

Measurement and Evaluation

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Good News from Florida: A Music Teacher Certification Test by Music Educators, for Music Educators

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The public's insistence on teacher accountability, the impact of national education reports, and the pressure from state legislatures have demanded in recent years the measurement and evaluation of teacher effectiveness. The need to ensure teacher competence is not the fundamental issue; rather, it is identifying the process for accomplishing this goal.

Any such process must reflect an understanding of the relationship between measurement and evaluation. Measurement of teacher effectiveness must be viewed as the collection of data through a variety of means by which evaluation of teacher competence can be made. Thus, measurement systems must provide information on teacher knowledge and skills, classroom performance, and attitudes toward students, all of which are essential to evaluate teacher effectiveness.

In recent years, efforts to evaluate teacher effectiveness have focused on the use of written examinations and observation systems. Teacher testing has become an accepted educational trend throughout the United States. In 1986, forty-six states had mandates to test prospective candidates for initial teacher certification, with an additional three states in the process of planning testing programs. Teacher testing is also extended to assessing candidates in specific cognate fields. (Anrig, 1986) Erbes reports that thirteen states also require some form of subject area test in music for initial teacher certification,

with some states using the subject area test of the National Teacher Examination. (Erbes, 1987) Florida now requires prospective music teachers to successfully complete a subject area test as well as a test of general professional knowledge. The purpose of this article is to describe the development of Florida's subject area test in music and to address concerns which surfaced during its development.

Selection of Participants

In the development of the test, the first step was to assemble a writing team of music educators from across the State of Florida. The writing team consisted of experienced music educators selected from among Florida's elementary and secondary school music teachers, school district music supervisors, and college music education faculty.

Initial Identification of the Content Outline and Music Competencies

The next step was to develop and validate a content outline and the music competencies for the test. In February 1987, following an extensive search of the professional literature, a four-member core writing team drafted a content outline and an initial list of teaching competencies to be measured by the test. The work of the Florida Music Educators Association, the MENC affiliate, significantly influenced the work of this committee.

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(Palmer, 1986) Following completion of their work, the core writing team met with additional members of the writing team to revise its work.

Validation of Music Competencies and Content Outline

Following the review and revision of the content outline and teacher competencies, a separate validation team met with the writing team to validate their work. In order to assure that the test was free of racial and gender bias, the writing and validation teams were balanced as to ethnicity and gender. To ensure that these competencies reflected classroom teacher behavior, a state-wide review was conducted. The competencies were assembled in a survey form and mailed to music educators throughout Florida. The survey respondents included music classroom teachers in elementary and secondary schools, school district music supervisors, and faculty members at Florida universities and colleges with music teacher education programs.

Once the survey information was tabulated, the ratings were carefully reviewed by the writing and validation teams. Critical issues were reviewed and resolved and subsequent revisions were made. In the summer of 1987, the Florida Department of Education approved the content outline and final list of music competencies for the test.

Content Outline and Test Competencies

The content outline for the music test is illustrated in figure 1. The music portion comprises 40 percent of the test and the other six topics account for 60 percent.

Fifty-four competencies for beginning music teachers served as the basis for the test.

A. Knowledge of Music

1. Identify and discriminate among rhythmic structures: beat, meter, pattern, polyrhythms.
2. Identify and discriminate among melodic structures: contour/patterns,

lar, and jazz music as well as music of non-European cultures.

8. Demonstrate proficiency in reading and conducting instrumental and vocal scores.

B. Knowledge of Curriculum Planning

9. Demonstrate knowledge of historical perspectives and the philosophical, psychological, and sociological principles of music education.

10. Demonstrate knowledge of current trends, issues, and applications of research in music education.

11. Formulate a sequence of concepts, skills, and teaching strategies essential for musical growth leading to students' musical independence.

12. Select and adapt music literature and materials appropriate for students' capabilities and musical maturity through which defined objectives can be realized.

13. Organize appropriate instructional strategies for the exceptional student.

14. Organize instructional priorities in terms of educational objectives.

15. Analyze and prepare musical scores for instruction, rehearsal, and performance.

16. Organize rehearsals and classroom activities to include basic music history, music theory, and sight-reading as integral parts of instruction.

17. Demonstrate knowledge of techniques for concert programming.

18. Diagnose, measure, and evaluate pupil progress.

19. Demonstrate knowledge of factors affecting curriculum development.

20. Evaluate the effectiveness of instruction in music content, teaching topics and techniques, student progress and teacher evaluation.

