

DOCUMENT RESUME

ED 106 585

CE 003 757

TITLE Exploring Careers in Music.  
INSTITUTION Cincinnati Public Schools, Ohio.  
PUB DATE 73  
NOTE 73p.; For related documents see CE 003 746-56, CE 003 758-64 and CE 004 312

EDRS PRICE MF-\$0.76 HC-\$3.32 PLUS POSTAGE  
DESCRIPTORS Applied Music; \*Career Education; Career Planning; \*Curriculum Guides; Fine Arts; Grade 9; Grade 10; High School Curriculum; \*Learning Activities; \*Music; Music Activities; Musical Instruments; Music Education; Musicians; Occupational Information; Resource Materials; Secondary Education; \*Teaching Methods; Vocational Development

IDENTIFIERS \*Career Exploration

ABSTRACT

The career exploration program for grades 9 through 10, as part of a comprehensive K through 10 career development program, attempts to develop an awareness of and appreciation for work, extend knowledge of the variety of career opportunities, and provide experiences in career areas of individual interest. The document, a collection of materials consisting of student learning experience packets and a resource list, is designed to introduce the students to careers in music. The definition of the career area, course objectives, course strategy, procedure, evaluation, and suggested time table are included in the introduction. The learning activities are organized according to objectives, procedures, and resources and cover the following career areas: (1) the performing role (concert singer, instrumentalist, popular singer, composer, arranger, teacher, conductor, and therapist), and (2) the supporting role (instrument manufacturer, salesman, instrument repair, piano tuner, music critic, librarian, and publisher). Other related careers and self evaluation of career maturity are also touched upon. Learning activities include role playing, self-analysis quiz, worksheets, field trips, discussion, demonstration, films, interviews, composition, and group work. The appendix contains procedures and suggestions for both field trips and exploration trips, forms for exploration trips, a music career interest survey form, a list of job titles, and a multimedia resource list. (JB)

U. S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCEO EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY.



# CAREER EXPLORATION

9 - 10

EXPLORING CAREERS

IN

MUSIC

First Edition, 1973

CAREER DEVELOPMENT K - 10

CINCINNATI PUBLIC SCHOOLS

CAREER EXPLORATION  
CINCINNATI PUBLIC SCHOOLS  
GRADES 9-10  
EXPLORING CAREERS  
IN  
MUSIC

(Tentative Copy)

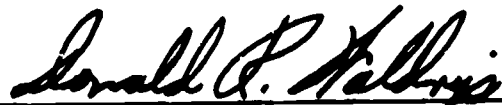
First Edition  
1973

## CAREER DEVELOPMENT

The Career Development Program responds to the needs of students, taxpayers, and employers for the public schools to provide personal, social, and economic relevance in the educational process. It is an integral part of the educational process essential to the development of all students.

The Career Development components, which are Career Motivation (K-6), Career Orientation (7-8) and Career Exploration (9-10), develop an awareness and appreciation for work, extend knowledge of the variety of career opportunities, and provide experiences in career areas of individual interest. These goals are accomplished through a curriculum based on pupil activities involving simulation, role playing, and individual investigation. These activities require that administrators and teachers develop a new level of working relationships with community resources such as public institutions, business, labor, and industry.

Every individual's right to learn what he or she needs in order to be a producing, participating member of society is a fundamental responsibility of education. Each individual also has a right to self-fulfillment. Career Development, presented as inseparable elements inherent within every level and subject area of the school curriculum, provides each student with the skills and insights to recognize and pursue goals of personal significance. As a result of this program students will increase their abilities to make well-informed and experience-based decisions related to their personal life, school program, and career selection.




Donald R. Waldrip, Superintendent  
Cincinnati Public Schools

## CAREER EXPLORATION

Career Exploration is the 9th and 10th grade component of the Career Development Program. Its primary goal is to provide experiences related to career areas chosen by the student. Focus is on the student's perception of himself or herself in relation to the real world of career opportunities. Emphasis is on individualized and personalized activities and experiences.

The student chooses and studies a specific career area using skills and insights gained in earlier parts of the Career Development Program. Students explore occupations within the chosen area with particular attention to those most closely related to their own needs, interests, and abilities. They will experience some of the satisfactions, opportunities, limitations and frustrations peculiar to the various occupations.

Career Exploration is planned as the culmination of the Career Development Program. Successful exploratory experiences will enable the student to formulate and refine realistic and personally meaningful career goals. These experiences will also provide a basis for planning a course of studies in the 11th and 12th grades (and beyond) pursuing career goals.

  
Stanley A. Marsh  
Administrative Assistant to  
the Superintendent

## FOREWORD

This manual is one of a series produced by the Cincinnati Public Schools as a part of a project designed to provide Career Exploration for students in grades 9 and 10.

It is designed to provide activities and information about an occupational area that will provide a more in-depth study than presented in Career Orientation in Grades 7 and 8.

This is a tentative guide and has been developed for the purpose of field testing and revising based upon feedback from participating teachers.

This manual was developed by William H. Harvey, an instrumental music teacher at Aiken Senior High School. Jack Ford, an instructional consultant, conducted the curriculum development under the general supervision of Mr. Ralph E. Shauck, Coordinator of Instructional Services.

## TABLE OF CONTENTS

ENDORSEMENT	i
RATIONALE	ii
FOREWORD	iii
I. INTRODUCTION	1
A. Definition of Career Area	1
B. Course Objectives	1
C. Course Strategy	1
1. Introductory Activities	1
2. Procedures	2
3. Evaluation	2
D. Suggested Time Table	3
II. CAREER EXPLORATION ACTIVITIES	5
A. Where to Begin	5
B. Exploration Activities	6
III. APPENDIX	51

## I. INTRODUCTION

### A. Definition of Career Area

Careers in music are extensive and include many related areas. The gifted musician can find many areas of employment as a performer, conductor, composer, arranger, teacher, church musician, or electronic music composer. There are many supportive roles in music which are vital for its existence. Many of these roles do not require that a person be an accomplished musician, so the average musician and even some non-musicians have an excellent opportunity to find a career in music. These supportive roles have also been explored and include manufacturing and design of musical instruments, instrument and music sales, instrument repair, tuner-technician, music critic, music therapist, and music librarian.

### B. Course Objectives

1. To acquaint the students with the various job opportunities which exist in the world of music.
2. To further explore the careers, on a more sophisticated level, and determine the specific training and duties demanded by each.
3. To provide the students with the opportunity to perform the duties involved with the career they are exploring.
4. To help students learn the relationship and importance of each career as it affects other music careers and the music world in general.
5. To provide the students with the opportunity to see, hear, and talk to professionals in the area being explored.
6. To help students develop acceptable standards of behavior such as:
  1. desirable personality
  2. emotional control
  3. dependability, responsibility and loyalty

### C. Course Strategy

1. Introductory Activities
  - a. A special experience being planned for students in every career area is a small group exploration trip. ~~Effort~~ has been made to make this as simple as possible for the classroom teacher. See Appendix B



- b. Introduce the careers which will be explored in this course. Have students make two lists, without prior class discussion, of all the careers that one might have in music. Divide the occupations into two categories: one listing the careers which deal with the performance of music and the other listing careers which serve in a supportive role. Examples of what these lists could include are:

Performing Role: Concert singer, instrumentalist, popular singer, composer, arranger, teacher, conductor, and therapist.

Supporting Role: manufacture of instruments, sales of music and instruments, instrument repair, piano tuner, music critic, librarian, and publisher.

- c. Introduce and explore sources where a student can obtain information about the careers in music. See Appendix C for resources, i.e., Occupational Outlook Handbook, D.O.T., Largo Career Kit, etc.
- d. Administer a "Music Career Interest Survey" which is found in Appendix E.

## 2. Procedure

This course has been constructed so that it can be taught by means of individualized instruction, or by normal class instruction. The method used is left to the discretion of the teacher. With either method, however, the following general procedure is recommended:

- a. Evaluate the students' knowledge of music careers prior to any class discussion.
- b. Review and/or briefly discuss the careers which will be explored.
- c. Explore the careers (either by individualized or class instruction).
- d. Evaluate students knowledge of the careers after having explored them.

Another suggestion would be that the two methods of instruction be combined. Explore each of the careers as a class and provide a week or two following that in which students could select one of those careers and explore it even further.

## 3. Evaluation

The last exploration activity in this course will ask each student to participate in a "Self Evaluation of Career Maturity" and will provide each student an opportunity to analyze and discuss their career-related experiences.

D. Suggested Time Table

The following is a suggested period of time that each of the exploration activities should be studied. The material has been constructed to fit this time table with more stress on the performing aspects of music. It is also recommended that the careers be explored in the order presented in the activity section. This time table has been based on a 45-day instruction period.

EXPLORATION ACTIVITIES

<u>NUMBER</u>	<u>TITLE</u>	<u>SUGGESTED DAYS</u>
1	Introduction to Course	2
2	Use of D.O.T.	1
3	Performer, Concert Singer	1
4	Performer, Popular Singer	1
5	Performer, Musician, Instrumental	2
6	Composer	4
7	Arranger	3
8	Electronic Music	3
9	Conductor	4
10	Teacher	2
11	Music Supervisor	2
12	Manufacturing	3
13	Salesman	3
14	Instrument Repair	3
15	Tuner Technician	1
16	Critic	1
17	Music Therapist	2
18	Church Music	2
19	Music Librarian	2
20	Related Careers	(Variables)
21	Self Evaluation of Career Maturity	2

## II. Career Exploration Activities

### A. Where to Begin --

1. Resources essential to pupil activities: Many resources listed on the following pupil activity sheets must be made available in the classroom before the students can begin the activities noted. These essential resources are specified IN WORDS on each exploration activity worksheet. THEY MUST BE OBTAINED BY THE TEACHER IN ADVANCE OF THE CLASS MEETING.

Examples:

#### a. Films

If . . . the worksheet reads:

RESOURCES
Film: Code Blue (C-7)

Then . . . The teacher must look in Appendix C, Item 7 for catalog information so that this film can be ordered in time for this activity.

- b. Material to be duplicated by the teacher for use in class.

If . . . the worksheet reads:

RESOURCES
See Analysis Quiz (B-4,5,6)

Then . . . The teacher must duplicate a class set of this item which is found in Appendix B as items 4, 5, and 6. Duplication can be achieved by Xeroxing, generating a ditto master via photocopying with IBM 107 and Thermofax or retyping onto a ditto master.

