DOCUMENT RESUME

ED 041 926 | 24 | TE 499 855

AUTHOR	Peterson, A. Viola; Finger, John A., Jr.
TITLE	Melodic Listening Survey; Exploratory Study of Listening Development in Primary and Secondary Schools. Final Report.
INSTITUTION	Rhode Island Coll., Providence.
SPONS AGENCY	Department of Health, Education, and Welfare, Washington, D.C. National Center for Educational Research and Development.
BUREAU NO	BR-8-A-005
PUB DATE	15 Dec 69
GRANT	OEG-1-8-08A005-0033-058
NOTE	60p.
EDRS PRICE	EDRS Price MF-$0.50 HC-$3.10
DESCRIPTORS	Audiovisual Instruction, *Auditory Perception, *Curriculum Evaluation, Elementary Education, Listening Habits, *Listening Skills, Music, Music Appreciation, *Music Education, Response Mode, Secondary Education, *Visual Perception

ABSTRACT

This study is designed to evaluate the musical listening ability that children have acquired through present instructional practices. To obtain an estimate of what children learn, over 3,000 students in grades 4-7 were administered a Melodic Listening Survey (structured into nine subtests) by tape recording under the direction of their own teachers. Children in each grade level were divided randomly into two groups--one that listened with the use of notation and one that listened without notation--to provide an evaluation of the auditory and visual perception factor in listening development. Results supported the use of auditory-visual discrimination as a factor in listening development, and revealed, despite generally low test scores, an increase in achievement with increasing grade level. Some areas of melodic listening measured by the Survey were grasped, but some were unfamiliar concepts to the students. Achievement scores on the Survey and the teachers' ratings of instruction revealed no relationship The need for rating scales for instruction was in evidence. (Included are the Melodic Listening Survey with teacher directions; raw test scores; and music curriculum questionnaires for the music supervisor and classroom teacher.) (Author/JMC)

FINAL REPORT
Project No. 8A-005
Grant No. OEG 1-8-08A005-0033-058

Melodic Listening Survey; Exploratory Study of Listening Development in Primary and Secondary Schools

A. Viola Peterson
and
John A. Finger, Jr.
Rhode Island College
Providence, Rhode Island 02908

December 15, 1969

The Research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

MELODIC LISTENING SURVEY: EXPLORATORY STUDY OF LISTENING DEVELOPMENT IN PRIMARY AND SECONDARY SCHOOLS

Abstract

This is a study of the progress being made in developing children's listening competency based on present instructional practices. Levels of achievement attained in school music experience by the fourth, fifth, sixth, and seventh grade are examined. Children's ability to listen actively, alerted to functions and qualities in melody, for the understanding of melody as an art form is the focus of the study. To obtain an estimate of what children learn over several school years, scores on a Melodic Listening Survey were studied. The test was designed to take defined limits of melodic expression appropriate to children's listening learning into consideration. It was structured in nine subtests that took in accumulated ability to listen and to apply concepts acquired in school music experience.

Children in grades four to seven (N 3,017) from schools in nine school systems served as subjects. They were administered the Survey by tape recording under the direction of their own teachers. Children in a grade level were divided by random selection into a group that listened without the use of notation and a group that listened with notation. This would allow an evaluation of the auditory and visual perception factor in listening development. Combined group results could be examined for estimates of total melodic listening response. The study emphasized perceptual response viewed as dependent upon concept formation, as well as sensing and imaging in the full listening process.

The results showed that listening achievement was significantly better at the seventh grade level in the with-notation group. The notation groups showed somewhat higher achievement in grades four and five. This was the evidence found to support the use of auditory-visual discrimination as a factor in listening development. The scores of all schools together showed an increase with increasing grade level. Scores of children in the fourth grade, when examined in greater detail, by subtest, indicated a low performance for the most. Scores of children in grades four, five, and six showed a narrow range of difference. Mean scores in the seventh grade were markedly higher. It was evident that total test scores were generally low.

The trend of outcomes, considered by subtest, gave an indication that some areas of melodic listening as included in the Survey content were grasped, and some were unfamiliar concepts. The performance of the children in the subtests has been compared with instructional

ratings made by twenty-nine teachers who participated in the project. These results were used to determine how achievement might relate year by year to the instructional program. Ratings of instruction showed inconsistencies within schools and subjective differences between school systems. Evidence pointed toward the need to create rating scales that supply the need for such an evaluation. No relationship was observed between the achievement scores and the teachers' rating of instruction. This is believed to be caused by defects in the procedures used to rate instruction rather than to the inability of the Melodic Listening Survey to evaluate instructional outcomes. Large differences between grade levels on the Melodic Listening Survey lead to the conclusion that the instrument does provide a measure of attained educational outcomes.

Table of Contents

LIST OF TABLES

LIST OF FIGURES

Foreword

This study is intended to clarify further some objectives and processes that are significant in the listening phase of music education. The purpose here is to focus on the highly perceptive response of thinking and feeling that touches expression in melody. This responsiveness is a quality we connect with children's emotional and intellectual growth, and it depends upon a quality and depth in learning experience only possible if children and teachers become aware of the goal.

The authors are indebted to the participating music supervisors and directors of music in public and private schools, and of course the children and teachers in the classes tested. Special thanks are due to the following:

Miss Patricia Brown of Falmouth, Massachusetts
Dr. Wilford B. Crawford of Dallas, Texas
Mr. Ernest Faliciglia and Dr. Louis Pichierri of Providence, Rhode Island
Miss Esther Keller and Mrs. A. R. Socolofsky of Cleveland, Ohio
Mrs. Glen Kolb of Montville, Connecticut
Mrs. C. F. McKeough of Johnston, Rhode Island
Sister Paul, R.J.M., of the Rhode Island Diocese
Mr. Joseph Stewart of Cheektowaga, New York
Mr. Alfred Wood of Westerly, Rhode Island

Their interest and cordial effort made the project possible.

Appreciation is due colleagues at Rhode Island College whose help was a support. The work of Mr. Raynor Marsland and others assisting in programming and processing data in the computer laboratory was essential to the study. Others who have helped in the Educational Services Center of Rhode Island College merit thanks.

It is important to add that excerpts of music included in the Melodic Listening Survey have been used for testing purposes with the permission of the publishers, Boosey and Hawkes, Inc., Carl Fischer, Inc., G. Schirmer, Inc., and Durand and Cie, Elkan Vogel Company.

INTRODUCTION

This study is designed to evaluate the musical listening ability children have acquired. It has identified effective teaching practices and devised a measure by which to analyze outcomes desired in the school music program. The Melodic Listening Survey is a multiple choice music test which measures certain kinds of auditory and visual perception, sensory and imaginal response, and concept formation which underlie listening competency. The research is a validation study which compares instructional programs with performance on the Melodic Listening Survey.

Developing listening ability remains a difficult part of the instructional program in music. Appearances indicate that there are omissions in the musical learning experience. The causes have not been determined. Several writers report the need to study the listening experience further. Earhart (2) taught students to cultivate ability to think and feel in order to comprehend the tonal structure. Trotter and Chapple (18) pointed out that children must be taught to think by phrases and to grasp the continuity of musical expression. Flagg (4) and Mainwaring (8) laid out guides for teachers in this cognitive process of listening to music. Murphy (11) urged better learning in the music perception. More recently after a study of achievement made by Gernet (5), there were studies made related to various aspects of listening development. The Boekelheide (1) study measured listening skills in the third grade children; the Hartzell (6) study analyzed singing response in primary grade children, and both studies recommended more recognition of the need for emphasis on music perceptual instruction. Petzold (15) provided individual measurement of perception in children from grade 1 to 6 with a rating scale devised to gauge the responsiveness found. These studies contribute to the increased awareness of the problems.

Procedures are needed to estimate the progress being made in developing listening competency. Teachers search for evaluative criteria, looking for answers to many questions: Is the child becoming keener in sensory reaction to the musical stimuli? Can the child hold tonal groups in mind? Is there development of tonal thinking, of selecting and organizing musical ideas? Do the children become increasingly sensitive to expressive qualities in melody?

While it is assumed that children from early childhood to senior high school build power to think and feel tonally, to use their capacity for imagery, and to assimilate the musical medium altogether for expressive and creative purposes, no evaluative techniques are available to demonstrate how such development proceeds. Whether children's capacities of sense, perception, and imagination are brought into play to a favorable degree or whether the listening complex is fully activated by the teaching procedures followed are questions this research attempts to answer through the validation of the survey instrument.

Musical listening development is related to learning experience as presented by Mursell (12). The potential listening comprehension and conceptual grasp of children in the grade levels of four to seven are determined to be based soundly on the findings of Piaget (16), Vinacke (19), and Welch and Long (20). Listening as a complex of sensing, perceiving, and imaging is interpreted here in accord with the work of Ortmann (13). Children's response to melody dealt with in this study takes in their seeing what is heard and observing distinctive features in the music as to key, phrase, and contour for an understanding of the musical content. Such response is familiar through the teachers' books of published music series used in the schools (3). Recent basic music books, such as the series by Landeck, Crook, and Youngberg (7) have stressed anew the expressive qualities of melody. Textbooks from Europe have also been accessible to teachers, like the one by Willems (21) in which his work with Swiss children offers a guide, and the work by Smits van Waesberghe (17) based on teaching in the schools of Amsterdam. The studies in American schools by Mueller (10) have also received attention for their analysis of attitudes and preference in children. These sources have served in the plan and analysis of this present study.

The Melodic Listening Survey is a test that measures ability to sense tonal and rhythmical grouping in melody, to recognize tones repeated, to perceive expressive qualities in melody, and to remember tones and what they do. It measures whether a child is an active listener by assessing the ability to remember long enough to compare a phrase of melody with another and one ending with another. The research project is also concerned with the feasibility of using a melodic survey in classrooms. While the Melodic Listening Survey measures achievement, it also provides instruction and musical examples of use in the classroom. Teachers do not always recognize that to understand melody as an art form, one must help children to acquire listening ability.

Presumably the survey measures both listening capacity and the skills of listening that are acquired. During testing the child must focus attention on melody, must evaluate the music in terms of its movement, dynamics, and characteristic tonal and rhythmic function. Melodic concepts acquired in prior experience with hearing, singing, and playing melody are applied. Responses on the survey depend upon tonal discrimination and memory. Acquired skills in reading notation are utilized in one form of the test, while in an alternate form the child hears the music but does not see the notation. The children within each classroom have been randomly assigned to one of two groups. Each group has been administered one of two forms so that listening achievement with only auditory could be compared with auditory and visual perception. Learning to associate symbols with sounds is thus controlled in this study.

PROCEDURE

This project examines listening development in school music experience. Achievement is studied at grade levels four to seven. Test performance is compared to instructional level. The objectives of the study are to (1) provide a means of evaluating children's achievement in musical listening ability acquired in school years to grade seven; (2) develop normative data relative to listening achievement and observe trends in melodic concept formation; and (3) evaluate school music programs on the basis of the achievement attained.

The study has been limited to grades four to seven. The music used in the test, examples taken from school repertory in singing and listening, represents varied styles, all being melodic examples. The emphasis on melodic singing and playing in the elementary school limits the choice of melody familiar to all children. The testing session was made to be an hour long, a single session without any pretesting or specific training. This could be arranged for in the school schedule. The variety of classes tested was limited because of the project's ability to recruit school systems to participate in testing. To obtain school systems willing to test several classrooms at each of four grade levels proved difficult. Thus the research is limited in the within school comparisons.

The school population which provided subjects for this study included classes from nine school systems, public and parochial, and greatly varied as to community and size. Out of the total number contacted, three school districts abandoned the project due to unforeseen difficulties in schedule and teaching loads. Letters and reply forms were sent to directors of music in the participating school systems requesting that two hundred children at each grade level, four to seven, be tested. Twenty-nine teachers agreed to carry out the survey. The sample, as described in Table 1, shows the number of children tested and the number of schools involved at each grade level in each location. A total of 101 cases, deleted because their answer sheets were defective and could not be processed, were not counted.

