

OFFICE OF QUALITY PROFESSIONALS AND SPECIAL SCHOOLS
Summary of State Board of Education Agenda Items
April 19-20, 2012

OFFICE OF EDUCATOR LICENSURE

24. Approval to begin the Administrative Procedures Act process: To Approve Regenerated Praxis Test for Music Education and Recommended Passing Score as Recommended by the Commission on Teacher and Administrator Education, Certification and Licensure and Development

Background Information:

Educational Testing Service has concluded a national standard setting review of the Praxis II test for Music Education. They actually have developed two tests, the 0113, which is the approved test for Mississippi, and the 0114, a new test. Each state has the option of which one to approve. The Certification Commission discussed the recommendation on January 5, 2012 to replace the current Praxis II for Music in MS, which is the 0113 with the newly regenerated 0113 or replace it with the 0114. The Commission voted on re-adopting the regenerated 0113, but with the new score of 161, which is the recommended score of the standard setting panel. The Music Praxis is one of the tests that is on our list of tests to be considered for the score to be increased. So, with the newly regenerated 0113, we now have the option of going ahead and adopting the nationally recommended score.

On March 2, 2012, The Certification Commission approved the recommendation to accept the regenerated Praxis II 0113 with a national score of 161.

In Mississippi, the Praxis II test for Music Education is required for all Music Education majors to become certified, as well as all alternate route candidates in Music.

All Praxis scores submitted to the State Board of Education for approval reflect passing scores recommended by the national standards setting panel.

Recommendation: Approval

Back-up material attached



Listening. Learning. Leading.

Multi-State Standard Setting Technical Report

PRAXIS™ MUSIC: CONTENT KNOWLEDGE (0113)

Educational and Credentialing Research

Educational Testing Service

Princeton, New Jersey

November 2011

Executive Summary

To support the decision-making process for state departments of education with regards to establishing a passing score, or cut score, for the Praxis™ Music: Content Knowledge (0113) test, research staff from Educational Testing Service (ETS) designed and conducted a two-panel, multi-state standard-setting study. The study also collected content-related validity evidence to confirm the importance of the content specifications for entry-level music teachers.

Participating States

Panelists from seventeen states and the District of Columbia were recommended by state departments of education to participate on expert panels. The state departments of education recommended panelists with (a) education experience, either as music teachers or college faculty who prepare music teachers and (b) familiarity with the knowledge and skills required of beginning music teachers.

Recommended Cut Scores

The recommended passing score for each panel, as well as the average passing score across the two panels, are provided to help state departments of education determine an appropriate operational passing score. For the Praxis Music: Content Knowledge test, the recommended passing score¹ is 70 (on the raw score metric), which represents 64% of the total available 110 raw score points. The scaled score associated with a raw score of 70 is 161 (on a 100 - 200 scale).

Summary of Content Specification Judgments

Panelists judged the extent to which the knowledge and skills reflected by the content specifications were important for entry-level music teachers. The favorable judgments of the panelists provided evidence that the content covered by the test is important for beginning practice.

¹ Results from the two panels participating in the study were averaged to produce the recommended passing score.

To support the decision-making process for state departments of education with regards to establishing a passing score, or cut score, for the Praxis™ Music: Content Knowledge (0113) test, research staff from Educational Testing Service (ETS) designed and conducted a two-panel, multi-state standard-setting study². The study also collected content-related validity evidence to confirm the importance of the content specifications for entry-level music teachers. Panelists were recommended by state departments of education³ to participate on the expert panels. The state departments of education recommended panelists with (a) education experience, either as music teachers or college faculty who prepare music teachers and (b) familiarity with the knowledge and skills required of beginning music teachers.

The two, non-overlapping panels (a) allow each participating state to be represented and (b) provide a replication of the judgment process to strengthen the technical quality of the recommended passing score. Seventeen states and the District of Columbia (see Table 1) were represented by 39 panelists across the panels. (See Appendix A for the names and affiliations of the panelists.)