2. Optional resources to be used for enrichment, supplements and student or teacher reference are described only in the Appendix.

If . . . the worksheet reads:

RESOURCES
C-8

Then . . . This indicates that for this activity there is a potentially useful reference described in Appendix C, Item 8. This reference item is not essential to the completion of the student activity.

EXPLORATION ACTIVITY (INTRODUCTORY)

(2 day)

INDUCTION TO COURSE

OBJECTIVES

- Students will be able to:
1. Discuss critically the objectives of the course.
  2. Question people's attitude at work under various conditions as illustrated in a film.
  3. Form a general understanding of the course outline and procedure.
  4. Form some basic conclusions through the "self-analysis quiz."
  5. List and discuss at least 4 important factors of good on-the-job performance.
  6. Describe a wide variety of skills needed for specific jobs in this occupational area.

ACTIVITIES

1. The student will be informed of the purpose of this course, what is hoped to be accomplished, and will be led into a discussion of activities involved in Career Exploration.
2. The student will defend or reject by role playing, the position of maintaining good personal appearance, attitude and conduct on the job.
3. Explain to students the relation of the course and the "Self-Analysis Quiz" to their career selection. Students will participate in this self-analysis quiz.
4. Hand out and discuss a "Job-Performance Rating Sheet" which will be administered and discussed as part of the last exploration activity in this course.

RESOURCES

- Class set of "Self-Analysis Quiz" (attached)
- Class set of "Job Performance Rating Sheet" (attached)
- "What Do We Look Like To Others" 16 mm film, 10 min., Sandler Instructional Films, Inc. Board of Education.

**JOB PERFORMANCE RATING SHEET**

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

DEPT. \_\_\_\_\_ OPERATION: \_\_\_\_\_

	EXCELLENT	GOOD	FAIR	POOR
Attendance & Punctuality				
Quality of work				
Production				
Initiative				
Cooperation with instructor				
Cooperation with other students				
Interest in job				
Meets industrial quality standards				

If the student rates "poor" on any factor

or

If the student rates "fair" on more than three factors:

Discuss with the student the areas in which he or she will need to improve, before he can attain success in his chosen field.

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## SELF-ANALYSIS QUIZ

Directions: Check the line closest to the statement that identifies you. If you are uncertain, check the middle space.

Make at least average grades	_____	_____	Make below average grades
Learn quickly	_____	_____	Learn slowly
Enjoy reading books, magazines, etc.	_____	_____	Enjoy reading comics
Like school and do extra work	_____	_____	Do only schoolwork that is necessary
Talk and write well	_____	_____	Talk and write poorly
Good planner and organizer	_____	_____	Poor planner and organizer
Like children	_____	_____	Dislike children
Patient with children's questions	_____	_____	Impatient with children's questions
Outgoing	_____	_____	Withdrawn
Popular	_____	_____	Not popular
Have large group of friends	_____	_____	A few close friends
Have confidence	_____	_____	Unsure around others
Give advice	_____	_____	Not asked for advice
Outspoken	_____	_____	Quiet
Sensitive to others	_____	_____	Insensitive to others
Trust people	_____	_____	Do not trust people
Volunteer	_____	_____	Do not volunteer
Pleasant personality	_____	_____	Do not have pleasant personality
Have a sense of humor	_____	_____	"Touchy"
Not prejudiced	_____	_____	Prejudiced

## EXPLORATION ACTIVITY (INTRODUCTORY)

### Use of the D.O.T. (Dictionary of Occupational Titles) Number:

The D.O.T. lists 35,550 jobs with a code number for each. The last three digits of this code refer to the relationship of that job to data, people and things. This exploration activity provides the students some experience in using this information to identify jobs which match their interests.

<b>OBJECTIVES</b>	<b>ACTIVITIES</b>	<b>RESOURCES</b>
<p>The student will be able to:</p> <p>Compare their knowledge about the data, people, things content of jobs to factual information listed in the D.O.T. for five jobs of personal interest.</p>	<p>The teacher will conduct a classroom discussion on the D.O.T. code number in identifying the data, people, things orientation of jobs. (See the attached page for examples.)</p> <p>Following this discussion each student is to complete the "D.O.T. Worksheet" which compares the student's estimate of the data, people, things job content to that listed in the D.O.T.</p>	<p>Dictionary of Occupational Titles, Volumes I and II</p> <p>Make a class set of "Examples of D.O.T. Code Usage."</p> <p>Make a class set of the "D.O.T. Worksheet"</p>

D.O.T. WORKSHEET

- STEP 1. In table I at the bottom of this page, write the names of five jobs which are interesting to you.
- STEP 2. Use the handout sheet titled "Examples of D.O.T. Code Usage" and make an estimate of the correct code to describe this job. Record this estimate in Table I.
- STEP 3. Use Volume I or II of the D.O.T. and look up the D.O.T. code designation for each job. Compare these designations to your estimate.

TABLE I

NAME OF JOB	STUDENT'S ESTIMATE OF THE CORRECT CODE	D.O.T. CODE DESIGNATION
1. _____	XXX. _ _ _	_____
2. _____	XXX. _ _ _	_____
3. _____	XXX. _ _ _	_____
4. _____	XXX. _ _ _	_____
5. _____	XXX. _ _ _	_____



EXAMPLES OF D.O.T. CODE USAGE

<u>JOB TITLE</u>	<u>D.O.T. CODE</u>	<u>D.O.T. CODE MEANING</u>
High School Teacher	091.228	(Things) 8 - No significant relationship (People) 2 - Instructing (Data) 2 - Coordinating
Waitress	311.878	(Things) 8 - No significant relationship (People) 7 - Serving (Data) 8 - No significant relationship
Stock Clerk	223.387	(Things) 7 - Handling Things (People) 8 - No significant relationship (Data) 3 - Compiling
Auto Mechanic	620.281	(Things) 1 - Precision working (People) 8 - No significant relationship (Data) 2 - Analyzing data

DATA (4th digit)

- 0 Synthesizing
- 1 Coordinating
- 2 Analyzing
- 3 Compiling
- 4 Computing
- 5 Copying
- 6 Comparing
- 7 No significant relationship
- 8

PEOPLE (5th digit)

- 0 Mentoring (Counseling)
- 1 Negotiating
- 2 Instructing
- 3 Supervising
- 4 Diverting
- 5 Persuading
- 6 Speaking-Signaling
- 7 Serving
- 8 No significant relationship

THINGS (6th digit)

- 0 Setting-Up
- 1 Precision Working
- 2 Operating-Controlling
- 3 Driving-Operating
- 4 Manipulating
- 5 Tending
- 6 Feeding-Offbearing
- 7 Handling
- 8 No significant relationship

For a definition of the above see pages 649 and 650 in Appendix A of the Dictionary of Occupational Titles Volume II.

## EXPLORATION ACTIVITY #3

PERFORMER 152.048

- A. Concert Singer: Sing classical, opera, church, or folk music in musical programs. Studies and rehearses words and music for performance as a soloist or member of vocal ensemble. Sing art music such as arias or contatas, combining musical training, expression and quality of voice with histrionic ability. Watches conductor or prompter for direction. May be known according to voice range, as soprano, contralto, tenor, or baritone. May be designated according to singing specialty as opera singer, recitalist, vocal soloist.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able :</p> <ol style="list-style-type: none"> <li>to identify, aurally, the difference between soprano, contralto, tenor, and baritone voices as heard on recordings of professional singers.</li> <li>to determine individual vocal range by singing a chromatic scale from their lowest note to their highest note, in a comfortable, open-throated position.</li> <li>to list and demonstrate a variety of different vocal techniques, such as proper breathing posture, diction, and voice control.</li> <li>to orally practice vowel and constant sounds used in singing with use of a tape recorder for evaluation.</li> <li>to orally define and explain some common musical terms used in music dealing with tempo, dynamics, and expression.</li> </ol>	<ol style="list-style-type: none"> <li>Listen to brief excerpts from selected recordings of professional singers to orient the students to the qualities of each of the vocal ranges. Have students turn their backs to the sound equipment and play some more examples and have the students attempt identification.</li> <li>Starting in a middle or common range, have students, as a group, sing chromatically up and then down the scale, raising their hand when they reach their limit. Assign each student a vocal classification according to his range.</li> <li>Demonstrate and have students practice good posture, breathing, diction, etc. Do correct and incorrect methods for each.</li> <li>View a film of a professional singer. Observe qualities in this person that you feel enabled him to be successful.</li> <li>Make a list of the duties of an opera singer and a concert singer. Discuss differences in preparation for a career in those areas and differences in the duties of each.</li> </ol>	<p>Vocal Music Curriculum Bulletin; also Appendix H, No. 25</p>
		<p>See Appendix H., Films #9 and 15</p> <p>See Appendix H, Bibliography # 14, 26, 28</p>

EXPLORATION ACTIVITY #3

(Continued)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>6. Review the career of a famous singer and determine the key to their success</p> <p>7. Discuss qualifications that would enable a person to enter the field as an opera singer.</p> <p>8. Contrast an opera and classical singer.</p> <p>9. Observe a concert singer in performance.</p>	<p>6. Invite a professional singer to your class to give a brief recital and interview. Have singer discuss the qualities a young singer must have to be a success as a professional</p>	<p>Contact College-Conservatory of Music 475-2883</p>

## POSTURE \*

Fine posture is a basic requirement of good musicianship. This is particularly true in singing, since proper breathing and full breath control cannot be developed without it. Correct posture also aids the normal physical development of the child, improves the mental outlook and, of course, enhances the appearance of the individual and the class. Since the mechanism of proper breathing depends upon an erect position of the thorax, the general rule of maintaining a straight spine is a fundamental rule to impress on the young singer. In the sitting position this necessitates having the shoulders back, the chest high, the feet flat on the floor. It is also desirable to sit well forward on the chair without strain on the back. In standing posture the same position of shoulders and chest should be stressed and emphasis should be placed upon vertical line of the body from head to hips. The feet should be set to give good balance front, back, and sideways, with a several inch spread between the feet and one foot slightly forward. Care should be taken to avoid all muscular tenseness or stiffness. Flexibility of the entire body will aid relaxation of the throat, jaw, tongue and face.