Table 1

Number of Children by Grade and by Schools

Location and School	Code	Grade 4	5	6	7	Total
Cleveland, Ohio	0					
Westropp					60	
Artemus Ward		72	54	59		245
Providence, R.I.	1					
John Howland		89	71	57		
Summit Avenue		67	68	66		
George J. West					189*	607
Rhode Island Diocese	2					
St. Adalbert		31				
St. Bartolemew		33				
St. Mary		35				
St. Sebastian		28				
St. Thomas		36				
St. Joseph		66				229
Falmouth, Mass.	3					
N. Falmouth East			63			
Hall			120			183
Montville, Conn.	4					
Montville		54	41			
Oakdale		43	52			
Uncasville		40				
Palmer Memorial		27	36			
H. S. Elementary			23			316
Westerly, R.I.	5					
Westerly Jr. High					106	
Babcock					99	205
Dallas, Texas	6					
Reinhardt					91	
B. H. Macon		101	89	86		
John Ireland		80				
Paul L. Dunbar			59	77		
John N. Bryan		15	9	16		
Alex Sanger					85	708
Cheektowaga, N.Y.	7					
U. Crest			184			
Maryvale				145		
Maryvale East		111				440
Johnston, R.I.	8					
Sarah D. Barnes		42	41			83

Total all schools - 3,017

*Includes 180 eighth grade students

Instrument of Measurement

The Melodic Listening Survey has nine parts with forty-four melodic examples and one hundred sixty-two items. The subtests are designed to be increasingly difficult. The first two subtests measure the capacity to sense tonal attributes. Subsequent subtests introduce other concepts while utilizing the ability to sense tonal attributes in new applications. Children who cannot identify tones or what they do are expected to show this at the outset by their answers to the questions of the first two subtests. On the other hand, the ninth subtest may challenge even able listeners as the mental operation required to compare several expressive factors is highly dependent upon tonal memory and the organizing functions of the mind, as well as awareness of the affective response to melody.

The survey calls for ability to sense the example heard tonally and rhythmically, to hold it in memory or in imagery while judgments are made, and answers selected to be marked. For each musical example there are several different questions to be answered. An overview of the content and processes tested can be seen in the outline which follows.

Outline of Subtests, Processes and Items

Concept Emphasis in Nine Subtests	Processes Tested	No. of Musical Examples	Items
1. Ten examples of tonal groups as found in melody, which move by step, concluding, or not concluding on the tonal center, major, minor, chromatic, modal.	To recognize direction, up and down, of tones related melodically, and to feel conclusion on a tonal center or modal final.	5	50
2. Ten examples of tonal groups found in melody, which move by 2nds and simple intervallic leaps, 3rds, 4ths and 5ths, concluding, or not concluding on the tonal center, major, minor, chromatic, modal.	To recognize the direction, up and down of tones related melodically, and to feel conclusion on the tonal center of modal final.	3	30
3. Four examples of single phrase melodies which have an intervallic range of a 5th or an 8ve from the lowest to the highest tones, selected for their characteristics of rhythmic grouping with contour.	To recognize direction of tones in a phrase, to observe range and rhythm, and feel expression in contour.	2	8
4. Three examples of single phrase melodies with wide or narrow range as limited here by less than a 5th, or more than an 8ve, with expressive force of static or climactic contour.	To recognize the range of the melodic phrase and observe the shape of the melodic line as more or less stationary or arched, affecting expressive quality.	3	9
5. Three examples of single phrase melodies which show structural and dynamic change.	To recognize contour along with dynamics of stress and release in the rise and fall as well as rhythmic grouping in the melodic movement.	3	9

Outline of Subtests, Processes and Items (cont.)

Concept Emphasis in Nine Subtests	Processes Tested	No. of Musical Examples	Items
6. Three examples of single phrase melodies which have a cadence concluding on the tonal center, or a cadence suspended on another tone.	To recognize the close of the phrase on a tonal center or another tone, to feel its expressive force in melodic structure.	4	12
7. Three examples of two-phrase melodies which complement each other, an extended melodic movement and structure.	To recognize continuity of more than one phrase, antecedent and consequent; to attend to and compare structure, tonal function and expression through two phrases.	4	12
8. Three examples of two-phrase melodies which show formal similarity or contrast, a force of balance or repetition, or change, as unity or variety.	To recognize parallel or contrasted structure of two phrases and feel the inherent dynamics.	4	12
9. Five examples of two or more phrases with rhythmic and tonal structures related as in aaba, etc., the expressive force emphasized.	To recognize the tonal and rhythmic elements of melodic movement (as in preceding examples) and to perceive several expressive qualities.	4	20

Total of 162 items to be answered.

The Melodic Listening Survey was originally developed by Peterson (14). It was subjected to item analysis with resulting indices of difficulty and discrimination to support the internal consistency of the instrument, checked for concurrent validity with the Seashore and Drake measures of tonal memory, and measured for reliability against the Kuder-Richards formula #21. The test has been revised a little. Some questions and answers have been shortened and a few examples changed. Answer sheets have been developed especially for this research project. The test has been adapted for computer scoring. Optical scanning forms were prepared to fit the Rhode Island College computer system allowing both for scoring and the complete response matrix in punch card form to be retained for each student. The test was printed in two forms, one with and one without musical notation (See Appendix A).

The directions for administering the test and the music for the test were recorded on tape. Audio-visual facilities at Rhode Island College were used. The quality of sound as well as the consistent administration of the test were controlled. A time chart was followed in recording, the tapes for Form 1 and Form 2 having identical stop watch intervals between playing of the examples and time for answering. Fidelity of the master tape was carefully checked for tone quality and sound level throughout the test (See Attachments).

Within each classroom students were randomly assigned to groups 1 and 2 so that the influence of listening with the notation could be evaluated. Children in the first group were given Form 1 answer sheets, and children in the second groups Form 2 answer sheets, identical test content but one, and the other without, notation.

Administering the Test

Subjects from nine school systems were administered the test in a one-hour session. The tape recording provided each supervisor with instructions, music, and questions. A Manual of Directions (See Appendix B) was sent out with the survey materials. The manual gave directions for orienting pupils to the project and to their part in the listening test. Teachers were familiarized with the procedures, timing, and tape recordings via the manual which also explained how the teacher was to assign children to group 1 or group 2, and how the two tape recordings in the two rooms were to be prepared. Blanks at the top of the answer sheets are completed, the recording is started and stopped twice, once for questions prior to starting the test and once for a rest intermission. Practice examples are part of the recorded test. During the testing the teachers are free to provide a good classroom atmosphere in which children can listen well.

Music Curriculum Questionnaire

In order to get information about the instructional practices prevailing in the participating schools, music teachers have completed a questionnaire which inquires about schedules, plans, testing, goals in listening development, extent of conceptual approach to melodic understanding, instruction in notation, dictation, aural training, and use of curriculum guides. The reports permit a study of difference in curriculum in plans and practices followed, and observation of results in the classrooms together with the program of the school being studied.

FINDINGS

Reliability

Using the scores in the test as a whole, an estimate of reliability obtains for Form 1 of .91 and for Form 2 of .94 in the seventh grades by the Spearman-Brown formula. In the other grade levels, coefficients range from .84 to .92. The reliability of the subtests has been calculated for each of the nine tests. The calculations yield reliability coefficients by subtest that range from .17 to .90. These results are shown in Table 2. In examining the obtained reliabilities it is important to keep the question of length in mind, for one of the subtests contains only eight items while four others have twelve or less.

Relationship Between Forms

In each classroom children have been randomly assigned to groups, the control or first group using Form 1, and the experimental or second group, Form 2. The results from the two groups, as shown by Form 1 and 2 scores in Table 3, show somewhat higher achievement in the second or experimental group at the fourth and fifth grade levels but not in the sixth. In the seventh grade a significant difference is indicated in favor of the experimental group achievement which measures listening with the use of notation. Table 3 has not been evaluated with a levels test, but it appears that there are significant differences by grade, by form, and for interaction. Further analysis indicates that the interaction appears to result from the extensive differences among schools.

To compare the performance on Form 1 and Form 2 each classroom is compared with the mean for all children at that grade level. A simple dichotomy of above and below average for each form is established, as shown in Table 4. This suggests that there is considerable correspondence between the two forms of the test.

Table 2

Split-Half Reliability Coefficients by Subtest

Subtest	Form 1				Form 2				No. of Items on Subtest
	Grade 4	5	6	7	4	5	6	7	
1	.846	.784	.779	.827	.905	.893	.876	.864	50
2	.615	.522	.641	.703	.807	.847	.809	.875	30
3	.198	.732	.192	.279	.349	.413	.309	.601	8
4	.225	.377	.415	.706	.295	.408	.534	.592	9
5	.177	.213	.399	.574	.357	.307	.399	.562	9
6	.606	.629	.644	.798	.598	.571	.582	.790	12
7	.806	.806	.200	.566	.319	.302	.328	.630	12
8	.163	.247	.806	.495	.216	.192	.216	.381	12
9	.400	.305	.355	.726	.351	.452	.489	.608	20
Total	.867	.840	.845	.916	.921	.928	.907	.948	162

Note: Corrected with Spearman-Brown formula

Table 3

Mean Scores by Grade and Form

Grade	N	Form 1	Form 2	Difference
4	971	93.95	96.67	+2.72
5	910	95.62	99.56	+3.92
6	506	101.21	96.65	-4.56
7	630	112.09	117.39	+5.30

F = 74.31
P<.001

Table 4

Number of Classrooms

Form 1

Form 2	Below average for grade	Above average for grade
Above average for grade	4	17
Below average for grade	15	6

Chi square = 11.7 Phi coefficient = .565
P is less than .01 Estimate of r from phi = .73

Content Validity

The Melodic Listening Survey is constructed in accordance with the content of school music programs that prevails under the guidance of the Music Educators National Conference and recognized in the published guides of that organization (9). The test follows fundamental principles of musical development. It measures listening ability within defined limits pertinent to the understanding of melody. The rationale of the melodic content and the concepts relevant to the listening process have been established herein under the description of the test.

The melodic examples are grouped in an order which demands attention to one and then to several functions and qualities of melody to which the child must respond. Testing conditions and procedures suitable for children at the designated levels, encompassing the potential ability of children in grades four through seven, have been selected after critical examination in previous trial runs.

Construct Validity

The test scores give access to individual achievement by grade level and to percentile norms relative to the groups involved in the research (See Appendix C).

The test measures perceptive listening to melody, as evident in the achievement scores that represent the extent to which the listeners responded to the melodic examples and judged how to answer. Total mean scores of all schools taken together, as seen in Table 5, show an increase with increasing grade level. While there is a minor exception to this increase (Form 2 in Grade 6), the discrepancy appears to result from a low score in one school. Differences in achievement scores between the control and experimental groups should also be noted. These results, tabulated in Table 3, show that there are significant differences among the grade and form means. There is a decided trend for the higher grade levels to attain higher scores although there is a slight reversal in one grade. There also appears to be a discontinuity between grade six and seven where there is a sizable increase in scores. This may be related to the increased music instruction at the seventh grade level. Form 2 has a mean approximately three points higher than Form 1, a surprisingly close match considering the differences of approach in the forms of the test.

Rating of Instruction

The mean scores for the total test by school system and grade level are central to the major inquiry of this project. The hypothesis to be tested is whether achievement year by year is related to the instruction in listening techniques. To get an analysis of instructional programs from the nine school systems, an instructional rating scale was devised. Each subtest of the Melodic Listening Survey was designed to measure a type of instruction that teachers rated.

Table 5

Mean Raw Scores on Melodic Listening Survey by Grade and by School
by Classroom and by Form

System & School	Grade Four			Grade Five			Grade Six			Grade Seven		
Groups	1	2	Both	1	2	Both	1	2	Both	1	2	Both
01										104.41	104.94	104.68
02	91.33	92.22	91.72	97.57	107.96	102.56	111.07	101.14	106.19			
11	94.11	85.61		100.60	106.75		105.11	105.80				
12	83.68	82.45		92.97	87.30		107.18	102.61			124.60	
13										123.50	128.15	
Total	89.62	84.26	86.97	96.79	97.45	97.12	106.34	104.13	105.16	123.67	127.97	125.89
21	118.62	114.83										
22	105.38	118.53										
23	106.94	116.12										
24	111.64	126.43										
25	110.00	118.88										
26	105.73	122.67										
Total	108.81	119.78	114.37									
31				103.81								
32				103.54	107.41							
Total				103.73		105.58						
41	88.67	96.00		94.00	94.05							
42	89.58	92.63		100.88	101.18							
43	96.63	96.24										
44	78.27	84.56		99.42	94.47							
45				94.00	91.30							
Total	89.38	93.06	91.35	97.48	96.44	96.77						
51										107.54	112.92	
52										90.20	121.00	
Total										104.86	119.20	112.41
60										112.30	113.88	

Table 5 (cont.)

