each tunes to refer back to. When asked if they felt they made progress in learning to play by ear, all students felt they had made great progress. One student who had a great deal of difficulty learning by ear in the early class sessions, said proudly at the end of class "now I can play without the music" (i.e.notation). There was evidence that the ability to replicate music accurately from aural presentation transferred for many students in that many, as mentioned before, used material from sources other than class for their solo performances.

Intellectual skills were practiced regularly. The teacher spent a lot of time working through the concepts of phrasing and ornamentation. She provided practice using these concepts in each tune. She asked on February

2, for instance, "last time we talked about things we could do to decorate the tune. Remember any of those? any ideas?" She talked about double stops as ornaments and they practiced using them. Later in the same class session, she had the class break into groups and work again on ornamentation thereby reinforcing the concept. One student noticed how this helped her use of phrasing, saying "I liked it when we broke into groups and practiced and performed for each other. I felt I really learned the tune that way and I could see improvements in the tunes." After working in the groups, the students had comments for each other that reinforced the concepts being worked on, such as "good use of trills."

Students were well aware of the place of practice in learning to play by ear. One student mentioned that in learning to play by ear "practicing is still the most important thing." Another student suggested that the way to achieve ability to play by ear is "practicing and playing with other people." While some students commented that they could do some of the practice on their own, most said that class was helpful in that it provided an opportunity for them to practice the skills of playing by ear.

4.8.2. Variety of styles

Research indicates that the ability to play by ear can be transferred to other styles and instruments. The

fiddle teacher in this study provided two different styles of music, Swedish and Contra dance styles, for the students to learn. The ability to learn by ear seems to transfer between those styles.

Some students came specifically to play one style or another. All of the students seemed pleased with the use of both styles. One student commented "I liked having a mix of both Contra dance and the Scandinavian."

While the teacher did not provide other instruments to attempt the transfer of ability to play by ear, she did have the students sing the tunes. This allowed the students to transfer the ability to perform from aural presentation (i.e., play by ear) across between fiddle and vocal performance.

To summarize, the fiddle teacher used practice in two styles of music to promote the retention and transfer of ability to replicate music accurately from aural presentation, and thereby to promote ability to play by ear. Since this study is limited to the examination of components of instruction used by the fiddle teacher in this case, the success of the aural instruction observed can not be assessed in terms of long term retention or transfer of learning.

4.9. Summary and Synthesis of Results

A strong correspondence between the instructional

components proposed in the research-based model of aural instruction was observed in the instruction of the fiddle teacher observed in this study.

The fiddle teacher initiated effective aural instruction using all instructional components listed in the exposition section of the proposed model of events of aural instruction. The teacher gained and maintained attention through immediate student participation in the performance of familiar tunes, exercises and new tunes. She provided pre-training and directing of objectives through full or segmented demonstration. Her presentation was primarily in aural mode by herself or using a high quality recording. She used small segments linked with practice of tunes and fiddle techniques, and maintained the musical context by explanation or opportunity to perform in authentic musical context.

The teacher continued her effective aural instruction using most of the components shown in the development stage of the proposed aural instruction model. The teacher guided learning during practice by naming dance styles and pitches, by consistently retaining the rhythm pattern in demonstration and practice and by providing for aural imagery. The guidance component not utilized by the teacher was mnemonic assistance. The teacher constantly elicited active participation through singing, movement, and fiddle performance. Feedback was provided through

specific comments from the teacher and by opportunity for peer feedback.

The fiddle teacher concluded her aural instruction effectively using components which correspond with those outlined in the recapitulation section of the aural instruction techniques model. She used performance as well as improvisation and composition to assess student achievement. Retention and transfer of motor skills (e.g., bowing and fingering), cognitive skills (e.g., strategies for playing from aural presentation), musical information (e.g., sequence of pitches), and intellectual skills (e.g., understanding and utilizing concepts of phrasing and ornamentation) were promoted through practice in the two musical styles of Swedish and Contra dance music.

So, there was only one component of the research-based model of events of aural instruction that was not found in the observation of the fiddle teacher in this study. As stated before, the mnemonic component suggested by research as important to the learning guidance section of the proposed model was not utilized by the fiddle teacher. As discussed above, the development of a mnemonic system for her use in fiddle instruction could be beneficial.

Another problem was observed in the lack of auditory quality and performance consistency in aural presentation

by the teacher. It was suggested by students that a high quality tape would be useful and the teacher indicated that there might be such a tape in the future. This problem appears to be related to a third problem, the difficulty reported in retention of musical information. Students complained that they were not able to remember certain tunes. Again, the use of a high quality tape might aid in retention of musical information, as could the use of a mnemonic system in guiding learning.

The theory in this dissertation is that accurate replication of music from aural presentation depends, in part, on effective aural instruction. It is hypothesized that research-supported aspects of aural instruction will be apparent in the observation of a teacher using primarily aural presentation who is considered to be an exemplary aural instructor by local folk musicians and folk music students. Ultimately to test the theory, it will be necessary to test the hypothesis that the more exemplary the aural instruction, the greater the use of the components of aural instruction identified in the proposed research-based model. It was believed to be impossible to test that hypothesis until the proposed model was examined for correspondence with the observed aural instruction of an exemplary fiddle teacher. The findings contained in this chapter seem to indicate that there was a strong correspondence between the proposed

model and the events of aural instruction of the observed teacher.

While strong correspondence was found, a review of the proposed model in relation to data from observations in the case study reveals some components which appear to be essential to effective aural instruction. These essential components (see Figure 4) include: 1) frequent and purposeful demonstration, 2) immediate and continual participation and 3) constant and appropriate guidance. These will be discussed in the final chapter.

The final chapter will summarize and discuss the importance and implications as well as the limitations of this study. It will also provide recommendations for teaching and for further research in this area.

5. SUMMARY AND CONCLUSIONS

Observed inability of one classically trained violinist to replicate music accurately from aural presentation led to the investigation of aural instruction in this study. There are many factors involved in performance from aural presentation (see Figure 1, p.2) which could provide theoretical approaches to the problem of this study. Lack of a research-based aural instruction model to facilitate accurate student replication of music from aural presentation is identified as a contributing factor in this problem. It is theorized that accurate replication of music from aural presentation depends, in part, on effective instruction and it is hypothesized that research-supported aspects of aural instruction will be apparent in the observation of a teacher using primarily aural presentation who is considered to be an exemplary aural instructor by local folk musicians and folk music students.

Replication of music from aural presentation without the aid of visual notation utilizes aural learning, which is known as "rote learning" in music education, and is an aspect of "oral transmission" studied in ethnomusicology. The effect of presentation in different modalities is studied in cognitive psychology and is discussed in terms of the impact of aural presentation on perception, sensory

memory, short-term memory, and long-term memory. Learning from aural presentation involves various expected learning outcomes among them being the development of cognitive strategies, intellectual skills, motor skills, attitudes and musical information.

Aural instruction is defined as teaching which utilizes primarily aural presentation, the provision of auditory stimulus being the main source of information. Aural instruction is generally referred to as "rote teaching" by music educators and is discussed as part of "oral transmission" in ethnomusicological research. Reports of the use of aural instruction are ubiquitous in studies of a variety of world music cultures.

The expected learning outcomes and the process of aural instruction can be framed by events of instruction (Gagne and Briggs, 1979). Examination of research concerning aural learning and aural instruction is the basis for the components identified in this study's research-based model of appropriate aural instruction (see Figure 3).

The research-based model of events of aural instruction is the observational framework for the case study of exemplary aural fiddle instruction in this study. Results of observations are discussed in terms of an examination of correspondence between the research-based model of events of aural instruction and the observed case

of aural fiddle instruction.

Strong correspondence between the components of instruction of the research-based model and the case study was found in terms of: gaining and maintaining attention, pretraining and directing objectives, presenting stimulus, guiding learning during practice, eliciting performance, providing feedback, assessing performance, and enhancing retention and transfer of aural learning. The strong correspondence between the model and observed aural instruction supports the hypothesis that research-based aspects of aural instruction will be apparent in the observation of an exemplary teacher using primarily aural instruction. After examining data generated by case study, it is proposed that in addition, use of frequent and purposeful demonstration; immediate and continual participation performance; and constant and appropriate guidance are especially prominent in effective aural instruction.

5.1. Aural Instruction: Importance and Implications

The research undertaken in this study suggests that the use of the term "rote teaching" in reference to instruction utilizing aural presentation has been misleading and that "aural instruction" is a more accurate and more descriptive term. The use of "aural instruction" might also allow cross-disciplinary study

without the confusion, inapplicability and negative implications that appear to be associated with use of rote to designate aural.

This study extends the research in the oral transmission of music. Research concerning stages of oral transmission (Adler, 1979), informal and formal transmission of folk music (Garrison, 1984) and changes in the use of oral transmission (Booth, 1986) have not emphasized instructional components. This study has identified and investigated the presence of specific components in aural instruction judged by folk musicians to be effective used in a case of oral transmission, thereby extending research in this area.

This study adds to research concerning fiddle music transmission (Guntharp, 1980, Garrison, 1984 and Frisch, 1987). Other fiddle music studies have not addressed the components of instruction utilized by fiddle teachers so this study addresses that gap by focusing on effective aural instruction used in a fiddle class setting.

Aural instruction used to facilitate the ability to replicate music accurately from aural presentation has been investigated in this study. A research-based model of aural instruction was developed based on recent literature in cognitive psychology, educational psychology, music education and ethnomusicology. Although it resembles all contemporary instruction models, this

model is the first to deal with particular components as they apply specifically to effective aural instruction. The model also serves as a preliminary step for testing the relation of aural instruction and aural learning. The use of instructional events as a framework for appropriate aural instruction allows for cross-disciplinary study of these events. While this study uses one case of fiddle music instruction, there are many other areas of aural instruction in music that could be studied using the model of aural instruction as a framework for observation of exemplary aural instruction.

5.2. Limitations

This study has applied the model in the observation of only one case of aural instruction judged by musicians to be exemplary. This limits the findings to one fiddle teacher, two musical styles (American and Swedish fiddle), and one group of older, well-educated students. The model of this study may not be useful in the observation of aural instruction of other musical instruments or of vocal instruction. It may not be applicable to aural instruction in a variety of musical styles and genres. The study was limited to a class instruction setting and the proposed model may not apply to cases of one-to-one, studio aural instruction.

The model is based on research, but was not

experimentally tested. In addition, no testing has been done to rank order the aural instruction techniques or to evaluate the model in relation to specific expected learning outcomes.

The identity and sequence of steps needed to perform from aural presentation - that is, to "play by ear", have not been identified. This study focuses on accurate replication of music from aural presentation, but does not address all aspects of performance from aural presentation.

5.3. Recommendations for Further Research

This study points to many areas for further research. Aural instruction is very important in music education and it is hoped that this study will support further research in this area. Such research is needed for: 1) development of a model of possible differences between aural and visual short-term memory in music, 2) investigation of the use of imagery in aural learning, 3) study of teacher and student characteristics in relation to aural learning, 4) development of curriculum utilizing aural instruction, and 5) more in-depth study of aural instruction components and events.

Experimental studies could test specific aural instruction components in the model to examine their effect with respect to specific expected learning

outcomes. Such an examination could be used to estimate the importance of these components and could be used to develop a weighted model of aural instruction.

Much more research is needed to understand how students learn to play from aural presentation; that is, "to play by ear". Studies are needed to identify the prerequisite skills for playing by ear. The ability to replicate music accurately from aural presentation and the ability to play by ear need to be dissected to designate critical steps and sequences of steps in aural learning. Learning strategies need to be identified that are especially useful in learning to play by ear.

There may be characteristics of teachers and students that are significant to the study of aural instruction. Research is needed regarding the impact of teacher characteristics such as leadership skill and intensity. The impact of learning and cognitive styles of both teachers and students on aural instruction could aid in understanding of aural instruction. Research is needed concerning the effects on learning due to issues of student development, aural perception ability, motivation, and anxiety.

Curriculum needs to be developed which utilizes important components of aural instruction. Curriculum could be specifically designed for fiddle music or other styles that are traditionally taught through oral

transmission. A generic music curriculum could also be developed which would be useful for all styles of music employing aural instruction. The importance of recordings, instrumental technique and complexity of genre need to be investigated for any curriculum based on aural instruction.

Each instructional event includes components suggested in the proposed model of events of aural instruction (see Figure 3), which could be investigated in more depth. A study could, for example, focus on an examination of assessment of aspects of effective aural instruction.

5.4. Applications in Music Education

This study grew from a music education problem in which a student was unable to replicate accurately the tonal, timbral, temporal and technical aspects of music from aural presentation. While the study represents only initial research in this area, there are some aspects of the research-based aural instruction model that can be applied in music education. Demonstration, participation, and specific learning guidance components appear to be especially useful for music instruction which is intended to facilitate student performance from aural presentation. The elements which appear to be especially significant in effective aural instruction based on correspondence

between the research-based model and observations in the case study are shown in the model of "Essential Components of Aural Instruction" in Figure 4. A final combined research-based model for events of aural instruction incorporating these is proposed in Appendix 7.8.

FREQUENT AND PURPOSEFUL DEMONSTRATION

to establish objectives

to provide model

IMMEDIATE AND CONTINUAL PARTICIPATION

to gain and maintain attention

to evaluate student replication of model

CONSTANT AND APPROPRIATE GUIDANCE

to provide structure and sequence

to reinforce learning

Figure 4. Essential Components of Aural Instruction.

5.4.1. Demonstration

The use of demonstration for pretraining and stating objectives and for presentation of instruction was found to be significant in existing research as well as in the case study of fiddle instruction. It is recommended that teacher demonstrations utilizing aural presentation might provide the best possible musical model. The model may be live or recorded, but it is important that the model be clear and error-free. The demonstration should, as much

as possible, be in appropriate musical context and use small segments linked with practice. Of course, it is assumed that musical qualities should be inherent in an exemplary model although these need to be identified and examined in a future study.

5.4.2. Participation

The use of student participation was found to be effective in gaining and maintaining attention, eliciting a response and assessment in both existing research and the case study. It is recommended that the aural instructor utilize immediate and continual participation through movement, singing and instrumental performance.