## BREATH CONTROL \*

Physiology of Breathing: Breath should be taken through the nose and mouth simultaneously. At each breath the lungs should be filled with air. The sensation of having breathed to the bottom of the lungs should be apparent. After breathing, the diaphragmatic and intercostal muscles should be set against the breath. As air is expended from the lungs to produce tone, muscle pressure should be increased proportionately. The increased muscle pressure compensates for the smaller volume of air within the lungs as the air is used to produce tone. This provides the support that is requisite to the control of tone for dynamic levels, pitch, stability, phrasing and volume. The short, catch breath is adequate to sing a lengthy phrase. The long, deliberate breath is impractical in performance because it can seldom be taken without making extended gaps in the phrasing.

Shoulders should not heave when breath is taken. Except for the opening of the mouth and the distension of the chest, the breathing of a singer should not be apparent.

\* Taken from Vocal Music Curriculum Bulletin 60, Cincinnati Public Schools, 1967. Page 26, 27

EXPLORATION ACTIVITY #4

PERFORMER 152.048

B. Popular Singer: Entertains by singing songs in popular idiom stage, radio, and television, or in night clubs, projecting pathos, whimsicality, or other forms or expression in voice, using own phrasing and special musical arrangements to achieve individual style of vocal delivery. May be designated according to singing style as Blues, Folk, Gospel

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able</p> <ol style="list-style-type: none"> <li>1. To compare the differences between a popular singer and a classical singer.</li> <li>2. To determine the opportunities in this field, and the training necessary for each.</li> <li>3. To discuss freedoms in performance that a popular singer has as compared to an opera singer.</li> <li>4. To list areas of employment and relative salary for each.</li> </ol>	<ol style="list-style-type: none"> <li>1. Listen to a recording of a popular singer. Compare vocal qualities, style, and type of literature song to that of an opera singer.</li> <li>2. Discuss public appeal of popular singer.</li> <li>3. Have students list the various areas they have seen a popular singer work. Have them estimate salaries for each area they name. Discuss results and make a master list of jobs and salaries.</li> <li>4. List and discuss the duties and qualifications for a popular singer. Discuss how one might enter this field.</li> </ol>	<p>Have students bring recordings to class.</p>

EXPLORATION ACTIVITY #5

PERFORMER 152.0+8

C. Musician Instrumental: Plays one or more musical instruments in recital, in accompaniment, or as a member of orchestra, band, or other musical group; studies and rehearses scores. Plays music, either reading score or by memory, manipulating keys, bow, valves, strings, or percussion devices, depending on type of instrument being played. May improvise or transpose music. May compose or arrange music. May be designated according to instrument played as bell ringer, pianist, violinist. May play accompaniment to singer or to another musician and be designated as accompanist.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able:</p> <ol style="list-style-type: none"> <li>To identify the great variety of instruments on which an individual may perform.</li> <li>To analyze the life of a professional performer.</li> <li>Discuss the qualifications a person must have to become a top instrumental performer.</li> <li>Observe a live performance of an instrumental performer followed by an interview with same.</li> <li>To determine the employment opportunities for an instrumentalist.</li> </ol>	<ol style="list-style-type: none"> <li>Each student should make a list containing the areas of work for an instrumentalist. After each student has listed as many as he can, have the class as a whole make a master list of the jobs.</li> <li>Separate the jobs into broad categories, such as classical, rock, jazz, etc., and discuss the qualifications and opportunities in each area.</li> <li>Review the wide variety of instruments that are used in performances regularly in the U.S.A. and have students speculate at how much demand there is for a specialist in each area.</li> <li>View film of a famous performer and discuss qualities observed that were probably responsible for this individual's success.</li> <li>Invite a performer to the class for a short recital and interview. If this is impossible a field trip to the orchestra (preferably when a soloist is working with the symphony) to observe and possibly interview a performer.</li> </ol>	<p>Appendix H. Films. Nos. 10, 11, 12, 13, 14, 16, 17, 18</p> <p>Contact College Conservatory of Music 475-2883</p>

EXPLORATION ACTIVITY #5  
(Continued)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>6. To discuss the competition for employment in each of the classifications of instruments (i.e., brass, woodwind, keyboard, etc.) and determine the salary that one could expect to earn in each.</p>	<p>6. Ask for a volunteer (s) to perform a short piece on an instrument of their choice. Discuss with this student the pressures felt leading up to their performance. Further discuss what a person might feel like before performing before a large audience.</p>	

EXPLORATION ACTIVITY #6

COMPOSER 152.088

D. Creates and writes musical compositions: invents melodic, harmonic, and rhythmic structures to express ideas musically within circumscribed musical form, such as symphony, sonata, or opera; translates melodies, harmonies, and rhythms into musical notes, and records notes on scored music paper.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Compose a simple 8 measure melody following discussion and practice of the composing methods.</li> <li>2. Transpose a simple melody on paper, involving both key change and change of clef.</li> <li>3. Discuss the qualifications and training necessary for one to become a composer.</li> <li>4. List several areas in which a composer can make a living.</li> <li>5. Identify and define many musical forms that a composer must work with.</li> </ol>	<ol style="list-style-type: none"> <li>1. View film of a composer and observe his training, education, and experience that was necessary before he was accepted as a composer.</li> <li>2. Introduce, or review, the basic theory which is necessary to compose even the simplest tune with accompaniment.</li> <li>3. Give each student a short, simple melody which they are to transpose to a different key, a different clef, or both. Group and individual exercises can be used.</li> <li>4. Examine several scores of compositions and make a list of musical terms used in them. Define any terms that are unfamiliar or misunderstood.</li> <li>5. As a class, compose several 8 measure melodies. Write them on the board and play each.</li> </ol>	<p>See Appendix H, Films No. 1, 2, 3, 4, and 24. Bibliography No. 2, 3, 7, 8, 11, 13, 18, 21, 22, 26, and 27</p> <p>See following pages</p> <p>See following pages</p> <p>Use scores from the music library at the school.</p>





EXPLORATION ACTIVITY #6

(Continued)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>6. Use simple theory, including intervals, key, clefs, notation, rhythm and chords.</p>	<p>6. Following the experimentation as a class, have each student attempt their own 8 measure melody. Allow student to complete the melody before using accepted rules to perfect the piece.</p>	
<p>7. To play a simple melody on the piano.</p>	<p>7. Introduce simple chord progressions (I, IV, V, I) and begin adding harmonies to several of the students' melodies</p>	
<p>8. Work with the class in composing a simple piece with harmony</p>	<p>8. Examine several instrumental scores to observe the wide variety of instrumentation.</p>	
	<p>9. Invite a composer to the class to talk about his work and explain how one interested in becoming a composer should go about it. Interview by the class should reveal salaries, positions available, etc.</p>	<p>Contact College Conservatory of Music 475-2883</p>

The following items should be reviewed and fully understood by all students before introducing more advanced theory:

1. KEYBOARD

- a. Be able to identify the notes
- b. Understand whole step and half-step relationships
- c. Be able to play a simple melody.

2. CLEFF SIGNS

- a. Treble and bass clefs should be known thoroughly
- b. Introduction to alto and tenor clefs.

3. NOTE AND REST VALUES

4. SCALES

- a. Should understand construction of major and minor scales
- b. Should know what is meant by diatonic and chromatic

Once these are established and understood, key signature, intervals, chords and simple chord progressions can be introduced. The aim of this is not to teach theory but to prepare the students with the proper tools so that they can experience the work of a composer at its simplest level.

TRANSPOSITION - Teaching Example

Play a simple, familiar melody on the piano (i.e., Twinkle, Twinkle Little Star - Key of C). Have a volunteer write the tune on the board in treble clef after watching which notes you played on the piano. Determine its correctness by playing what is on the board.

Have the entire class rewrite this melody in bass clef. Again, determine if written properly by playing a finished copy. Put the correct copy on the board. The entire class can then transpose the melody from the key of C to the key of D, both in treble and bass clef. Always play the students' work so that they can hear if they made a mistake and can correct it on their own.

When this seems to be understood, have each student work independently transposing several melodies into different keys. More advanced students can transpose both melodies and their harmonies.

GROUP COMPOSITION\*

An interesting and useful project which can involve group creative composition is the creation of "singing commercials" to advertise and promote school activities, such as the school newspaper, dances, and all types of musical and dramatic performances. Such a project can be organized in the following manner:

- Present the idea of the "singing commercial" and the specific advertising campaign to the class.
- Explain the problems involved in the composition of a commercial; limited time, easily understood lyrics, emphasis of specific selling points from the point of view of both words and music, and immediate appeal to the listener.
- Discuss the points to be presented or emphasized.
- Request ideas for lyrics to be submitted.
- Discuss lyrics submitted with the entire class or have a committee appointed to make the final selection.
- When the final selection has been made, notate the rhythm on the blackboard.
- Develop melody to fit the selected poem from class suggestion.
- Develop harmonic background and/or accompaniment.
- Experiment with styles of presentation as a group creative activity.