Mean Raw Scores on Melodic Listening Survey by Grade and by School, by Classroom and by Form

System & School	Grade Four			Grade Five			Grade Six			Grade Seven		
Groups	1	2	Both	1	2	Both	1	2	Both	1	2	Both
61	81.53	70.73		82.57	81.23		94.74	78.89				
62	101.59	121.18										
63				91.76			103.33	98.39				
64	80.82	96.75		91.56				98.25				
65										110.02	100.05	
Total	88.55	96.93	91.99	88.05		86.17	95.89	91.54	92.63	117.17	107.51	109.31
70				92.75	100.75	96.75						
71							96.60	97.90	97.20			
72	85.49	78.01	80.91									
81	99.05	95.95	97.50	101.15	105.05	103.15						
Total for all	93.95	96.67	95.31	95.62	99.56	97.43	101.21	96.65	98.57	112.09	117.39	

An F test, simple randomized, gives the following results: $F_{21,2994} = 64.00$, $P < .001$

Thus each of the subtests could be validated against the specific instructional rating.

The rating of instruction provided by twenty-nine music teachers, music supervisors, and classroom teachers provided a measure of each of the school's instructional programs. In the Music Curriculum Questionnaire (See Appendix F), the teachers have indicated how much listening for melodic understanding they include in their instructional program. They have used a rating scale of (a) a great deal, (b) quite a lot, (c) some, (d) slightly, and (e) not at all, to indicate how much they include concepts and processes such as those of the survey. They also rated the degree of emphasis they place on those concepts on a three-point scale.

These ratings are tabulated for each grade and school system. The original ratings were evaluated and assigned an A for high, B for average, and C for low, to show how much the concepts of the survey subtests have been included in instructional programs in each school. These results are shown in Table 6.

This study then is designed to determine the relationship between instructional programs and the scores in the Melodic Listening Survey. The school ratings, shown in Table 6, are compared with the mean scores on the Melodic Listening Survey for each of the schools, as seen in Table 7. The results reported seem to indicate that there is little or no relationship between the ratings of instruction and the scores on the Melodic Listening Survey. Probably these results should have been expected since at the early grade levels the usual school practices do not provide planned instruction in the type of listening skills measured by the Survey. The major concern in testing the validity of the Melodic Listening Survey has to do with the total experience that a child has over a period of years. It has already been established that there is only a small increase in scores across grades 4, 5, and 6, and the significant change in scores appears to come at the seventh grade level. Thus attention should be directed at the seventh grade where a child is being measured for skills which represent the culmination of instructional effort over several years.

Before going to an analysis of the performance of the students at the upper grade levels, it is important too to consider characteristics of the Melodic Listening Survey itself. An analysis of the difficulty of the Survey can be determined by comparing the number of items that children get right on each of the subtests in comparison to the total number of items on the test. A ratio score can be defined as the ratio of the mean number of items correct divided by the total number of items on the subtest. Such ratio scores are reported for each grade and each subtest in Figure 1.

Table 6

Rating of Instruction in Melodic Concepts
in Nine School Systems

		Subtests								
	System	1	2	3	4	5	6	7	8	9
Grade 4	0	A	B	B	A	B	A	B	B	B
	1	B	B-	C	B	B-	C	B-	B-	C
	2	B	B	B-	B	B	C	B-	B-	B-
	4	C+	C+	C	C+	C	C	C+	C+	C
	6	B	B	B-	B	B-	C	C	C	C
	7	B	B	C	C+	B	C	C+	C+	B
	8	B	B	B	A	C	C	B	B	C
Grade 5	0	A	B	B	A	B	A	B	B	B
	1	A	B	C	B	B-	C	B	B	C
	3	A	A	C	A	C	C	B	B	B
	4	C+	C+	C	C+	C+	C	C+	C+	C
	6	B	C	B	B	C	B	B	B+	B
	7	A	B	C	B	A	C	B	B	B
	8	B	B-	B	A	C	C	B	B	C
Grade 6	0	A	B	B	A	B	A	B	B	B
	1	B+	B	B-	B	C	B-	B	B+	B-
	6	B	B-	B	B	C	B	B	B-	B
	7	C	C	C	C	C	C	C	C	C
Grade 7	0	A	B+	B	A	B	B	B	B	B-
	1	B	B	B	B+	B	B-	B+	B+	A-
	5	B	B	C+	B-	B	C+	B	B	B-
	6	A	A	B	C+	B	C	B-	B-	C

Table 7

Ratio Scores for Each Subtest and Instructional Rating

System	Subtests 1		2		3		4		5		6		7		8		9	
Grade 4	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
0	57.7	A	62.4	B	60.2	B-	56.2	A	51.5	B	53.6	A	48.7	B	51.2	B	55.9	B
1	49.7	B	57.7	B-	55.7	C	58.0	B	56.6	B-	57.5	C	47.9	B-	52.4	B-	55.3	C
2	82.0	B	79.7	B	67.1	B-	65.1	B	64.2	B	60.5	C	54.5	B-	55.3	B-	59.8	B-
4	55.8	C+	59.6	C+	55.0	C	53.6	C+	51.2	C	61.3	C	49.9	C+	48.8	C+	54.9	C
6	60.7	B	59.9	B	60.5	B-	58.8	B	56.2	B-	51.4	C	48.7	C	48.8	C	52.9	C
7	42.3	B	58.5	B	57.1	C	54.0	C+	51.3	B	51.5	C	46.8	C+	49.5	C+	51.9	B
8	54.5	B	65.2	B	79.7	B	72.4	A	61.3	C	65.2	C	48.2	B	56.7	B	58.9	C
Grade 7																		
0	69.2	A	69.7	B+	62.1	B	67.7	A+	53.3	B	64.8	B	50.4	B	58.3	B	62.1	B-
1	83.7	B	79.1	B	70.7	B	84.3	B+	74.3	B	87.4	B-	74.4	B+	66.4	B+	64.7	A-
5	77.1	B	73.5	B	67.2	C+	71.8	B-	64.5	B	72.3	C+	57.2	B	58.0	B	58.1	B-
6	71.9	A	73.2	A	72.1	B	74.8	C+	68.0	B	64.0	C	53.5	B-	55.9	B-	59.5	C

Note: A ratio score is the number of items answered correctly divided by the total number of items.

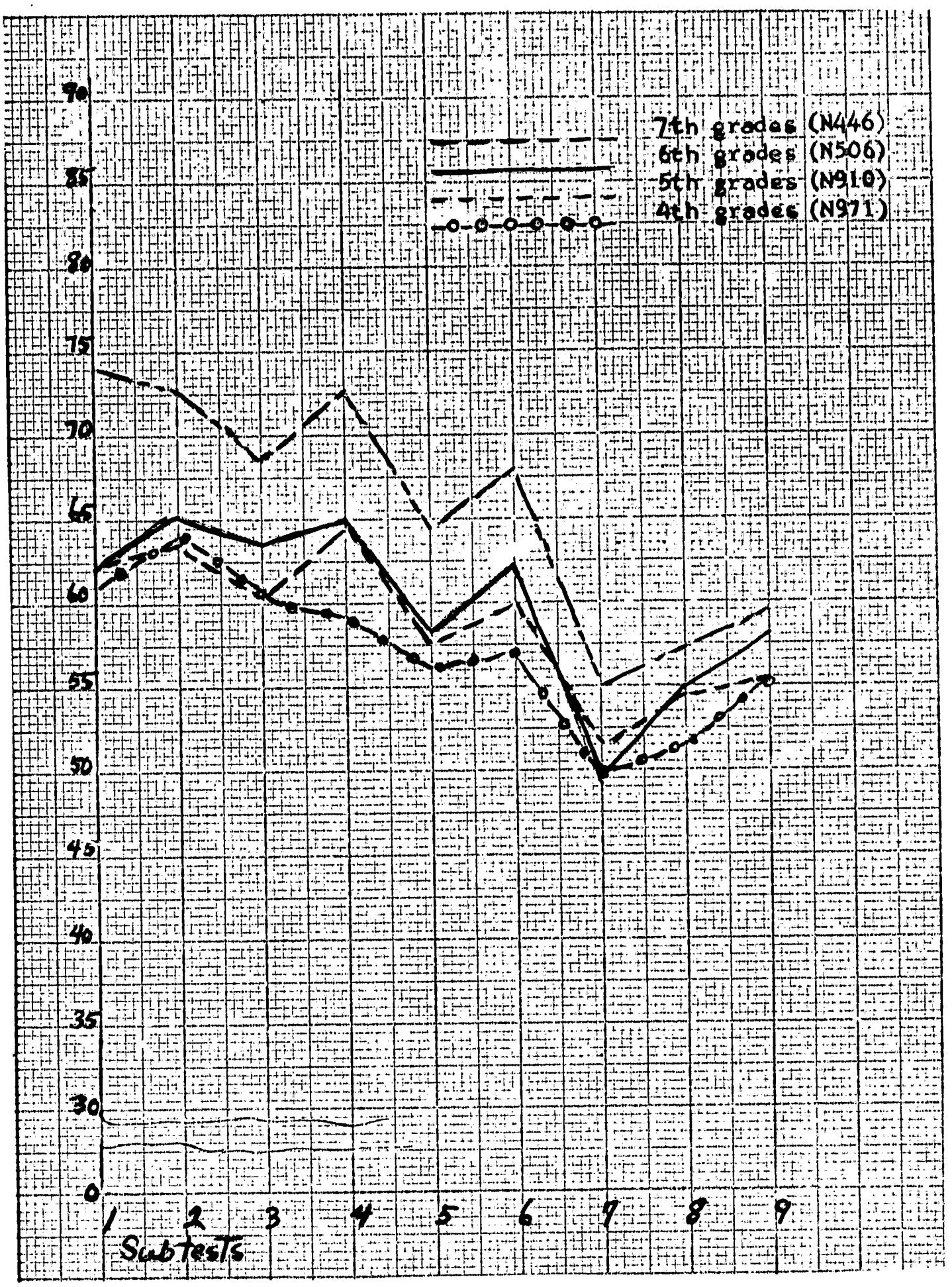


FIGURE I

Ratio Scores by Grade and by Subtest

Note: A Ratio Score is the number of items answered correctly divided by the total number of items

Where a test is so difficult that children guess the right answer, it will have a ratio score of 50, for on the average, children will guess the score of half of the items right in the tests of which they have no knowledge when there are only two responses. An examination of Figure 1 shows that, at the fourth grade level, the highest ratio score for any of the subtests is 64 for subtest 2, while the ratio score for subtest 7 is 50, and the scores for subtests 6, 8, and 9 are at 55 or below.

It is this low performance of the fourth grade students that leads to the conclusion that the Melodic Listening Survey is not appropriate for testing fourth grade children, not necessarily because of any deficiencies in the instrument, but possibly because the children have not yet been taught the skills measured by the tests. It is at the seventh grade level that children begin to show high levels of performance on the Melodic Listening Survey although subtests 7, 8, and 9 have such low ratio scores as to raise questions as to the appropriateness of these subtests to measure instructional efficiency. It is not possible from available data to tell from an examination of the results from any one school whether the subtests 7, 8, and 9 show such low performance because the schools are not providing instruction in the skills measured by the subtests, or because the test instrument is ineffective in measuring these outcomes. That the cause of low performance in subtests 7, 8, and 9 is related to the instructional program is given support by an analysis of the actual mean scores obtained among the four school systems, as in the seventh grade level. Examination of the grade seven performance, as shown in Table 7, shows that there are large differences among schools on these subtests.

Adjusted Scores

Because the various subtests were of differing lengths, it was not possible to compare one school system's performance on the various subtests directly. One simple procedure to follow would have been to convert all the scores to standard scores, but that procedure has some drawbacks since to compare a school system on subtest standard scores would assume that all of the subtests were of equal difficulty.