Table 1

Participating States and Number of Panelists(Across Panels)

Arkansas (3 panelists)	North Carolina (3 panelist)
Connecticut (1 panelist)	New Hampshire (3 panelists)
District of Columbia (3 panelists)	Nevada (2 panelists)
Hawaii (2 panelists)	Ohio (3 panelists)
Idaho (2 panelists)	Pennsylvania (1 panelist)
Kentucky (3 panelists)	Rhode Island (1 panelist)
Maine (1 panelist)	South Carolina (2 panelists)
Maryland (3 panelists)	Tennessee (2 panelists)
Missouri (2 panelist)	Vermont (2 panelists)

² The multi-state standard-setting study collected judgments for two related Praxis tests — Praxis Music: Content Knowledge (0113) and Praxis Music: Content and Instruction (0114). Separate technical reports were prepared for each test.

³ State departments of education that currently use one or more Praxis tests were invited to participate in the multi-state standard-setting study.

The panels were convened in October/November 2011 in Princeton, New Jersey. For both panels, the same processes and methods were used to train panelists, gather panelists' judgments and to calculate the recommended passing scores.

The following technical report is divided into three sections. The first section describes the content and format of the test. The second section describes the standard-setting processes and methods. The third section presents the results of the standard-setting study.

The passing-score recommendation for the Praxis Music: Content Knowledge test is provided to each of the represented state departments of education. In each state, the department of education, the state board of education, or a designated educator licensure board is responsible for establishing the final passing score in accordance with applicable state regulations. The study provides a recommended passing score, which represent the combined judgments of two groups of experienced educators. The full range of a state department of education's needs and expectations cannot likely be represented during the standard-setting study. Each state, therefore, may want to consider the recommended passing score (as well as the separate panels' recommended passing scores) and other sources of information when setting the final Praxis Music: Content Knowledge passing score (see Geisinger & McCormick, 2010). A state may accept the recommended passing score, adjust the score upward to reflect more stringent expectations, or adjust the score downward to reflect more lenient expectations. There is no *correct* decision; the appropriateness of any adjustment may only be evaluated in terms of its meeting the state's needs.

Two sources of information to consider when setting the passing score are the standard errors of measurement (SEM) and the standard errors of judgment (SEJ). The former addresses the reliability of Praxis Music: Content Knowledge test score and the latter, the reliability of panelists' passing-score recommendations. The SEM allows a state to recognize that a Praxis Music: Content Knowledge test score—any test score on any test—is less than perfectly reliable. A test score only approximates what a candidate *truly* knows or *truly* can do on the test. The SEM, therefore, addresses the question: How close of an approximation is the test score to the *true* score? The SEJ allow a state to consider the likelihood that the recommended passing score from the current panels would be similar to the passing score recommended by other panels of experts similar in composition and experience. The smaller the SEJ the more likely that another panel would recommend a passing score for a test consistent with the

recommended passing score. The larger the SEJ, the less likely the recommended passing score would be reproduced by another panel.

In addition to measurement error metrics (e.g., SEM, SEJ), each state should consider the likelihood of classification error. That is, when adjusting a passing score, policymakers should consider whether it is more important to minimize a false positive decision or to minimize a false negative decision. A false positive decision occurs when a candidate's test score suggests he should receive a license/certificate, but his actual level of knowledge/skills indicates otherwise (i.e., the candidate does not possess the required knowledge/skills). A false negative occurs when a candidate's test score suggests that she should not receive a license/certificate, but she actually does possess the required knowledge/skills. The state needs to consider which decision error may be more important to minimize.

Overview of the Praxis Music: Content Knowledge Test

The Praxis Music: Content Knowledge *Test at a Glance* document (ETS, 2010) describes the purpose and structure of the test. In brief, the test measures whether entry-level music teachers have the knowledge and skills believed necessary for competent professional practice. A National Advisory Committee of expert practitioners and preparation faculty defined the content of the test, and a national survey of the field confirmed the content.

The two hour assessment contains 120 multiple-choice questions⁴ covering four content areas: *Music History and Literature* (approximately 17 questions); *Theory and Composition* (approximately 19 questions); *Performance* (approximately 28 questions); and *Pedagogy, Professional Issues, and Technology* (approximately 56 questions)⁵. The reporting scale for the Praxis Music: Content Knowledge test ranges from 100 to 200 scaled-score points.

⁴ Ten of the 120 multiple-choice questions are pretest questions and do not contribute to a candidate's score.