\* This activity was taken from the Vocal Music Curriculum Bulletin #60, Cincinnati Public Schools, 1967. Page 137

## EXPLORATION ACTIVITY #7

ARRANGER 152.088

E. Transcribes musical compositions or melodic lines to adapt them to or to create particular style for orchestra, band, choral group, or individual: familiarize self with composition and imagines effects of various combinations of voices, instruments, harmonic structure, rhythms, tempos, and music dynamics. Selects instruments or voices to be employed to obtain desired effects, utilizing knowledge of their range, characteristics, limitations, and key and talents of individual performers. Writes scores employing knowledge of music theory, harmony, form, notation, and dynamics and wide background and experience in music. May use piano to play harmony and chords. May copy parts from score for individual performers.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able</p> <ol style="list-style-type: none"> <li data-bbox="597 82 703 580">1. To analyze the definition of <u>Arranger</u> as given by the D.O.T.</li> <li data-bbox="718 82 854 580">2. To determine the areas in which there is a need for arrangers and the salary that each would pay.</li> <li data-bbox="869 82 960 580">3. To compare similarities and differences between an arranger and composer.</li> <li data-bbox="975 82 1081 580">4. To discuss qualifications and duties of an arranger, including education, training, and experience.</li> <li data-bbox="1096 82 1202 580">5. To list and explain five techniques used by an arranger.</li> </ol>	<ol style="list-style-type: none"> <li data-bbox="597 580 703 1440">1. Discuss the definition of an arranger given in the D.O.T. and explain anything not understood by the students.</li> <li data-bbox="718 580 854 1440">2. Demonstrate several techniques that an arranger can use to make a familiar piece sound different.</li> <li data-bbox="869 580 960 1440">3. As a class, arrange a simple tune with accompaniment. Have students decide which techniques they are going to use to revise the piece ahead of time. Make an arrangement and play the finished product.</li> <li data-bbox="975 580 1081 1440">4. After completing several class arrangements, have students work individually on producing their own arrangement of a simple tune. Use a minimum of arrangement devices and be sure that each student decides in advance how he will revise the piece.</li> <li data-bbox="1096 580 1202 1440">5. Discuss, as a class, several areas in which an arranger is needed (i.e., television variety shows, popular singers and groups, high school bands and choirs, etc.)</li> </ol>	

EXPLORATION ACTIVITY #7

(Continued)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>6. By using different rhythms, ornamentations, and different harmonies, the student will arrange a simple eight measure melody.</p>	<p>Investigate each briefly, determining qualifications needed for the job and the salary one might expect.</p> <p>6. Invite an arranger to speak to the class and discuss how to get started in the field of arranging and describe the role and responsibility of arranging.</p>	<p>College Conservatory of Music 475-2883</p>

EXPLORATION ACTIVITY #8

ELECTRONIC MUSIC (No D.O.T. Number)

Production of music by specially trained musicians who use amplifiers, echo chambers, instruments originating sound through radio tubes and transistors, synthesizers, and other synthetic means of creating music. Uses special music written specially for electronic instruments.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Discuss the definition of electronic music.</li> <li>2. List five areas in which electronic music is an integral part.</li> <li>3. Discuss the history of synthetic music and its equipment.</li> <li>4. Describe several ways a sound can be produced and modified synthetically.</li> <li>5. Analyze the needs and demands for synthetic music and determine the opportunities for one entering this field.</li> <li>6. Using a synthesizer, the student will create a single sound and proceed to modify it four different ways.</li> </ol>	<ol style="list-style-type: none"> <li>1. Introduce the class to electronic music by listening to recordings with music produced synthetically.</li> <li>2. Define or explain any terms used in the definition or which will be used in the discussion of electronic music.</li> <li>3. Discuss the history of synthetic music and its uses since its development.</li> <li>4. List several areas where electronic music is used and discuss the duties, qualifications, working hours and conditions, equipment necessary and salary.</li> <li>5. Visit an electronic music lab and observe the process and equipment.</li> <li>6. Invite a music dealer to the class to demonstrate the synthesizer sold by his store. This will also provide the equipment with which the students can experiment with the dealers' and teachers' guidance, allow each student to produce one sound and modify that sound by four different methods.</li> </ol>	<p>"The Well-Tempered Synthesizer" Walto Carlos, Columbia Records MS7286</p> <p>Dr. Paul Palumbo, College Conservatory of Music 475-2883</p> <p>Howard Early Music Bill Menning 793-4100</p>

## ELECTRONIC MUSIC

### Brief History:

Electronic music is not new but has been in existence since the early 1900's. The invention of the vacuum tube led to the real development of this field. Electronic production of notes and sounds has been accepted as music since the '40's, when De Moog developed his first synthesizer. The first, and biggest, synthesizer is housed at Columbia University in New York City, taking up an entire floor and costing over a million dollars to build.

Until the '60's, synthetic music was used almost exclusively for the background music of science fiction films. With the development of smaller, portable synthesizer, the use for them has grown tremendously. Today, they are still used for science fiction background music, but their use has expanded into commercials, cartoons, and rock groups.

A synthesizer can produce only one note at a time, but can produce an infinite number of different and unique sounds. At first it was used to produce things that an instrument was incapable of. More and more, however, it is being used to replace instruments. In commercials, for instance, it is much cheaper to pay one or two people to produce the music electronically than to pay from 5 to 15 instrumental musicians at high union wages.

The field for electronic music engineers is wide open. One needs only basic engineering knowledge, and a thorough music education or to enjoy experimenting, and be creative and inventive. The work is a combination of composer and engineer, and the salary can be quite good. In commercials, a one-minute commercial which runs for 13 weeks will pay \$700-\$1,000 flat rate in addition to \$150 per week royalty to a person supplying the musical background and sound effects.

With the production of more sophisticated and portable equipment, electronic is probably growing faster than any other area of music.

EXPLORATION ACTIVITY #9

CONDUCTOR 152.048

Orchestra Leader: Conducts instrumental music groups, such as orchestras and dance bands. Auditions and selects members of group. Selects music to accommodate talents and abilities of group and to suit type of performance to be given. Positions members within group to obtain balance among instrumental sections. Directs group at rehearsals and performances to achieve desired effects, such as tonal and harmonic balance, dynamics, rhythms, tempos and shadings. Utilizing knowledge of conducting techniques, music theory and harmony, range and characteristics of instruments, and talents of individual performers. May transcribe musical compositions and melodic lines to adapt them to or create particular style for group. May schedule tours and performances and arrange for transportation and lodging. May be designated according to specialization as jazz orchestra leader, symphonic orchestra leader.

**OBJECTIVES**

- The student will be able to:
1. research the life of one conductor and report on pertinent information leading to his success as a conductor
  2. Observe a conductor and list the skills involved with this job.
  3. List opportunities, place of employment, and possible salaries for a conductor.
  4. Define in writing twenty musical terms found in scores which the conductor commonly deals with.
  5. List duties and responsibilities, including non-musical details, which a conductor must perform.

**ACTIVITIES**

1. View film of a conductor. Distribute resource material on conductors and have small groups prepare reports on famous conductors.
2. Observe a conductor in a live performance, rehearsal, or via film and have students make a list of observable skill required to be a conductor.
3. Make a list of duties a conductor performs. Include both musical responsibilities and non-musical duties, such as lighting, program notes, dress, publicity, timing, etc. Discuss how in many of the larger orchestras a separate individual (s) takes on many of the non-musical details.
4. Assemble a list of qualifications, education, training, and experience that a conductor must have to be employed in this field.
5. Distribute a common score to the class and have each student make a list of the musical terms found within. Each term should be defined by the student, using a musical dictionary when necessary. Teacher should reinforce

**RESOURCES**

Appendix H. Films No. 5, 6 and 7  
Bibliography No. 1, 10, 12, 21 and 26

Use materials from school music library.



EXPLORATION ACTIVITY #9  
(Continued)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>6. Following class discussion, the student will prepare a rehearsal plan for a one hour rehearsal of a symphony orchestra.</p> <p>7. Each student will learn and demonstrate the standard motions of conducting, including meters including 2-12 beats per measure</p> <p>8. Will conduct a chorale while the class sings, following his direction.</p>	<p>the definitions when necessary to increase a student's understanding</p> <p>6. Discuss in class the preparations a conductor makes prior to rehearsal and performance. Include in this discussion rehearsal techniques. Following discussion, the students should prepare a one-hour rehearsal plan, including seating, observance of union rules, music to be played, and order of rehearsal.</p> <p>7. Demonstrate and have class practice the various beat patterns that a conductor uses. Begin with preliminary exercises such as the figure eight arm motion. Students should be capable of conducting patterns including 2, 3, 4, and 6 beats per measure.</p> <p>8. Have each student prepare a chorale which they could conduct with the class singing. Individual conductors should express difficult aspects discovered in the process of preparing and conducting. The class should offer constructive criticism.</p>	
<p>6. Following class discussion, the student will prepare a rehearsal plan for a one hour rehearsal of a symphony orchestra.</p> <p>7. Each student will learn and demonstrate the standard motions of conducting, including meters including 2-12 beats per measure</p> <p>8. Will conduct a chorale while the class sings, following his direction.</p>		



## EXPLORATION ACTIVITY #10

TEACHER, MUSIC 152.028

Teaches individuals or groups instrumental or vocal music in public or private school; plans daily classroom work based on teaching outline prepared for course of study to meet curriculum requirements. Evaluates student's interest, aptitudes, temperament and individual characteristics to determine suitable instrument for beginner. Instructs students in basic harmony and melody and provides individual music lessons. Conducts orchestra rehearsals and coaches members in their individual parts. Instructs and trains choral groups in fundamentals of musicianship and ensemble singing. Leads orchestra and choral groups in regular and special performances for school programs, community activities, concerts, and festivals. May be designated as Teacher, Instrumental; Teacher, Vocal.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify and list the different types of music teaching a teacher can specialize in.</li> <li>2. List any special qualifications related to each type of music teacher.</li> <li>3. Compare the role of the classroom teacher to the private teacher to the classroom teacher.</li> <li>4. Investigate the education and training required to receive certification as a music teacher in the state of Ohio.</li> <li>5. List each classification of music teachers and detail the duties involved with each.</li> </ol>	<ol style="list-style-type: none"> <li>1. Following class discussion, have each student list, on their own, the specialized areas of music teaching. After the class decides on the final list which everyone should use, discuss and list the duties included with each category.</li> <li>2. Use college catalogues from Ohio colleges to locate the requirements for one to receive a teaching degree in music education. Separate the courses required for all music majors from the course required for education majors only. Check the entrance requirements and determine which high school courses are required.</li> <li>3. Observe a music teacher performing the normal, daily, classroom activities. Discuss what was accomplished, methods used by the teacher and what non-teaching jobs were performed, such as record keeping, library maintenance, etc.</li> <li>4. Set up a "class" of four or five students from the class. This will represent a beginning band class. A student, having volunteered and prepared ahead of time, will act as a teacher. The students objective will be to teach the class how to play the clarinet well enough to play middle C, D, E, F, and G.</li> </ol>	<p>See attached example</p> <p>Catalogues available from school counselors office</p> <p>Observe a music class in the school or travel to another school.</p>

Exploration Activity #10 (continued)

OBJECTIVES

6. Observe a teacher at work with a class and note the many details that must be attended to during the normal class period.
7. Teach a small group of students to play five notes on the clarinet.

ACTIVITIES

RESOURCES

The following is an example of how the duties for each category of music teacher might be listed.

Elementary Music Teacher - general and vocal

- To develop the student's desire for an understanding of music.
- Teach students to sing, play, listen, create, and read music.
- Discover and train pupils with special talent for music.
- Furnish opportunities for individual and group development.
- Help explain to students the contributions of music throughout civilization.