Scores can then be equated across schools and subtests by subtracting the adjustment score from each actual ratio score. The effect of this can be visualized graphically, as seen in Figure 1, for the adjustment would result in all of the points falling at 50, and the four grade lines thus being coterminous. Adjusted scores, as seen in Table 8, make it possible to compare between performance on the Melodic Listening Survey and the instructional rating in each subtest area of the test. Looking at scores in the seventh grade, there is a difference of performance among schools, a low of 38.8 in subtest 5 and a high of 32.8 in subtest 9. They do perform in a different way so that the test must be measuring something. What we would like to be able to show is that those differences are related to instructional rating as determined or evaluated by the teachers themselves. The evidence points toward inconsistencies in the rating of instruction within a school system and the achievement scores. It is quite possible that some areas of the survey content have been less familiar to teachers and less ably judged

Table 8

Achievement in Adjusted Scores for Each Subtest and Instruction Rating

System	Subtests 1		2		3		4		5		6		7		8		9	
Grade 4	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
0	46.7	A	48.1	B	49.5	B	47.1	A	44.9	B	46.6	A	48.8	B	49.7	B	50.3	B
1	38.7	B	43.4	B-	45.0	C	48.9	B	50.0	B-	50.5	C	48.0	B-	50.9	B-	49.7	C
2	71.0	B	65.4	B	56.4	B-	56.0	B	57.6	B	53.5	C	54.6	B-	53.8	B-	54.2	B-
4	44.8	C+	45.3	C+	44.3	C	44.5	C+	44.6	C	54.3	C	50.0	C+	47.3	C+	49.3	C
6	49.7	B	45.6	B	49.8	B-	49.7	B	49.6	B-	44.4	C	48.8	C	47.3	C	47.3	C
7	31.3	B	54.2	B	46.4	C	44.9	C+	44.7	B	44.5	C	46.9	C+	48.0	C+	46.3	B
8	43.5	B	50.9	B	69.0	B	63.3	A	54.7	C	58.2	C	48.3	B	55.2	B	53.3	C
Grade 5																		
0	52.7	A	55.9	B	47.5	B	53.0	A	54.0	B	61.3	A	55.2	B	51.7	B	53.9	B
1	46.5	A	51.3	B	52.1	C	57.1	B	52.5	B-	56.7	C	48.3	B	54.0	B	51.3	C
3	56.2	A	54.4	A	52.7	C	59.6	A	55.8	C	60.9	C	51.8	B	58.6	B	54.5	B
4	57.2	C+	46.5	C+	44.1	C	49.4	C+	44.8	C+	51.4	C	48.2	C+	50.4	C+	46.7	C
6	39.6	B	40.3	C	47.1	B	53.7	B	48.5	C	43.3	B	47.4	B	52.7	B+	45.2	B
7	48.3	A	53.5	B	49.7	C	56.1	B	50.7	A	48.4	C	51.6	B	49.6	B	49.7	B
8	51.0	B	52.1	B-	69.0	B	66.2	A	54.4	C	58.2	C	51.1	B	56.8	B	53.2	C
Grade 6																		
0	56.0	A	53.1	B	53.5	B	51.9	A	50.2	B	62.2	A	51.8	B	51.0	B	58.3	B
1	56.4	B+	52.4	B	49.2	B-	55.5	B	57.2	C	56.7	B-	55.7	B	48.7	B+	53.3	B-
6	41.2	B	48.6	B-	52.3	B	51.2	B	51.2	C	44.4	B	46.1	B	51.8	B-	48.0	B
7	53.2	C	49.1	C	48.0	C	42.8	C	47.5	C	46.0	C	49.4	C	48.8	C	46.5	C

Table 8 (cont.)

Achievement in Adjusted Scores for Each
Subtest and Instruction Rating

System	Subtests 1		2		3		4		5		6		7		8		9	
Grade 7	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R	S	R
0	45.1	A	46.8	B+	43.6	B	45.1	A	38.8	B	46.8	B	45.4	B	51.0	B	52.8	B-
1	59.6	B	56.2	B	52.2	B	61.7	B+	59.8	B	69.4	B-	69.4	B+	59.1	B+	55.4	A-
5	53.0	B	50.6	B	48.7	C+	54.2	B-	50.0	B	54.3	C+	52.2	B	53.0	B	48.8	B-
6	47.8	A	50.3	A	53.6	B	52.2	C+	53.5	B	46.0	C	48.5	B-	50.9	B-	50.2	C

Note: To compensate for differences in difficulty amont subtests, the ratio of correct to total responses was calculated for each grade level and for each subtest combining all schools and both forms. Since all of the ratios exceeded 50, the mean at each grade level for each subtest was arbitrarily set to zero. The adjustment score equals the actual ratio minus 50.

in the rating. It is also conceivable that attention has not been given fully to the listening phase of the instructional program in all its aspects, some areas of developmental skills being left to chance. It is apparent here that this exploratory effort into the actual situation of teacher planning and evaluation reveals an inconsistency by teachers within a school as well as by teachers in several schools of one system, and again by teachers of different systems, as compared with actual outcomes in children's scores. It is this vagueness of instructional rating that may possibly reveal why the listening phase of the instructional program has appeared to show vague outcomes. The measurement at the seventh grade level, obviously a sum total of accumulated experience, would lead to the implication that instructional quality or effectiveness might well be added up at the fourth, fifth, and sixth grade level, to get at the average accomplishment year by year. This study has not attempted this. It stops at this point. School system 1 showed 69.4 in subtest 7 while in subtest 3 the score was 53.2. This difference would supposedly have to do with quality of instruction.

Because an examination of the results in Table 8 do not seem to indicate any relationship between the school ratings and the children's performance on the various parts of the Melodic Listening Survey, a retabulation of results has been made utilizing only those subtests with satisfactory reliability coefficients. The reliability coefficients have been shown in Table 2. At the fourth, fifth, and sixth grade levels it appears it is the subtests 1, 2, and 6 that have acceptable reliability. At grade seven all of the subtests except 3 and 8 have adequate reliability. Table 9 is a tabulation of the results of Table 8 for the selected subtests at each grade level. Even when these limited numbers of subtests are examined, it does not appear that there is any relationship between scores on the Melodic Listening Survey and the school's rating of instruction. While there is a tendency for there to be little variability in the instructional ratings, where a school indicates that it has poor instruction, it does not necessarily get the lowest Melodic Listening Survey scores. Neither between nor within schools can one detect any relationship between instructional rating and scores on the Survey.

Summary of Findings

The results obtained by administering the Melodic Listening Survey to 3,017 children in grades four to seven in nine school systems indicate that there is some increase of achievement in melodic listening by increasing grade level. The comparison of results obtained from the experimental and control groups show that the experimental group, as seen in Table 3, has higher scores than the control group in grades four, five, and seven; composite scores show that there is a significant difference in favor of the experimental group at the one per cent level in the seventh grade. This would indicate that listening achievement is better with the use of notation in the seventh grade. It appears that achievement is highest in the seventh grade where experience and age may possibly be factors as well as instruction. The study here of instructional rating by teachers of nine school systems reveals an incon-

TABLE 9

Selected Adjusted Scores
and Instructional Rating

			Subtests 1		2		6	
	System	N	S	R	S	R	S	R
Grade 4	0	72	46.7	A	48.1	B	46.6	A
	1	156	38.7	B	43.4	B-	50.5	C
	2	229	71.0	B	65.4	B	53.5	C
	4	164	44.8	C+	45.3	C+	54.3	C
	6	197	49.7	B	45.6	B	44.4	C
	7	111	31.3	B	54.2	B	44.5	C
	8	42	43.5	B	50.9	B	58.2	C
Grade 5	0	54	52.7	A	55.9	B	61.3	A
	1	139	46.5	A	51.3	B	56.7	C
	3	183	56.2	A	54.4	A	60.9	C
	4	152	57.2	C+	46.5	C+	51.4	C
	6	157	39.6	B	40.3	C	43.3	B
	7	184	48.3	A	53.5	B	48.4	C
	8	41	51.0	B	52.1	B-	58.2	C
Grade 6	0	59	56.0	A	53.1	B	62.2	A
	1	123	56.4	B+	52.4	B	56.7	B-
	6	179	41.2	B	48.6	B-	44.4	B
	7	145	53.2	C	49.1	C	46.0	C

			Subtests 1		2		4	
	System	N	S	R	S	R	S	R
Grade 7	0	60	45.1	A	46.8	B+	45.1	A
	1	189	59.6	B	56.2	B	61.7	B+
	5	205	53.0	B	50.6	B	54.2	B-
	6	175	47.8	A	50.3	A	52.2	C+

			Subtests 5		6		7		9	
	System		S	R	S	R	S	R	S	R
Grade 7	0		38.8	B	46.8	B	45.4	B	52.8	B-
	1		59.8	B	69.4	B-	69.4	B+	55.4	A-
	5		50.0	B	54.3	C+	52.2	B	48.8	B-
	6		53.5	B	46.0	C	48.5	B-	50.2	C

sistency between levels of rating and apparent achievement as shown in the Survey. Further analysis of the teachers' ratings show that music supervisors in several schools gave a rating more consistent with the actual scores than did classroom teachers. The question remains whether ratings are inaccurate. The question also arises that instruction may not deal with the fundamentals basic to listening development as represented in the Survey, and considered essential to perceptive listening from the earliest years, according to this study. It leads as well to the inference that another rating scale must be devised to assist teachers in making a consistent judgment of the conceptual processes involved.

A wide range of achievement has been found among schools. To determine whether or not this difference among schools is related to the instructional program or whether it has been related to the testing situation, the schools that had scored the lowest and the highest were contacted and asked about the specifics of their testing program. It was determined that the school with the lowest score, the children in school 61, group 2, indeed had had an unsatisfactory arrangement for their testing. It was also determined that the fourth grades in school system 2 which had very high scores had not followed the instructions that were given to them concerning the selection of students, and that the survey was administered to a non-random sample of students selected because of their superior performance in music and selected because they were being taught by the more capable music teachers. Thus we are forced to recognize that the differences among schools may be related to the testing situation rather than to the instructional program. Even when instructions for testing are tape recorded and very precise in the directions given for procedures to be followed, it is not possible to assure that a test will be administered under appropriate conditions.

CONCLUSION

This research project deals with the listening performance of 3,017 children from school music classes in several public and private schools. The purpose of the project has been to examine some of the outcomes of instructional programs as to the musical listening competency being developed. A test has been needed in order to observe the results of teaching in terms of melodic listening ability as it emerges over a span of school years. The study has compared the achievement of those who listen while they saw the melodic examples in notation and those who did not.

The total test administered in thirty schools gives evidence that the survey has elicited an accumulated musical listening ability acquired over several school years, as shown in the total test scores. The mean scores show an increase from grade four to grade seven. They show a small difference between grade levels, 4, 5, and 6 with a greater difference between grades 6 and 7. It is apparent that there is con-

siderable difference among the thirty schools in the nine school systems, with mean scores of combined groups ranging from 109.3 to 125.8 for the systems represented in seventh grade, and from 92.6 to 106.19 in those represented in the sixth grade.

Comparison of results obtained between Form 1 and Form 2 in grades four through seven show that the Form 2 scores in general were higher than those shown in the total test scores. The mean scores show an increase from grade four to grade seven. They show a small difference between grade levels four, five, and six with a greater difference among the thirty schools in the nine school systems, with mean scores of combined groups ranging from 109.3 to 125.8 for the systems represented in seventh grade, and from 92.6 to 106.19 in those represented in the sixth grade.

Comparison of results obtained between Form 1 and Form 2 in grades four through seven show that the Form 2 scores in general are higher than those of the control group in grades four, five, and seven. It appears that scores are higher in groups who used notation. It is evident that scores are markedly better with the use of notation in the seventh grade.

Examined by subtest, the scores reflect the listeners' ability in detail. The test is organized in an order of melodic elements and tonal concepts, relevant to listening learning in the designated grade levels. Means by schools are higher for subtests 1 and 2, perhaps indicating that tonal memory for direction of tones and tonal centers is quite well established. Means for subtest 6 are also higher, leading to the inference that grasp of one melodic phrase and its ending has also been established in the developmental experience of the children as tested. The low scores in subtest 3 perhaps indicate that these children have not learned to recognize expressive quality in a melody relative to its structure of range and intervals. The low scores in subtest 5 indicate that the concept of melodic contour as an expressive factor is poorly learned. Low scores in subtest 7 also show a low performance perhaps indicative of the inability to follow longer examples of two phrases, or indicating that continuity of attention or memory has not been adequately developed. We assume that the test performance was related to the curriculum and effective instructional practices.

This study has endeavored to relate scores with evidence of instruction in the areas tested in the subtests. We find that the mean scores did increase with increasing grade levels. However, the narrow range of scores between grades four to six give evidence that leads to the inference that the children have not been adequately instructed in the material measured, part by part, in the Melodic Listening Survey. Teachers' ratings of instruction within schools have proved to be inconsistent with the melodic listening scores. Ratings among the nine school systems have not matched scores. It is thus concluded that no relationship is found between ratings and mean scores.

