# REPORTS ON RESEARCH AND DEVELOPMENT IN MUSIC EDUCATION

The recognition that music is a conceptual and academic discipline as well as a field of esthetic experience is increasingly evident in present research in the materials and methods of teaching music. Many of the projects undertaken by individuals, music departments, and professional organizations are sponsored by the U.S. Office of Education under the recently established Arts and Humanities Program, two of the most extensive being the Yale and Juilliard projects. The Music Educators National Conference is sponsoring the Contemporary Music Project for Creativity in Music Education, a massive program of long duration. Individual research projects range widely from teacher training, selection of materials, and psychological testing, to curriculum development, experimentation with audio-visual aids, and programmed learning with electronic machines. The quantity of research in all branches of education has reached such proportions that the U.S. Office of Education is establishing the Educational Research Information Center (ERIC), a storage and retrieval system intended to increase the availability, and hence the utility, of research publications. If music educators everywhere make use of ERIC to familiarize themselves with the best research in music education and even in other disciplines as well, standards will surely rise throughout the country.

The function of the following group of reports is not to give a sampling of all types of educational research and development in music. Rather, it is limited to those projects that deal principally with the materials and techniques of teaching music literature. Although the impact and effectiveness of these projects will obviously vary considerably according to a large number of factors, we hope that these reports will present the reader with some idea of what is being done in an area of music education of immediate concern to musicologists.-GORDANA LAZAREVICH.

## An enlarged repertory for kindergarten through grade six

U.S. Office of Education, Arts and Humanities Program, H-117 (1964-66)

## Roger Sessions, Director

Known as the Juilliard Repertory Project, this undertaking aims to enlarge the existing repertory of musical compositions studied and performed in public schools by anthologizing works from the Middle Ages to the present. In contrast to the heavily arranged and excerpted music that is so conspicuous a part of present music educational materials, the compositions published by the Juilliard Project will be carefully edited to preserve their integrity. The compositions are to be drawn from literature for solo voice, choir, orchestra, and chamber ensemble with a view to their suitability for children from kindergarten to grade six.

The Project represents the combined efforts of musicologists, performers, and music educators. The committee members responsible for the various categories of material are: Gustave Reese, Middle Ages; Noah Greenberg (deceased), Renaissance; Claude Palisca, Baroque; Paul Henry Lang, Classic; Alfred Wallenstein, Romantic; Norman Dello Joio, post-Romantic; Nicholas England, folk music, including Africa, the Middle East, and the Orient. Contemporary composers are being commissioned to write compositions for inclusion in the anthologies.

The procedure of selection is as follows for the Romantic period, for example: fifty pieces were originally selected, most of which are solo songs. These were sent to schools where they were tried out in the classroom, and then returned with reports on their effectiveness and their acceptance by teachers and students. The reports are presently being evaluated, and the final selection and publication will soon be completed. –G.L.

#### Contemporary music project for creativity in music education

Music Educators National Conference, with a grant from the Ford Foundation (1963-69)

#### Grant Beglarian, Director

The present project is an outgrowth of a project for young composers-inresidence which began in 1958 under the auspices of the Ford Foundation Program in Humanities and the Arts. It was expanded in 1963 through a six-year grant from the Ford Foundation, and has since been under the administration of the MENC. Norman Dello Joio is Project Chairman, and John Davis, Assistant Director.

The current project supports three major activities:

1. The placement of young American composers for a minimum of one year's residence in various public schools for the purpose of composing music to be performed by the students.

2. Seminars and workshops for music educators in cooperation with colleges and universities.

3. Pilot projects in public schools to study methods of presenting contemporary music and to bring about a full realization of musical talent through creative experiences, improvisation and composition.