5.4.3. Guidance

Some instructional guidance techniques that research suggested were also apparent in the case study. It is recommended that the teacher use constant and appropriate guidance, including: naming, the use of a verbal tag such as letter names for pitches or names for styles learned such as "Polska"; imagery, descriptions which produce a mental picture; verbal, kinesthetic and/or onomatopoeic mnemonics, vocalizations which aid memory of aural patterns; and the retention of rhythm patterns even when the music is simplified in other ways such as removing the harmony parts. Feedback during this guidance period can include specific feedback from the teacher and/or feedback from participation in small groups with peers.

5.5 Conclusion

There are countless aspects of instruction to consider each time one teaches music. Aural instruction, teaching which employs primarily aural presentation, is an integral part of music teaching. Perhaps, music educators cannot simultaneously consider all of the factors surrounding aural instruction including student characteristics, learning processes, teacher characteristics, attributes of teacher and student relationships, instruction process, and socio-cultural context, along with music performance components, as they are in the midst of teaching a class. However, additional information and depth of understanding of each of these factors should enhance, or lead to the refinement of aural instruction over time. It is hoped that the provision of this research-based model of events of aural instruction will allow music educators to facilitate their students' ability to replicate music accurately from aural presentation as well as increase their enjoyment of aural learning and aural instruction.

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7. APPENDIX: Transcriptions and Materials

7.1. Teacher and Student Interview Outline

Beginning Fiddling:
Why did you start to play fiddle?

What was your first instrument like, how did you get it?

How did you get started, who helped, where, size of group.

How did you learn tuning, bowing, position, fingering, tunes.

What was the first tune you played on the fiddle?

Can you still play it? Where did you first hear it?

Current Fiddling:
Can you read music notation? should others?

What is important to learn for fiddling?

How do you practice?

Are workshops, conventions, competitions, helpful?

Why did you take Andrea'a fiddle class?

What do you learn in this class?

Who should take a class like this?

Teachers and Instruction:
What is good and/or what could be better about how you learned?

Is A a good teacher and/or fiddler? How compared to others? Why?

What makes a good fiddle teacher?

Can a teacher help someone learn by ear?

What other fiddle teachers have you had?

Have you ever helped someone learn fiddle? How?

Should fiddle be taught in the public schools?

Goals:
Do you consider yourself a fiddler?

How many tunes do you know? How many do you want to?

Can you play well by ear?

Have you ever gotten discouraged and/or quit?

What are your goals as a fiddler?

How will you achieve them?

Have you ever performed? For who, where? Do you want to?

Would you like to be with a group?

Would you like to teach fiddle?

Do you want to learn other instruments?

7.2. Student Questionnaire.

Name:

Age:

Occupation:

Education:

What did you listen to before you played the fiddle (type of music, how often, where):

Are there any musicians in your family?

Did you play any instrument before you started the fiddle?

Are you currently taking any other classes?

How long have you been playing the fiddle? How is your progress?

Could I interview you:

at a post-class session at my Wallingford home?_____

Tuesday, March 22nd, 7:15-8:45
1831 N. 52nd
633-3213

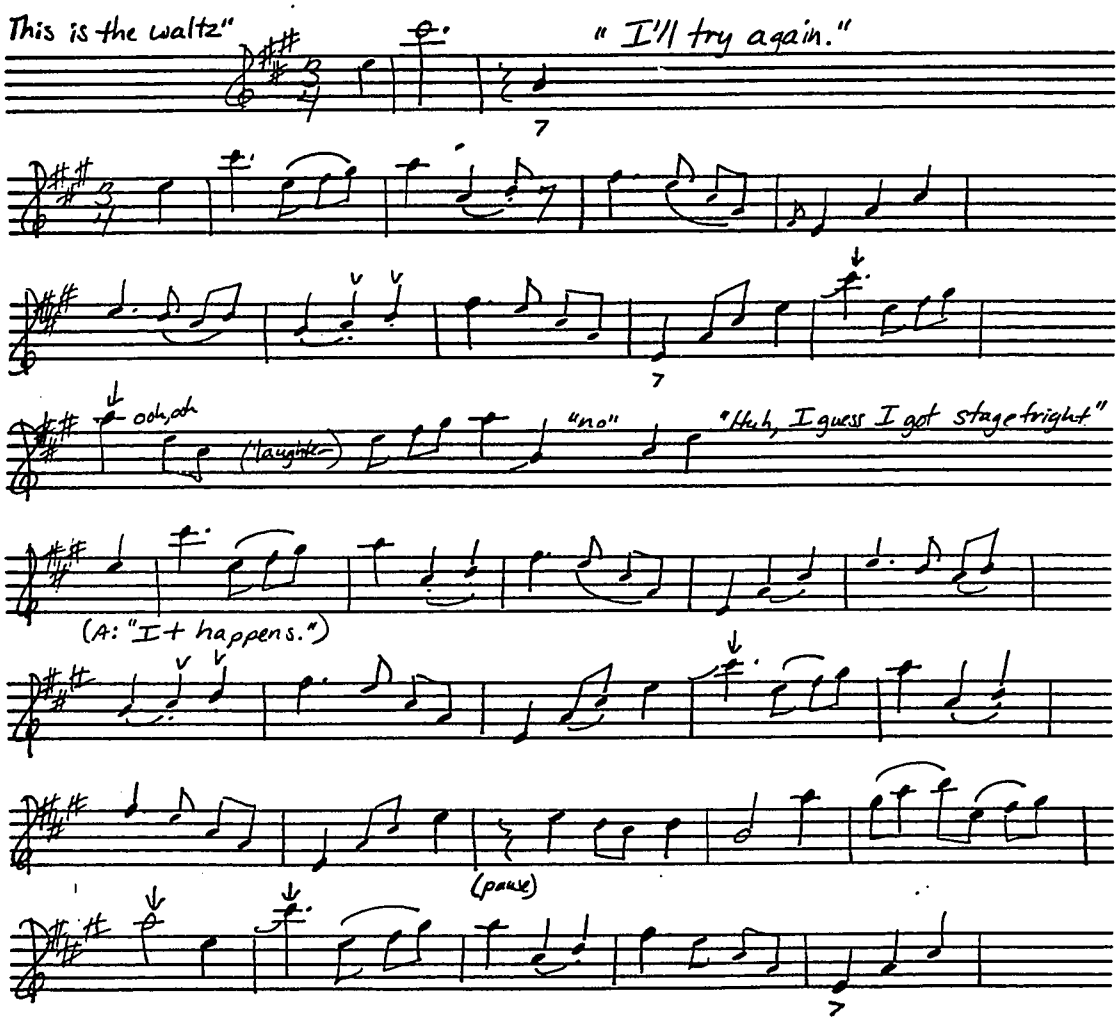
If need be, I can interview before or after class or arrange other times. Please put your phone number here if we need to arrange a special time. Thank you.

7.3. Coding Chart for Observation

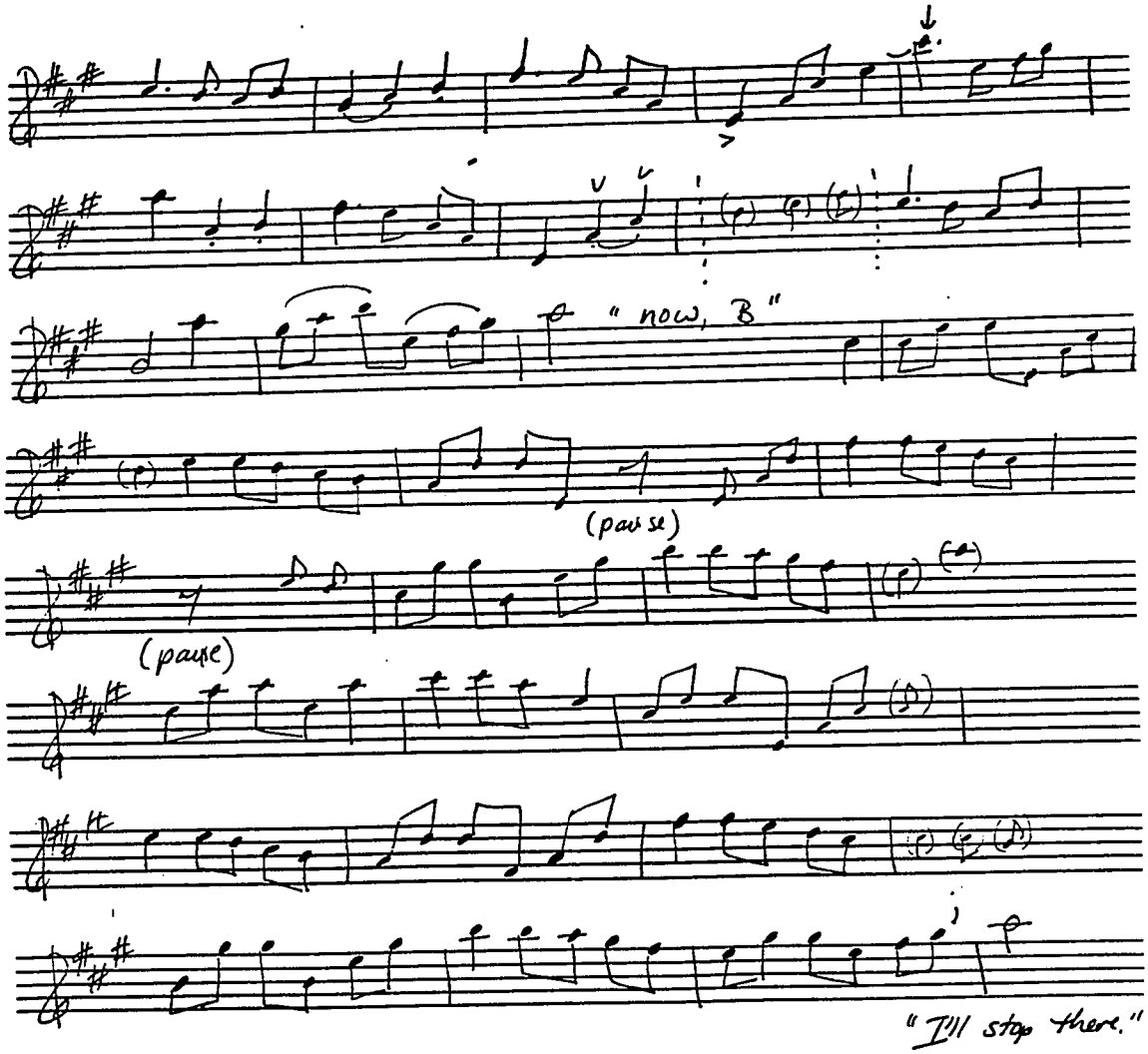
A	Attention gaining.
O	Objective statement or demonstration.
P	Presentation, aural and in context.
P/CL	Presentation in chunk and link format.
G/N	Guiding via naming.
G/RP	Guiding via rhythm pattern.
G/I	Guiding via imagery.
G/M	Guiding via mnemonics.
R	Eliciting response.
R/S	Singing response.
R/M	Movement response.
F	Feedback.
S	Assessment.
T	Enhancement of retention and transfer.

7.4. Musical Transcriptions

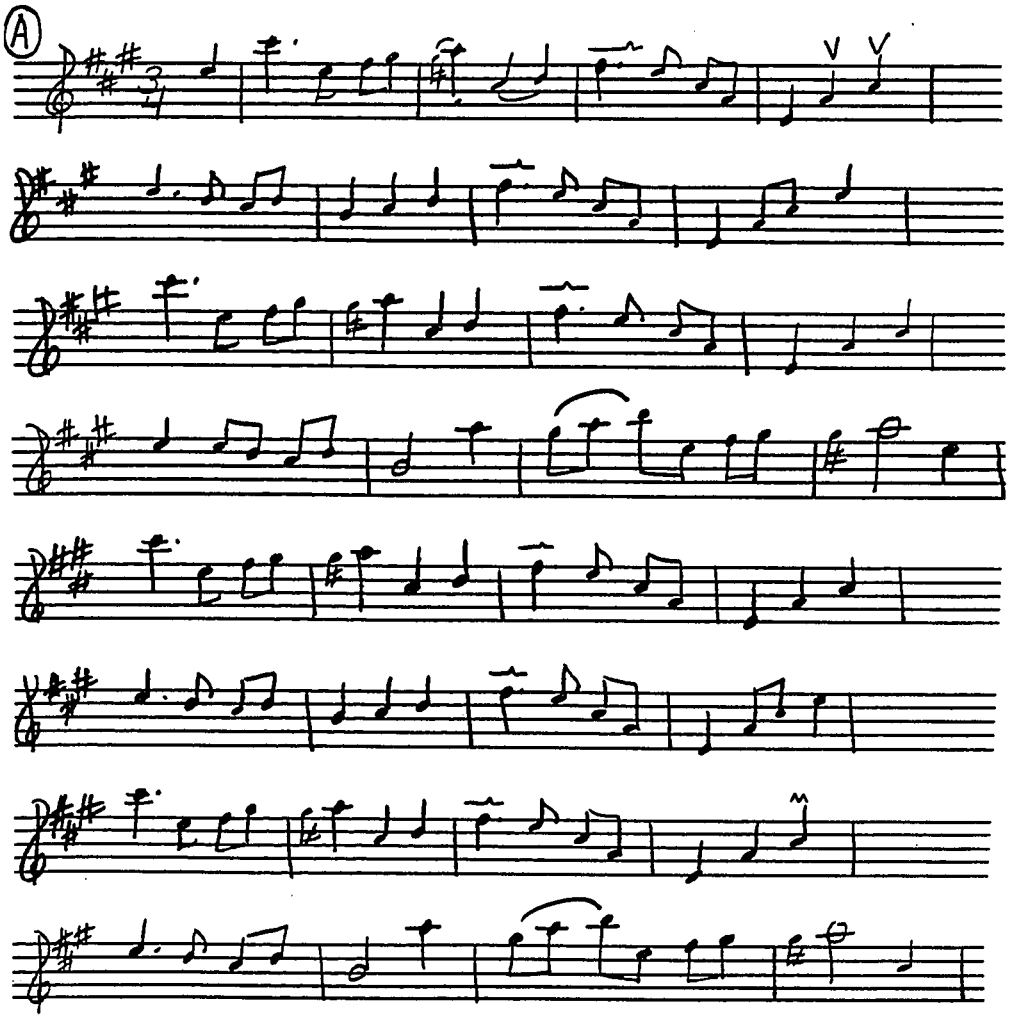
7.4.1. Student performance of "Waltz in A"