Topics	Competencies
Music	8
Curriculum Planning	13
Instructional Procedures	5
Management Resources	7
Instruction in Choral Music	6
Instruction in Instrumental Music	8
Instruction in General Music	7

FIGURE 1

tonal system (mode/scales), and melodic sequence.

3. Identify and discriminate among harmonic structures: textures and harmonic analysis.

4. Identify and discriminate among standard music forms: binary, ternary, fugue, rondo, sonata, suite, concerto, symphony, and theme and variations.

5. Identify qualities of music performance: characteristic tone quality of instruments, phrasing, blend, balance, timbre, tempo, dynamics, articulation, and intonation, both linear and vertical.

6. Identify, discriminate among, and describe stylistic features, principal forms, and contributions of representative composers of the traditional stylistic areas of Western music.

7. Identify, discriminate among, and describe stylistic features and principal forms of folk, ethnic, electronic, popu-

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21. Demonstrate an understanding of the relationship between the general music program and the performing organizations.

C. Knowledge of Instructional Procedures

22. Analyze and correct music performance problems

23. Select teaching strategies that promote students' music growth, independence, and creativity

24. Make critical judgments about aesthetic qualities of music performances.

25. Select strategies for motivating students to learn music.

26. Analyze and apply various strategies for effective classroom management as related to music education.

D. Knowledge of Management and Resources

27. Evaluate electronic equipment and instruments, sound systems, visual aids, and related materials for instructional purposes.

28. Specify ways in which community resources may enhance music learning.

29. Demonstrate knowledge of school law and copyright law as they pertain to music education.

30. Identify and select computer hardware and software for use in managing instructional programs, individualizing instruction, and managing musical performances.

31. Demonstrate familiarity with professional organizations and publications and their contributions to music education.

32. Identify procedures for student recruitment and placement in appropriate music courses.

33. Identify techniques for generating community support for school music programs.

E. Knowledge of Instructional Emphasis: Choral

34. Discriminate among examples of vocal diction in English, Latin, and Italian.

35. Analyze and correct problems with vocal production.

36. Classify vocal characteristics and ranges at various levels of maturation.

37. Demonstrate knowledge of vocal development, production, and classification for specified age groups.

38. Demonstrate knowledge of representative repertory for solo voices and choral and vocal groups at various levels of maturation and achievement.

39. Demonstrate knowledge of the structure of a balanced choral curriculum.

F. Knowledge of Instructional Emphasis

40. Demonstrate knowledge of fingerings, slide positions, and basic performance techniques for all wind, string, brass, and percussion instruments.

41. Apply knowledge of wind instrument transposition.

42. Analyze and correct problems of instrumental tone production.

43. Choose bowings appropriate for various styles of music.

44. Analyze and correct problems encountered by wind and percussion students in orchestral performance.

45. Demonstrate knowledge of representative repertory for solo instruments, band, orchestra, wind, string, and percussion chamber groups at various levels of maturation and achievement.

46. Demonstrate knowledge of the care and maintenance of standard instruments and accessories.

47. Demonstrate knowledge of the structure of a balanced instrumental curriculum.

G. Knowledge of Instructional Emphasis: General Music

48. Demonstrate knowledge of materials and repertory for the general student.

49. Demonstrate familiarity with various approaches to class keyboard instruction.

50. Apply instructional guitar techniques.

51. Demonstrate knowledge about the care and maintenance of the classroom instruments.

52. Demonstrate familiarity with techniques to utilize creative movement, choreography, and dance in music instruction.

53. Demonstrate knowledge of techniques for teaching listening skills.

54. Apply techniques for teaching students how to play classroom instruments including the autoharp and chromatic bells.

Development and Validation of Test Item Specifications

In the fall of 1987, test item specifications were developed by the writing team. The specifications were reviewed, refined and approved by the validation team. The writing and validation teams determined that 40 percent of the test items would measure the teacher's knowledge of music and 60 percent of the items would measure the teacher's knowledge of music teaching pedagogy.

Writing the Test Items

With the music competencies, content outline, and test specifications validated, the writing team developed a bank of 800 multiple-choice test items from which two equivalent forms of a 100-item test were developed. Training in item writing for all writers was completed as an integral component of the test development. Test items were written to assess knowledge of music, aural/visual abilities, and knowledge of music teaching pedagogy consistent with the content outline and teaching competencies. Items were written at the knowledge, application, and analysis levels.