⁵ The number of questions for each content area may vary slightly from form to form of the test.

Processes and Methods

For both expert panels, the same processes and methods were used to train panelists, gather panelists' judgments and to calculate the recommended passing scores. The following section describes the standard-setting processes and methods. (The agenda for the panel meetings are presented in Appendix B.)

The design of the standard-setting study included two non-overlapping expert panels. The training provided to panelists as well as the study materials were consistent across panels with the exception of defining the Just Qualified Candidate (JQC). To assure that both panels were using the same frame of reference when making question-level standard-setting judgments, the JQC definition developed through a consensus process by the first panel was used as the definition for the second panel. The second panel did complete a thorough review of the definition to allow panelists to internalize the definition. The processes for developing the definition (with Panel 1) and reviewing/internalizing the definition (with Panel 2) are described later, and the JQC definition is presented in Appendix C.

The panelists were sent an e-mail explaining the purpose of the standard-setting study and requesting that they review the content specifications for the test (included in the *Test at a Glance* document, which was attached to the e-mail). The purpose of the review was to familiarize the panelists with the general structure and content of the test.

The standard-setting study began with a welcome and introduction by the meeting facilitator. The facilitator explained how the test was developed, provided an overview of standard setting, and presented the agenda for the study.

Reviewing the Test

The first activity was for the panelists to "take the test." (Each panelist had signed a nondisclosure form.) The panelists were given approximately an hour and a half to respond to the multiple-choice questions. (Panelists were instructed not to refer to the answer key while taking the test.) The purpose of "taking the test" was for the panelists to become familiar with the test format, content, and difficulty. After "taking the test," the panelists checked their responses against the answer key.

The panelists then engaged in a discussion of the major content areas being addressed by the test; they were also asked to remark on any content areas that they thought would be particularly challenging

for entering music teachers, and areas that addressed content that would be particularly important for entering music teachers.

Defining the Just Qualified Candidate

Following the review of the test, panelists internalized the definition of the Just Qualified Candidate (JQC). The JQC is the test taker who has the minimum level of knowledge believed necessary to be a qualified music teacher. The JQC definition is the operational definition of the passing score. The goal of the standard-setting process is to identify the test score that aligns with this definition of the JQC.

Panel 1 developed the JQC definition. The panelists were split into smaller groups, and each group was asked to write down their definition of a JQC. Each group referred to the Praxis Music: Content Knowledge *Test at a Glance* to guide their definition. Each group posted its definition on chart paper, and a full-panel discussion occurred to reach a consensus on a definition (see Appendix C for the definition).

For Panel 2, the panelists began with the definition of the JQC developed by Panel 1. Given that the multi-state standard-setting study was designed to replicate processes and procedures across the two panels, it was important that both panels use consistent JQC definitions to frame their judgments. The panelists reviewed the JQC definition, and any ambiguities were discussed and clarified. The panelists then were split into smaller groups, and each group developed performance indicators or “can do” statements based on the definition. The purpose of the indicators was to provide clear examples of what might be observed to indicate that the teacher had the defined knowledge and skills. The performance indicators were shared and discussed.

Panelists’ Judgments

The standard-setting process for the Praxis Music: Content Knowledge test was a probability-based Angoff method (Brandon, 2004; Hambleton & Pitoniak, 2006). In this approach, for each question, a panelist decides on the likelihood (probability or chance) that a JQC would answer it correctly. Panelists made their judgments using the following rating scale: 0, .05, .10, .20, .30, .40, .50, .60, .70, .80, .90, .95, 1. The lower the value, the less likely it is that a JQC would answer the question

correctly, because the question is difficult for the JQC. The higher the value, the more likely it is that a JQC would answer the question correctly.

For both panels, the panelists were asked to approach the judgment process in two stages. First, they reviewed the definition of the JQC and the question and decided if, overall, the question was difficult for the JQC, easy for the JQC, or moderately difficult/easy. The facilitator encouraged the panelists to consider the following rule of thumb to guide their decision:

- difficult questions for a JQC were in the 0 to .30 range;
- moderately difficult/easy questions for a JQC were in the .40 to .60 range; and
- easy questions for a JQC were in the .70 to 1 range.