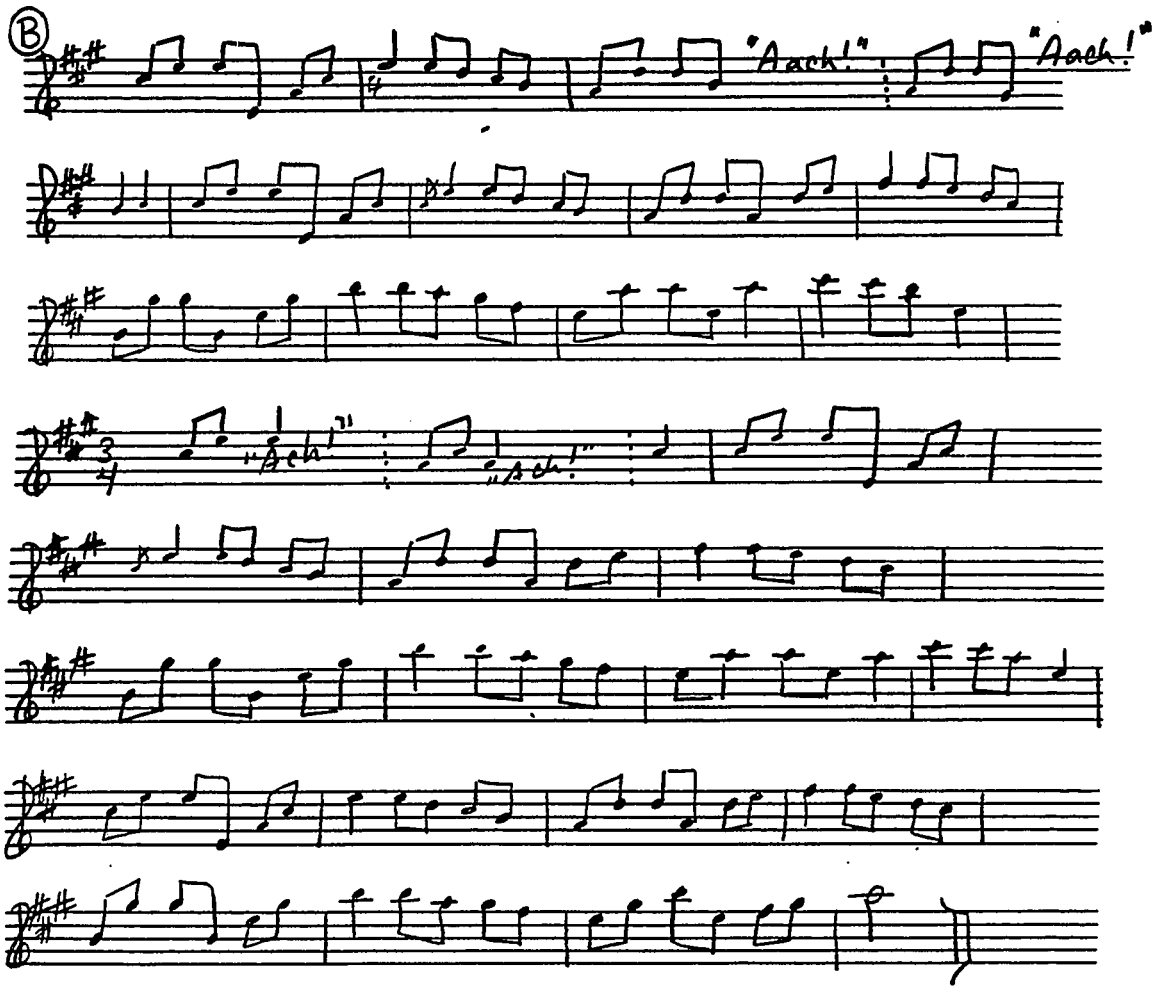
7.4.1. Student performance of "Waltz in A" continued



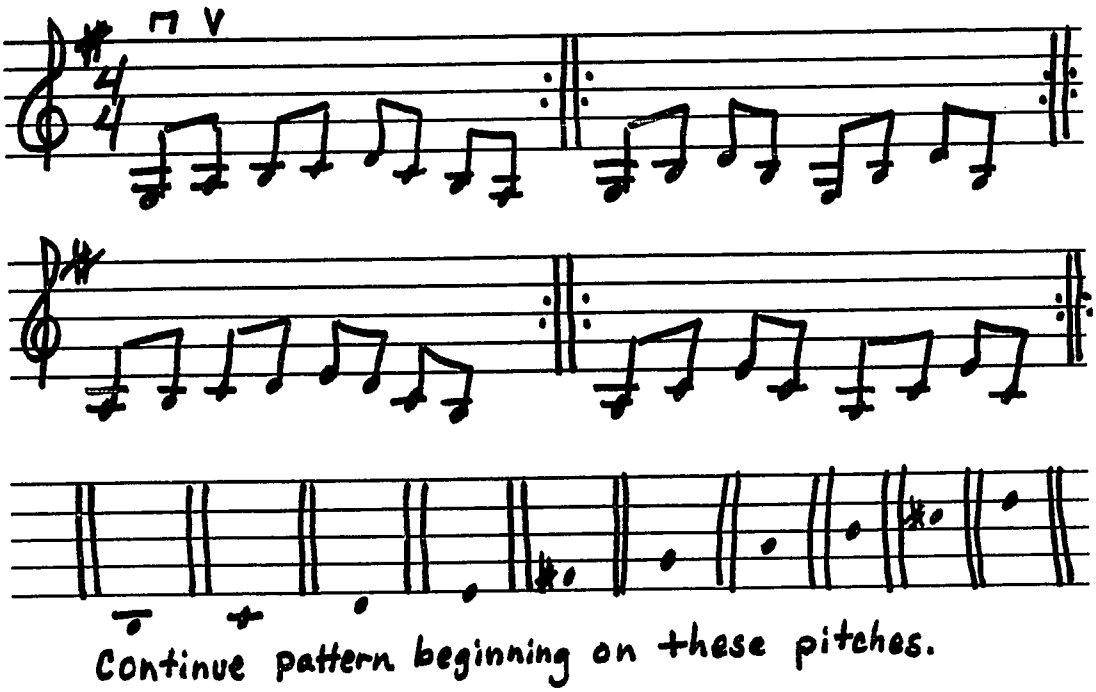
7.4.2. Teacher presentation of "Waltz in A"



7.4.2. Teacher presentation of "Waltz in A" continued

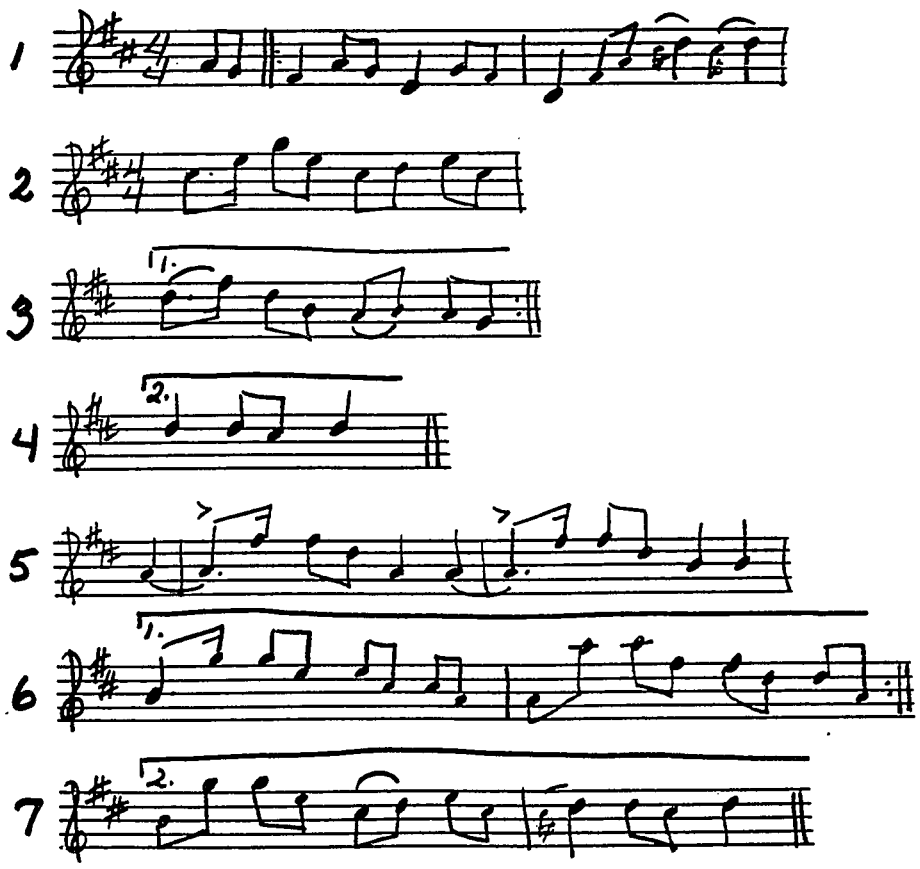


7.4.3. "Big Train" exercise



7.4.4. Shottish from Skona: chunk-and-link pattern

#1.
#1, and 2.
#1, 2, and 3.
#1, 2, 3, and 4.
#5.
#5, and 6.
#5, 6, and 7.
#1, 2, 3, 4, 5, 6, and 7.



7.5. Class Dialogue Transcription

A is teacher. F, B, L, M, C, D, S, Ji, and Je are students.

January 26, 1986
Intermediate fiddle class

(class members coming. F and B discussing instruments. Tuning. L also arrives and begins to question researcher about involvement. Introductions. A comes in and answers door. Discussion re B surgery. D arrives.)

A: You guys want to get the A and go out into the kitchen to tune, then we can start doing somethin'. (tuning) You still sound sharp. (more tuning) So, why don't we play something like Soldier's Joy, you all know that?

B: Well, not really.

A: It's pretty easy, O.K. (begins to play Soldier's Joy, others join in and play. Second time through there is a knock at door, A says "come in" and then answers door. Someone is selling peanut brittle. A: says "not now, I'm teaching a class" class continues to play and A rejoins them for third time through tune M, C, and L seem to know it, F and B try it, D sort of tries).

D: What's the name of that tune?

A: Soldier's Joy.

D: That's Soldier's Joy?

A: Is it? (others agree)

D: That's a different version than I know.

B: Her's has a Southern accent. (laughter)

D: yeah, yeah.

A: What's that thing we just found? Instead of going (shows difference between straight eighth notes and shuffled ones).

A: Well, Bob, what's something we might do that you know?

B: Well, I don't know, like I say I'm not really that confident to just play I don't want to hold you back.

A: Well, um .....I just want to do something that you can all warm up on (more fiddlers arriving). Do you all know "Tennessee Waltz"?

B: I know some of it.

A: OK, lets take that one, In the key of D. (A begins to play slowly, others join in. Play through) Hello, are you Scott? Pull up a chair over there. (still playing, all seem to catch some part of the tune, A adds harmony on fourth time through).

A: We, might as well do introductions again, I'm Andrea (all say names) Well, I think this is as big as we are going to get, except for Jim, he paid so I think he will show up (laughter).So, do you want to get the A Bob and you can tune in the kitchen if you want to so you can hear your self. So. lets start down here and play an A scale all the way up to the top as fast as we can, 1,2,3, GO (all play each at own speed) OK,lets see if we can get it all on one bow (all play again at own speeds). So, you have this one on the bottom string and these ones on the top strings (referring to sharps). Here's your C sharp. Let's take it slow. (all play A scale about 60mm). (vibrato used by S and D, seem to be classic violinists) OK, take it again as fast as you possibly can. (all play much faster than before). OK lets do the B flat on scale now

D: that's a joke.

A: starting there (all play at top some get of) That wasn't so hard was it. Lets play it again and play the top note twice so we all stay together. (all play again, much better)

A: I thought I'd start off with a new tune so that we'd all have one tune in common.We learned one tune last time. Did you guys bring tape recorders? (M,C, D, J, nd L have recorders) No? Oh, Oh well, we'll play that other one later on too This tune is a sling polska from the area of Skona in Sweden, I don't really know much about this except I heard it on a tape by a group called Fielar Folka, they do a lot of kind of radical music, so, it sounds like one of them might have written it, it just came in to my head the other day and, so, If you don't know what a sling polska is, just listen and see if you can find out something about the rhythm and the feeling of it. (A plays sling polska through, exclaims, "ach" when something is off, plays with variations in harmony two time through)

D: what's the name of it again?

A: I don't know, its a sling polska from Fielar Folka. from Skona, yeah, I think from Skona. It might be new. I don't know. If I find out I'll let you know.

D: If you played that for a dance would you play it faster?

A: Oh, probably not much, maybe some, (hums a bit) Well, what did you find out about the rhythm? (someone says its in 2/4) It's actually in 3/4 (sings a bit of it) They're all pretty equal. It's a polska and if you haven't heard of a polska before, it's a generic name for a lot of Swedish dances that are in 3/4 and a lot of them have a real strong ONE, two, three, One,2,3, but this one is kind of even. (sings a bit, someone asks if it could be done in 2/4) I guess you could (sings a bit) I think you find accents in strange places if you did plays a bit) I can't even do it. But the accent is kind of on the one (plays and counts accent on one). Every third beat is really where a new phrase starts (plays part B) So, we could try playing it in two, it would be kind of interesting. There are polskas that you can play in two, but I think this one would be a real brain twister. Which is always good for you. So, what key have we got? (plays a bit)

S:D

A:D

D: Then the next part is a minor?

A: Yeah, there in the B part (plays) gets c naturals and g sharps here you have d natural, c sharp, g sharp. But the A part is just straight. So, I'll just play the A part a couple times.(plays A twice with some harmony) So, lets try it slow and go through the whole thing, then break it down. Here we go (all try, F, L, B get it and C, J, D, S, M fairly lost)

A: OK, listen again. (plays A, phone rings) Here we go again. (all play again several times) Question Bob?

B: Is that a fourth finger? (A shows, several try, lots of talk re questions)

A: Take it by yourself for a few minutes. (all play, M is lost, D stops and says "I find myself making it up"- all laugh)

A: OK, lets take it all together. Listen once (plays A).

Let's take it a little slower than that (all play several times). Good.

A: Sounds good, any questions, there's still a few rough spots.