The Project has already placed 70 young composers in public schools and supported sixteen teacher workshops and six pilot projects dealing with newer techniques in music education. It also supported the Seminar on Comprehensive Musicianship held at Northwestern University, April 1965. The aim of the four-day conference was to consider the state of training provided by the schools of music in institutions of higher learning. Among the participants were historians, theorists, educators, composers, and performers. The proceedings of this seminar are published in *Comprehensive Musicianship: the Foundation for College Education in Music* (MENC 1965), which lists the participants, summarizes the recommendations of each of the three groups (composition, analysis, and history), and prints the five important background papers read at the seminar:

James C. Carlsen, The role of programmed instruction in the development of musical skills.

Allen Forte, The role of the study of music theory in the development of musical understanding.

Charles Leonhard, The philosophy of music education—present and future. Learning theory and music teaching.

William J. Mitchell, The role of music history and literature in the development of musical understanding.

Ole Sand, Current trends in curriculum and instruction.

A second publication, *Experiments in Musical Creativity* (MENC 1966) reports on the three pilot projects sponsored by CMP during 1964. These were conducted in cooperation with school systems in Baltimore, Md., San Diego, Cal., and Farmingdale, N.Y.

The Baltimore and San Diego projects provided in-service seminars for music teachers, who in turn instructed pilot classes at selected grade levels. Their major aim was to find suitable approaches to the presentation of contemporary music to children. The teacher seminars met each week to study and analyze contemporary music under the direction of a composerconsultant.

The Farmingdale project was conducted with 31 talented children from grades six to eight. The objectives of this project were to demonstrate experimental techniques in musical composition using 20th-century idioms; and to demonstrate the development of musical resources through rhythmics, singing, improvisation, and composition.

On the recommendation of the Seminar, five institutes for music in contemporary education have been established and are to operate for two academic years, starting in the fall of 1966. Each institute consists of a regional group of universities, colleges, and public school systems, with an administrative center and a regional director:

Northwestern Region	Robert Trotter, School of Music, University of
	Oregon
Western Region	Ellis Kohs, School of Music, University of Southern
C C	California
Midwestern Region	Arrand Parsons, School of Music, Northwestern
0	University
Southern Region	Wiley Housewright, School of Music, Florida State
C	University
Eastern Region	Walter Hendl, Eastman School of Music, Univer-
0	sity of Rochester.

The purpose of the institutes is to strengthen the teaching of music in public schools and colleges. Instructional programs are offered in basic musicianship courses in pre-college, upper-level graduate, and undergraduate music curricula. They are aimed at musicianship training in depth for all music students whether they aspire to be professionals, teachers, or amateurs.

The instructional programs of the institutes cover composition, a survey of theoretical systems, the study of the development of music in its historical context, the practice of aural skills necessary for analysis, performance, and music criticism; they will also include conducting, orchestration, and arranging. The results of the project will be evaluated in annual reports by the project directors. Bulletins on the various activities of the CMP appear regularly in the *Music Educators Journal*. G.L.

#### The theory of expectation applied to musical listening

U.S. Office of Education, Cooperative Research Program, H-106 (1964-66)

#### Richard Colwell, Director

Leonard B. Meyer, in his book *Emotion and Meaning in Music*, sets forth a theory of musical understanding which has since gained wide acceptance. A musical event, says Meyer, has "meaning" only when it has come to arouse in us the expectation of another more or less definite musical event. Emotion or affect results from a particular situation where this expectation is not fulfilled in the ordinary way. In a good piece of music our expectations are constantly being modified through delayed resolution with the consequent high yield of affect; but they are never frustrated to such an extent that we cease to expect altogether, for at this point the piece would become meaningless.

This, in brief, is Meyer's "Theory of Expectation," although this particular phrase seems to be Colwell's. Colwell deals in his study with two main problems: (1) What must the student be taught so that he can appreciate music along the lines of Meyer's theory? and (2) Can this material be successfully taught to fifth-grade children?

In order to determine what were the "meaningful" musical elements to be taught, Colwell did not consider it sufficient to rely on a list abstracted from Meyer alone; this list was compared to, and modified by, reports by experienced listeners on what they heard in certain given pieces. Furthermore, Colwell had the felicitous idea of relying not on the studied responses of these listeners, nor even on their response to a printed score—both of which might have involved more wishful than actual hearing—but rather on their impromptu comments written on a virtually blank score after only a few hearings of a representative (though not overly familiar) work. The results of this "blank score test" were sufficiently consistent with Meyer's theories to provide a broader base for the subsequent classroom experiment.