The second decision was for panelists to decide how they wanted to refine their judgment within the range. For example, if a panelist thought that a question was easy for a JQC, the initial decision located the question in the .70 to 1 range. The second decision was for the panelist to decide if the likelihood of answering it correctly was .70, .80, .90, .95, or 1.0. The two-stage decision-process was implemented to reduce the cognitive load placed on the panelists. The panelists practiced making their standard-setting judgments on four questions on the test.

The panelists engaged in two rounds of judgments. Following Round 1, question-level feedback was provided to the panel. The panelists' judgments were displayed for each question. The panelists' judgments were summarized by the three general difficulty levels (0 to .30, .40 to .60, and .70 to 1), and the panel's average question judgment was provided. Questions were highlighted to show when panelists converged in their judgments (at least two-thirds of the panelists located a question in the same difficulty range) or diverged in their judgments. Panelists were asked to share their rationales for the judgments they made. Following this discussion, panelists were provided an opportunity to change their question-level standard-setting judgments (Round 2).

Other than the definition of the JQC, results from Panel 1 were not shared with the second panel. The question-level judgments and resulting discussions for Panel 2 were independent of judgments and discussions that occurred with Panel 1.

Judgment of Content Specifications

In addition to the two-round standard-setting process, each panel judged the importance of the knowledge and skills stated or implied in the content specifications for the job of an entry-level music teacher. These judgments addressed the perceived content-based validity of the test. Judgments were made using a four-point scale — *Very Important*, *Important*, *Slightly Important*, and *Not Important*. Each panelist independently judged the knowledge categories and knowledge statements.

Results

The recommended passing score presented is the average of the results from the two panels. Results from the separate panels also are presented. More detailed results are presented in Appendix D.

Expert Panels

The two panels that comprised the study included 39 educators representing seventeen states and the District of Columbia. (See Appendix A for a listing of panelists.) In brief, 28 panelists were teachers and 11 were college faculty. All of the panelists who were college faculty were currently involved in the training or preparation of music teachers. Thirty-one panelists were White, five were Black or African American, one was Hispanic or Latino, one was Asian or Asian American, and one was Multiracial. Twenty-one panelists were female. More than half of the panelists (22 of the 39 panelists) had 11 or fewer years of experience as a teacher.

The number of experts by panel and their demographic information is presented in Appendix D (see Table D1).

Table 2***Panel Member Demographics (Across Panels)***

	<i>N</i>	<i>%</i>
Current Position		
Teacher	28	72%
College Faculty	11	28%
Race		
White	31	79%
Black or African American	5	13%
Hispanic or Latino	1	3%
Asian or Asian American	1	3%
Multiracial	1	3%
Gender		
Female	21	54%
Male	18	46%
Which of the following best describes your music education specialty?		
General Music Education	14	36%
Instructional Music Education	17	44%
Vocal Music Education	6	15%
Other	2	5%
Are you currently certified as a music teacher in your state?		
Yes	32	82%
No	7	18%
At what K-12 grade level are you currently a music teacher?		
Elementary	8	21%
Middle School	7	18%
Elementary and Middle School	3	8%
High School	5	13%
Middle and High School	3	8%
All Grades	1	3%
Not currently a music teacher at the K-12 level	12	31%

Table 2 (continued)***Panel Member Demographics (Across Panels)***

	<i>N</i>	<i>%</i>
How many years of experience do you have teaching?		
3 years or less	5	13%
4 - 7 years	6	15%
8 - 11 years	11	28%
12 - 15 years	6	15%
16 years or more	11	28%
Which best describes the location of your K-12 school?		
Urban	11	28%
Suburban	8	21%
Rural	9	23%
Not currently working at the K-12 level	11	28%
If you are college faculty, are you currently involved in the training/preparation of music teachers?		
Yes	11	28%
No	0	0%
Not college faculty	28	72%

Initial Evaluation Forms

The panelists completed an initial evaluation after receiving training on how to make standard-setting judgments. The primary information collected from this form was the panelists indicating if they had received adequate training to make their standard-setting judgments and were ready to proceed. Across both panels, all panelists indicated that they were prepared to make their judgments.