C: what about that spot where it goes down?

A: That spot? (plays spot, then all try) It's C's question so let's hear it. (C plays) Yeah you come back with your first finger. Let's everybody take that piece. (all play) What I do is just put my finger on both strings. [all try]. You walk down the string (all try). So, let's try that section fast (all do together). A little faster [all do]. Oh, there is a way to make this easier. If you use just a little bow you don't have to move so far. And also, where you are makes a difference, put it in the middle close to the balance point and you don't have far to go, but out here it's much farther, so I would play it more in the middle (all try). Right, do it with just an inch of bow, just to experiment with how little you can use (all try) now use as much as you can [all try] that's hard, right, so somewhere there's a happy medium. But if you play for dancers with just this much (shows) you will sound awfully niggardly. But somewhere there's a happy medium. Let's take this A part a little faster, then we can go on to B. Let's go about (begins to play, all join in). All right. (still playing)

A: Yeah, end with a D the second time, that way you know that you're done. (tunes) So, are we ready for B or do you want to do this a couple more times? (all want again) OK, here we go. (play again several more times). Where I like to put slurs is usually the first two out of the four notes (shows) like there (plays I usually put one there (plays) and I like to slur those two (plays) But its not all separate, its nice to have a few slurs in there to give it some softness. The dance has a real swingy feel to it. (to D) Do you know how to dance it

D: Oh, sure (they get up to show) well, how do you start out? yeah, you walk and then move your feet in time (A and D show)

A: It has swing to it but it's much more mellow, not like a hambo or schottish. So, the slurs give you this.

B: What does the 'sling" mean?

A: Sling? What does it mean? I'll look it up. (get's dictionary) (others talk and F tries A section) I'll give you the whole idea here, I think swing is the one we want:

"touch, as in touch of the flu, sling as in gulp down your food, throw ones cloths on, dangle or swing", that's the one that we want, swing, dangle, but mostly it means swing. You hear of sling polska as a reel. (hums) So, let's play a couple ;more times with some slurs in then. (all play) There's a nice one. there's a nice one (still playing). Let's get these ones that I'm playing just for now so that we can all play it the same. I mean you can change it when you go home, so watch as you play. (all start) Here. here (notes the slurs as they play). So, watch me and keep this in your ear. (all play and try to get slurs) (A notes 'here", "here" as the slurs come.

A:Let's sing it and do it in the air.THis way maybe the bow will do what the brain wants to do.

F: What makes it do that.

A: Gremlins the gremlins in the bow make it do that. An accumulation of gremlins at a certain point.

F: Can I use your bow (all laugh)

A: no, the gremlins won't like it. So, (starts to sing) is this a terrible key to sing in? (changes to lower key and all sing and bow in air) Let's put one in there. Looks like the hardest one to do is: (sings). Funny place for a slur. But, listen to the sound. (plays) See how the little thing there makes it smooth. (all sing and bow again) That's how I feel it. OK, let's try it a few more times and if it doesn't go we'll try something else.

F: WHere do you start the bow?

A: I start right about the balance point.(shows) The reason is because you want to get that little bounce in there and its easier to do at the balance point. (shows) Feel that bounce in your arm (all try) Just put your bow on the string and let it bounce around a little. (all try) Hey you guys, take it a minute without even the tune. Feel that suspension in your arm roll it around on the string (all doing it) It feels like someone just pressing down on your arm a little bit. Do it without even moving the bow. That's the felling that I like to have on this song.Just that sensation of real lightness. So, let's take it a few more times. (all play several times).Did you keep that bouncy sensation in there? (some agreement) Ok, B part (plays B part twice)

D: Sounds like a Klesmer tune.

A: Yeah, that's what makes me think it's either a very old

or new tune. (tuning and trying by others)

L: Will you play it one more time pleas.

A: OK, the whole thing?

L: Yeah, I just want to hear it one more time. (A plays b again).

A: OK here we go. SEe how much you can feel the bounce in your arm as we go. Its not something that you always do. (all play b slowly several times).

A: Ah, second time (shows how it ends differently second time) All the way up this time (still playing) Back down this time. (still playing) Listen and sing along (A plays and all sing several times).

A: OK here we go again. On this record they play it with trumpet and saxophone.

D: You should hear the new thing by Knutsen for trumpet.

A: Oh yeah? We have to get him out in public with it one of these days. OK, (all play B slowly).

A: Listen again and sing along if you want. (plays B and all sing softly) Last ending (plays) Let's do it again.

D: When you go down on g is it C sharp?

A: Yeah (all play B slowly several times).Let's take the last ending. (several agree) (A shows and then all play slowly just ending pattern for B last time). Are there questions on it?

S: Is that last note a B flat?

A: I play it with a C sharp. (shows) so I can get (shows) Yeah, usually if I play it as b flat I play it this way and as c sharp this way (shows). Let's take the whole B part one more time. (all play together B part several times).

A: Questions? Let's take the whole thing. (all play) Let's do one more B. (play whole thing several more times) Sounds good! (grumbles of discontent). All right, let's let it mellow a little. So, we will now have a concert of people who were here last time of Bellnap's March.

D: I played it last night for the first time.

F: She's volunteering to lead.

A: OK, go.

(several attempts at starting and eventually they get going , much background talk) A; 1 and 2 and 3 and (F and D know pretty well, J, C, and L know somewhat, M very little, B and S are new, A is listening)

A: All right, it was it sounded good. So, now that you've remembered how it goes I want you to pretend that those of us who are not playing are the kings and queens of the realm and you are the Belknapps of Belknappville and you've come all the way here from Belknappville to play your march so, make us want to give large portions of our royal wealth to Belknap or at least show some civic pride. So, with pride, even if you're not too sure of the notes you'd better make us think that you are.

D: so, we project our selves a little?

A: Yeah right you could look alt us a little, stand up if you want (others remark re forcefulness, standing)

F: no tape recorders on

D: Do you want to start (to F) (F starts, F,J,D, and C stand and L and M sit to play) (sounds much more vital)

A: Yeah, that sounded a lot different.

F: Yeah, different than Belknapp.

A: No, nice downbeat. Good full tone, sounded good Yeah, team!The Belknaps.

F:How much do we get?

A: Well, we'll buy you all new boots. So, what I thought we could play around with a little, is playing cello. What we're going to do here is to learn to sling our hands around here on the fiddle so that we can play in 89th position if we want to. But, mostly just to get more freedom around the fiddle that if you're always playing down here that's cool but, if you know that you can play just anywhere, then you can have just a lot more free fun times with it. So, we're going to do that a little. So, what this is , is just slide up and down and notice how your thumb just goes along with your hand. In fact they are connected in some mysterious way. So, when you come up here your thumb can follow around. Your thumb does not have to stay in one place So, in fact if you have it up

here you can have your thumb up here (shows, all are doing it) Don't leave your thumb in the lurch. Bring your thumb all the way up to the bridge. Yoik! Yoik! You can hold on with your other hand too. So, let's make some ghosts (Swing finger up and down to make harmonics). So, what does it feel like in your arm when you do that. (D and F say it stretches) Stretches? What else?(C says it hurts) All the time? Yeah it can .Put your hand up and see at what point it starts to hurt and see if there is anything that you can do at that point to make your thumb not hurt. Like move it here. If it doesn't hurt great. (all do more "ghosts") So, do it like this, back and forth. Start from above and let your arm slither down. So, find this note (harmonic) Find this note with your first finger on the D string. (all) and with your second finger on the G strings. and this note with your third finger on the G string. Let's jump an octave with our first finger on the D string. See how fast you can do it.

B: What do you mean, from d to D?

A: from e to E.

A: So, you guys if you find an octave above the open you can find a harmonic. Make your bow light and fast. (all). Can you find it? It's the same note whether you press or don't press. (shows, all do) So, more to come on this subject, but play around with it.
I want to play a few tunes for the tape recorder.

C: Can you play our Belknapp tune properly for us?

A: Sloppily? (laughter)

C: Properly.

A: Ok, Belknap March written by Bill Williamson (plays)

A: OK, so moving right along here, a classic of contra dance tunes, The Lady of the Lake. Do you play this tune, Frank?

F: I know it but I can't remember it.

A; OK, here it goes (plays).

A: So, there's one. Here is a jig, Old Man (?) by (?). (plays).

A: and then a waltz from ? in A. Remember this one? (ach! when mistakes are made in B section).

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F: Now back?

A:(laughter) I don't know about that. Go back if you want to. Let each finger move independently. See if you can get all the way to the end. It's always fun to play with different part of the bow. OK, let's play a little. Use just four inches at the top of the bow. Play an A scale use four inches, that's all. (all play up and down). OK, now use the bottom of the bow. (all play) OK, now use middle of the bow (all play). Now the whole thing from very end to very end. So, do your hands feel OK? So, let's play a little Belknapp. (all play)

C, ??, J, F, D, and L doing well.

M, B, S, and ? are unsure.

A: (while they play) bravo, good...
A: That sounded good and spunky! S, um. last night we talked about things we could do to decorate the tune. Remember any of those? Any ideas? (plays)

F: Like double stops?

A: Yeah, where would you do those? Like first notes of phrases? (plays to show how to add low E)

J: Are there any rules to know when not to add them?

A: Yeah, (plays) (others try) Usually they are used to accent (others still playing) (talk re open string double stops and where to use them)

A: OK you guys, lets play the B part again and then you can put some in. SO, in the B part we're in the key of G so you can use G double stops and play around

S: G ,B, D?

A:Yeah, G, B, D would be likely candidates.
Lots of places. so, right at the beginning (plays) (all try) So, there's a spot here? What would be something likely to add here? (all try) Yeah,(more experimentation).So, what should we use here?

M: you're coming up on C so it's probably a C chord.

A: Yeah, (shows and suggests some other chord spots). (all experiment). So, why don't you listen to me play it once and I'll put in double stops where I think they might go. (plays Belknap B section) So,what do you think?

B: Doesn't that cover the melody?

A: Use this.

L: Do you usually a note below the melody line?

A: Sometimes. SO, here we go (all play slowly).

A: Sounds like this is a little too fast to think about all these notes. OK, we'll take it a little slower (all play very slow).

A: So, how's it going? You're not getting a whole lot of double stops. is it too fast? (general agreement)

B: It's hard to think of where your fingers should go twice. We're thinking linear and then you throw in an extra finger... which is not, well, I can't tell from just hearing it what the finger should be. That's too much at once.

A: OK, let's do this, we'll go over again the ones you can use. OK, you're playing E in the melody, you can do this (shows double stop).

B: I don't see what you're doing.

A: E is the melody. (shows, several, then all try). Then you have your open strings you can hit D and G together (all do) If you're playing G in the melody. you can get C down here (shows) if you're playing the other G you can get your finger across to the A string and get (shows) if you're here you can reach down your first finger here. So, just take a few minutes by yourself and play it.

D: What do you do on the E?

A: Oh, E or C.

D: You do that a lot don't you.(all playing, talk not discernable).

(all practice double stops. Hoag goes out of room for a bit)

A: OK, how goes? Is it big success? Yeah? a Little? (D has question about the D string) I f you want one with D try down here, (shows). So, what about trills and things? and we did this turn kind of thing. (shows) here it is one first finger on A and what it is in slow motion is, the and the other note and then the note and then back and then the note (as she shows them)so, five little notes and the idea is to get them fast enough that you hear one. (all trying it). You can put those anywhere that you have a long note(shows on A section of Belknap) Wherever there's time you can do that.

B: that one you're doing on the D, That's going above? You're doing the five notes there?

A: I don't know where I'm doing it. (shows) You can do it with any finger.(shows)Try it, just test it out a little (all start in). SO, there's probably a couple of things I can say about this and one thing is it's pretty easy to let you hand go in this shape (shows hand in fiddle position but with fourth finger not ready) Because that's the way your hand is basically built at that angle, but if you get in the habit of keeping your, all four fingers over the string then when you need them to do those little turns they're there and it's pretty tricky to get your finger there from here(shows wrong way) but if you're there then it moves a lot quicker, you don't have so far to go (shows). And the other thing is just do it a lot, that's really all there is to learn about this thing. Now it's hard and then it's easy.You don't know how it happens.

A: The other thing that you can do is little bow triplets. Well, I don't know if we've done this before the bow rebounding, it's like dribbling a ball,(shows) you toss your arm down,so, do that a little bit (all try) You guys,let it come from your wrist, if you're using your whole arm it's kind of big and clumsy, but if you use your wrist it goes (shows) and relax a little bit (all try) try it without the bow a little bit (all do) so , here's your wrist in a sort of ... that's the motion (all do in air) it really is a lot like racquetball or paddle ball, so, do it, make it big and clumpy first and (all try) not like this (shows) So, if your wrist is moving you're not going to .. So, you want to do the little triplet with the bow (shows)n Belknapp) It's the same motion, except you need to get three and not 4 or 5, so experiment with that a little (all do).

A: So, where do you put the little triplet, wherever you can (shows and says where) I don't, know there are not many very great places, that's not so great, there!

There! So, there's not a whole lot of places I'd use it in this tune. Just try it on your own for a few minutes and see where you want to put in those turns and triplets. It's just a matter of playing with it. (all play).

A: I tell you what, let's take it together, but take it real slow (all play Belknapp A section slowly). One more time.

A: So, ideas that you can play with. let's leave this for a moment. So, let's think a little bit about what to do about dynamics, where to be loud and soft. A sort of general rule of thumb is when the melody goes up then it starts to get louder, but sometimes I'll do just the opposite of that just to fool people. But you know it is pretty natural to make a big climax there (shows) So, let's just play it that way a couple times through, go quiet when it goes down low and those lines where it's building up let it really build up to something. Here we go (all play A section). One more time.

A: So places like here it comes down like here (shows) that seems like a really natural place (shows) but you can also do the opposite thing where people are expect it to build up, the melody is going up, you can make an effect by getting quiet (shows). Because people really expect that, almost, so it makes a big effect when you do something different here. Let's take it a couple more times through, just be experimental about it.(all play).

A: Yeah, that's the idea. OK, I'm moving through a lot of things here tonight, the next thing is phrases. So, you can play this tune as one gigantic phrase with no breaths from beginning to end or you can put some punctuation in it and it's, I think it's pretty straight forward where the phrases are going to be since it's such and even rhythm (plays). I'll play and just tell me where would be a good place to phrase just say THERE (starts to play and all listen, a few say there) So, yeah, so you can have the phrases start right on the down beat there (shows) I think usually the pick up notes are part of the new phrase. You can make real "big bones" out of the down beat just to get that extra UM. So, what do you do about phrases.Any ideas?