Recommendations are that the instructional program for listening development be studied in grades four through seven, that goals be examined, curriculum evaluated, and achievement measured year by year. The prevailing practice of instruction in notation may need to be evaluated in the way it relates to listening. It is recommended that a study be made of instructional rating to find a scale which teachers can use to evaluate their own teaching. Attention is being given apparently to the concepts that apply in auditory perception more adequately than formerly even though achievement as shown in these results is less than desired. There are limitations in the continuity and depth of the listening developmental program that might possibly be overcome.

REFERENCES

1. Boekelheide, Viola E. Some Techniques of Assessing Certain Basic Music Listening Skills of Eight and Nine Year Olds. Unpublished doctoral dissertation, Stanford University, 1960.

2. Earhart, Will. Music to the Listening Ear. New York: M. Witmark and Sons, 1932.

3. Ernst, Karl, Rose M. Grentzer, and Wiley Housewright. Birchard Music Series Book Four, Teacher's Book. Evanston: Summy-Birchard Co., 1963.

4. Flagg, Marion. Musical Learning. Boston: C. C. Birchard and Co., 1949.

5. Gernet, Sterling K. Musical Discrimination at Various Age and Grade Levels. Dissertation, Temple University. Washington: College Press, 1940.

6. Hartzell, Ralph E. An Exploratory Study of Tonality Apprehension and Tonal Memory in Young Children. Unpublished doctoral dissertation, University of Cincinnati, 1949.

7. Landeck, Beatrice, Elizabeth Crook, and Harold C. Youngberg. Making Music Your Own, Teacher's Edition, Books Four, Five, and Six. Morristown: Silver Burdett Co., 1965.

8. Mainwaring, James. "Psychological Factors in the Teaching of Music," British Journal of Educational Psychology XXI (1950-51), 105-121, 199-213.

9. Morgan, Hazel N. (ed.). Music in American Education, Music Education Source Book No. 2. Washington: Music Educators National Conference, 1955.

10. Mueller, Kate Hevner. "Studies in Music Appreciation," Journal of Research in Music Education IV, No. 1 (1956), 3-25.

11. Murphy, Howard A. Teaching Musicianship. New York: Coleman-Ross Co., 1950.

12. Mursell, James L. "Growth Processes in Music Education," Basic Concepts in Music Education, Fifty-seventh Yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago Press, 1958.

13. Ortmann, Otto R. "Some Tonal Determinants of Melodic Memory," Journal of Educational Psychology XXIV (1933), 454-467.

14. Peterson, A. Viola. Developmental Listening Factors in Children's Ability to Understand Melody. Unpublished doctoral dissertation, University of Rochester, 1965.

15. Petzold, Robert G. Development of Auditory Perception of Musical Sounds by Children in First Six Grades. Cooperative Research Project No. 1051, University of Wisconsin, 1966.

16. Piaget, Jean. Judgment and Reasoning in the Child. Translation by Marjorie Warden. Patterson: Littlefield, Adams and Co., 1959. Reprint of 1928 ed. printed by Routledge and Kegan Paul, Ltd., London.

17. Smits van Waesberghe, Joseph. A Textbook of Melody. Translation by W. A. G. Doyle-Davidson. Dallas: American Institute of Musicology, 1955.

18. Trotter, T. H. Yorke, and Stanley Chapple. Yorke Trotter Principles of Musicianship. London: Bosworth and Co., Ltd., 1933.

19. Vinacke, W. Edgar. "The Investigation of Concept Formation," Psychological Bulletin XLVIII (1951), 1-31.

20. Welch, Livingston, and Lewis Long. "The Higher Structural Phases of Concept Formation of Children," Journal of Psychology XIX (1940), 59-95.

21. Willems, Edgar. L'Oreille Musicale. 2 vols. Geneve: Editions "Pro Musica," 1940; 1946.

BIBLIOGRAPHY

1. Barlow, Wayne. Foundations of Music. New York: Appleton Century Crofts, Inc., 1953.

2. Boatwright, Howard. Introduction to the Theory of Music. New York: W. W. Norton and Co., Inc., 1956.

3. Cooper, Grosvenor W., and Leonard B. Meyer. The Rhythmic Structure of Music. Chicago: University of Chicago Press, 1960.

4. Edwards, Arthur C. The Art of Melody. New York: Philosophical Library, 1956.

5. Gage, Nathaniel L. (ed.). Handbook of Research on Teaching. Chicago: Rand McNally Co., 1963.

6. Wing, Robert. "Tests of Musical Ability and Appreciation," British Journal of Psychology Monograph Supplements (ed. James Drever). Cambridge: Cambridge University Press, XXVII (1948), 1-88.

List of Appendixes

APPENDIX A

NAME _____ GRADE _____ SEX _____ AGE _____ DATE _____

Instrument _____ Orchestra _____ Band

Student Number

MELODIC LISTENING SURVEY FORM 1

This might be called a game of Tone and Tune Detective.

Rules:
1. Hum the given tonal center.
2. Listen to the tones.
3. Keep remembering the tonal center.
4. Think the tones again; recognize what the tones do.
5. Mark your answer.

PART I

TONES. Examples A - J. Consider 5 questions for each tone group.
1. Do the tones make a scale melody that feels finished?
2. Should one tone going up be added?
3. Should one tone going down be added?
4. Should more than one tone going up be added?
5. Should more than one tone going down be added?

1.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
2.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
A.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
B.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
C.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
D.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
E.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
F.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
G.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
H.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
I.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no
J.	1 yes	no	2 yes	no	3 yes	no	4 yes	no	5 yes	no

PART II

TONES. Examples K - T. Consider 3 questions for each tone group.
1. Do the tones make a tonal group that ends on the tonal center?
2. Do the tones go up or down?
3. Do the tones move by step interval or skip interval?

1.	yes	no	2	up	down	3 step skip
2.	1 yes	no	2	up	down	3 step skip
K.	1 yes	no	2	up	down	3 step skip
L.	1 yes	no	2	up	down	3 step skip
M.	1 yes	no	2	up	down	3 step skip
N.	1 yes	no	2	up	down	3 step skip
O.	1 yes	no	2	up	down	3 step skip
P.	1 yes	no	2	up	down	3 step skip
Q.	1 yes	no	2	up	down	3 step skip
R.	1 yes	no	2	up	down	3 step skip
S.	1 yes	no	2	up	down	3 step skip
T.	1 yes	no	2	up	down	3 step skip

PART III

TUNES. Examples U - X. Consider 2 questions for each melodic example.
1. Is the lowest tone at least an octave lower than the highest?
2. Does the range of the melody give the feeling of a wide curve?

1.	1 yes	no	2 yes	no
U.	1 yes	no	2 yes	no
V.	1 yes	no	2 yes	no
W.	1 yes	no	2 yes	no
X.	1 yes	no	2 yes	no

NAME _____

Student Number

PART IV

TUNES. Examples Y - AA. Consider 3 questions for each melodic example.

1. Is there a range of at least an octave in the melody?
2. Do any tones repeat in succession?
3. Is the melodic pattern wide or narrow in its shape?

1. 1 yes no 2 yes no 3 wide narrow

Y. 1 Yes no 2 yes no 3 wide narrow
Z. 1 Yes no 2 yes no 3 wide narrow
AA. 1 yes no 2 yes no 3 wide narrow

Here are the rules of the game again, with one rule added.

1. Hum the given tonal center; find the upper octave yourself.
2. Listen to the phrase; think it through again.
3. Keep remembering the tonal center.
4. Recognize what the tones do.
5. Get the feeling expressed in the melody.
6. Mark your answer.

PART V

TUNES. Examples BB - DD. Consider 3 questions for each melodic example.

1. Is the melodic shape a wide or narrow curve?
2. Do you feel there is force in the rise of melody and rest in its fall?
3. Do the tones come to a close, or cadence, on the tonal center?

BB. 1 wide narrow 2 yes no 3 yes no
CC. 1 wide narrow 2 yes no 3 yes no
DD. 1 wide narrow 2 yes no 3 yes no

PART VI

TUNES. Examples EE GG. Consider 4 questions for each melodic example.

1. Does the melody close on the tonal center (rest tone)?
2. Does it feel finished?(complete cadence)?
3. Does the melody close on another tone (active tone)?
4. Does it feel unfinished (incomplete cadence), like a pause before another phrase?

1. 1 yes no 2 yes no 3 yes no 4 yes no
EE. 1 yes no 2 yes no 3 yes no 4 yes no
FF. 1 yes no 2 yes no 3 yes no 4 yes no
GG. 1 yes no 2 yes no 3 yes no 4 yes no

NAME _____

Student Number

Part VII

TUNES. Examples HH - JJ. Consider 4 questions for each melodic example (more than one phrase).

1. Does the first phrase close on the tonal center to make a complete cadence (answer phrase)?
2. Does it close on another tone to make an incomplete cadence (question phrase)?
3. Does the second phrase close on the tonal center to make a complete cadence (answer phrase)?
4. Does it close on another tone to make an incomplete cadence (question phrase)?

HH. 1 yes no 2 yes no 3 yes no 4 yes no
II. 1 yes no 2 yes no 3 yes no 4 yes no
JJ. 1 yes no 2 yes no 3 yes no 4 yes no

Part VIII

TUNES. Examples KK - MM. Consider 4 questions for each melodic example.

1. Is the second phrase like the first phrase in tonal pattern, with a sequence higher or lower in pitch?
2. Is the second phrase like the first phrase in rhythmic pattern even though the pitch of tones may be different?
3. Are the two phrases alike (unity of pattern)?
4. Are the two phrases different (variety of pattern)?

KK. 1 yes no 2 yes no 3 yes no 4 yes no
LL. 1 yes no 2 yes no 3 yes no 4 yes no
MM. 1 yes no 2 yes no 3 yes no 4 yes no

Part IX

TUNES. Examples NN - RR. Consider 4 questions for each melodic example. Is the expression of feeling in the phrases of melody connected with

1. Loudness and softness as the melody goes up or goes down, as toward climax or rest?
2. Urging-forward rhythm that builds more force?
3. Tonal pattern repeated in sequence, for emphasis?
4. Change of mode or key, changing the mood?

NN. 1 yes no 2 yes no 3 yes no 4 yes no
OO. 1 yes no 2 yes no 3 yes no 4 yes no
PP. 1 yes no 2 yes no 3 yes no 4 yes no
QQ. 1 yes no 2 yes no 3 yes no 4 yes no
RR. 1 yes no 2 yes no 3 yes no 4 yes no

NAME _____ LAST _____ FIRST _____ MIDDLE _____ GRADE _____ SEX M F _____ AGE _____ DATE _____

SCHOOL _____ Instrument _____ Orchestra _____ Band _____

Student Number

0 1 2 3 4 5 6 7 8 9

MELODIC LISTENING SURVEY FORM 2

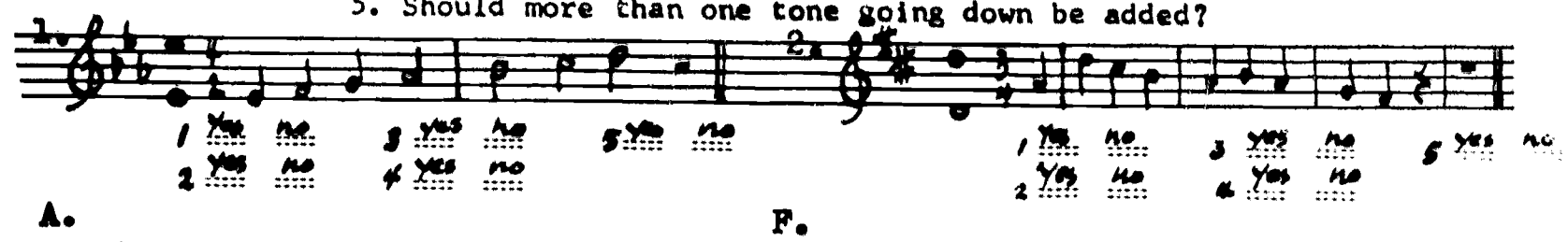
This might be called a game of Tone and Tune Detective.

Rules: 1. Hum the given tonal center; observe the notes.
2. Listen to the tones; observe the notes.
3. Keep remembering the tonal center.
4. Think the tones again; recognize what the tones do.
5. Mark your answer.