Summary of Standard-setting Judgments

A summary of standard-setting judgments (Round 2) are presented in Table 3. The numbers in the table summarize the recommended passing scores—the number of raw points needed to “pass” the test. The panel’s average recommended passing score and highest and lowest passing scores are reported, as are the standard deviations (SD) of panelists’ passing scores and the standard errors of judgment (SEJ). Panelist-level results, for Rounds 1 and 2, are presented in Appendix D (see Tables D2 and D3).

The SEJ is one way of estimating the reliability of the judgments⁶. It indicates how likely it would be for other panels of educators similar in makeup, experience, and standard-setting training to the current panel to recommend the same passing score on the same form of the test. A comparable panel’s passing score would be within one SEJ of the current average passing score 68 percent of the time.

The panels’ passing score recommendations for the Praxis Music: Content Knowledge test are 71.96 for Panel 1 and 67.78 for Panel 2 (out of a possible 110 raw-score points). The values were rounded to the next highest whole number to determine the functional recommended cut scores — 72 for Panel 1 and 68 for Panel 2. The scaled scores associated with 72 and 68 raw points are 164 and 159, respectively.

Table 3

Summary of Round 2 Standard-setting Judgments

	Panel 1	Panel 2
Average	71.96	67.78
Median	72.00	68.90
Lowest	49.35	56.95
Highest	84.00	77.60
SD	7.82	5.62
SEJ	1.75	1.29

⁶ An SEJ assumes that panelists are randomly selected and that standard-setting judgments are independent. It is seldom the case that panelists are randomly sampled, and only the first round of judgments may be considered independent. The SEJ, therefore, likely underestimates the uncertainty of passing scores (Tannenbaum & Katz, in press).

In addition to the recommended passing score for each panel, the average passing score across the two panels is provided to help state departments of education determine an appropriate passing score for the Praxis Music: Content Knowledge test. The panels' average passing score recommendation for the Praxis Music: Content Knowledge test is 69.87 (out of a possible 110 raw-score points). The value was rounded to 70 (next highest raw score) to determine the functional recommended passing score. The scaled score associated with 70 raw points is 161.

Table 4 presents the estimated standard error of measurement (SEM) around the recommended passing score⁷. A standard error represents the uncertainty associated with a test score. The scaled score associated with one and two SEMs above and below the recommended passing score are provided.

Table 4
Passing Scores Within 1 and 2 SEMs of the Recommended Passing Score⁸

Recommended passing score (SEM)		Scale score equivalent
	70 (4.38)	161
- 2 SEMs	62	152
-1 SEM	66	157
+1 SEM	75	167
+ 2 SEMs	79	172

Summary of Content-specification Judgments

Panelists judged the extent to which the knowledge reflected by the content specifications was important for entry-level music teachers. Panelists rated the knowledge/skill statements on a four-point scale ranging from *Very Important* to *Not Important*. The panelists' ratings are summarized in Appendix D (see Table D4). All but one of the 44 knowledge/skill statements were judged to be *Very Important* or *Important* by at least three-quarters of the 39 panelists.

⁷ The raw score SEM value included in this report are updated as data become available. The SEM values listed in each edition of *Understanding Your Praxis Scores* (http://www.ets.org/Media/Tests/PRAXIS/pdf/uyys_web.pdf) are scaled score SEM values based on candidate scores on one or more test forms.

⁸ The unrounded SEM value is added or subtracted from the unrounded passing score recommendation (see Table 2). The resulting values are rounded up to the next highest whole number and the rounded values are converted to scaled scores.

Summary of Final Evaluations

The panelists completed an evaluation form at the conclusion of their standard-setting study. The evaluation form asked the panelists to provide feedback about the quality of the standard-setting implementation and the factors that influenced their decisions.

All panelists *agreed* or *strongly agreed* that they understood the purpose of the study and that the facilitator's instructions and explanations were clear. All panelists *agreed* or *strongly agreed* that they were prepared to make their standard-setting judgments. Across both panels, all panelists *strongly agreed* or *agreed* that the standard-setting process was easy to follow.

All but one of the panelists reported that the definition of the JQC was at least *somewhat influential* in guiding their standard-setting judgments; nearly 80% of panelists indicated the definition was *very influential*. Thirty-six of the 39 panelists reported that between-round discussions were at least *somewhat influential* in guiding their judgments. Nearly three-quarters of the panelists (28 of the 39 panelists) indicated that their own professional experience was *very influential* in guiding their judgments.