Separate list would be made similar to the one above for each of the following:

- a. elementary - instrumental
- b. junior high - vocal and general
- c. junior high - instrumental
- d. senior high - vocal
- e. senior high - instrumental
- f. private
- g. college level teachers

EXPLORATION ACTIVITY #11

MUSIC SUPERVISOR 091.169

Coordinates music education program in school system and supervises teaching staff engaged in instructing classes in vocal or instrumental music. Consults with teaching and administrative staff to plan and develop music education curriculum. Observes, evaluates, and recommends changes in work of teaching staff to strengthen teaching skills in the classroom. Analyzes music education program periodically to evaluate effectiveness of instructional methods and materials. Orders instructional materials, supplies equipment, and visual aids designed to meet training needs of students. Directs and inspects repair of instruments. Establishes interschool orchestra, band, and choral group to represent schools at civil and community events.

**OBJECTIVES**

The student will be able to

1. Discuss the duties of a music supervisor in a public school system.
2. Discuss the role of the music supervisor as to how it affects the music teacher.
3. List the qualifications necessary for a career as a supervisor.

**ACTIVITIES**

1. Invite a supervisor to relate to the class the responsibilities of the job. Discuss qualifications, duties, and salary.
2. Discuss how a supervisor can be a help or a hindrance to the classroom music teacher.

**RESOURCES**

Appendis H Bibliograph  
No. 23

EXPLORATION ACTIVITY #12

MUSICAL INSTRUMENT MANUFACTURE

Instrument Assembler 730.884: Assembles musical instruments, using drill press and hand tools. Reams holes in metal parts, fits and assembles metal parts, and stringed instruments, following a sample and using tools.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify the major groupings of instruments.</li> <li>2. Report to the class on the occupations available in the construction of instruments listed under one of the major groupings.</li> <li>3. List four major instrument manufacturers and report on what instruments each makes</li> <li>4. Discuss the manufacture of the piano, describing the major steps in its construction from raw lumber to the finished product.</li> <li>5. Design and construct a simple instrument.</li> </ol>	<ol style="list-style-type: none"> <li>1. Have students name all the instruments they can think of. As each is named, place it under one of the following broad classifications: Brass-wind Instruments, Stringed Instruments, Keyboard Instruments, Percussion Instruments.</li> <li>2. Using the resources have students locate and briefly define the occupations associated with the construction of one of the major classifications of instruments.</li> <li>3. Students should assemble a list of four major instrument manufacturers. One method for this would be to assign each student a different instrument and have them call a music dealer to find which companies manufacture the instrument.</li> <li>4. View films, look at charts, and invite a person from the construction industry to lecture to the class.</li> <li>5. As a class, or individually, construct a simple instrument.</li> </ol>	<p>See Job Titles, listing these occupations. (Appendix F.)</p> <p>Contact Music Dealer</p> <p>Appendix H. Film No. 21. Filmstrips No. 25, 26, 27, 28.</p> <p>Appendix H. Bibliography No. 16 and 19</p>



## MAKING INSTRUMENTS

Although students will not be able to make a standard instrument in class or at home without much experience and proper equipment, there are many elementary instruments which are easily made with readily accessible materials. These instruments will introduce students to the science of sound production and problems with construction and design of instruments on even the simplest levels. The students should find this exercise most enjoyable and easily accomplished in a short period of time.

The following books contain a wealth of information about the construction of these simple instruments. The directions are easily understood and the diagrams and pictures most helpful.

Hawkinson, John. Music and Instruments for Children to Make.  
Books 1 and 2. Chicago: Albert Whitman and Co., 1971

Mandell, Muriel. Make Your Own Musical Instruments, New York:  
Sterling Publishing Co., Inc. 1957

EXPLORATION ACTIVITY #13

SALESMAN, MUSICAL INSTRUMENTS AND ACCESSORIES 287.358

Sells brass, percussion, stringed and woodwind musical instruments, accessories and supplies. Performs other duties as described under salesman (ret. tr.: whole. tr.) (See also, salesman, Piano and Organs, Salesperson, Sheet Music)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify and list occupations available in a large music store.</li> <li>2. Observe and report to the class the operation of a music store.</li> <li>3. Discuss salesmanship and their techniques</li> <li>4. Evaluate training, education abilities, and musicianship necessary in this business.</li> <li>5. Analyze importance of this industry to music.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with class the purpose of the music store. What does it sell? Determine what kind of personnel is necessary to keep a big music store running smoothly. Include salesmen managers, secretaries, bookkeepers, warehouse employees, repairmen, stock manager, etc.</li> <li>2. Take a small group on a field trip to a music store, its warehouses, repair shop, etc. Observe what is displayed, stocks, services it offers (private lessons, rental program, etc.) and amount of advertising and methods of advertising. Report findings to entire class.</li> <li>3. Discuss qualities a person usually needs to be a good salesperson. Explore some of the techniques used by salesmen to sell a product. How much music ability must a music salesman have?</li> <li>4. Students should make a list of qualifications necessary to enter the sales end of music.</li> <li>5. Through class discussion, determine how much influence the music store has in determining the growth of music. How important is this industry?</li> <li>6. Invite a music dealer to the class to talk about his business.</li> </ol>	<p>Contact any music store</p> <p>Jack Shallat, Buddy Rogers Music Co. 931-6720</p>



MUSICAL INSTRUMENT REPAIRMAN 730.281

Repair percussion (Percussion - Instrument Repairman),  
Stringed (Fretted - Instrument Repairman; Violin Repairman) and  
Wind Instruments (Wind-Instrument Repairman)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>Investigate the need for qualified repairmen in the Cincinnati area.</li> <li>Report on the number of repairmen in the Cincinnati area and identify for whom they work.</li> <li>Identify the areas of specialization in this field.</li> <li>Describe in writing the duties and qualifications of a repairman.</li> <li>List three common repairs for each of the following instruments: trumpet, clarinet, and violin.</li> <li>Determine the repairs needed and complete the necessary repairs when given a clarinet with a missing pad.</li> </ol>	<ol style="list-style-type: none"> <li>Using the yellow pages of the phone book, look under <u>Musical Instrument - Repair</u>, to determine the number of repairmen and what type of instruments they repair. Note whether the repairmen are associated with a music store or are independent. Call any shop in which you have a doubt as to their association.</li> <li>Have students, after finding the listings of repair shops, list the areas of instruments each shop specializes in, i.e., wind, percussion, or strings.</li> <li>Visit a repair shop with a small group. Talk with the repairperson and observe a demonstration of common repair jobs. Observe the shop set-up, the equipment used and the parts in stock. Note the methods for repairing the instruments and the skills required to perform those tasks. Interview the repairman as to education, working hours, how he established the business, etc. Have the group report back to the class what they saw.</li> <li>Present the class with a clarinet which does not play properly. Do not tell them what's wrong. Have a student play it and allow the class to experiment and investigate to determine what repairs are necessary. When they think they know, allow them to attempt the repair. Several instruments could be used, dividing the class into smaller groups with each group working on an instrument.</li> </ol>	<p>Cincinnati Phone Book - Yellow pages</p> <p>Mr. Richard Hober 521-4595</p> <p>Appendix H Bibliography No. 9</p>

The following careers are listed in the D.O.T. and can be used in conjunction with the repair activities:

Accordion Repairman	730.281
Fretted Instrument Repairman	730.281
Violin Repairman	730.281
Wind Instrument Repairman	730.281
Percussion Instrument Repairman	730.281
Pipe Organ Repairman	730.381

PIANO TUNER - TECHNICIAN 730.391

Tunes pianos in private and public establishments, using tuning fork and tuning hammer. Removes board from inside of piano to expose strings. Places strips of felt between strings, nearest string to be tested to mute them. Strikes note and compares pitch with that of standard tuning fork. Tunes string pin with tuning hammer to adjust tension on string until pitch of tuning fork and string correspond. Tunes remaining strings in similar manner. May repair and refinish pianos (Piano Technician)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>Investigate the demand for a piano tuner.</li> <li>Identify the main parts of the piano that the tuner works with.</li> <li>Explore the moving parts of the piano and discuss their function and the common repairs performed on them.</li> <li>Identify the tools of the trade.</li> <li>List the qualifications and training of a tuner.</li> <li>Describe the procedures and skills involved in the tuning of a piano.</li> <li>Explain differences between a tuner and a technician.</li> </ol>	<ol style="list-style-type: none"> <li>Review the construction of the piano so that students recall the hundreds of parts, moving and non-moving, that go into its construction.</li> <li>Open up a piano so that the students can watch the motion of parts when the key is struck. Note the number of strings per note.</li> <li>Compare the arrangement of the parts in the upright piano as compared to the grand piano. Note the difference in action assembly</li> <li>Invite a piano tuner to the school to demonstrate the trade.</li> <li>Discuss the procedure the tuner used in tuning the piano. Explain the temperament octave, intervals used in the tuning, method for muting strings, listening for beats, etc.</li> <li>Make a list of the tools used and how they were used.</li> <li>Have a class discussion about the difference between the tuner and the technician. Make a list of the duties each performs and the qualifications each must have to enter this field.</li> </ol>	<p>Mr. Loar - Aiken High School - 681-8484</p> <p>See also Accordion Tuner 730.281; Pipe Organ Tuner 730.391; Chip Tuner 730.684</p>

Writes critical reviews on merits of literary or artistic works for newspapers or periodicals. Reads books, attends art exhibits, or stage, screen, and musical performances, and forms critical opinions of them based on knowledge, judgment, and experience. Writes criticisms, usually making comparisons with other works or production, and discussing such pertinent factors as artistic motif, expression, and technique. May be designated according to major field of interest as Art Critic, Drama Critic, Movie Critic, Music Critic, Book Critic.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>List the areas of specialization in writing music criticisms.</li> </ol>	<ol style="list-style-type: none"> <li>Invite a music critic to the class to lecture and be interviewed by the students. Prepare an interview guide ahead of time and inform the critic of the type of questions which will be asked. Before the visit, have students collect several articles written by her and discuss them in class. The critic might even be confronted with them and be asked to explain why specific comments were made.</li> </ol>	<p>Gail Stockholm, Cincinnati Enquirer - 721-2700</p>
<ol style="list-style-type: none"> <li>Discuss the training and education of a music critic on a newspaper staff.</li> </ol>	<ol style="list-style-type: none"> <li>As a class, make a list of the training and education that the visiting critic had. Discuss the necessity and reasons for the training and experience.</li> </ol>	<p>What Are Critics Like? "Music," May, 1970</p>
<ol style="list-style-type: none"> <li>Compare the music critic to the regular newspaper reporter.</li> </ol>	<ol style="list-style-type: none"> <li>Make a list of places of employment for a music critic, i.e., newspaper, magazine.</li> </ol>	
<ol style="list-style-type: none"> <li>Describe the preparations a music critic makes before attending a concert.</li> </ol>	<ol style="list-style-type: none"> <li>From the interview guide, have students list what they feel are good and bad features of the job.</li> </ol>	
<ol style="list-style-type: none"> <li>Identify areas of employment for music critics and possible salaries one might expect.</li> </ol>	<ol style="list-style-type: none"> <li>Observe a musical performance, either live or via film, and have each student write a criticism about it. Discuss the difficulties they had in writing a good criticism, including lack of knowledge of subject and lack of writing experience. Give the students a deadline to meet and limit the criticism to one or two paragraphs.</li> </ol>	