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Field Testing

The test was administered to undergraduate students at the nine state universities. From the pilot test, developers accumulated data on the difficulty of each item. The field test also enabled the developers to revise or eliminate poor test items.

Setting the Passing Score

Following the first administration of the test in the spring of 1989, music teachers, music supervisors, and music teacher educators met to establish a passing score. The test performance data for those who took the test were reviewed. Upon review of the data, participating music educators recommended a passing score to the Florida Department of Education.

Concerns

During the development and refinement of Florida's music teacher competency test, several testing issues were identified which deserve discussion.

Paper and Pencil Tests

The use of a paper and pencil test to measure a prospective teacher's knowledge of music and music teaching pedagogy does not ensure that all that is required to be a successful teacher has been completely evaluated. Gregory Anrig, the president of Educational Testing Service, has identified some important limitations of paper and pencil tests. He notes that such tests cannot measure dedication, motivation, perseverance, caring, sensitivity, or integrity. He cautions us to recognize that tests measure a sampling of the knowledge required for teaching. (Anrig, 1986)

Multiple Choice Test Item Format

The multiple-choice test item format is used exclusively for the Florida

test. Critics note that writing an analytical essay is important to measure an examinee's thinking skills. (Buckley, 1990)

Demonstrating Teaching Skills in the Classroom

It is acknowledged that teacher-competency testing alone will not ensure effective teaching. Subject-area testing is only a part of the overall program for Florida beginning teachers seeking to gain initial teacher certification. An integral component of the program is the Professional Orientation Program (POP). Since 1983, first-year music teachers have been required to complete a year-long Professional Orientation Program during their first year of teaching. The program requires teachers to demonstrate the generic teaching competencies in a school classroom as they serve as full-paid, first-year teachers. Each new teacher is supported and supervised by a Professional Development Team consisting of a principal, a peer teacher experienced in music teaching, and another professional educator, often a teacher of education. However, the observation instruments used in the Professional Orientation Program do not deal with some of the unique behaviors of the music teacher, such as the development of performance skills.

Authority to Certify Teachers

Some teacher educators do not believe that a competency test should be required for initial certification. After all, they argue, colleges and universities are certifying basic teacher competency when the students graduate from state-approved teacher education programs. Other teacher educators acknowledge that teacher testing has allowed for communication among educators and a sharing of what is important. Also, they acknowledge that the test helps articu-

late to the public what is being taught in teacher education programs.

Other Issues

Several other issues have been addressed by educators involved in the teacher testing movement (Barber, 1985; Madous and Pullin, 1987): (1) continued accreditation of teacher education programs becomes dependent on the test performance of the prospective teachers as they enroll; (2) that testing may lead to unfair testing of experienced teachers (Anrig, 1986); and (3) that there will be an adverse effect of the testing movement on the access of minorities to the teaching profession. (Smith, 1984; George, 1985; Smith et. al., 1988)

Conclusion

The concerns that were identified during the development of the test need to be addressed. However, the collaboration among music educators has resulted in important outcomes. The process by which a test is developed influences the degree to which it is accepted by the educational community. The involvement of public school elementary and secondary music teachers, school district music supervisors, and college music education faculty in the development of the Florida music teacher certification test makes it a test by music educators for music educators. The process is also important because it brought music educators together to dialogue about what effective music teachers need to know and be able to do. This process is just as important as the development of the test itself. Florida music educators have taken a significant step in ensuring quality music experiences for their students, provided by quality teachers.