Across both panels, all of the panelists indicated they were at least *somewhat comfortable* with the passing score they recommended; 25 of the 39 panelists were *very comfortable*. Thirty-two of the 39 panelists indicated the recommended passing score was *about right* with six panelists believing the passing score was *too low* and the remaining panelist believing the passing score was *too high*. A summary of the final evaluation results are presented in Appendix D (see Tables D5 and D6).

Summary

To support the decision-making process for state departments of education with regards to establishing a passing score, or cut score, for the Praxis Music: Content Knowledge (0113) test, research staff from Educational Testing Service designed and conducted a two-panel, multi-state standard-setting study. The study also collected content-related validity evidence to confirm the importance of the content specifications for entry-level music teachers.

The recommended passing score for each panel, as well as the average passing score across the two panels, are provided to help state departments of education determine an appropriate operational passing score. For the Praxis Music: Content Knowledge test, the recommended passing score⁹ is 70 (out of a possible 110 raw-score points). The scaled score associated with a raw score of 70 is 161 (on a 100 - 200 scale).

Panelists judged the extent to which the knowledge and/or skills reflected by the content specifications was important for entry-level music teachers. The favorable judgments of the panelists provided evidence that the content covered by the test is important for beginning practice.

⁹ Results from the two panels participating in the study were averaged to produce the recommended passing score.

References

- Brandon, P.R. (2004). Conclusions about frequently studied modified Angoff standard-setting topics. *Applied Measurement in Education, 17*, 59-88.
- ETS. (2010). *The Praxis Series: Music: Content Knowledge (0113) Test at a Glance*. Princeton, NJ: Author.
- Geisinger, K. F. & McCormick, C. M. (2010), Adopting Cut Scores: Post-Standard-Setting Panel Considerations for Decision Makers. *Educational Measurement: Issues and Practice, 29*: 38–44.
- Hambleton, R. K., & Pitoniak, M.J. (2006). Setting performance standards. In R. L. Brennan (Ed.), *Educational Measurement* (4th ed., pp. 433-470). Westport, CT: American Council on Education/Praeger.
- Tannenbaum, R.J., & Katz, I.R. (forthcoming). Standard setting. In K.F. Geisinger (Ed.), *APA Handbook of Testing and Assessment in Psychology*. Washington, DC: American Psychological Association.

Appendix A
Panelists' Names & Affiliations

Praxis Music: Content Knowledge

Panelist

Olyn Alexander
Melanie Champion
Philip Clary
Rachel Cullen
Christopher Elbing
Jeanette A. Engelhart
Camille L. France
Brian Frye
Carly Goodman
Heidi Cohenour Gordon
Brandi Hallford
Jamie M. Hamblin
Debbie M Headley
Daniel S. Hellman
Joshua Lee Howard
Ryan Howe
Carolyn Kirio
Kenneth Martin
Charles Masters
Melissa McCabe
Brian McCants
Brian McGillen
Michael W. Moore
David A. Myers
Jennifer Nash
Holly Oliver
JoAnn Phillips
David A. Rickels
Adam R. Sawyer
Karin Sehmman
Nita Modley Smith
Kathy Stefani
Nicholas Stokes
Alex Stone
Ken Thompson
Linda K. Thompson
Jacqueline Townsend
Kristin Wages
Donna Gwyn Wiggins