D: A pause or ...

A: Yeah, but a little pause.(shows) You can make actual pauses like that or you can make just quieting down. (shows)They both have the effect of pause. One you actually stop and one you don't.

F: Can you tell whether it's up bow or down bow that starts a phrase?

A: Up bow or down bow? (yeah) I think it doesn't really matter. If you have a down bow gravity is on your side (shows) especially if you want to get a big double stop (shows), but I think it's really nice to be able to get a big punch with an up bow because what if you end up on an up bow, you don't want to be just left out in the cold there. So, I like to be able to practice to be able to get strong up bows and wimpy down bows just to be able. Let's play it and just think about where the phrases are and what you want to do with them, what kind of breaths you want to take. You can take a little breath after the phrase too, that's one thing I like to do with this tune (shows) So, here we go, just think about where you want things to be. (all play A section) We talked about a really nice way to punctuate phrases which is to start out with a bang and then to get off it.(shows) (all play Belknap) One more time.

A: OK, um, that's ok for now. Let's do one more thing and that's playing in little groups for each other. So, what we're going to do now is go in little groups of two or three and put your heads together and think especially about phrasing and about dynamics. So, you can put in double stops and things if you have time. Talk together about where does the phrase begin.and how to make a really big deal out of it.Which one of the little tricks is useful. So, take like 15 minutes to work on it and come back for show and tell, or show or tell. And if anybody doesn't have the basic tune down, does anybody not have the tune? (Scott indicates he does not) YOu guys want to go in groups?Somebody can have the kitchen (start to move to groups) There's no really right or wrong answers here you know.

A and S to upstairs to work on tune.
B, ? and F to kitchen.
J, ?? and D to living room.
M, C, and L to hall (tape recorded).

C: Well I have the melody down.

L: You have that much (laughter)

C: I have the hardest time getting them.

L: I can't get them here. I have to go home and think about it.

C: Did someone figure it out?

M: The first phrase.

L: Remember when she goes (sings).(all talk) Or yeah when she goes (plays)There she does some double stops there you know.It sounds like she's doing that or something on the whole note.(plays) I think it's something like that.But how does she do that when she needs to get the next note? Did you notice how she had her finger here to start?

C: Yeah,

A: and then she just (plays) Is that how she does it?

(agreement) (all try)

C: OK that's not the whole melody.

L: Ok, let's just play that much. Wanna try it? (all try A and B sections).

M: There's some rough spots in there. (yeah)

C: HOw about your lowest note? (tuning)

(playing separately)

M: She plays this E with the B?(all play)

C: I think we should do some of the trills or something. And she'll think we learned one thing at least today.(all playing).

M: Well, how does the very first part of the tune go? Maybe we better work on the accents.

L: Yeah that's what I was going to say. (playing) Well, should we go softer here?

C: I don't know (all playing)

M: I think let's get louder as we go up.

L: Louder? OK. (all play)

M: I need to get some parts.

C: OK, let's go through it and gets some more dynamic change. He just wants us to go through it slow.

L:Ok (all play slowly)

M: OK, I think I got it. Is that the B part?

C: uh huh.

M: Ok, let's do that.

C: it's like that. I have a hard time playing it at the transition too.(plays)
L: Have you found some spots?

M: I don't know.

(playing slowly)

M: Looks like I'm missing something in there. After we go to that first time in there down to the D, C# (all playing while showing).

C: C#, E, (telling notes to M as playing). It's like D, (plays) 3, 1, 3 (plays and says fingering and letter names as they play section A slowly). Yeah that's a tricky spot. Start here and go down.

M: How do you do it? (C and L show) Then you go back down?

C: right and probably end going up. Just like this. It's like this the first time but it's this the second(shows). Instead of (shows) you go (shows). All right.

M: That it? C: uh huh.OK?

M: not sure I have it all.

C: Well, we'll just have to keep playing it then. That's all there is to do is just keep playing it over and over and try to find out. That's enough. It's not to perform.

L: Let's play it faster. Can you play it a little faster? (all play about half as fast as living room group is playing).

C: I think you got it. (all play). Now let's try when we go low just get soft and then when we go high go up a bit.

M: Sounds a bit arranged. (tuning)

C: I think that's a bit sharp. What do you think if we do all the low parts a bit soft and the high parts go up.

L: Sounds good to me. All of a sudden I'm just so tired.

C: Let's just try it that way. When we're down here go as low as you can and when we get to the high string go as loud as you can. (all play slowly).

L: Maybe we should phrase the B part.

C: WE should get the low part.

M: You can get that low note real good.

C: Right there is 1,2,3 the only place that's real loud.Kind of fun to try to keep up the music in this change. Just that one time we can do that (shows)

L:We do that hard?

C: Yeah, just the 1,2,3. (laughter)

L: Both times or just the first time. Both times?

C: Yeah, (laughter)

L: Oh, Cindy how daring! (laughter)

C: Ok let's go there.

M: you don't have to if you don't want to.

L: Oh, no, that's perfectly all right. We could just do it all. Oh, no that's silly.

C: let's go from the top, Ok, ok (all play slowly). (laughter)
L: Oh, no someone's taping this. WHose is that is that yours?

M: No, that's Ramona's.

L: HOw about if we play it the first time on A loud and then soft again.

A: OK, I think we'll have all the groups play and then we'll open the floor for compliments. Say anything you thought was cool and then after that we'll talk about what you did that you thought was cool. OK, so you've had many years of practice saying what's bad about your fiddling but we're not going to do that now, just things that are good.

D: Like _____art work.

A: OK, you guys I mean, it sounds good. Brandon thought

you were great. (laughter).

B: Yeah, that's a compliment. (laughter)(Brandon squawks)

D: Yeah, that's the one.

A: So, I want you to play with confidence and take pride in what you did. Cause you did, there's some phrasing, right? Cool! So, OK, who wants to go first? How about the kitchen group?

B: We didn't do anything.

A: Oh, yes you did. YOu were Brandon's favorite. (laughter).

F: OK, Bob. start. (kitchen group plays).

A: One more time. Don't stop yet! (they stop). Go one more time. (they play again).

YEAH, applause, phone rings A: The bells are ringing.

A: OK, how bout you guys (living room)group. You can wait 'till it stops ringing. Play it twice through.

D: OK, are we getting louder as we get higher and then softer, OK, ready (L.R. group plays once, stops and begins a second time).

YEAH, applause, A: OK, door number three.

(hall group all talk at once, C: starts them. They play much slower than other groups and sing ba,ba,ba on the ending pattern.)
YEAH, applause

A: OK, so what

D: Well, I like that ba, ba, ba,

J: Well, these guys got some trills.

B: Yeah we worked hard on trills.

D: I think both groups worked on dynamics. We finally got some there. (big silence)

C: I thought the kitchen group really stayed together.

M: In other groups we noticed that they made their own versions.

B: I think if you play it by yourself you get more out of it, I mean when you play it at home practicing.

A: I thought you all got the phrases. Did you hear the phrases in the different groups? OK, what did you guys do that was really neat?

D: We mastered the beginning of the B part (laughter)

C: Even though we didn't think we had any ideas we did come up with a few ideas.

L: Yeah.

M: But nobody noticed. We were trying to play the beginnings, the low part softer and I don't know that it came off.A: I think it did. Could have done even more, wider range.It felt like that was happening. I guess, you know, things like that are conspicuous in their absence, if someone is playing (shows) then you know something is wrong, but if you're playing it a sort of natural sense of rising with the melody then you don't notice it. I think it can be good if they don't notice anything. What else did you do that was cool? Or did you have any good discussions or debates about what to do?

J: We were trying to figure out how you phrase things.You were playing the same notes we were , but it always sounds different. We're trying to figure out why. (laughter) You put something different in it each time through, we were trying to figure out when to play the trills and to make them bounce. But we figured we were doing it all every time.

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7:20 all playing Belknap's March several times.

A: Any other questions?

D: The bowings, are you...

A: I'm doing that same old basic thing of slurs and separates (plays an example) yeah, (plays) same thing there. So if we take it slow can we get the bowing? (all play slowly).

So where there's all those quick notes it's slur separate. Let's do just that much. (all play A slowly) Good, there's some other slurs in there besides those little quick ones.

(all play slowly). There. Let's try it a few times. (all play) Here, here (as playing) Hmmm... Let's try it again. (as playing) down,, slur , One more time, slur, and together, slur, slur,

That getting there? Um, The second half is (unintelligible) Let's take the whole A again. (all play a little faster) That's right I forgot about that thing I was doing before...(plays) Oh, well, let's do the B part. (all play B).

So, I don't really have anything particular that I do with the B part. You can make up your own. Um, let's try it a little faster and really try to get that bouncing feel.(all play faster).

L,C,F doing well. M and J doing OK, Ji having trouble.

all play without A.

A: Sounds good basically. There's a little problem in the endings (plays) should bounce this way (plays). It's sort of too much happening here, you don't want it to be too. It makes a big difference to listen to it if you get all of a sudden (plays). And in the middle of the B part, same thing (plays). Doesn't quite make it. (plays) So, in those two places, slur the first two.(plays). Let's take that one (all play four notes with slur sep, sep) and in the B part Same thing (all play section).

D: So you first bounce that.

A: that same old pattern.So, let's take it one more time. We can see if we get that. (all play).

watching A: J, B, D. Not watching A, but watching own hand: M,L,C, Ji, F.

A: Yeah, so let's take "Lady of the Lake" , we can come back around to this guy. So, you guys have all learned it? ha,(plays a bit) How many have played along with the tape?

B: Successfully?

A: Yeah, how many have listened to it 50 times or more? (Ji, M, B, and J raise hands)or at least a lot. OK, so let's try taking the whole A part slow and then we can break it up. Ok, here we go (all begin to play slowly). Ok, pretty good.

F: You're doing a couple of other bows in there that I

never (A plays) yeah there

A: all I'm doing is letting my bow bounce back. (plays) You're talking about there? (plays) Let's just take A a mess more times. See if there's anything else that you want to know. (all play A section several times).

Yeah, are there like some gaps in it or do you just need it a couple more times?

C: I have some missing gaps but that's ok, I'll just try harder.

A: Shall we try slower? (agreement) Even though we go slow , keep the sense of where the accents are and where the phrases are. Do it about(plays) (all play)

Are there less missing gaps?Any other questions?

JI: After you go up it seems I's missing a note here(plays) (A plays) (several try section)

A: Any other? Want to do it again? (agreement) And..(all play) One more time (all playing).

I think probably the actual melody doesn't have the (plays) in it. It's just (plays) so there's one place that there's no notes (plays) But that's one of those places that I play different ways different times, so I'm just forewarning you if you get around any purists, they might tell you the real way is (plays). It's kind of nice to have that to break up the tune, cause otherwise it's just a steady string of notes. It punctuates. Uh, it seems if anything is missing it's right in there (plays). Let's just take that (all play CHUNK of A section) And again. (all play chunk several times). You know?

B: Well, I thought I had it earlier.

A: (to mike) You got it?

M: Kind of.

A: Let's take it real slow. (all play chunk very slow). A couple more times (all play several times) One more time. Yeah? Let's take it a little faster again. And (chunk) Again. One more time. Yeah, you guys got it. Let's go on from there with the two big B's. (plays) In fact, I tell you what, let's go through the whole A part real slow, then we'll just speed it up.(all play slow) Big C's (while playing). A little faster (all keep playing but faster). One more time.

Yeah, so let me play the B part or we'll have it in our long term memories as a one part tune. (laughter) (A plays) Let's just play it kind of up tempo a couple of times just to get in the room a bit (all play). So, this is one of those places that I never play the same twice, so if I'll teach you guys one version if you promise to make up another one.OK?

D: OK.

A plays.
A: So, we'll play it that way. (all play slowly) Yeah, let's play it slower. Want to put in some extra stuff, that's good, go for it.

M: That's not extra stuff, that's mistakes.

A: No, I hear you filling in the little wholes which is great. You don't have to know you're doing it.

D: Is there a C and then a C sharp?

A: (plays) here

D: and then you go right to the others?

A: Yeah. You're right at the end instead of just going(plays) you go (plays).

B: Oh, yeah I'm trying.

A: Oh, no go for it. Cause like I said, this is just one distillation here. So, let's take it real slow. (all play B slowly). OK, you think you guys have it?

C: You know that last part where it goes down to the B. Can you play that slowly?

A: I think at the top part of the run you guys are mostly playing G and I'm mostly playing E. (plays) Well, those are both cool.And you know two versions, already. (plays) This part down here (plays slowly) there's a seventh (all play slowly together). Is it there yet?

B: I don't even know where we're starting.

L: Are you starting an D or E?

A: It's really both. (plays)and then(plays) F sharp is the second note (plays) and then down the scale skipping the C.(plays) and then C (still playing and saying letter

names) Play it a couple more times. (all play) And (play again) One more time. Or what I do a lot of times (plays alternate version) (all try separately).
So, let's do this, let's play the B part a few more times real slow and then see if we can put it back with A. (all play B slowly)

A little faster (all play faster). One more time. Are there still pieces that you don't know what they are?

M: What;s this first high note? And then when you drop back down what are you doing here? (plays)

A: (plays and says a few notes) That's where there's the DC sharp. Why don't you take it by yourself few times. Work on whatever part you need work on. If you're missing anything let me know. (all play individually).

(to M) that part there?

M: Yeah, I know it stays about half way and then I lose it.

(A is helping various people individually)

A: That last part goes (plays) (all still playing various parts while A gives help).

A: So, let's take the whole thing.

L: I should have practiced the B part.

A: Here we go, 3,4, (all play).

A: A part again (all keep playing). A part! (all keep playing). One more time (all keep playing). So, what do you think? So, let's have a commercial break, and Ramona, will you tell us who you are and why you are here?

_____ Break to do student questionnaires_____

A: Well, I tell you what's going to happen no, my opinion about what's going to happen now, that I will play this tune a couple times for your tape recorders with some little variations. You can study it.

M: Will you play the A part slow for us? I think it's the B part you played slow once for us.