In the classroom phase Colwell decided to concentrate on music of the Classic period and to use sixth- as well as fifth-grade students. The material constituted a year's course and was divided into 4 nine-week units as follows:

1. *Keyboard performance*. The piano was used as a physical focus for the understanding of basic chords and melodic patterns.

- 2. Factual information. Along with some standard biographical and historical material, verbalizations were presented for stylistic traits, musical forms, and differences between instruments.
- 3. *Listening*. It was attempted to make listening an active rather than the usual passive experience through a concentration on specific elements of the music (e.g. tempo, meter, rhythm, melody). Students followed the music with line scores.
- 4. Singing. The primary purpose was "to use the conventional singing materials to further not only singing ability but also listening skills."

The teachers involved were carefully briefed on the proper methods of instruction in each of these areas. Musical tests of various kinds, some devised by Colwell, were administered both before and after the year of instruction. Control groups were provided.

Results:

- 1. *Keyboard performance.* This unit was beset by problems of finger coordination, and even special eighteen-week groups did not achieve satisfactory results. Conclusion: "The keyboard appears to be an inefficient vehicle in terms of time, for teaching the awarenesses desired by this study."
- 2. Factual information. A lot of facts were conveyed—there were many perfect objective test scores—but "much of this material was not utilized when listening, because the students did not get enough practice doing this to build listening skills."
- 3. *Listening*. There was "complete inability to apply any concrete learnings to the musical situation." E.g. students could not identify simple rising and falling melodic patterns in the music they heard.
- 4. *Singing*. Results "fell far short of success" because, in Colwell's opinion, students were so habituated to singing as recreation that intensive learning experiences in this area were hard to achieve.

These results are almost completely negative. But Colwell interprets them not as a failure of Meyer's criteria in practice, nor even as evidence that such material is actually unteachable at this grade level, but as a general indictment of the early years of music education. "This study found that students retained no concrete knowledges or skills from their first four years of music instruction. Even though the knowledges and skills which the study needed as prerequisites are widely accepted objectives cited by teachers, found in song book series, in curriculum guides and methods texts, they are taught and learned in a fashion which offers no tangible results. No doubt this situation is due to a combination of time limitations, inappropriate or negative materials, and certain traditional or habitual approaches toward teaching music."

The indicated solution involves a general overhauling of music education from the very earliest grades. Teachers should be trained to teach music in terms of specific musical elements, not through anecdote or group rote singing. Realistic but definite goals should be set for each student for each year of music study. –THOMAS FRENKEL.

#### Educational research information center (ERIC)

ERIC is the first nation-wide, comprehensive information system to serve American education by acting as a central storehouse of information about educational organizations, curricula, methods, and materials. Its function is to coordinate field activities and make information available to teachers, administrators, and researchers. It stores documents and relates information promptly and inexpensively.

Whereas Central ERIC operates within the Office of Education as a branch of the Division of Research Training and Dissemination, Bureau of Research, there are twelve decentralized clearinghouses located at different universities throughout the U.S., each one specializing in one area of research. Others will be located at research and development centers and at regional educational laboratories. The center for music is to be located at Ohio State University.

Among those already in operation are the clearinghouses on Junior Colleges, Exceptional Children, Linguistics, Reading, Counseling and Guidance, Science Education, Small Schools and Rural Compensatory Education, The Disadvantaged, Teaching of Foreign Languages, School Personnel, Vocational and Technical Education, and Educational Administration.

Although ERIC registers and makes available research supported by the Office of Education, it also provides services to state and city school systems, colleges, universities, and professional organizations. –G.L.