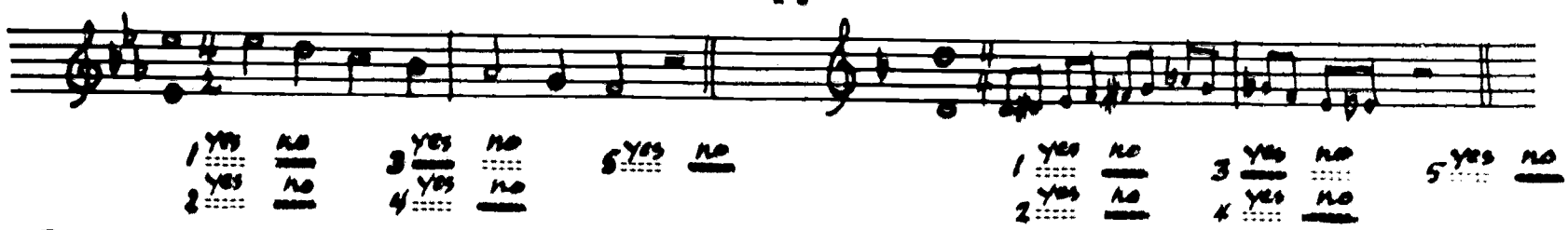
PART I

TONES. Examples A - J. Consider 5 questions for each tone group.

1. Do the tones make a scale melody that feels finished?
2. Should one tone going up be added?
3. Should one tone going down be added?
4. Should more than one tone going up be added?
5. Should more than one tone going down be added?



A.



F.

B.

G.

C.

H.

D.

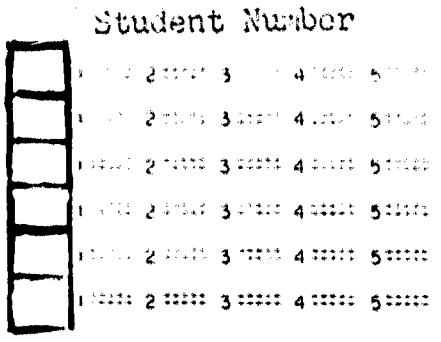
I.

E.

J.

NAME _____

Student Number



Part II

TONES. Examples K - T. Consider 3 questions for each tone group.

1. Do the tones make a tonal group that ends on the tonal center?
2. Do the tones go up or down?
3. Do the tones move by step interval or skip interval?

K.

P.

L.

Q.

M.

R.

N.

S.

O.

T.

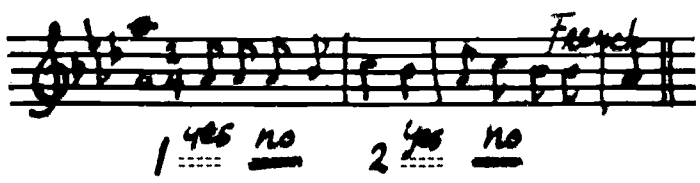
Part III

TUNES. Examples U - X. Consider 2 questions for each melodic example.

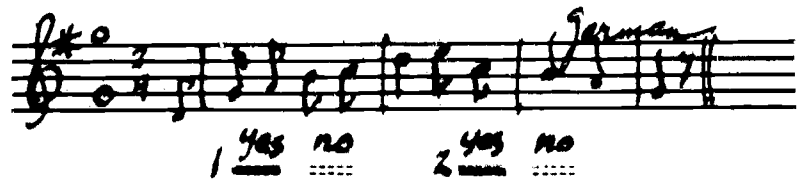
1. Is the lowest tone at least an octave lower than the highest?
2. Does the range of the melody give the feeling of a wide curve?

1.

U.



W.



V.

X. From "American Ballads" for piano, by Roy Harris. Carl Fischer, Inc., New York, Copyright 1947.

NAME _____

Student Number

Part IV

TUNES. Examples Y - AA. Consider 3 questions for each melodic example.

1. Is there a range of at least an octave in the melody?
2. Do any tones repeat in succession?
3. Is the melodic pattern wide or narrow in its shape?

1. **Four measures from Schubert**

Y. **Four measures from St. Saëns**

Z. **Five measures from Smetana**

AA. **Four measures from Prokofieff**

Here are the rules of the game again, with one rule added.

1. Hum the given tonal center; find the upper octave yourself; observe the notes.
2. Listen to the phrase; think it through again.
3. Keep remembering the tonal center.
4. Recognize what the tones do in the melody; observe the notes.
5. Find the feeling expressed in the melody.
6. Mark your answer.

Part V

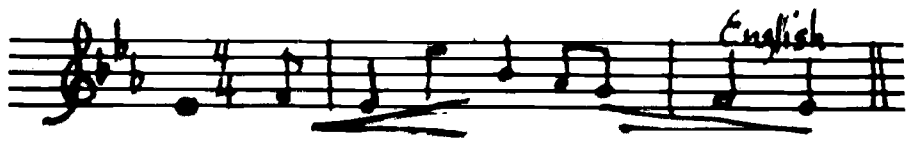
TUNES. Examples BB - DD. Consider 3 questions for each melodic example.

1. Is the melodic shape a wide or narrow curve?
2. Do you feel there is force in the rise of melody and rest in its fall?
3. Do the tones come to a close, or cadence, on the tonal center?

BB.

1 wide narrow 2 yes no 3 yes no

CC.



1 wide narrow 2 yes no 3 yes no

DD.

Three measures from the piano-vocal score of Amahl and the Night Visitors by Menotti. Published by G. Schirmer, Inc., New York, copyright 1952. The excerpt is on page 1, measures 13 to 15.

NAME

Part VI

TUNES. Examples EE - GG.

Consider 4 questions for each melodic example.

1. Does the melody close on the tonal center (rest tone)?
2. Does it feel finished (complete cadence)?
3. Does the melody close on another tone (active tone)?
4. Does it feel unfinished (incomplete cadence), like a pause before another phrase?

1.

EE. **Five measures from Haydn**

FF. **Four measures from Mozart**

GG. **Four measures from Mendelssohn**

Part VII

TUNES. Examples HH - JJ. Consider 4 questions for each melodic example (more than one phrase).

1. Does the first phrase close on the tonal center to make a complete cadence (answer phrase)?
2. Does it close on another tone to make an incomplete cadence (question phrase)?
3. Does the second phrase close on the tonal center to make a complete cadence (answer phrase)?
4. Does it close on another tone to make an incomplete cadence (question phrase)?

HH. **Nine measures from Kodaly**

II. **Ten measures from Bartoffk**

JJ. **Five measures from Hindemith**

NAME

Student Number

Part VIII

TUNES. Examples KK - MM. Consider 4 questions for each melodic example.

1. Is the second phrase like the first phrase in tonal pattern, with a sequence higher or lower in pitch?
2. Is the second phrase like the first phrase in rhythmic pattern even though the pitch of tones may be different?
3. Are the two phrases alike (unity of pattern)?
4. Are the two phrases different (variety of pattern)?

KK. Eight measures from Dvorak

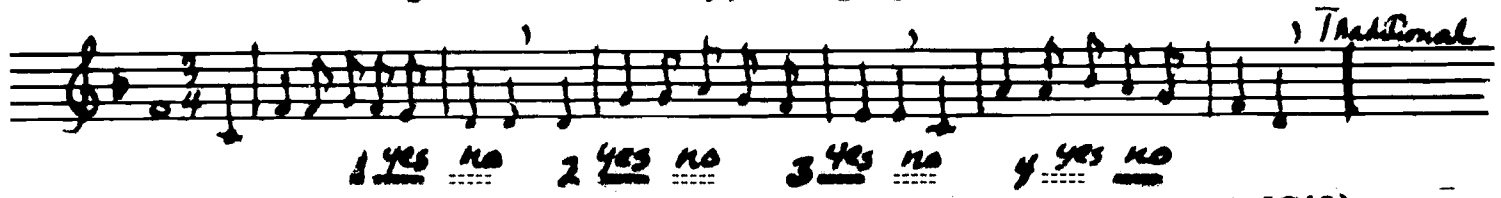
LL. Nine measures from Bizet

MM. From the score in miniature of the Grand Canyon Suite by Ferde Grofe. Seventeen measures of the trombone part (pp. 68 and 69 in the score published by Robbins Music Corp., New York.).

Part IX TUNES. Examples NN - RR. Consider 4 questions for each melodic example. Is the expression of feeling in the phrases of melody connected with

1. Loudness and softness as the melody goes up or goes down, as toward climax or rest?
2. Urging-forward rhythm that builds more force?
3. Tonal pattern repeated in sequence, for emphasis?
4. Change of mode or key, changing the mood?

NN.



OO. Measures 8 to 12 from The White Peacock by Griffes. 51 Piano Pieces from the Modern Repertoire, published by G. Schirmer, Inc., N.Y., copyright 1940).

PP. Measures 18 to 25 of Golliwogg's Cakewalk by Debussy. Elkan-Vogel Co., Publishers, Philadelphia.

QQ. Eleven measures from Wagner

RR. Eight measures from Silent Noon by Vaughn Williams (50 Art Songs from the Modern Repertoire, published by G. Schirmer, Inc., p. 135, the first eight measures. Copyright 1939.)

APPENDIX B

MELODIC LISTENING SURVEY: MANUAL OF DIRECTIONS

Introduction. Teachers of school music generally find that observation of achievement in large classes remains a problem. This is less true in judging responsiveness in singing and playing than it is in estimating progress in listening. The introspective nature of listening makes it less accessible to observation, since its active and passive aspects require more detailed analysis.

Here is a survey to serve as our first exploratory step in a study of children's listening development, some theories and practices thereunto. It is a device by which we shall take a measurement of listening competency as developed out of experience in the school music program up to grades four, five, six and seven.

Every teacher tries to find answers to such questions as these. Does the child show increasingly greater sensitivity to tonal and rhythmic elements? Has he quickened his sensory reaction to musical stimuli? By the age of seven or eight years, can he hold tonal groups in mind? Is he able to remember and compare them? Does he begin to attend, select, and organize the musical elements? Does he think and feel movement and continuity as aspects of melodic qualities? Does he recognize expressive forces? We look for evidence of children's increasing responsiveness based on the learning in early and middle school years.

Teachers and pupils are asked to enter into this survey as a cooperative, exploratory venture. Pupils are to be oriented to a game of Tone and Tune Detective to pique curiosity and to challenge alert response. Teachers can look upon this measure as an inventory of natural response and a summary of acquired listening learning to date. The process of listening has been taken into account as fully as possible, as a complex of sensing, perceiving, and imagining as it must be applied to music, to melody in particular. The child is aroused to draw upon his sense, thought, and feeling to understand structure and expression in melody as an art form. As he proceeds with the so-called game, the child is led, within the limits of his ability, to

(1) recognize and feel tones moving in a melodic direction, concluding or not concluding;
(2) realize melodic rhythmic and dynamic changes;
(3) think about and feel expressive force in the arc, or more static, contours;
(4) perceive what tones do in a cadence;
(5) perceive continuity of a phrase to another phrase;
(6) perceive expressive qualities associated with tonal and rhythmic function; and
(7) coordinate ability to attend to several aspects, and apply his learned reactions to new listening situations.

Altogether, the listener is encouraged to exercise his full process of listening, bringing concepts of melody to bear when confronted with several kinds of melodic examples. Achievement is to be considered through this measure; the goal of the project is to investigate attainment in grasping the message of music here represented.

Melodic examples in the survey include figurations and phrases in the structure of 18th- and 19th-century style, the most familiar to children in schools. There are included also contemporary music examples. More schools are broadening the scope of music repertory heard and studied and performed, perhaps influenced by the pilot projects of 1965.[1] Where there are melodic examples in an idiom somewhat "farther out", they relate to the earlier traditional style quite obviously.

Harmony has been omitted as accompaniment while it may seem implied in some styles. Harmony may be traced by the listener in melodic chordal line, to be sure, but there is no reference made to harmonic elements in this survey. There are no chordal progressions or contemporary sonorities included.

The school music program has more emphasis on many styles and idioms of music than it had formerly. The basic music series[2] indicate the increased repertory and attention to tonal structure and rhythmic structure in greater diversity. The connection of structure and expression has received attention along with the effort to provide experience in greater depth. The concepts of rhythm extend from 18th- and 19th-century structures to changing meters, uneven phrases, etc. The tonal structures must go beyond major-minor order to modal, polytonal, whole-tone, or tone row orders. Tone quality goes outside the vocal cantabile realm into percussive, non-vocal utterance, and new sounds have been added. Today's young listeners are led to consider these qualities of melody within the content of songs now found in their textbooks and heard in recordings.