A: OK, I'll just play the whole thing slow with some little variations. 3,2,1 (plays Lady of the Lake slowly and then speeds up and adds variations). It's hard to do

this slow (still playing).

F: Could you play it dance tempo for us?

A: Yeah (plays faster). So, You guys can play around with variations and think about phrasing, especially in this big descending part. How are you going to do that? Are you going to go (plays)? Are you going to make the phrasing there or are you going to split it up? (plays) Are you going to put a pulse in there?(plays) Something like that. It's a place where it can sound really stupid. (plays).But think about how you want to make that phrase end.

L: Are there rules to phrasing or is it just up to the fiddler?

A: Don't sound stupid, that's the only rule (laughter).

D: If you don't know they'll tell you, right?

A: Well, for contra dancing you want to make sure they know where the down beat is, but you can start into it early there. (plays) You know, you can consider the phrase to start there,or that could be the end of the last phrase (plays). That could be the new one there. Sometimes I make a big deal out of it just to be goofy. (plays) Wakes 'em up. But play with that part especially and just think about where the phrases are, where you're loud and soft and where the accents are. You know, you don't want to accent every down beat. (plays). So, you could make it just a couple times. (plays).And the big accent (plays)It's really up to you what you want to do, so, that's your homework is to think about that and next time we'll spend some time in little groups like we did last time and work on phrasing.

C: are we starting that jig?

A:Yeah.

J: Which jig?

C: the jig on the tape.

A: Unless we do that waltz. It's nice to alternate, really.

D: I feel really outnumbered (she is into Swedish fiddling)

F: Oh, you're into Swedish fiddling.

A: Yeah, we'll probably work on that waltz. So, yikes, there's just not enough time here so we don't get to do all the really cool things that I wanted to do. See I promised the other group I would show up promptly tonight. But next week I'm not going over there. I've done this every week but, two weeks ago they called and just as I was going out the door and said "there's nobody here, don't come" and last week they called and said the same. But this week I'm going over there promptly and that's it, next week I'm NOT going so we can go longer next week and we can do all the cool stuff like, actually I'll tell you what I was going to do and you guys can do it on your own time. Oh, let's just do it, what the heck, OK.
You're going to play a scale, starting here with E on the D string and we're going to play the whole scale with one finger climbing up the string. (all play) start on E with your first finger (still playing) keep climbing (all playing) and back down. All right! So, you can do that on all strings and with all different fingers. Let's do one more just for the heck of it, let's do our second finger starting with C sharp on the A string.(all play)
Oh, boy. So, play around with those things and we'll talk more about it next time but it makes it easier if you can get up there. So, we'll do more of that stuff next week.

J: Should we practice that waltz? Or should we not really work on those things?

A: Yeah, you can work on it, sure. The other thing that I want to do is to take those things where you go with different bowings and yeah, if you want to work on the waltz a bit. Let's play Lady of the Lake one more time before we depart. (all play)
One more time. (all still playing).
So, remember your promise about learning some variations. So, we'll all have at least two versions by next week. OK, so next week we'll have a marathon, do everything hitherto undone.

February 16, 1988
Intermediate Class

(tuning and talking)

A: OK, so, warm up time. WE're going to do the big train. (plays). How many people have never done this before? Ok, it's just up and down the scale.(plays)Yeah, so we do that twice and then we do every other finger. Just skip every other finger (plays) (all do) Yeah, so let' s do it together. Yeah, that's it. So, let's do it this way (plays with accents on first of four. all do it.) And then second part (all do with accents) Oh, hi, you're

here. So, (getting chairs) so you can start while you tune up. You've done this haven't you? (shows bow shove) It's this motion like pushing a button. (all do)

J: What is it exactly that you're doing?

A: (shows) Pushing down with the heel of your hand.

J: Kind of snap?

A: Yeah, and then with the bow (all play). This is my attention getting device for tonight since I have no voice. (waves bow) If you just really exaggerate that motion with the wrist the bow will just flop after. Do it that way just to really get the motion and the n you can use your fingers to control it. (all play). Yeah, that's good. What do your fingers have to do to make it stay on the string? (plays) Can you find out what your fingers have to do? (all play)

D: sort of a down stroke? (all playing)

A: So you want to be straight like this.

D: I straighten out my thumb you mean?

A: Yeah, so let's take this thing again (plays four on a note in big train and others join in). Can you see me there?

JI: yes

A: So, twice (plays) and then (plays) here we go (all play) So, some people are playing up here(plays) it's hard to get a really good bite (plays) so if you go here (all play) . Here we go again (all play together).

L: So, you just sort of go (plays)

A: Yeah it's not big. To me it feels like I'm playing the fiddle, but there's a little button over here that I have to push to start the operation. (plays) Here we go again (all play).
Yeah, it looks good can you feel it?

D: Yeah, it hurts.

A: Good, just for curiosity, wanted to see.OK, so now, we're going to go up one step (plays) Start with your first finger, and (all play). So something that happens here, we have to change strings (plays) Here we go (all play). One more time.

All get left hand pretty well.

A: You can use different parts of your bow. In fact let's experiment with that. Use different parts of your bow (all play at different tempi).

A: So, which part do you get the balance in?

D: The middle,.

A: Yeah the middle, so, if it starts to sound kind of flaky you can see if you're out at the edge. So next one, and (all play) OK, so we're going to go all the way up. So, starting with the third finger and when we get up to the top it'll go (plays) Let's do that one. (all play) So, what scale are we in? G? Yeah,let's do it one more time. (all play) ANd this is how we're going to get down. (plays) I'll just do it one on a bow. Let's do it start with your third finger (all play) Yeah, so let's go bottom to the top Let's start this way (all play).

Good: D, JI, and S
OK: F. L, B, and C.
Problems: M, J.

A: Stop and rest. Are you feeling anything in your wrist and arm?

B: Are you always doing it on two and four?

A: No, it's always which ever one you start on and then every other one. That's OK. So, how's it feel? OK, so shake it out. And shake out the other hand. It's actually true that when you exercise one side the other side gets tired. Ok, so we're going to start here. OK, here we go and (all play). Good (still playing). And down. Oh, yeah, that's good I didn't think that you'd all make it all the way. That's a really good exercise for fast playing because usually when you have fast notes they come in groups of four like that. (plays some of L of the L) It's basically the same thing, oh, you do a few other things. But, a good thing to practice. We'll do more tricks with it next time.

So, let's play this about (plays L of L slowly) Is that a good speed? One, two, three, go (all play)

(all doing well on L of L at slow tempo).

A: So, what do you think about bowing?

D: It's a mess. (laughter)

L: It's hard on the one I think.

D: I had trouble getting from G up to A. The B part I have trouble with bowing.

A: In there? Does everyone agree?

D: It's hard to make it not (plays)

A: You can do something. (plays) Let's do this first. Find where G is when you're playing in the middle of the G string. Find where your arm is (all play) and then if you're going to play on the far left side as far as you can go without hitting the fiddle. (all playing) You look confused (to J) How can there be a side on such a skinny string? But if you think of your string, think of it not just as a little tiny thing, but think of it as a big square, so you can play on the middle or on the side or on the other side. So, if you're playing on the left side, you know when you started off fiddling and you hit the fiddle? That's what I want you to do, but almost. As far left as you can go (all play) An then go as far right as you can go on the right side without hitting the D string and back to the middle (all playing) and back to the left (still playing) and back to the middle and back to the right. Now on the D string. Left. Middle. And now on the right. Middle. Left. Right. And middle. So, it sounds different. Does it feel different? So, that's a little exercise you can do to get across the string so if you have to go from the G string and over to the A. You can have further to go, but if you stay on the near side you can get there quicker. So, what you can do is start on the middle or left of the G string, listen first (plays). About here and then go on to the right side and then change to the D on the middle of D and then go on the left of D and then on the G. So, middle right, middle left. Here we go (all play). Now to D.
Is it working? So, what is your arm doing? What shape is your arm making?

J: Circle?

D: figure eight.

A: Yeah, so try it over here. (all play) So, let's instead of making such a big motion (plays) but still getting that feel (all play).
So, if you practice it 5 minutes a day, this is what ----- - says who will be here says, if you practice this 5 minutes a day you won't just be a very good fiddler,

you'll be the best fiddler in the world, but there are some days when you won't practice this exercise, so you won't be the best fiddler in the world (laughter). I know, he says, and I am not the best fiddler in the world. But it's really good.

J: I don't get the figure 8 I feel a circle.

A: Well, if you're going middle right middle, it's sort of an exaggerated motion.

J: and when do you switch bow?

A: Well, you could do it different ways.(plays) I have to apologize for my fiddle today, I flew and loosened up the strings so I can't keep it tuned.
Um, if you have, let's say this is the tune, (plays) you could change this way (plays or you could change this way (plays) but you can practice it both ways. YOu can practice it on arpeggios too. In fact, let's take that one, C arpeggio. Let's find the notes first. C arpeggio (all play C) and then (all play E) and then (G) now do it and make sure your fingers know where they are. So, let's do this, let's make (plays C arpeggio) And go (all play). Can you feel the figure 8 there? (still playing).
Yeah, so you can make your own exercise all different ways you can go do, do, do (sings patterns) and feel different things that the figure 8's can do.
So, let's do the tune a little faster now. If it's not obvious to you now it will be later after you practice. So, we'll go 1, 2, 3, go (all play L of L faster).

Good: F, JI, C, D.
Fair: L, S, and B.
Problems: M and J.

A: Yeah, sounds good. OK, so before we go to sleep I'll have us stand up and do something, but before we do are there any questions.

J: Yeah, I can't get how you climb up there.Start of B part. I can't quite get it. (plays),

A; Start with that here (both play).

J: Oh, second finger.

A;Yeah!

J: Hey, that's it.(plays) oh, (plays) I don't quite have it yet.

A: Actually, you know what, does everybody else have the notes pretty much? Cause I can work with you for a few minutes by yourself.

J: Yeah, OK, why don't we.

A: Is anybody else having questions about?

B: There's one little spot there that I'm still getting confused.

A: Good.

B: No, I mean...

A: Yeah, well, when you get in your group you can see how they're doing it. Don't decide that what you're doing is bad. Maybe you can bring them around to your way.

D: I finally gave up on the last two notes.

A: You can always get it someone else's way later. Might as well try your way. So, what I want you guys to work on for a little bit in groups is making all the down beats audible, so you don't have anyplace where it goes (plays) OK, no wimpy down beats, OK? And I want you to talk about bowing, if there's a place where you think you can slur it and you think it's really cool. Talk to each other about that. And then come up with some idea about the shape of the tune. Where you're going to make the climax. Where you're going to make the little dramatic pauses. And especially in this little place we talked about last time (plays) where it goes down. So, 3 in a group except one group can have two while I help J a little bit and then he will join. OK, go (laughter). Well, one in the hallway one, in the kitchen, one in here. OK, you can stand up for a bit, recess, you can run out and scream. That's what the kids do every morning out in the street here.

(A helps J while C and L in hall, F, S, and B in living room and M, D and JI in kitchen)
A: play it a bit at the beginning. Yeah, and then back to G. (as J plays). You need another note there. Play what you have here (J plays). Yeah, you just come back up. Let me show you how I have it here (plays). You go to G here. And then back up here. Yeah, not a very good one to do that with. Do you get it? OK, so try to get in with a group. (J joins hall group)

Living room group:

S: Do you use your fourth finger here?

B: I don't use it.

A: You guys doing OK?

(Yeah)

S: We could play it in different octaves

F: how about different keys, one play it in C.

B: Just kind of stick your thumb underneath there?

S: Yeah, that's how, good.

B: How do you do that vibrato.

S: I guess there's several ways to do it. Some people shake their whole body.

(start playing L of L pretty fast)

(M,D, and JI in kitchen playing medium tempo. C and L and J in hall playing slowly)

(D and JI come to A in living room for help)

(VERY DIFFICULT TO DISTINGUISH DIFFERENT GROUPS TALKING AND PLAYING)

Break for tea.

L still practicing in hall

Come back to talk about first friday dance.

S and J fill out questionnaires.

D and J and one group member and F and C and L playing for first friday dance group. Discussion re what to play and how to set tempi.

A announces Swedish fiddler workshops and camp.

February 23, 1988
Intermediate Class.

A: Let's start with some stretching.

Stretching exercises:
1. Each arm reaching to ceiling.
2. arms back alternating sides.

3. reaching over shoulder with one arm, up back with other to touch fingers.
4. Fingers lifting from position on thighs alternating 1 and 3, then 2 and 4. Walking up and down thighs with same alternation.
5. "Squeezing a grapefruit" motion of fingers coming in as arms are held in front with palms toward each other.
6. "Picking up bugs" bringing fingers and hand up abruptly using wrist motion.

Bowing exercises:
1. "Ants walking" moving fingers up and down bow.
2. Same thing with bow on string.
3. The "Big Train" >--- pattern.

Groups separating off:

Kitchen: F, D, J, and J to work on chords for waltz.

Hall: L, M, B, and JI to work on notes in waltz tune.

Return to living room and play tune together with chords and melody.

March 1, 1988
Intermediate class

A; Well, let's do a few tunes to warm up. What do we know?

All play Belknapp's, Lady of the Lake, Sling Polska and Waltz, then Waltz a bit slower.

A; Let's do some solos. Who would like to be first.

JI: You. (laughter)

C goes first. plays "Eidlewhile Jig". She learned it from tape of A with a bit of help from F. Played strong with more errors in pitch than in rhythm. Class comments were on good spirit and good choice of tune and ability to learn new tune without class.

D plays "Skol Budapolska". Learned from Scandinavian fiddler in recent workshop. Very nervous, but very sensitive rendition. Class comments on beauty of tone and vibrato. She mentions not supposed to vibrato. A says that in this song it adds nice effect although not really swedish to use vibrato. F asks if the waltz rhythm is supposed to be more apparent. D notes that it is not a waltz, but a Budapolska. A mentions that these are

difficult rhythms to notice if you are not aware of the dance type. D mentions that rhythm is her weak point. A asks if she knows what to do to work on that. D says that it helps when her husband plays keyboard with her. A shows a bowing exercise to work on accents.

F plays "Around the Horn" reel after one false start on the wrong tune. A says he surely got the rhythm going since there were so many feet tapping. Class was impressed with speed and spirit of tune.

S comes in late. A says she meant to call and tell about solo night, but forgot. (laughter).