The development of the content and materials for a music literature course in the senior high school

U.S. Office of Education, Arts and Humanities Program, H-243 (1965-66)

## Neal E. Glenn, Director; Robert Glidden, Assistant Director

The purpose of this project is to broaden the high school music curriculum through an experimental class in music literature, titled "Masterpieces of music literature," established at the University High School in Iowa City. The two-semester, full-credit course is open to students whether they have musical proficiency or not.

The objectives of the project are:

(1) To experiment with the content of a secondary school course in music literature and to observe the students' response. Their achievement is tested and evaluated through the use of Gordon's Musical Achievement Profile and the Listening Achievement Test. [The Gordon Achievement Profile contains four sub-tests: melodic recognition, rhythmic recognition, harmonic recognition, and symbolic understanding. The first three are auditory-visual discrimination tests of 44 items each; the symbolic understanding test has 50 items. The Listening Achievement Test contains 45 multiple-choice items, three each on fifteen musical excerpts. Various musical styles are represented and questions are based on composer, rhythm and meter, melodic constructs, harmony, timbre, and texture.] Students are interviewed by the University High School Guidance Department, where their reaction to specific aspects of the course is recorded. Parents are mailed a questionnaire in an attempt "to determine parental attitude toward the music literature course and its place in the curriculum."

(2) To assemble and develop curricular materials. At the end of the project the teacher is presented with a set of source materials to be used in future teaching of the course.

(3) To examine the potentialities of various audio-visual teaching aids and to evaluate their applicability to the course. The following audio-visual equipment is employed: tape recorders for use in the classroom and listening laboratory, overhead projectors, 35mm slides, 16mm motion films, and record players.

The emphasis is on form and content of the compositions presented. The compositions are by representative composers from 1500 to the present. Tapes prepared for classroom use include thematic excerpts for the study of form, content, and style comparison. To save class time, information in the form of musical themes, cadence points, and diagrams of form is prepared on 10x10 transparencies. Scores are not used because of the expense they would present to the school, and because "that practice would place undue importance on music reading for a course that is offered to performers and non-performers alike." (Abstracted by G.L. from the directors' Progress Report.)

## EDEX: Systems instructions in music listening Warren I. Rasmussen, Director

The first stage of an experimental project utilizing a systems approach to instruction in music listening has recently been completed at San Francisco State College. Dr. Warren Rasmussen, Assistant Professor of Music, prepared a series of 25 taped listening lessons for two fourth-grade classes at the College Laboratory School. The tapes, which emphasized listening for the constituent elements of music, were presented by means of the EDEX, one of the newer developments of instructional technology. The EDEX makes it possible to construct such lessons as self-contained "packages." Visual illustrations, such as overhead projecturals or 2x2 slides, can be programmed for automatic projection at predetermined points during the taped lessons. Students are able to respond to multiple-choice questions posed on the tape or on projecturals by means of individual response units. Scoring of these responses can be done automatically by means of signals programmed on the tapes. Cumulative individual student scores are indicated by individual counters on the EDEX console.

One of the major purposes of the initial project was that of determining the extent to which such "packaged" instruction could be utilized effectively with elementary school students. This was considered important because of possible implications for improving music instruction in the self-contained elementary classroom. Another purpose was that of gathering data which would provide guidelines for further planning of sequential instructional materials.

Results of the project supported the idea that sequential planning for instruction in listening skills can be effective, and that presentation to elementary classes through such media as the EDEX is practicable. (This report was submitted by Professor Rasmussen. For further description, see Robert A. Weisgerber and Warren I. Rasmussen, Eighty cars a teacher. *In* Music Educators Journal, November-December 1965, p. 79.)

### Evaluation and synthesis of research studies relating to music education

U.S. Office of Education, Arts and Humanities Program, E-106 (1963-65)

## Erwin H. Schneider and Henry L. Cady, Investigators

This project deals with the problems created by the lack of an organized body of research information in music education, and meets the need for a classification of a large body of research studies. It also synthesizes the knowledge gained from such research for actual use in the profession and provides a system for the dissemination of this knowledge.