EXPLORATION ACTIVITY #16

(Continued)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>6. Interview a music critic and write a report about "one day in the life of ..." that person.</p> <p>7. Following a musical performance, the student will prepare a criticism.</p> <p>8. Analyze the reason for criticisms in the performing arts.</p>	<p>6. Discuss the reasons for criticism. Emphasize the fact that criticisms are not always derogatory but can be complimentary. Explain, through discussion, that some criticisms, though bad for the performer, are constructive in nature and aid the performer in improving.</p>	

## INTERVIEW GUIDE - MUSIC CRITIC

- Name of person interviewed: \_\_\_\_\_
- How long have you been in your field?
- What kind of education have you had? degrees?
- What special skills must you have as a music critic?
- What personal qualities are necessary?
- Did you enter this field directly out of college or was time spent in apprenticeship?
- Where did your career begin?
- Where are you presently employed?
- What hours do you work?
- Are you an hourly or salaried employee?
- Are you free to publish articles outside of your employer's paper?
- What is the average number of concerts you attend each week?
- Do you attend classical, rock? jazz? country?
- How do you prepare for each concert?
- Do you listen for any one thing at the concert?
- How much time do you have to prepare a criticism?
- Are all criticisms bad?
- Do you do anything else beside criticisms?

EXPLORATION ACTIVITY #17

MUSIC THERAPIST 079.128

Plans, organizes, and directs medically prescribed musical activities as part of care and treatment of patients; collaborates with other members of rehabilitation team in planning musical activities in accordance with patients needs, capabilities, and interest. Directs and participates in instrumental and vocal activities designed to meet patients' needs, such as solo or group singing, listening to selected recorded music or music quiz programs, playing in bands or orchestras, or attending concerts given by visiting musicians or patients. Instructs patients in prescribed instrumental or vocal music. Studies patients' reaction to various activities and prepares reports describing symptoms indicative of progress of regression; submits periodic reports to treatment team or physician to provide clinical data or evaluation.

OBJECTIVES

- The student will be able to:
1. Describe the work of a music therapist, listing five activities a therapist performs.
  2. To investigate the training and education required to be a qualified and certified music therapist.
  3. Analyze the personal qualities which are important in this field.
  4. Explore the need for specialist in music therapy.
  5. Survey area hospitals to determine if there are openings for music therapist

ACTIVITIES

1. Have students read material on music therapy. Through class discussion, describe the duties of a music therapist and relate their job to the total rehabilitation of the patient.
2. Given resources, have some students report to the class the training and education a music therapist must have to obtain a job in this area.
3. After discovering what services a music therapist performs, discuss the kind of person it takes to work in this field, i.e., patient, creative, sensitive, interest in patient's welfare, etc.
4. Contact several hospitals and inquire whether a full time music therapist is employed. If not, determine if one is needed or wanted.
5. Have students write a report on whether they feel music therapy is important in rehabilitation

RESOURCES

Write National Association for Music Therapy, Inc.  
 Box 15, Lawrence, Kansas  
 66044

Appendix H Bibliography  
 No. 14 a, 15, 20, 27

CHURCH MUSIC 152.048

Choirmaster: Conducts vocal music groups, such as choirs and glee clubs; auditions and selects members of group. Selects music to accommodate talents and ability of group and to suit type of performance to be given. Directs choir at rehearsals and performances to achieve desired effects, such as tonal and harmonic balance, dynamics, rhythms, tempos, and shadings, utilizing knowledge of conducting techniques, music theory and harmony, and characteristic range and individual talents of voices. May schedule tours and performances and arrange for transportation and lodging. May transcribe musical compositions and melodic lines to adapt them to or create particular style for group (arranger). May conduct group with orchestral accompaniment (orchestra leader)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify the jobs performed by musicians in the church.</li> <li>2. List the jobs and identify the duties of each.</li> <li>3. Compare the differences in musical needs between de-nominations.</li> <li>4. Discuss qualifications and salary for a church musician</li> </ol>	<ol style="list-style-type: none"> <li>1. List the jobs that a musician can perform in the church and determine whether it is a full-time or part-time job. Note that many times jobs are combined and performed by one individual.</li> <li>2. Have students call churches of different denominations and inquire about the musicians employed and what their duties are. If possible, assign a student to observe a rehearsal or have students observe the musicians in their own church and report to the class their duties.</li> <li>3. Survey several church musicians and inquire about their occupation. Determine what they do, besides work in the church, to earn a living.</li> </ol>	<p>See <u>D.O.T., Occupational Outlook Handbook</u></p> <p>Appendix H, Bibliography Number 26</p>



EXPLORATION ACTIVITY #19

MUSIC LIBRARIAN 100.388

Classifies and files musical recordings, sheet music, original arrangements, and scores for individual instruments. Selects music for subject matter of program or for specific visual or spoken action. Suggest musical selections to DIRECTOR, MUSIC. Issues required MUSIC to ORCHESTRA LEADER; MUSICIANS or other studio personnel.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Determine and discuss the areas in which a full-time music librarian is employed.</li> <li>2. List the duties performed by the music librarian.</li> <li>3. Interview a music librarian and investigate the training and experience leading to employment in that field.</li> <li>4. Discuss employment opportunities for a music librarian.</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact radio and television stations and enquire whether a music librarian is employed. Interview that person on the phone, if one is employed, and list the duties performed by him. Discuss the training and qualifications for the job and project how a student can get into the field.</li> <li>2. Discuss the need for a full-time music librarian. Discuss also, the non-paid or part-time music librarians associated with performing groups, schools, etc.</li> <li>3. Determine the need for a solid music background, if any, for the music librarian on a radio staff.</li> </ol>	



EXPLORATION ACTIVITY #20

Individual Student Exploration into Related Careers. Because of the multiplicity of careers in this occupational area, many have been left untouched in this curriculum guide. In this exploration activity, the students can explore a related career of their choice. There are a number of related careers which are the major subject of other curriculum guides.

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify and explore at least one additional career related to their individual interests and this occupational area.</li> <li>2. Locate and record specific information related to a career of individual interest.</li> </ol>	<p>Each student selects and explores a career or job which is related to both individual interest and the occupational area described in this curriculum guide.</p> <p>The students are to use career information reference located in the class room, school library, public library, their homes and community as resources to complete an "Individual Career Exploration Worksheet" which is attached.</p>	<p>Dictionary of Occupational Titles, Volumes I &amp; II.</p> <p>Occupational Outlook Handbook 1972-73 Ed.</p> <p>Encyclopedia of Careers and Vocational Guidance Volumes I &amp; II (Doubleday)</p> <p>Largo or SRA Career Kits</p> <p>Make a class set of the "Individual Career Exploration Worksheet"</p>



INDIVIDUAL CAREER EXPLORATION WORKSHEET

1. Student's Name: \_\_\_\_\_
2. Related careers being explored:
  - a. D.O.T. Number(s) \_\_\_\_\_
  - b. Relationship to:
    1. Data \_\_\_\_\_
    2. People \_\_\_\_\_
    3. Things \_\_\_\_\_
3. Nature of duties or tasks performed:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Important qualifications
  - a. Education \_\_\_\_\_
  - b. Age \_\_\_\_\_
  - c. Previous experience \_\_\_\_\_
  - d. Other \_\_\_\_\_
5. Procedure for applying  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. In what occupational areas is this related career found? (If many, list 3 specific areas.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. What is the salary for this career?
  - a. Starting \_\_\_\_\_  
45
  - b. Maximum \_\_\_\_\_

Student Self Evaluation of Career Maturity

This activity is planned to help the students analyze and learn to value their career-related experiences and the level of their career maturity.

Seven areas of growth and development which have been identified for this use are as follows:

1. Individual and Environment (Social Awareness)
2. Economics
3. World of Work
4. Education and Training
5. Employability and Work Adjustment Skills
6. Vocational Decision Making
7. Self (Self-Awareness)

OBJECTIVES	ACTIVITIES	RESOURCES
<p>The student will be able to:</p> <ul style="list-style-type: none"> <li>- Respond, in a purposeful and business-like manner, to one or more questions which ask the student to analyze their experiences in each of the developmental areas.</li> </ul>	<p>Each student is asked to seriously consider their career related experiences. A brief class discussion and/or small group discussions may be used to introduce this topic.</p> <p>The students should view the films "What Do We Look Like to Others" and "I Want to Work For Your Company". If these films have been viewed previously they should be reviewed and discussed.</p> <p>Following a review of these films each student is asked to respond to a set of self-analysis questions prepared by the teacher. To help the teacher in preparing these questions a definition of each developmental area and sample questions for each area are attached to this sheet.</p>	<p>The teacher will need to generate class sets of questions.</p> <p>These two films are available from Resource Services on Iowa Street.</p>

## DEFINITIONS OF DEVELOPMENTAL AREAS

### Individual and Environment (Social Awareness)

In this area of the student's development, the student must determine who he is and how he relates to his environment. He must be involved in experiences which will help him to determine his relative abilities to work with people, to manipulate tools, to sense his presence in his environment, and to comprehend laws of nature and the processes for behavioral advancements within his community.

The student will be involved with understanding his interests, aptitudes, achievements, temperament, his family peers, his society, and etc.

### Economics

Students must learn to see themselves as a productive worker unit who supports his community through efficient positive efforts as a producer and consumer. He must learn that the money he receives for his work is an important factor in determining the behavior of his community through the way in which he spends his money; the way in which he is willing to work for his money; and how this spending gives direction to the use of raw materials for production and consumption of goods and services to be used in his community.