JI plays one of Gert Olssen's tunes from workshop. Very difficult tune, but he is obviously fascinated with it and is doing well. Class is impressed with the speed. L mentions that it is one she wants to do some time. Ji mentions he has problems with the bowing. A suggest several bowing exercises.

All play 2 octave GM scale with fingers while keeping the bow on G string. Next play G, D, A, E strings while fingering on the G only. B asks why anyone would want to play on a different string than fingers are on. A answers that it is a way to learn control over separate parts.

L plays Olssen's Waltz. One false start. Stops just before end and says she just can't do it. A says "Oh go ahead." but L won't. Class has several positive comments. She says that she tried to work on one spot that was especially difficult and that it still came out wrong.

B says he only has one of the class tunes to play. A says that's fine. He says he'd like to wait until next week so that he can have it a bit better. A says fine.

M says he'd also like to wait. A says probably S wants to wait since he had no warning. He agrees.

A: So, how is old man river? Did you get it from the tape?

All play together. All play A section several times.

A goes out for a bit while all practice individually. F starts all together on A section. F next suggests that they do just one chunk. He helps all get first part.

A returns. All play A section together. Wide variety of ability levels in this tune. Ji is still confused. and asks questions. A has each play as far as they know

separately. Some do not know any at all. She plays first chunk slowly and all play together.

A has each person play a phrase and pass it around the room at their own tempo so that everyone can use own speed. Most only know the first phrase so that is impossible. Ji suggest that they do it with just the first phrase so that all can do it own speed.
A works on first chunk some more.

March, 8, 1988.
Intermediate Class

Three students tuning and discussing personal work. Some begin to practice jig.

B: That one is easy for me. But it's too corny or something.

(several other's begin to play it. Hoag joins in and they all begin to play it. C and D seem to know it quite well. B knows it pretty well. M and J are having difficulty.)

A: So, what can we do in this part so that it comes out, (plays) and not, (plays). What can we do about that this week?

B: Play this

A: and strong. I think a lot of times your finger is not sure it's going to land in the right place. It oozes onto the string.

D: Is it the last note, I'm not getting that.

A: (sings part) That's it, the first (plays). So it goes like. Let's take that (plays one bar) with strength and courage. (all play several times) Yeah, that's better. So, let's play the B part with that. (all play several times). One more time. Good. And now A. (all playing still). One more time.

Yeah, that's good.

D: Andrea, after the A part I'm lost (plays)

A: (shows).

C: I feel like, there's a note that you said we don't usually play in there and last time when we went through I said I didn't get it and you said there's one note we might not be used to playing, so I'm wondering if I'm

playing the wrong note somewhere.

D: It's D sharp (plays)

C: I think I'm maybe playing it but not realizing that I'm playing it. I have to start from here (plays).

A: Yeah, you're hitting it a little low. (plays, then C plays) Yeah.

C: That's the one I thought you meant.I mean I knew there was a note. It sounded OK, but..

A:Well, usually you're half in between.

C: Yeah, not OK. Well, there's one other thing, what about that figure here (plays)? (A shows)

A:Any other note questions?

B: I thought I tried to follow your bowing and I end up just the opposite.

A: There's not anything real specific I'm bowing here. How is it with the fingers? Do they know when to play? Then think about this for a minute in the A part. There is a place where it tends to speed up. Where do you think it might be?

B: (plays and sings part)

A: Exactly. Because it's a big exciting part in the music. So, it goes faster, faster, faster. So, let's play the A part paying attention to the part where there is a very exciting thing. (all play).
Yeah, yeah that was good. So, what can you do there instead to let everyone know that it's exciting.

D: louder.

A: Yeah, especially on the downbeat. So, try that on for size. (all play). Yeah, so a jig. You guys are mostly emphasizing (sings) and that's Ok. In fact let's practice that.

D: when you play this for contra dances do they do a jig or do they contra dance?

A: They contra. But yeah, let's do that let's really accent all the down beat's.

B: I just have one question before we start. Do you

encourage your students to watch the string? Watch your fingers when you play?

A: No, I encourage you to watch everyone else in the room. Other people are basically more interesting. But, you know lot's of people are really in the habit of watching here when they play and if you're in a group that has a leader or you're the leader or you're playing with someone you can be not watching them then. ____ was telling about these ways of learning and visual people look down and to the right. Which is just where the fingers happen to be. But I think it's one way to get out of being a visual learner is to use your ears.
OK, so, the B part with big down beats and also don't wimp out on the high notes, those are the exciting parts of the piece. (all play, A stops playing and all stop when they get to high note.)
OK, take another stab at it. (all except A play) Take the whole thing one more time (all still playing).
Yeah, that sounds good. If you wanted to put some slurs in where would you put them? Well, there's a problem if you do it that way (plays) because you start to emphasize the up bow and you want it to be (plays) So, what else could you do? How about three.

D: So, it's three sixteenths?

A: It's six eight, so..

D: OK, right.
(all try)

A: Well, if you don't want to emphasize the three, you can do the opposite (plays slurring down, up, up instead of down, down, up). So, you can do it that way and you can do it three (shows). So, what we have now, is we've got a lot of big strong down beats and we've even got some sense of phrasing. We've got some of the down beats stronger than other's because of the phrases. (plays) Right, so, what we can do now to make it even more right is to just pop some more slurs in there. So, let's just take that and think about it.
Take it a little slower so you have time to think about it. One, 2, 3, 4 (all play).
So, as I look around there are a few slurs, but there's still a lot of just back and forth. Well, let's do this sort of thing. Let's take the first part and let's (play showing slurs) TAke it slowly (all play). (A takes just one five note chunk, then all repeat it) Yeah, I like starting out the tune this way (plays) and this one I kind of (plays) (All play two measure chunk) OK, again (all play) take it down bow (again) Where are you going wrong?

B: Do you start down bow?

A: Start with the pick up note up

B: Ok,

A: and then down. ANd make the down beat big too. (all play 2 mm chunk) we're getting there. (all repeat several times). Almost. (repeat) Take this part again (4 note chunk several times) Let's take the whole thing one more time (2mm) Yeah, pretty close. (plays next chunk) Slur two, last three, start with a little up bow (all play next 2mm chunk).

D: where are you starting here?

A: We're starting with the little up bow on this note (all play). So, if you're going to slur 3 you need to leave some room on your up bow. (all play). It doesn't really matter to me if you start on up bow or down bow, but if you get the slurs it's good (all play) Yeah, let's put em both together. (links both 2 mm chunks) Let's do just that (plays last 5 notes of the chunk, all play several times) These are the 2 that are slurred (play, then all play several times.) Watch. (plays) One more time. (all play) Some of your are going for one more note. (all play) YOu got the idea. (plays) Let's do one of those again (all play) Here's where the slurs go (all play several times) S, there's some folding chairs over in the dining room corner.
So, let's do the whole thing. Watch, I hope you remember everything I do. (all start to play, A mentions bowings as they come) Here it comes (referring to big climax) One more time. (still playing).
HOw's it going?

C: I have some of my slurs I practiced this afternoon so it's real hard to change them.

A: Yeah, you don't have to use these. I just want you to be sure to think about them. But with jigs you don't want to have to many of those (plays) Cause it's real hard to keep from accenting that (plays) So, I like to start off a phrase with different ones. Sort of establish the mood. (all try) Start with the bottom finger.

B: Down?

A: Start with the lowest finger. (all practice) You guys see the difference if you start off with a slur? (plays) It establishes the sound. (plays) But if you just start

out with (plays) there's no doubt that there is going to be some exciting playing. That's usually how I start out that one.
Let's take this whole tune a couple more times. See what you can find out about slurs, 1, 2, 3, (all play)
Yeah, that sounds good. One more thing (plays) Don't go (plays) there's just one lonesome high A there. So, let's take the B part one more time Listen(plays) 1,2,3, (all play). Yeah, (still playing) It's still running out of steam here. Don't' let off until you really have to go (plays) One more time. One thing I think that's getting kind of let go of is (plays) Let's just take those two notes and make them as sweet as you can. (all play a, A several times) OK, that's it. Sounds good, now play it with this little breath (plays) (all play several times) Yeah, so it's not so far to go, and you don't have to take a flying leap from A. So, one more time (all play B part). Good. One more time. Yeah, that sound more like it .
So, let's leave this tune for a minute and do the train. (plays). Let's do it this way. (plays slurred). Your fingers do the fast part, OK (all play). #rd finger, 2nd finger.
ne more thing. Keep your fingers close. You're starting from a high finger position. If you keep them close to the string they'll be able to move a lot faster. (plays) and that way you can go much faster if you keep them close to the string.
So, now we're starting here. On 4th finger and what scale? G scale. Here we go. (all play) first finger (still playing).
Start here with A and go like this (plays down the scale) Here we go (all play).
D: After the scale it's every other finger?

A:Let's do it the same way but this fast. 1, 2, 3, 4, (all play).
Third finger coming up (still playing) and down. How about if we take it slower, this way. (all play). third finger. (still playing). third finger (still playing) and down. OK, same thing (all play faster this time).

(phone rings, A waits)

A: So, try this. (bowing practice with accent, all do with her). OK, (still playing). OK, let's do this (plays). Little pause to think. And..(all play). Let's take that one again. It's a little harder across strings. Next one.

D: Are you doing a down bow each time?

A: Yeah,(plays). Let's do that one again.(all play) Ready for the third finger? Let's take that one again. (still

playing) Let's take that one (all play that one over and over). Start with your fourth finger. Again on that one. Let's take this part slow (all play four notes slowly).

D: On Down bow?

A: Down (all play several times).
OK, so let's take everything we've done so far. Starting from here. 1,2,3,go (all play, it falls apart) OK, let's take it slow. The more bow you use the slower you go so let's take it like this. (plays) And.. (all play).
OK, now let's take it fast. Hang in there. And... (all play, it falls apart.) So, now we know how to practice to make your fingers go fast.

D: Every day and then we will be great fiddlers.

A: Part of going fast is just knowing the tune really well. Part of it is making sure your bow and fingers can go quick at the same time . SO, it's very good exercise.

C: Well, should we, I mean, I don't do scales at all. I mean I have trouble thinking about the close position and using that fourth finger. That's why I couldn't follow you. I kept thinking of playing it on the next string.

A: Well, if you practice this exercise every day you will get very fast with your fingers. (plays).
So, let's take old _____ again. 1,2,3, go (all play several times). One more time. Yeah, did it work to play it that fast? On a scale of one to ten did it work to play it that fast?

D: 5

M: 3

A: You did good. It's good to practice too fast sometimes. Make your self go faster than you can. Then you've something to live up to. And make yourself keep going. Sometimes it's good to stop and find the notes, but sometimes you need to really go, then your fingers feel embarrassed and they really go.
Let's take it a little slower one more time. 1,2,3,go (all play). Don't forget that fourth. (still playing). (A plays 2mm) Let's take that one more time. (all play) Let it fade away, don't chop it off. (plays)Know what I mean? (plays) If you chop it off it sounds like the A got slashed in the throat. (plays) Let it fall. Let it die of natural causes. (all try) It's such a beautiful A. One more time. And... (all play).
There. (still playing) Yeah, that sounds much better. The

A sounds much better. the D needs a little more. Old Man Winter needs elegant melancholy or something. So, think about that thing in A. What you can do about it. Think about where you can put slurs in it. But I think that sounds good, really good. You think so?
So, you guys are going to do solos, right? Are you ready? To get it over with?

B: Yeah, I won't do that same tune. Well, I'll stand up. This is the Waltz.
(plays part) huh, stage fright I guess.

A: That happens.
(starts again)

B: Now B (still playing). I'll stop there.
(applause, yeah) I do better when I'm not here.

A: I always say "I play it better at home".

D: Yeah.

A: Good perseverance. So, what did you like you guys?

D: I liked when you started out you did the you know the bowing you got (plays). You had that right in there. That was nice.

J: Very nice ones and threes.

A: Yeah, nice light feel. (to B) What did you like?

B: Nothing then. I did get down that using my fourth finger on the B part. The, a see (plays) at that place. Cause I'd always hit that when I came off that one (plays). Well, I can do it. That's the only thing that I worked out.

A: I s there anything you'd like to do?

B: Well, I'd like to get faster and not hit strings that I don't want to hit.

A: you can also do this (plays) b and c and d. Good way to make yourself find it. (B tries) Another thing that's good to find where the strings are is (plays).
Ok, Mike.

M: OK, this is an Irish song called "She beg she more". Something about some feud between some Irish fairies.
(plays)

(applause Yeah)

D: I've heard that before.

M: Did it sound like that?

D: Yes it sounded a lot like that.

B: Yeah, I liked the range of the high notes to the low.

C: There was a nice rhythm to it. That's what I liked the best. You kept a real steady rhythm.

M: Probably not the way the rhythm is supposed to be.

C: That right? But it was steady, it didn't speed up too much.

A: I liked the way you used a lot of your bow. That really set the mood. What do you think.

M: Well, I liked that I remembered it for the most part.

A: Yeah, that's good.

M: There's a lot of similar phrases. They go in different directions. Well, I left, there's a lot of little grace notes in it. If I start playing those by memory it gets me all confused.

A: I think that comes with time too. You just get a feeling for where it's supposed to go.(to S) OK, it's all yours.

S: (tunes and gets out tape recorder, plays a bit of a tune) That's it. (tunes, plays with mute on, part of Schottish from Gert Olssen class). I don't know the rest.

C: But you're doing so well.

(A sings B section)

S: To tell the truth it was the first thing that came on the tape about 2 hours before I came here. I tried to memorize it.

A: You played nice double stops. How come the mute?

S: Sounds better.

A: Is it a loud fiddle?

(S plays) S: Scratchy.

A: What did you like?

S: Getting through, the A part at least.

C: I wanted you to keep going. It sounded really good.

(S tries to play B part).

S: Goes something like that.

A: Yeah. Good lifts. Anything to trouble shoot?

S: Practice, practice, practice.

A: Well, let's take Lady of the Lake. (plays opening) Can we do it this speed. Ok, 1,2, 3, 4, (all play)

Good: C, M, and D
OK: B and J.

A: Yeah, sounded good, lively. How about this one. (plays a bit). Go ahead and start (knock at door) while I go buy girl scout cookies. (all play)

Good: C, and D.
OK: B, J, S
Problems: M

(A plays) A; There is a c sharp. (all try).