The investigators collected research data from various studies in music education completed between 1930 and 1962, evaluated and synthesized the data, and indicated the implications for current practice and future research. The findings, in the form of indexes, abstracts, and microfilms, are to be put at the disposal of the Educational Research Information Center (ERIC) of the U.S. Office of Education. The procedures employed in gathering this data included compiling a list of titles of published and unpublished reports and documents in music education during this 32-year period, developing proper criteria for their evaluation, synthesizing these findings, and indicating the implications for practice.

From a total of 11,810 titles of research studies in music education, 1818 studies were reviewed and/or abstracted. 182 (31 percent) of the doctoral dissertations and 40 (19 percent) of the masters theses were found to be both relevant and competent research. Only 51 (5 percent) of the published reports and none of the unpublished documents reviewed were considered both relevant and competent.

Some of the conclusions obtained from the analysis of the research literature were that the assumption that much of the competent and relevant research in music education is produced by college and university professors of music education is not warranted, nor is the premise that all or even a majority of theses and dissertations in music education are reports of research studies. Neither titles which indicate research, types of reports, nor the source of publication are indicative of reports of research in music education. Finally, descriptive studies, usually of the status and survey type, constituted the majority of the research studies completed during the years covered in the survey.

Schneider and Cady summarize the knowledge presented in this body of research in a series of statements grouped under various categories, but they note that these conclusions must be taken as tentative and could well be contradicted or modified by research completed since 1962. For example, regarding teacher selection and training, the authors conclude that no generally accepted criteria appear to exist for selecting prospective music teachers, and that existing selection practices do not seem to be valid in that most are concerned with only the musicality of the candidate; the adequacy of the preparation for teaching music in the elementary school curriculum is ranked very low by both men and women classroom teachers. With regard to the music pupils, a definite relationship seems to exist between academic average and grades, aptitude, and achievement in music; no significant relationship appears to exist between participation in high school instrumental music activities and the student's social, racial, or economic background. Children in the lower grades show a positive attitude towards music experience in school, but evidence less and less interest in later years. There appears to be agreement that mere association with the arts is not enough in an educational sense, and that a rational or disciplinary approach to the arts is necessary. On the other hand, there is much disagreement among teachers and administrators concerning the methods for achieving the objectives of music education. If the practices of music teachers are an indication of what kind of preparation should be provided them, then college music theory courses must be modified.

Using these findings, the authors deduce a number of implications for practice. For example: the objectives for music teachers need to be defined; curricula for the prospective teachers of music should provide understanding of human psychology and administrative techniques; the content of theory and harmony courses for music education majors needs to be redesigned in terms of the knowledge and skills needed by music teachers; and teachers should not operate on the assumption that economic, cultural, or social background determines musical ability. Also, greater reliance should be placed on intelligence test scores and academic achievement in selecting students for specialized study in music.

The major implications for future research include the suggestion that, since music education apparently suffers from philosophical confusion, further analysis in this area is a prerequisite for determining the nature of the deficiencies in music education. Psychological, sociological, and anthropological studies on the development of esthetic sensitivity would provide muchneeded data for a clearer understanding of the meaning and value of music to man. Studies are also needed on the types of music literature most meaningful and appropriate to the various ages and backgrounds of students, as are examinations of the effects of sensory deprivation (of the culturally disadvantaged child) on the development of musical perception and on ability. Future investigation should also determine whether or not the knowledge required and acquired by prospective music teachers is at all valid, and which musical skills are needed by them. (Prepared by Margaret Ross from the authors' *Summary* of the project.)

A study of new concepts, procedures, and achievements in music learning as developed in selected music education programs

U.S. Office of Education, Developmental Activities Project, V-008 (1965-66)

### Ronald Thomas, Director

For this project on experimentation in school music education, Ronald Thomas collected descriptions of 92 innovative programs from 132 schools in 36 states. He defines four categories of innovation: Content (structure, sequence, or form of the study), Strategies (techniques, organization, or procedures), Media (instructional aids), and Performance and Literature.