The student must learn what is meant by a fair day's pay for a fair day's work and the implied obligations between the consumers and producers.

### World of Work

This area is concerned with the student's development of a method for collecting information about jobs. It also is concerned with the student developing an understanding of what behavior is required to do certain jobs. Examples of job information include, in part, the following items:

- Job entry levels
- Performance activities
- Working conditions

Education and training requirements  
Availability of jobs  
Seasonality of jobs  
Job status  
Advancement possibilities

### Education and Training

The student must learn what behavior modifications (education and training) will be expected of him for certain jobs. In doing so he will learn the innate abilities he has and if these abilities can be developed to the level required to perform certain jobs he chooses for his vocation.

Students must learn which educational programs will help them to acquire the experience that will help them to develop the performance behavior required for certain jobs.

### Employability and Work Adjustment Skills

This section is concerned with attitude strategies and the importance of the development of successful attitude strategies which are necessary for continued economic gains.

Students must learn how good attitudes are a contribution to their own adjustment and success as well as the success of their community. People are dismissed from their jobs more often because they cannot get along with people than they are because they do not have the skills for their jobs.

### Vocational Decision Making

Students must learn a method for making decisions if they are to become employable and well adjusted citizens. They must learn to gather facts about themselves, jobs, and values and how to weigh this information to reach a conclusion as to what work they are able to do and what work they want to do.

### Self

In this area the Self as subject is the major focus. Self as subject requires that the person's own feelings, perceptions and beliefs are dealt

with. This requires an internal orientation to the activities as opposed to the external orientation of activities for the other areas.

Seven topics are developed in the broad area SELF. These trace self-awareness, self-acceptance and self-affirmation of the child through interests, aptitudes and abilities, achievement and values and attitudes.

## SAMPLE QUESTIONS FOR CAREER MATURITY

Listed on this page are sample questions related to areas of growth and development.

1. Self and Environment

- What things have I done with any degree of success?
- What things have I done that others have commended me for doing exceptionally well?

2. Economics

- How much money have I earned?

3. World of Work

- What jobs have I held? Describe them in detail.

4. Education and Training

- What courses have I taken that would prepare me for an entry job position?

5. Employability and Work Adjustment Skills

- What were the expectations of employers concerning the job I have held?

6. Vocational Decision Making

- Where could I get additional information about jobs and careers?

7. Self

- What are the things I really like to do?
- What are the things that I don't like to do?



### III. APPENDIX

- A. Field Trips in Career Development
- B. Procedure for Exploration Trips
- C. Exploration Trip Permission Form
- D. Exploration Trip Report
- E. Music Career Interest Survey
- F. Job Titles
- G. Resources

## FIELD TRIPS IN CAREER DEVELOPMENT

### General Student Needs

1. Field trips commonize the background of the students so that there is a basis from which to develop a strong well-rounded instructional program.
2. Because the student is so far removed from his potential career, he needs a broad understanding and exposure to work.
3. Broad off-school-site experiences build readiness for learning by demonstrating that basic skills are essential to a productive work-life.
4. To thoroughly understand a career, the student needs to see the job first hand.
5. Students may not realize all the implications/facets of an occupation in terms of personal interests until they have an exposure to the worker in action.
6. Omission of hands-on experiences may cause a lack of credibility in those courses taught, in the upper levels.
7. While field trips benefit the student, they also benefit the teacher, who, without their assistance, is required to serve as expert on the details of many careers which are not necessarily related to his own speciality.
8. Field trips, when used correctly, can be a source of creating better communication and understanding between business, labor and industry in the community and the school.

### Specific Student Needs

Field Trips will do the following:

1. Develop an appreciation/awareness that an individual's skills, talents and senses are used in a variety of ways.
2. Develop an awareness of the importance of responsibility and attitude for one's work.
3. Encourage the development of communication skills. Broad off-school-sites experiences demonstrate need and provide motivation for skill learnings.
4. Develop an awareness of the interdependence of the student and all workers.
5. Develop an awareness that there are many people who have different responsibilities in business, labor and industry.

6. Develop an awareness that workers are not necessarily associated with or limited to a specific location and an understanding that there are many kinds of work within specific sites/fields.

## GUIDELINES FOR IMPLEMENTATION OF FIELD TRIPS IN CAREER DEVELOPMENT

1. The local administrator is responsible for observance of the guidelines by participating staff members.
2. The local administrator should take responsibility for appointing a person to finalize field trip arrangements.
3. There should be planning of each trip well in advance.
4. Teachers should make field trip plans in consideration of/consultation with other teachers who have a teaching responsibility for the pupils.
5. For the convenience of the faculty, field trip information should be given out several days in advance including destination, length of time out of school, and students participating.
6. The teachers should be aware/appreciative of the expense of the trip to the business or industry in relation to the time spent hosting visitors.
7. Teachers should justify the trip in relation to their instructional program.
8. Teachers who desire to take a particular field trip should plan the trip together, although they may not go together.
9. The faculty of each school may prepare a list of meaningful walking trips utilizing the resources of the local community.
10. After the arrangements have been made, and before the trip, there should be communication between the teacher and the contact person at the place where they are going to clarify teacher expectations.
11. Students should be adequately supervised not only for their safety, but to minimize the interruption to business or industry.
12. There should be well planned pre- and post-activities for each trip.
13. After each trip, there should be a note of appreciation to the business or industry. The teacher may communicate the extent to which expectations were met.
14. A follow-up report concerning the value of the trip and results relating to the specific reason for the trip should be submitted to the administrator/coordinator.
15. Identify the businesses and industries of the Cincinnati community that have only one representative (i.e. the phone company) and those businesses and industries that have multiple representatives in this community (i.e. bakeries, garages).

16. To avoid overloading of limited field trip sites, and to maintain privileges, it is necessary to clear requests for these trips through a central clearing office to be designated by Jack Ford.
17. Teachers may build a list of trips and experiences that parents could provide for their children outside of school hours.

## PROCEDURE FOR EXPLORATION TRIPS

### SCHEDULE CONSIDERATIONS:

An opportunity is to be provided for students to visit cooperating organizations in small groups for a highly personalized and individualized experience directly related to their career interests. It is essential to minimize the burden on cooperating organizations and to distribute this burden among all community resources and throughout the school year. To accomplish this, trips must be scheduled from the beginning of the school year, and be evenly spaced during the year until every student has been accommodated. The students in a quarter length exploration class may, therefore, participate in an exploration trip prior to, during, or following the time that the course is in progress.

### PROCEDURES:

Once each month, or even less frequently, the teacher will need to:

1. Place a single phone call to a cooperating organization to set the date and time for the trip.
2. Notify Mr. Jerome Cousins (Education Center, 230 East Ninth St.) of the date and time for the trip.
3. Select six students from the Career Exploration class list.
4. Send permission slips and trip report forms to the selected students via their homerooms.

Permission slips and report forms are illustrated on the following pages. These forms should be reproduced from this curriculum guide as required.

The career committee chairman or coordinator will provide you with a list of organizations which are known to be willing and able to accommodate your students. Addresses, phone numbers and names of persons to contact will be provided.

CAREER EXPLORATION TRIP PERMISSION FORM

You are schedule for \_\_\_\_\_  
(Career Course Title)  
which meets 1-2-3-4 quarter. Exploration trips will be scheduled throughout  
the year regardless of whether the course is in session.

A trip has been schedule for \_\_\_\_\_ to \_\_\_\_\_  
(Date) (Name of Company)  
Please have this form signed and return to \_\_\_\_\_  
(Teacher's Name)  
\_\_\_\_\_ before \_\_\_\_\_.  
(Room) (Date)

My son/daughter \_\_\_\_\_ has my permission  
to visit \_\_\_\_\_ on \_\_\_\_\_ with  
the Career Exploration Course \_\_\_\_\_. The  
group will return to school upon completion of the tour. There will be  
about six students in each group.

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Date

The following teachers have been informed of my absence from class. (Teachers'  
signatures required.)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

EXPLORATION TRIP REPORT

1. Course Title \_\_\_\_\_

2. Student's Name \_\_\_\_\_

3. Organization or Company \_\_\_\_\_

Address \_\_\_\_\_

4. Major Products or Service:

1. \_\_\_\_\_ 4. \_\_\_\_\_

2. \_\_\_\_\_ 5. \_\_\_\_\_

3. \_\_\_\_\_ 6. \_\_\_\_\_

5. Major Types of Jobs:

1. \_\_\_\_\_ 4. \_\_\_\_\_

2. \_\_\_\_\_ 5. \_\_\_\_\_

3. \_\_\_\_\_ 6. \_\_\_\_\_

6. What did you like best about this trip?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Did you see any jobs that you would like to do? List them.

\_\_\_\_\_  
\_\_\_\_\_

8. What did you learn from this tour?

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature  
Representative of Organization  
Visited



E. MUSIC CAREER INTEREST SURVEY

Yes    Unsure    No

1. Are you interested in music?
2. Does good music excite you?
3. Would a career in music interest you?
4. Have you been successful in music so far?
5. Do you get satisfaction from hard work, such as practice?
6. Can you play the piano?
7. Do you enjoy sitting at the piano and attempting to create a new tune?
8. Do you enjoy playing new music?
9. If handed a piece of music you had never seen before, could you identify the key of the piece?
10. Do you enjoy listening to music?
11. Do all types of music please you?
12. Do you enjoy rock?
13. Do you enjoy Blues?
14. Do you enjoy Jazz?
15. Do you enjoy country and western?
16. Do you enjoy classical?
17. Do you enjoy Popular?
18. Would you like to learn to play a new instrument?
19. Do you enjoy singing?
20. Does the history of music stimulate your interest in music?
21. Do you enjoy performing?
22. Are you skillful with your hands?
23. Would you choose music over a higher paying career?