There are nine parts in the survey, forty-four melodic examples in all. The sequence of the nine parts to the survey allows for an accumulation of melodic elements and melodic concepts to be featured. There may be the introduction of a concept in one part to be continued into the next part along with an added feature. The child begins with content which is most obvious and familiar to proceed smoothly to meet the challenge of the other parts as the requirement increases. In

1 Music Educators National Conference, Experiments in Musical Creativity, a Report of the Contemporary Music Project in Baltimore, San Diego, and Farmingdale, Washington, D.C. 1966

2 Landeck, Beatrice et al., Making Music Your Own, Silver Burdett Company, Morristown, New Jersey, 1965

Part I and Part II there are ten examples, in Part III there are four examples, in Parts IV to VIII there are three examples, and in Part IX there are five. For example, in Part I examples are to be heard in modes as well as in major and minor. Before each example is played, the tonal center is given to be hummed by the listeners. One needs to remember that determination of modal tonal centers is not absolute, and is subjective in some degree. Furthermore, modal writing does not conform in practice to major-minor signatures. For purposes here, the modal tonal center is clarified through the initial announcement of it. The tape recordings willpermit the teachers to become familiar with the music included.

Orientation of the Pupils. The children need to discuss their part in the project at an earlier date with the teacher. They will thus feel ready to make the exploration in listening,to expect the session on a given day, one of an hour's length, and to be ready to become part of a first or second group as the lots fall,to assemble in the correct room, and to realize this is a part played by other students far and near who are enlisted in this research.

It is right to discuss the medium, melody and to bring into the talk a vocabulary that may be met with in the survey. For this reason, this list of words is provided as a guide:

hum
melody
melodic
tone
tonal
tonal center or keynote(1 or do)
tone group
repeated tones
note
notation
pattern (rhythmic or tonal)
rhythm
rhythmic
time sign
chord
interval(octave,third,step,skip)
phrase
sequence
close of a phrase (cadence)
question and answer phrase
range
dynamics

Although the children will not see the answer sheets before the actual session, it is wellthat the teachers who are to administer the survey examine them so as to explain to the children how they will mark answers. This will help listeners to concentrate on the essential listening without being unsure about markings. It is important to use a minimum of time to fill out name and information headings also.

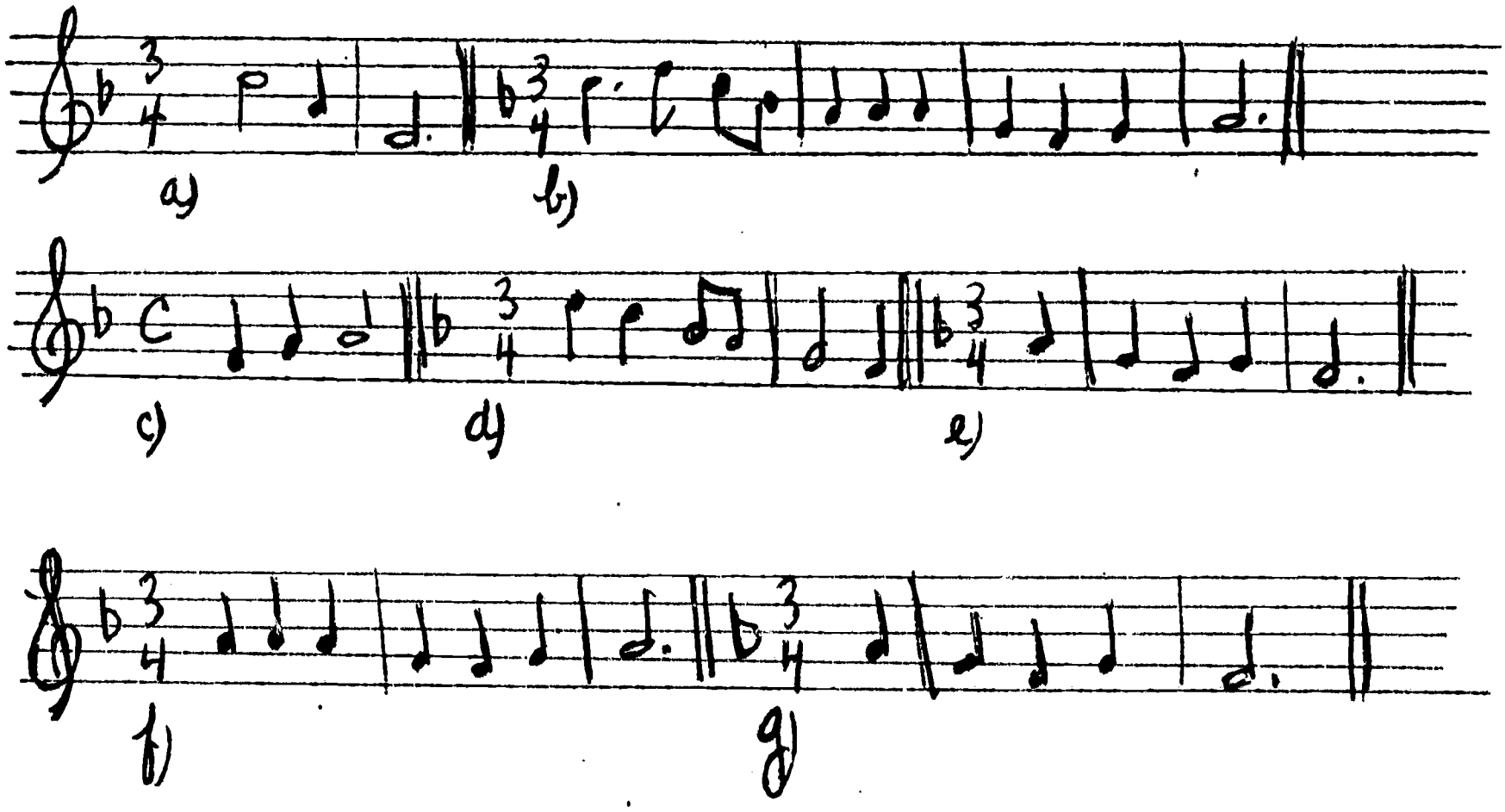
Above all, the pupils should be prepared for this as a true exploratory study in which they, with us, investigate their powers of listening ability, that they not think of it as an examination, and that it be stimulating. The teacher can affect this in manner, classroom climate, interest, and poise.

Administering the Survey. Two forms of the survey provide that two approaches in listening can be compared. Form 1 allows the listener to depend solely upon his hearing, as his answer sheet has questions and places for answers only. Form 2 has the examples shown in musical notation and allows the listener to see the notes while he listens. Study of the data will be made to determine whether approach affects the listeners' competency. The two forms are identical in content and procedure, differing only in listening with or without notation, and in number of pages, the Form 2 having two additional pages to provide space for the notated examples.

On the day arranged for the listening session, the music supervisor will have the children draw numbers 1 or 2, a selection for random treatment, and the children will be assembled in two classrooms as group 1 and group 2. The two groups proceed with the survey separately but at the same hour. A tape recording Form 1 and Form 2 are used accordingly, set up in readiness by the teacher in charge.

The teacher with group 2 has practice examples written on the chalkboard, ready to be observed, as follows:

PRACTICE EXAMPLES



A pace of procedure is set through the use of the tape recordings. The pace has been arrived at through trial runs. The procedure of hearing and humming the tonal center or keynote, hearing the melodic example which is played twice at evenly spaced intervals, the pause for determining and marking the answer, these are taken into account in the recording. The tape recording controls the time of the session as an hour, intermission of three minutes near mid-point, and a stop at one point for necessary questions.

Time must be given first, however, to filling out the blanks on the answer forms for number and name of the pupil, etc., and making out a name sheet. Familiarity on thepart of the teacher with the forms, tape recordings, and directions will make this an efficient procedure.

The Name Sheet is filled out by the student. He must print his name in the spaces provided and then grid his name by marking a space under each letter of the name. The Name Sheet should also have the student's grade and sex reported. There is a student number printed in the upper right corner of the Name Sheet. This number is to be printed on each of the answer sheets in the space marked Student Number. The student should fill in the first four boxes in the six boxes provided. Each student then must grid his number by marking the appropriate spaces in the area under student number. The student should also print his name on each of the answer sheets. After students complete the test, the answer sheets should be collected so that for each student there is the name sheet followedby the answer sheets in the proper order.

The tape recordings are run at $7\frac{1}{2}$ips. It is important that the teacher become familiar with the survey content insofar as it will be necessary to stop well (a) for the necessary questions; (b) for the intermission or seventh-inning stretch; and (c) the final stop and rewinding of the tape.

It is best that the teachers show children how to mark answers,perhaps illustrating at the board in a previous class time,to prevent time and energy being used up for that rather than the primary objective of listening to melody. The marks are to be made with a pencil (each child needs the usual #2 pencil used in school) heavy enough to show clearly. If it must be done, erasing must be complete.

The teachers in charge have much to do with the success of the procedures. They control the situation to make it conducive to good performance, and they orient the listeners to the venture before as well as on the day of performance. Their enthusiasm for the project and its value can affect the climate for optimum listening.

It is suggested that,wherever possible, the school schedule be arranged so that the survey is administered to fourth grade children by themselves. Fifth and sixth grades can be combined if it is more convenient. Furthermore, it is usually more convenient to have the seventh grades by themselves.

Scoring and Study of the Data. The completed answer sheets together with tape recordings, manuals, questionnaires, and any extra forms are to be mailed promptly to Dr. A. Viola Peterson or to Dr. John A. Finger, Jr., Rhode Island College, Educational Services Center,Providence, Rhode Island, 02908. It is important to prepare the survey materials for mailing with considerable care, and to send the packets carefully labeled.

Scoring will be done by computer at Rhode Island College under Dr. Finger's supervision after which the study will be continued.

Questionnaires sent to the teachers are necessary at this point when a curriculum summary is needed. Kindly and devoted attention of the teachers is earnestly requested again, for this questionnaire, brief as it is.

The data will be studied for significant difference between the two approaches in listening, for an estimate of the extent to which melodic concepts have been used in the listening process, such as recognizing the feeling of cadence along with other concepts featured in the nine parts of the survey. Achievement levels will be examined as to group and individual results and grade levels will be compared.

In a previous study percentile scores were obtained as follows:

Percentile Scores by Grade Level
Based on 1,141 Children

Form 1	90%	80%	50%	20%	10%
Grade 4	131+	115-130	95-114	84-94	82-
Grade 5	137+	123-136	108-122	91-107	90-
Grade 6	152+	133-151	108-132	88-107	87-
Grade 7	142+	128-141	108-127	95-107	92-
Form 2					
Grade 4	137+	117-136	96-116	84-95	83-
Grade 5	142+	127-141	101-126	90-100	89-
Grade 6	157+	140-156	117-139	99-116	98-
Grade 7	155+	144-154	121-143	109-120	108-

It has appeared in the studies so far that participants cross grade levels in ability, that ability to answer varies greatly, that fatigue has not seemed to bother the listeners, and these ratings have been comparable to a high degree with capacity as measured in standard tests.

Analysis of previous data acquired in eighteen Rhode Island schools subjected to the Kuder-Richardson #21 formula, yielded reliability coefficients in all four grades, four through seven, that ranged from .87 to .94. Scores compared to scores in the Seashore Measure of Tonal Memory, and the Drake Musical Memory Test compared in correlation coefficients from .46 to .63.

From the present findings, out of a far larger sampling, we seek normative data. Results will be available for the schools who participate in the study. The survey is to serve in individual diagnosis and progress reporting as a teacher needs it, appropriate to auditory-visual perception, formation of melodic concepts, and listening competency relative to school experience.

STEPS OF PROCEDURE FOR THE LISTENING SESSION

1. Time of an hour and a quarter is arranged for in the school schedule.

2. Two rooms are available for the double session, one for Group 1 and the other for Group 2. A teacher is in charge of each with an assistant to check name sheets.

3. In each room the tape recorder is ready, set at 7½ips, with a Form 1 tape ready for the first group, and a Form 2 tape for the second group. The teachers operate the tape recording during the session.