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References

- Anrig, G.R. (1986, February). "Teacher Education and Teacher Testing: A Rush to Mandate." Phi Delta Kappan, 67 (6), pp. 447-551.
- Barber, L.W. (1985). Teacher Competence. Phi Delta Kappa Center on Evaluation, Development and Research, pp. 1-284.
- Boyle, J. D. and R. E. Radocy (1987). Measurement and Evaluation of Musical Experiences. Schirmer Books, pp. 1-332.
- Buckley, William F. "Not Many Big Changes Made in the Scholastic Test." Florida Times - Union, November 12, 1990.
- Bracey, G.W. (1986, February). "Pandora and Pollyanna: Some Comments of 'The Rush to Mandate'." Phi Delta Kappan, 67 (6), pp. 52-455.
- Cohen, M (1988, April). "Designing State Assessment Systems." Phi Delta Kappan, 69, (8), pp. 583-588.
- Coker, H. (1955, March-April). Consortium for the Improvement of Teacher Evaluation." Journal of Teacher Education, 36 (2), pp. 12-17.
- Colwell, Richard. (1970). The Evaluation of Music Teaching and Learning. Prentice Hall, Inc., pp. 1-181.
- Editor, (1986) Editorial Manual for Item and Test Development. Institute for Instructional Research and Practice, Content Area Teacher Tests, University of South Florida, 66 pages.
- Erbes, R.L. (1984, November). "Entrance into the Profession: The Revolution in Teacher Certification." Music Educators Journal, pp. 35-39.
- Florida Department of Education (1989). Study Guide for the Florida Teacher Certification Examination: Music K-12. State of Florida, Department of Education, pp. 1-32.
- Flippo, R.F. (1986, March-April). "Teacher Certification Testing: Perspectives and Issues." Journal of Teacher Education, 37 (2), pp. 2-8.
- George, P. (1985, November-December). "Teacher Testing and the Historically Black College." Journal of Teacher Education, 36 (6), pp. 54-57.
- Hoffer, C.R. (1982). Teaching Music in the Secondary Schools. Wadsworth Publishing Company, pp. 1-432.
- Heger, H. and Salinger, T. (1985, November-December). "Responding to Teacher Candidate Testing Through Program Development." Journal of Teacher Education, 36 (6), pp. 58-59.
- Holt, D.M. and Thompson, K.T. (1980). Developing Competencies to Teach Music in the Elementary Classroom. Charles E. Merrill Publishing Company, pp. 1-348.
- Labuta, J. A. (1974) Guide to Accountability in Music Instruction. Parker Publishing Company, Inc., pp. 1-216.
- Lehman, P. R. (1985, May). "The Lesson from McDonald's." Music Educators Journal, p. 80.
- Lehman, P. R. (1986, April). "The Right-Answer Imperative." Music Educators Journal, pp. 79-80.
- Madaus, G.E. and Pullin, D. (1987, September). "Teacher Certification Tests: Do They Really Measure What We Need to Know?" Phi Delta Kappan, 67 (6), pp. 31-38.
- Palmer, M. (1986, November). "Characteristics of Beginning Music Teachers." Florida Music Director, pp. 17-20.
- Popham, W.J. (1987, September). "Re-Certification Tests for Teachers: A Defensible Safeguard for Society." Phi Delta Kappan, 69 (1) pp. 45-52.
- Sandefur, J.T. (1986, August). State Assessment Trends, AACTE Briefs, 7 (6), pp. 12-14.
- Shulman, L. (1987, September). "Assessment for Teaching: An Initiative for the Profession." Phi Delta Kappan, 69 (1), pp. 38-44.
- Smith, G. P. (1984, March-April). "The Critical Issue of Excellence and Equity in Competency Testing." Journal of Teacher Education, 35 (2), pp. 6-9.
- Smith, G. P., M. C. Miller, and J. Joy (1988, July, August). A Study of the Impact of Performance-Based Testing on the Supply of Minority Teachers, Journal of Teacher Education, 39 (40), pp.45-53.
- Woolever, R.M. (1985, March-April). "State-Mandated Performance Evaluation of Beginning Teachers: Implications for Teacher Educators." Journal of Teacher Education, 36 (2), pp. 22-25.

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A report from correspondent

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on the Symposium on Measurement and Evaluation in Music Education

The Symposium on Measurement and Evaluation in Music Education was held June 20 - 22, 1991, on the campus of Indiana University, Bloomington. Featured speakers were Lyle Davidson, David Boyle, Edwin Gordon, Carlotta Parr, David Peters, and Linda Tyler. Linda Tyler's report on music certification assessment as viewed by the Educational Testing Services (ETS) is of interest to SRIG members.