Innovative approaches to content include activities encouraging individual exploration of the musical process, the stressing of group composition of vocal and instrumental pieces, and the acquisition of vocal skills as a logical outgrowth of creative activities.

New and imaginative strategies have been devised as solutions for traditional problems. Dictation is used to develop musical memory so that pitch perception becomes an aural as well as a visual experience. Students conducting their own laboratory classes learn from group evaluation, the teacher serving as a "resource" person. Curriculum planning is revolutionized through flexible scheduling and programming that allow for group or individual instruction, and for ensembles.

The use of educational media has been vastly expanded to include flash cards, television, projectors, and video-tape recorders.

The variety, excellence, and expanding repertory of vocal groups, orchestras, chamber ensembles, etc., were noted everywhere.

While each program differs in philosophy, intent, procedure, scope, and goals, many common factors appear:

(1) Each has clearly defined objectives in music learning. (2) There is concern in the design of the programs for the student's point of view, suggesting a new awareness of the educational process. (3) Traditional assumptions about the relationship of skill and cognitive growth are being questioned. Few of the programs were designed on the premise that cognition stems directly from training in a technical skill. (4) Teachers are taking a new role. They share in class activities rather than dominate them; they provide leadership rather than authoritarian control. (5) The student is being given an opportunity to experiment and thereby to gain experience and to develop value judgments from his own discovery. (6) Teachers in the selected schools lead active musical lives apart from their school work. Some are performers, some conductors, others composers and arrangers. (7) With few exceptions, innovative programs are "one man operations" planned and executed by practicing school music teachers who are educationally concerned and have musical insight. They are not the product of the disciplined professional educator or of research sponsored by foundations or supervised by institutions of higher learning. Instead, they constitute an exciting and significant grass-roots movement which depends for its pressure and intensity on the energy and will of individual teachers in the classroom. (Prepared by Libby Rubin from a Report presented by Ronald Thomas to the Fifth Annual Conference of the National Council of the Arts in Education, Dartmouth College, September 1, 1966.)

## An approach to musical understanding for secondary school students

U.S. Office of Education, Arts and Humanities Program, H-221 (1965-68)

## Kenneth A. Wendrich, Director

One of the major conclusions of the Seminar on Music Education held at Yale University in June 1963 was that the primary aim of music education is to develop musicality. Two years after the Seminar this project was initiated, its objective being the development of musical understanding through listening, performance, and the study of music literature as an academic discipline. The objective is to be attained through the designing and testing of a one-year curriculum consisting of a number of related units. Each unit deals with a particular musical genre and is to be built around a core work representative of that genre. Each unit will provide the following material derived from, or directly pertaining to, the core work:

- (1) A teacher's manual containing material for discussion and suggested procedures;
- (2) A student workbook containing exercises, musical examples, articles of biographical and historical interest, performance materials, and suggested reading and listening lists;
- (3) Reduced scores of large orchestral and choral works with instrumental parts transposed to facilitate reading;
- (4) Tape-recorded illustrations.

Upon completion, the unit is to undergo several testing periods: first, in one of six public schools in Connecticut over a period of two years, followed by the testing of the entire curriculum in 25 schools throughout the nation. The teachers who are to perform the testing in its second stage will attend an eight-week in-service training program in the summer of 1967.

The first unit, Music for the Dance, is centered around *Petrouchka* by Stravinsky and was completed in September 1965. It was revised after having been tested in six public schools during the past year. Among the five units currently in progress are: Solo Piano Music (Schubert's Impromptu in A-flat major, Op. 142, No. 2, and Chopin's Ballade in G minor, Op. 23); Chamber Music (Haydn's Quartet Op. 76, No. 3); Symphony (Beethoven's Third Symphony); Concerto (Bach's Fifth Brandenburg, and Brahms' Violin Concerto); Opera (Verdi's *Otello*).

Assisting the director are three other members of the Yale faculty (Allen Forte, Claude Palisca, and Leon Plantinga) and two musicologists from New York University (Jan LaRue and Victor Yellin). (This report is based on information supplied by Kerala Snyder, Yale University.)