4. Form 1 answer sheets are ready for Group 1 and Form 2 answer sheets for Group 2. Name answer sheets (see page 10 are to be filled out first. The children are to bring pencils.

5. The teacher with Group 2 has written examples a to g on the chalkboard before time to begin.

6. The children have drawn tickets marked 1 or 2, for an equal division of participants into two groups, and they are seated in the two rooms, forms on the desk ready.

7. The teacher in charge directs the children to fill out name answer sheets. They grid their names on the paper as directed (page 10). The student number at upper right corner is then to be marked on each page of the answer sheets in the boxes in the upper left corner.

8. The teacher instructs the children to complete the blanks at the top of the first page and to add their name on each page. After Instrument it is necessary to name only instruments played with fair facility due to some instruction. After Orchestra and/or Band, it is necessary to make a check if presently engaged in playing in those school organizations.

9. The teacher begins to play the recording without delay. Time of the session is satisfactory when the procedures move efficiently. The first stop comes after "We pause for any essential questions " just before Part I is begun. The Stop button is depressed. Again, the Play button is depressed to resume.

10. The children hear instructions for Part I and are prepared to listen, make a judgment and mark the answer as the recording proceeds.

11. The next stop is made after example AA to conclude Part IV. This is an intermission at midpoint approximately of three minutes, to be timed by the teacher. One other stop will be made (except for any emergency), the one at the end of Part IX and the concluding statements, when the tapes must be rewound.

12. The use of recorded instructions is intended to allow the teacher to be interested and concerned with each child in the room, to encourage complete participation and to give ease to the situation. It is helpful if the teacher with Group 2 assists by pointing to the practice examples on the board during the introductory explanation.

13. The completed answer sheets, unused forms, manuals, tape recordings, name answer sheets and also, questionnaires to be completed by the teachers are to be sent to Dr. John A. Finger, Jr., Director of Educational Services Center, Rhode Island College, Providence, Rhode Island, 02908 for scoring and next procedures in the research.

14. The music supervisor and classroom teachers receive a brief questionnaire about curriculum. Kindly and devoted attention to the questions, brief as they are, is most earnestly requested.

Appendix C

Percentile Norms of Melodic Listening Survey By Grade and Form

Raw Scores by Grade

Form 1

Percentile	Grade 4	Grade 5	Grade 6	Grade 7
99	129	132	139	144
95	121	120	130	135
90	116	115	120	128
80	108	108	114	121
70	103	103	108	117
60	97	99	104	111
50	92	94	100	106
40	87	90	96	100
30	83	86	91	92
20	78	82	88	84
10	73	75	78	75
5	68	70	72	57
1	55	61	63	46

Appendix C

Raw Scores by Grade

Form 2

Percentile	Grade 4	Grade 5	Grade 6	Grade 7
99	147	148	141	149
95	133	132	129	145
90	127	125	122	139
80	118	116	111	129
70	107	110	106	124
60	100	103	100	118
50	93	97	95	112
40	86	92	90	106
30	82	88	86	99
20	75	81	81	93
10	69	71	71	82
5	65	65	63	76
1	50	54	47	41

A P P E N D I X D

Sample Report Returned to Each Participating School

School 60 Grade 7 Form 2

Reinhardt School
Dallas, Texas

	NAME		SCORE	PR
2933	COMBS	CYNTHIA L	129	80
2936	FURR	STEVE	098	28
2935	SMITH	STEVE A	083	11
2937	SNEAD	JOHNNY D	104	36
2938	HALL	JAMES L	089	17
2939	WLLE R	DENNIS	106	39
2941	CONE	DAVID W	127	78
2942	GRIMES	DAVID A	105	37
2943	ROGERS	ROCKLEN D	082	09
2944	BRAMLETT	BARCLAY T	095	22
2945	THRASHER	DARREL E	087	15
2946	GUNNELS	GREG R	089	17
2947	NIX	ANGELA	124	69
2948	GRACEY	BARBARA	142	92
2949	STAHL	BECKY L	130	82
2951	LENHART	CYNTHIA R	121	65
2952	FRANCO	BELINDA I	096	24
2953	THIEME	JANA L	127	78
2954	BECK	ANN F	128	78
2955	GEIGER	IRENE V	121	65
2956	NALLY	KATHERI L	076	05
2957	HAYES	SHERYL R	136	88
2958	STUART	KAREN S	135	87
2962	WEATHERFOR	TERRY C	117	57
2964	REYNOLDS	ROGER W	110	45
2965	MARSHALL	RONALD B	114	52
2966	LEWIS	JOHN M	130	82
2971	MCWHERTER	MELISA	104	36
2973	COMBS	HELEN L	110	45
2974	HEARN	SHARLEN L	106	39
2977	YORK	CYNTHIA A	105	37
2979	WALLACE	CASSIE L	121	65
2981	TABOR	VICKIE L	122	68
2983	BIL INGSLE	MITCHEL D	076	05
2984	NEELY	NIENA R	125	71
2985	STRICKLIN	THERESA S	099	29
2993	BRANHAM	ROBIN L	146	96
2994	LONG	GARY D	126	74
2996	WELCH	ALEXAND	109	43
2999	KUYKEDALL	JAMES S	130	82
3112	HERRICK	JANANN	150	99
3116	RICHEY	ERVON D	119	62
3118	TOLMAN	LORALE	129	80
3121	NEAL	ROY S	121	65
3122	JORGENSON	PATRICI L	145	95
3124	WILLETT	GARY A	127	78
3125	SMITH	EDDIE D	113	51
3126	PARRISH	RONNIE G	082	09

Appendix E

Sample Items from the Test

The following is a direct transcription of a portion of the taped directions.

"Melody will be presented in tone groups, then in a phrase, and also in two or more phrases. Listen to these examples, a tone group (an example is presented), a phrase, tones going up, tones going down, a group of tones going to a tonal center or keynote, a group of repeated tones in a phrase, a cadence, two or three tones coming to a close or end of a phrase, (an example of each has been presented)...

"While you proceed with the Tones and Tunes game (this excerpt is from Form 2), you will see the musical examples on your paper. Your eyes will help your ears ..."

The following is an excerpt from the time chart used to tape the directions.

Part 1, Examples A to J
- Hum 5 seconds
- Play example first time 5 seconds
- Pause 10 seconds
- Play example second time 5 seconds
- Pause 10 seconds

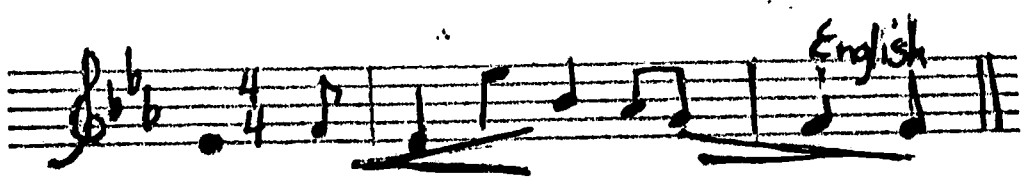
Part 3, Examples U to X
- Hum 5 seconds
- Play example first time 5 seconds
- Pause 20 seconds
- Play example second time 5 seconds
- Pause 20 seconds

Following is an example from the test with the items to be answered.

TUNES. Examples BB - DD. Consider 3 questions for each melodic example.

1. Is the melodic shape a wide or narrow curve?
2. Do you feel there is force in the rise of melody and rest in its fall?
3. Do the tones come to a close, or cadence, on the tonal center?

CC.



MELODIC LISTENING SURVEY

APPENDIX F

Music Curriculum Questionnaire for the Music Supervisor

1. In what grades do you supervise the classroom music instruction? Please circle as many as apply:

K 1 2 3 4 5 6 7 8 9 10 11 12

2. Please fill in the following schedule of your instructional program. Indicate here the number of periods per week that you work with each grade level:

K 1 2 3 4 5 6 7 8 9 10 11 12

Indicate here the average amount of time you spend in each classroom at one time:

K 1 2 3 4 5 6 7 8 9 10 11 12

3. Does the classroom teacher supplement your teaching? Please circle: Yes No. If your answer is yes, please explain how:

4. Do you plan the curriculum for the classroom teacher? Please circle: (a) Yes, entirely; (b) In cooperation with the classroom teacher: (c) Other guides. Comments on curriculum you wish to add:

5. How is listening development planned for in your music curriculum?

6. Do you devise tests to measure progress in listening development? Please circle: Yes No.

7. Please circle all tests you use:

Kwalwasser-Ruch	Seashore	Wing	Gordon
Kwalwasser-Dykema	Drake	Gaston	Colwell

Others

8. Do you believe that understanding melody as an art form can be developed in the elementary school music experience? What concept(s) do you consider would be needed for the child's artistic response?

9. Do you emphasize melodic concepts as represented in the Survey? Please Circle: None at all. Some. Quite a lot. Please explain your practice: _____

_____

_____

Do you include the melodic concepts following in your plan of instruction? Please circle (a) a great deal, (b) quite a lot, (c) some, (d) slightly, or (e) not at all.

a b c d e Recognize stepwise melody (major-minor, modal)

a b c d e Recognize conclusion on the tonal center

a b c d e Recognize simple intervallic leaps

a b c d e Recognize wide or narrow range

a b c d e Recognize repeated tones

a b c d e Recognize phrases

a b c d e Recognize active and inactive tones

a b c d e Recognize melodic cadences

a b c d e Recognize dynamic changes within phrases

a b c d e Recognize unity in rhythmic and tonal structure

a b c d e Recognize variety in rhythmic and tonal structure

a b c d e Grasp the expressive force of melodic elements

10. In what grade level do you introduce the reading of notation?

_____

11. Do you use rhythmic and/or tonal dictation? Please circle: Yes No. Please indicate the grade levels that you do this:

_____

12. Do you follow the Kodaly procedures? Please circle: Yes No.

13. If you have a curriculum guide, please enclose a copy.

Name _____

Position _____

School _____

Grade (s) _____

Address _____

_____

School System _____

MELODIC LISTENING SURVEY

Music Curriculum Questionnaire for the Classroom Teacher

1. In what grades do you have partial or full responsibility for classroom music instruction? Please circle as many as apply:

K 1 2 3 4 5 6 7 8 9 10 11 12

2. Please fill in the following schedule of your instructional program. Indicate here the number of periods per week that you work with each grade level:

K 1 2 3 4 5 6 7 8 9 10 11 12

Indicate here the average amount of time you spend in each classroom at one time:

K 1 2 3 4 5 6 7 8 9 10 11 12

3. Do you supplement the teaching of a music supervisor? Please circle: Yes No. If your answer is yes, please explain how: _____

4. Do you plan the lessons? Please circle: (a) Yes, entirely; (b) In cooperation with the music supervisor; (c) Other guides. Comments on curriculum you wish to add: _____

5. How is listening development planned for in your music curriculum? _____

6. Do you devise tests to measure progress in listening development? Please circle: Yes No.

7. Please circle all tests you use:

Kwalwasser-Ruch Seashore Wing Gordon

Kwalwasser-Dykema Drake Gaston Colwell

Others _____

8. Do you believe that understanding melody as an art form can be developed in the elementary school music experience? What concept(s) do you consider would be needed for the child's artistic response? _____

9. Do you emphasize melodic concepts as represented in the Survey? Please Circle: None at all. Some. Quite a lot. Please explain your practice: _____

_____

_____

Do you include the melodic concepts following in your plan of instruction? Please circle (a) a great deal, (b) quite a lot, (c) some, (d) slightly, or (e) not at all.

a b c d e Recognize stepwise melody (major-minor, modal)

a b c d e Recognize conclusion on the tonal center

a b c d e Recognize simple intervallic leaps

a b c d e Recognize wide or narrow range

a b c d e Recognize repeated tones

a b c d e Recognize phrases

a b c d e Recognize active and inactive tones

a b c d e Recognize melodic cadences

a b c d e Recognize dynamic changes within phrases

a b c d e Recognize unity in rhythmic and tonal structure

a b c d e Recognize variety in rhythmic and tonal structure

a b c d e Grasp the expressive force of melodic elements

10. In what grade level do you introduce the reading of notation?

_____

11. Do you use rhythmic and/or tonal dictation? Please circle: Yes No. Please indicate the grade levels that you do this:

_____

12. Do you follow the Kodaly procedures? Please circle: Yes No.

13. If you have a curriculum guide, please enclose a copy.

Name _____

Position _____

School _____

Grade (s) _____

Address _____

_____

School System _____