The two tests that were the focus of Tyler's remarks were the National Teacher Exam (NTE) and the California Performance Assessment (CPA). According to Tyler, seventeen states currently require teacher candidates to take and achieve a minimum score on the NTE as part of their eligibility for certification. The states requiring the Music Education Specialty test and their self-selected minimum scores are as follows:

Arizona	510
California	620
Connecticut	580
Hawaii	520
Indiana	510
Kentucky	510
Louisiana	530
Maryland	530
Mississippi	530
Missouri	510
New Jersey	550
North Carolina	520
Oregon	610

Pennsylvania	560
South Carolina	480
Tennessee	480
Virginia	510

Minimum cut-score used: 480
Maximum cut-score used: 620
Mean cut-score: 534

Mean achieved score: 603
Standard Deviation: 81
N=5066

Presently the NTE is being radically revised. The new NTE will be called PRAXIS and, when completed, will contain three different tests. These PRAXIS tests will be:

I. The PRAXIS Preprofessional Skills Assessments--"Enabling Skills" (Reading, Writing, Mathematics). Designed to be taken at the midpoint of undergraduate studies. The test will be administered on computer

II. The PRAXIS Subject Assessments--Designed to test subject-matter content knowledge. There will be a core module with optional specialized area and pedagogy modules.

III. The PRAXIS Classroom Performance Assessments--Assessment tools will include classroom observation, interviews, and teacher portfolios.

The proposed modules for the PRAXIS subject assessment in music education are a 2-hour required Core Module and up to four 1-hour optional modules. In addition a Performance Assessment Module using taped performances may be developed.

1. Core Module (2 hours)

Multiple-choice and constructed-response questions

Topics: Basic musicianship, music theory, music history/literature, basic performance media (instrumental and vocal)

2. Choral Module (1 hour)

Multiple-choice and constructed-response questions

Topics: Choral music, vocal techniques, choral conducting,

3. Instrumental Module--Band and Orchestra (1 hour)

Multiple-choice and constructed-response questions

Topics: Band music, orchestral music, string methods, wind methods, percussion methods, conducting

4. General Music Module (1 hour)

Multiple-choice and constructed-response questions

Topics: General music, grades K-8

5. Music Pedagogy Module (1 hour)

Multiple-choice and constructed-response questions

Topics: Content-specific pedagogy, curriculum, and instruction

6. Performance Assessment Module

Taped performance: Requirements not yet developed

The PRAXIS Preprofessional Skills Assessments are scheduled to be completed by 1992. Since the number of students taking the Music Education subject test is small in comparison to other subjects and ETS resources have not yet been committed to fully develop

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the test, Tyler indicated that a completion date of 1994 or 1995 would be more realistic.

Both the Preprofessional and Subject Assessments will have a new (to ETS) approach to questioning: constructed-response items. These items require the student to develop or construct an answer based on the materials found in the question or statement. For example, since the Preprofessional Assessment will be administered on computer, the student might be asked to highlight the sentence in a paragraph that contains the main idea, or the sentence(s) that reflect a particular kind of argument or logic. The student may be asked to select all answers thought to be correct versus selecting the standard "best" answer. In the Music Education Subject Assessment, students will be required to write some of their answers by notating music, not selecting one of five notated examples. (The newly revised GRE Music test already uses student-generated notation responses.)

An evaluation of music performance is also being considered by ETS. Formal procedures for such an assessment have not yet been established.

Tyler indicated that the Classroom Performance Assessment is not sched-

uled for development for several years. Once the Preprofessional and Subject Assessment are in use, the correct NTE Subject-Matter test will be phased out.

Tyler also discussed the development of the California Performance Assessment. This test, mandated by the California legislature, is a measure of a student's competence to teach and is to be used in addition to the NTE. Students graduating from schools with education programs not certified by California will be the only students required to take the test.

ETS is careful to call PRAXIS an assessment, not a test, reflecting the increased popularity of the term "assessment" in education today. When the seventeen states chose the NTE as their "exit" exam, they were requested by ETS to form a committee of secondary and university music teachers to examine the test and make a judgment concerning the validity of the test for their state. Along with these comments, suggestions from teachers are welcomed by Linda Tyler or the MENC SRIG on Measurement and Evaluation.

Special Session Planned for New Orleans Inservice

Measurement and Evaluation SRIG members were active in writing for the forthcoming Handbook of Research in Music Teaching and Learning. One entire section of the Handbook is devoted to evaluation topics. David Boyle, Professor of Music Education at the University of Miami coordinated the writing of this section. He and his fellow writers will provide an overview of the contents of their section to MENC members attending the New Orleans meeting. Joining Professor Boyle will be Donald Taebel, Georgia State University, who wrote on teacher evaluation, Rob Cutietta, Kent State University, author of the chapter on measurement in the affective domain, Peter Webster, Northwestern University, who contributed the chapter on evaluation of creative activities and Paul Lehman, University of Michigan, who authored the chapter on program evaluation.

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