A: Let's do it this way with feeling. (all play) Last time through. That's good. (all still playing). Yeah, that really had the bounce in it. Think about how the slurs go too.(plays) Not moving very far if you put in (plays) it automatically gets softer. Good, that's good.
A: So, before we part ways here I want to go around and say one thing you liked and about the class and one thing you didn't like. If you want to say more that's fine. (to B) You want to start?

B: Well, this is the last week. Well, the fact that I got to learn a few songs that I didn't know before. And I couldn't really play any songs before. I think I learned a lot and also I don't know if this is good or bad, but I learned how much I have to know. You know, there's a lot to just begin. Where before I could just turn up the music loud and just pretend. (laugher)

A: We've all done that.

B: But it's good to know that, um, I must have made some progress. It's not easy to tell for sure.

A: How bout something you'd like improved.

B: Goes to fast for turning. (laughter) No, nothing, really.

M: Well, I have a conflict cause what I like is also what I don't like. That's the learning things by ear is really good. I've developed, my ear has improved a lot. But, I also find it very difficult to practice after I get home by playing it on the tape. It usually doesn't stick in my head so I don't develop the speed that I need. So, I guess what I'm saying is that I'd like to have some music also,but that may be a crutch.

A: How would you compare last time with music to this time without?

M: Well, I'm not really sure. What I think I'm doing is trying to write music.

A: Do you really do that?

M: Yeah.

A: That's good for you.

M: Yeah, and then I practice from those notes.

A: I think you know why I don't like to give notes out.

M: And it's well, now these pieces are somewhere deep in the tape. It's really hard to find them again.

D: I've been rewinding it and playing it on the way to work. It's real helpful.You know I've got a little time then.
I like not getting music even though I agree it's harder. Because I need to just listen. I've learned an awful lot. I've just about- I need to work on rhythm. I've learned a lot there playing with people. And then the phrasing stuff is finally coming and I - I'd like a little more Scandinavian. 'm biased.
Je: I think the instructor's cute (laughter.

A: That doesn't count.

Je: I didn't like it when I had to do exercises that I couldn't figure out. And I just sit and feel stupid. But you know this is good. I thought the tunes were

wonderful. I didn't mind that they weren't all Swedish. But it's all good for me. I just hate my vegetables. But they were good vegetables. I hate music.

A: You hate music?

Je: I mean I hate written music. Perhaps if we have a wonderful tape of all these tunes. It would be a lot of work.

M: No, just the first couple bars of each piece.

C: You mean written?

M: Yeah, that's where I have trouble, finding where to start.

Je: That might just stifle our creativity. Make it too easy.

B: I'd use it. I used to play the french horn so I read music. But I never could do anything on my own on the french horn without gnostic. So, I'm glad that we're learning without the music.
M: That's what I say, I think that that's also important.

B: and yet I can see the disadvantage of it.

A: Well. it's an ongoing question. We need to keep going because I need to go to the other group.

C: I liked it when we broke into groups and practiced and performed for each other. Some times we spent maybe too long, on the other hand I feel like I really learned the tune that way and I could see improvements in tunes. I liked doing that. I liked having a mix of both contra dance and the scandinavian. It's helpful if you're going to the New Melody and that's a question I was going to ask are you going to be at the New Melody on the 28th?

A: Yeah

C:And are we gonna play some tunes? (A nods) Things I don't like. Sometimes I don't get the tune straight because I don't catch on by ear as fast as some of the other people do. And so I really need it to go slow. Sometimes I think Am I really doing something wrong with technique because we don't get any individual attention or not that we notice. So, sometimes I think oh no, am I doing something terribly wrong and making a bad habit?

A: Yeah, we could do that, take a bit of individual times.

S: I think the quality of what this records (own recorder) it's kind of hard to pick up. I go home and make a copy of this on my Nakamichi and it sounds a lot better. Still I don't think it's quite

A: I could do that you know and included it in the cost or something. Anything else you'd like to say?

S: I really liked that workshop.

A: Yeah

S: He coming back?

A: Maybe. I finally got the phone numbers made for everybody (passes out class roster with phone numbers). Anyone want to know about the Scandinavian musicians guild? This doesn't really say a lot.

class disperses.

7.6. Clinic Report I

1988 Evergreen Orff Chapter
World Beat Mini-Conference
Randle, WA, April 15-17

Clinics: Saturday, April 16
9:15-10:45
11:00-12:30
2:00-3:30 and
3:45-5:15.

Session: Irish Tin Whistle and Estonian Songs.

Title: Aural Instruction: Instructional techniques for music from oral traditions.

by Ramona Holmes

The purpose of the clinic-demonstration was to demonstrate how instructional techniques for music from oral traditions can follow the path of aural transmission. While it is not necessary to replicate every aspect of instruction as it would occur in the traditional setting, there are certain critical points, or signposts, that need to be passed on the way to performance or improvisation in music from oral traditions. Using examples from Ireland and Estonia, the clinic was designed to involve music educators in listening, singing, and dancing followed by instrumental performance and planning of improvisational text. The structure of the clinic follows:

1. Children's song.
    a. listening to tune on tin whistle.
    b. singing song.
    c. playing on tin whistles.
2. Slow air.
    a. listening to song.
    b. singing song.
    c. playing on tin whistle.
3. Story song.
    a. listening to story and song.
    b. singing song.
    c. playing on tin whistle.
4. Dance tune.
    a. listening to tune.
    b. dancing polka.
    c. playing on tin whistle.
5. Presentation of information regarding aural instruction.
    a. Gaining and maintaining attention.
    b. Use of expressive objectives.
    c. Presentation.
    d. Prompting and guiding.
    e. Eliciting performance.
    f. Providing feedback via creation of new song.
    g. Assessing performance among peers.
    h. Enhancement of learning to learn skill of how

to learn "by ear".

6. Improvised song.

a. listening.

b. singing.

c. planning improvisational text.

Listening to an Irish children's tune on the tin whistle opened the demonstration with immediate musical involvement. A brief explanation of tin whistles and their place in the oral tradition of Ireland followed. Next the song was taught to the group. Finally the tune was taught on the tin whistle, completing the path of oral tradition as it would be found in this type of tune.

The session continued with a slow air and then a story tune. In each of these settings, the instruction followed the path of oral tradition again, through listening, singing and then playing the tune. The next tune presented was a dance tune. This tune was not sung, since it is not a vocal tune, but instruction still followed the path of oral tradition, this time by listening, dancing and then playing.

Techniques for aural instruction were presented next following the events of instruction from Gagne and Rohwer (1969). Points presented included the importance of:

1. Gaining of attention via immediate participation.

2. Use of an expressive objective.

3. Presentation in aural mode.

4. Guiding via naming, chunking and linking, and imagery.

5. Elicitation of immediate response.

6. Feedback from peers as well as teacher.

7. Assessment through creation, by teacher and peers.

8. Promotion of retention and transfer of ability to learn "by ear".

The important points of aural instruction were illustrated in the presentation of an improvisatory song. The song was presented aurally using the clinician as a model. Immediate participation was provided by teaching the song. Stated expressive objective was that the educators would be exposed to an Estonian regilaul.

Chunking and linking was used to guide the learning. Naming of the regilaul was furnished in a short lecture describing regilaul, Estonia, and the context of these songs. Imagery was added by illustrating the critical features in regilaul of overlapped voices (leegajus), alliteration, assonance, parallelism, and repetition. Immediate response was elicited both in an Estonian version and an English version.

Feedback and assessment was given by creation of new song text by the educators. Small groups developed their own lines using regilaul principles. Retention and transfer of the ability to learn by ear was promoted by solo/chorus performance of the new lines with the

educators singing the response and again by having the educators sing the Estonian version, this time while dancing to a recorded version.

Musical examples for the Irish songs were from the music of Joe Heaney. Tapes of his music can be found in the University of Washington Ethnomusicology Archives, as well as on records. The Irish dance tune tape was performed by Rod Margason of Seattle, Washington. The Estonian example was from a recording by the Estonian group, Leegajus. These examples were chosen for their suitability for use in elementary music settings in that they contain appropriate lyrics and fit easily on the D tin whistle.

Handouts were provided for all songs and tunes. Information regarding Estonia and Estonian regilaul, maps, a tune source list, and an outline of the path of aural instruction were also included in the handouts.

Response at the end of the clinics was quite favorable. Participants appreciated the pacing and variety of materials. The direct applicability for classroom use was noted. Others mentioned the strong research base.

The use of music from oral traditions needs special care in transfer to the classroom situation in order to preserve its character. A single clinic can not provide educators with the necessary skills to appropriately use

these materials. However, it is hoped that this clinic will heighten awareness for the needed instructional techniques and will encourage educators to consider instruction, as well as materials, when introducing music from oral traditions.

7.7. Clinic-Demonstration Report II

MENC NW Division Conference

Boise, 1989

Clinic: Saturday, February 18

9:00 - 10:15

Session: Aural Teaching Techniques: A Critical Component of Multi-Cultural Music Instruction.

by Ramona Holmes

The purpose of this clinic was to demonstrate the use of effective aural teaching techniques for K-12 instrumental, vocal and general music teachers attending the MENC NW division conference. Music from oral traditions is often taught using teaching techniques that are designed for use with notated music. While it is not necessary to replicate every aspect of aural transmission, it is the clinician's theory that there are some essential aural teaching techniques. Aural instruction depends on:

1. frequent and purposeful demonstration to establish objectives and to provide a continual model,

2. immediate and continual participation to gain and

maintain attention and to evaluate student replication of the model, and

3. constant and appropriate guidance to provide structure and sequence and to reinforce learning. Guidance is not just one technique, but is a cluster of many appropriate techniques such as naming, imagery, verbal mnemonics, chunk and link format, and preservation of rhythmic structure.

The clinician demonstrated each of these techniques utilizing musical examples from Estonia, Ireland, and Macedonia. The structure of the clinic follows:

I. Introduction

A. Frequent and purposeful demonstration

B. Immediate and continual participation

C. Constant and appropriate guidance

II. Demonstration of techniques.

A. Estonian regilaul

1. Demonstration of expressive objective

2. Immediate and continual participation in singing a regilaul.

3. Guidance

a. Chunk and link format

b. Imagery

c. Naming

B. Irish tin whistle tune

1. Use of demonstration in different medium, yet

same mode.

2. Immediate participation using song.

3. Guidance using verbal mnemonics.

C. Macedonian dance song

1. Authentic demonstration using violin and voice

2. Immediate and continual participation singing chorus and dancing.

3. Guidance in verbal material through preservation of rhythmic structure.

III. Review of three essentials of aural instruction.

IV. Review of music.

V. Questions

The clinician opened by playing a segment from an Irish fiddle tune and then asked the audience to sing "la" along with the violin on a second version of the tune. The audience experienced difficulty in this attempt and the clinician offered a guided version of the tune which was much easier for the audience to replicate. Thus, the clinic opened with a demonstration of the problem of students being unable to replicate the model, as well as a solution to that problem through use of effective aural instruction techniques. While there is, of course, a problem with assuming that an aurally presented instrumental model would be replicated through vocal performance, this instructional strategy was used to gain

interest and to provide focus.

The session continued with an explanation of the three essentials of aural instruction; demonstration, participation, and guidance. Frequent and purposeful demonstration is used both to establish objectives and to provide a continual model. Immediate and continual participation is used to gain and maintain attention as well as to evaluate the student's replication of the model. Constant and appropriate guidance is used to provide structure and sequence and to reinforce learning. Guidance is not one item, but rather is a kit of appropriate techniques such as naming, imagery, verbal mnemonics, chunk and link format and preservation of the rhythmic structure.

The first application of these techniques utilized Estonian regilaul to focus on an expressive objective. The clinician demonstrated the regilaul and explained the use of "expressive objectives" (Eisner, 1977). The audience immediately participated by singing the answering line in the regilaul. The importance of immediate and continual participation was emphasized (Rosenshine and Stevens, 1986). Guidance was provided through chunk and link format of the song, imagery of the words "laulemaie, luulemaie" which are alliterative words which sound like singing "la", and naming of regilaul and leegajus (overlap). The section of the clinic utilzing Irish

music focused on the nature of the aural model beginning with a demonstration on the tin whistle. The clinician explained that the demonstration can be in a different medium, such as instrumental instead of vocal, but it needs to be in the same mode as the expected outcome, such as aural for aural performance (Reisner and Gagne, 1982). Immediate participation was provided by learning the song vocally before beginning to tackle instrumental technique. Guidance through the use of verbal mnemonics was illustrated by singing numerical finger patterns that reflect instrumental technique. The importance of verbal mnemonics for retrieval plan, imagery, focus of attention, organization of information and rehearsal was emphasized (Loftus, 1982).

The importance of authentic, exemplary demonstration was emphasized with the use of a Macedonian song with violin performance of the instrumental introduction. It was noted that the demonstration may be teacher performance or recording, but that it must be an authentic, exemplary demonstration.

Immediate participation was utilized with the audience singing the chorus to the song. Guidance was provided in the learning of the verbal material through preservation of the rhythmic structure (Rubin, 1979). The audience participated in the dance with the song as an illustration of the use of continual participation as a

means of assessing student ability to replicate the model.

A summary of the essentials of aural instruction focused on demonstration, participation and guidance. The points were repeated with reference to the illustrations used in the clinic for each of the essential components of aural instruction. The audience sang the Estonian song with an authentic recording, sang the Irish tune and verbal mnemonics, and danced with the Macedonian song.

Questions and comments were taken at the end of the session. One participant asked how students were able to learn so quickly. The clinician discussed pacing. Another participant asked about students who do not like this music or find it peculiar. The clinician noted that immediate participation does not leave room for this type of attitude problem. The audience was actively involved in this session and showed appreciation for the ideas and materials.

7.8. Combined Model of Aural Instruction Based on Research and Observation

Material/Method	Component	Purpose
Mnemonics Musical material Singing, movement & instrumental performance	PARTICIPATION	Gain & maintain student attention Evaluate
Live or recorded Chunk & link presentation Musical context	DEMONSTRATION	Establish objectives Show prerequisites Provide model
Rhythm pattern Mnemonics Specific comments	GUIDANCE	Provide aural imagery structure & sequence Reinforce learning Transfer to long-term memory

VITA

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Seattle School District, vocal music and physical education, 1974-1975.

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