F. JOB TITLES

<u>TITLE</u>	<u>D.O.T. NUMBER</u>	<u>D.O.T. PAGE</u>
Concert Singer	152.048	155
Musician, Instrumental	152.048	488
Musical Entertainer	152.048	488
Popular Singer	152.048	549
Composer	152.088	153
Arranger	152.088	20
Orchestra Leader	152.048	501
Teacher, Music	152.028	727
Music Supervisor	091.168	488
Salesman, Musical Instruments	287.358	618
Musical Instrument Repairman	730.281	488
Piano Tuner	730.381	530
Critic	132.088	177
Music-Program Director	152.168	488
Music Therapy	079.128	488
Choirmaster	152.048	127
Director, Choral	152.048	205
Music Librarian	100.388	488

Following is a list of occupations available in the field of Manufacture and Design of Musical Instruments. The jobs are organized into four sections depending on the instrument produced as a result of this job. A complete list of these occupations can be found in D.O.T. Volume II, Page 160, listed under Occupations in Fabrication and Repair of Musical Instruments and Parts.

The following occupations produce Brass-Wind Instruments: Bell Maker, 730.381; Brass-Wind Instrument Maker, 730.381; Final Inspector, 730.387; Tester, 730.684; Mouthpiece Maker, 730.781; Piston Maker, 730.781; Trombone Slide Assembler, 730.781; Final Assembler, 730.781; Bell Neck Hammerer, 730.884; Mounter, Brass Wind Instruments, 730.884; Mounter, Keyed Instruments 730.884; Seam Hammerer, 730.884; Sheet-Metal-Cut-Out-Man, 730.884; Cutter, Woodwind Reeds, 730.887; Inspector, Woodwind Instruments, 730.684; Socket Puller, 730.884; and Knobber, 730.884.

The following occupations produce Stringed Instruments: Fretted-Instrument Maker, Hand, 730.281; Fretted-Instrument Inspector, 730.684; Rim Bender, 730.884; Hand Carver, 730.381; Stringed Instrument Assembler, 730.884; Musical String Maker, 730.884; Bow Repairer 730.884; Bellyman, 730.781; Violin Maker, Hand, 730.281; and Sander and Buffer, 730.884.

The following occupations produce piano's: Action Inspector, 730.684; Chip Tuner, 730.684; Piano Action Regulator, 730.781; Assembler, Piano; 730.884; Keyboard Action Assembler, 730.884; Tone Regulator, 730.884; Action Inspector, 730.684; and Tone Regulator, 730.884.

The following occupations produce organs: Organ Pipemaker, metal 709.781; Organ-Pipe Voicer, 730.381; Stop Assembler, 730.887; Pipe Organ Installer, 730.381; Electric Organ Inspector and Repairman, 730.281; Pipe Organ Builder, 730.281; Electric Organ Assembler and checker, 730.381; Organ-stop Assembler, 730.887; Metal Reed Tuner, 730.381; Racker, Octave Board, 730.884; and Tone Cabinet Assembler, 730.884.

## G. RESOURCES

### I. BIBLIOGRAPHY

1. Anderson, W.R. Music As A Career. London, Oxford University Press, 1939.
2. Bakeless, Katherine Little. Story-Lives of American Composers. New York, J.B. Lippincot Co., 1953
3. Baker, Fred. Movie People (Quincy Jones on the composer). New York, Douglass Book Corp., 1972.
4. Ballantine, Bill. The Flute. New York, Franklin Watts, Inc., 1971.
5. Ballantine, Bill. The Violin. New York, Franklin Watts, Inc., 1971
6. Berger, Melvin. The Violin Book. New York, Lothrop, Lee and Slopard Co., 1972.
7. Bishop, Clair Hucket. Johann Sebastian Bach, Music Giant. Illinois, Gerrard Publishing Co., 1972
8. Bishop, Clair Hucket. Mozart, Music Magician. Illinois, Garrard Publishing Co. 1968.
9. Brand, Eric. Musical Instrumental Repair. Indiana, Selmer Band Instrumental Co.
10. Clarke, Eric. Music in Everyday Life. New York, W.W. Norton and Co., Inc. 1935
11. Cross, Milton. Encyclopedia of the Great Composers and Their Music, Vol. 1 & 2. New York, Doubleday and Company, Inc., 1953.
12. Curtis, Robert E. Your Future in Music. New York, Rosen Press, Inc., 1962.
13. Dobrin, Arnold. Aaron Copland: His Life and Times. New York, Thomas Y. Crowell Co., 1967.
14. Ewen, David. Famous Instrumentalist. New York, Dodd, Mead and Co., 1965.
15. Gaston, E. Thayer, editor. Music in Therapy. New York, MacMillian Publishing Co., 1969.
16. Guthel, Emil A. Music and Your Emotions. New York, Liveright, 1952.
17. Hawkinson, John. Music and Instruments for Children to Make Vol. 1 & 2, Chicago, Albert Whitman and Company, 1969.

18. Hindemith, Paul. A Composer's World. Cambridge, Harvard University Press, 1955.
19. Machlis, Joseph. American Composers of Our Time. New York, Thomas Y. Crowell Co., 1963.
20. Mandell, Muriel. Make Your Own Musical Instruments. New York, Sterling Publishing Co., Inc., 1965.
21. Morgan, Hazel Nohavee. Music Education Source Book. Chicago, Music Education National Conference, 1947.
22. Rich, Alan. Careers and Opportunities in Music. New York, E.P. Dutton and Company, Inc., 1964.
23. Rushmore, Robert. The Life of George Gershwin. New York, Crowell-Collier Press, 1966.
24. Snyder, Keith D. School Music Administration and Supervision. Boston, Allyn and Bacon, Inc., 1959.
25. Solbelman, Doris. Therapeutic and Industrial Use of Music. New York, Columbia University Press, 1948.
26. Trusler, Ivan. Functional Lessons in Singing. New Jersey, Prentice-Hall, Inc., 1972.
27. Ward, John Owen. Careers in Music. New York, Henry Z. Walck, Inc., 1968.
28. Westcott, Frederic. Composers and Their Times. New York, Henry Z. Walck, Inc., 1967.
29. Young, Patricia. Great Performers. New York, Oxford University Press, 1962.

ADDITIONAL REFERENCE MATERIAL

Dictionary of Occupational Titles Vol. 1 & 2

Encyclopedia of Careers and Vocational Guidance Vol. 1 & 2

Occupational Outlook Handbook 1972-73 Edition

### III FILMS

1. Beethoven: Ordeal and Triumph. 54 min. color  
The story of Beethoven's struggle with his growing deafness and how his music became one of the greatest symbols of the triumph of the human spirit over despair and defeat.  
Available from Cincinnati Public Library.
2. Stravinsky. 50 min. film in two parts.  
An informal portrait in depth of the great 'maitre' of modern music. Genius at work as the composer supervises a recording of his 'Symphony of Psalms'.
3. To Be a Composer. 25 min. color  
Observes Argentina-born composer Lalo Schifrin, as he works with experimental music, jazz, television, movie scores, and contemporary chamber music. Available from the University of Illinois, 82168.
4. A Visit with Darvis Milhaud, prominent contemporary composer.  
Available from Cincinnati, Public Library.
5. Leonard Bernstein Concert-The Young Performers Part I and II.  
60 min. Bernstein conducts the New York Philharmonic Orchestra. Features young artist and conductors. Visual Aids Exchange #2581.
6. Leonard Bernstein Young Peoples Concert Series: A Tribute to Sibelius, Parts I & II. 60 min.  
Bernstein conducts the New York Philharmonic Orchestra. Visual Aids Exchange #2582.
7. Cincinnati Symphony Spotlight: Max Rudolf. 29½ min.  
Dr. Max Rudolf discusses his book "The grammar of Conducting" and different interpretations as applied to various works, styles, and intentions of a composer. Freedoms and limitations of a conductor, as well as rapport with players also debated. Cincinnati Public Library.
8. Discovering Electronic Music. 23 min. Visual Aids Exchange #877.
9. Marian Anderson. 26 min. V.A. Exchange #1765  
Vignettes of the great singers life, from her early years through her Town Hall recital.

10. Jascha Heifetz-No. 2 25 min. V.A. Exchange #1766  
Home and practice life of a violin virtuoso...how Heifetz lives and prepares for his public appearances.
11. Portrait of Van Cliburn, Parts I & II. 60 min. V.A. Exchange #2548  
A behind-the-scenes look at the pianist.
12. Arthur Rubinstein. 26 min. The famous pianist plays on all-chopin program. Cincinnati Public Library.
13. Cincinnati Symphony Spotlight: Nine Men and Instruments. 42 min. Interview with Sigmund Efron and eight Cincinnati Symphony Orchestra members. Instruments and techniques are shown, played, and discussed. Cincinnati Public Library.
14. Glenn Gould: On the Record. 30 min. Cincinnati Public Library. Gould plays portions of Bach's 'Italian Concerto' at a recording session, and the viewer learns something of his unique personality, both in performance and conversation.
15. Kenneth Spencer, Baritone. 10 min. Cincinnati Public Library. The Negro bass-baritone sings.
16. Man With a Violin-Isaac Stern. 25 min. Cincinnati Public Library  
A fascinating profile of one of the world's greatest violinist in rehearsal, concert, and classroom.
17. Pablo Casals-A Legend Come to Life. 26 min. Cincinnati Public Library. Casal's daily life in Prades, France, climaxed by his performance of Bach's "Suite No. 1 in G Major".
18. Wanda Landowska. 30 min. Cincinnati Public Library. The noted harpsichordist, in an interview, speaks of her life, career, philosophy as an artist, and her efforts to gain public acceptance of the harpsichord.
19. Suzuki Teaches American Children and Their Mothers. 27 min. color. Visual Aids Exchange #754.
20. Music Therapy Internship. 20 min. Available from National Medical Audiovisual ML 467



21. Pianorama 25 min. Available from Wurlitzer. Tour through piano factory. Shows process of how piano is made.

#### FILMSTRIPS

22. Music-A Teaching Career 17 min. with record.  
Available from Menc.
23. Famous Musicians at Work-Sets 1 and 2.  
Visual Aids Exchange #7868-75. Eight filmstrips about the lives of eight musicians.
24. Famous Composers. Visual Aids Exchange #4543-49.
25. Fundamentals of Brass Instruments. Audio Visual Aids #6955  
Construction and operation.
26. Fundamentals of Woodwind Instruments. A.V. Aids #6956.  
Construction and parts.
27. Fundamentals of Percussion Instruments. A.V. Exchange #6953  
Construction of parts.
28. Fundamentals of stringed-Instruments. A.V. Exchange #6954  
Construction of the violin.

#### IV TAPE

Careers in Music. Available from McGraw-Hill.  
Sound Seminars, TM Code 75550-'68.