Affiliation

District of Columbia Public Schools (DC)
Goodwin Elementary School (CT)
Indian Hill High School (OH)
Maple Ave. Elementary School (NH)
New Bern High School (NC)
Clark County School Dist. (NV)
Benjamin Banneker High School (DC)
Bancroft Elementary School (DC)
Clark County School District (NV)
UAPB (AR)
Mansfield R-IV Schools (MO)
Casey Co. Middle (KY)
Little Rock School District - Baseline Elementary (AR)
Missouri State University (MO)
Alleghany County Schools (NC)
Department of Education (HI)
Kapolei Middle School (HI)
Mountain View Middle School (NH)
Central Dauphin High School (PA)
Towson University (MD)
Hand Middle School (SC)
Sudbrook Magnet Middle School (MD)
Bob Jones University (SC)
Shelburne Community School (VT)
Etna-Dixmont School (ME)
Plymouth State University (NH)
University of Rhode Island (RI)
Boise State University (ID)
Albert D. Lawton Intermediate School (VT)
Eastern Kentucky University (KY)
Metro Nashville Public Schools - IT Creswell Arts Magnet (TN)
Mountain View School Dist #244 (ID)
Baltimore County Public Schools (MD)
Pine Knot Primary School (KY)
Bowling Green State University (OH)
Lee University (TN)
Keystone Local School District (OH)
Gravette Middle School (AR)
Winston-Salem State University (NC)

Appendix B

Study Agenda

AGENDA

Praxis Music Standard Setting Study

Day 1

8:00 – 8:15	Welcome and Introduction
8:15 – 8:45	Overview of Standard Setting & the Praxis Music Test
8:45– 10:30	“Take” the Praxis Music Test
10:30 – 11:00	Discuss the Praxis Music Test
11:00 – 12:00	Define the Knowledge/Skills of a JQC
12:00 – 12:45	Lunch
12:45 – 2:00	Define the Knowledge/Skills of a JQC (continued)
2:00 – 2:15	Break
2:15 – 3:00	Standard Setting Training
3:00 – 5:00	Round 1 Standard Setting Judgments for Multiple-Choice
5:00 – 5:15	Collect Materials; End of Day 1

AGENDA

Praxis Music Standard Setting Study

Day 2

9:00 – 9:15	Overview of Day 2
9:15 – 9:45	Standard Setting Training for Constructed-Response
9:45 – 10:15	Round 1 Standard Setting Judgments for Constructed-Response
10:15 – 10:30	Break
10:30 – 12:00	Round 1 Feedback & Round 2 Judgments
12:00 – 12:45	Lunch
12:45 – 1:45	Round 1 Feedback & Round 2 Judgments
1:45 – 2:15	Specification Judgments
2:15 – 2:30	Feedback on Round 2 Recommended Cut Score
2:30 – 2:45	Complete Final Evaluation
2:45 – 3:00	Collect Materials; End of Study

Appendix C
Just Qualified Candidate (JQC) Definition

Description of a Just Qualified Candidate¹⁰

NOTE: Where appropriate, the knowledge/skill described refers to materials presented in either aural or written modes

Our JQC ...

1. Music History & Theory
 - a. Understands period of music history and genres
 - b. Understands theory and compositional practices
 - c. Is familiar with world musics by regions
2. Performance
 - a. Knows instructional techniques for vocal/instrumental rehearsal and performance
 - b. Knows warm-up, tuning, and intonation
 - c. Knows effective strategies for programming and presentation of performances
 - d. Understands accompaniment
 - e. Understands how to present proper etiquette
3. Instruction
 - a. Knows strategies for instruction, management (classroom and administrative), and assessments for diverse learners and context
 - b. Knows local, state, and national standards
 - c. Knows basic techniques for improvisation, composition and arranging and how to teach them and other concepts through performance literature
 - d. Is aware of approaches for fostering musical expression (performance and creativity)
4. Professional Issues
 - a. Is aware of professional responsibilities and situational factors effecting music instruction
 - b. Is familiar with careers in musical and advocate music
5. Technology
 - a. Understands appropriate use of technology for performance, instruction, recording
 - b. Understands ethical and safety issues
6. Instructional Activities
 - a. Understands how to select appropriate repertoire
 - b. Understands effective pedagogical and instructional techniques
 - c. Understands the logistics of concert planning
 - d. Is aware that performance problems may have perceptual or production causes
 - e. Understands strategies for developing sight-reading skills

¹⁰ Definition appropriate for both Praxis Music: Content Knowledge (0113) and Praxis Music: Content and Instruction (0114) tests.

Appendix D
Results for Praxis Music: Content Knowledge

Table D1***Panel Member Demographics (By Panel)***

	Panel 1		Panel 2	
	N	%	N	%
Current Position				
Teacher	14	70%	14	74%
College Faculty	6	30%	5	26%
Race				
White	16	80%	15	79%
Black or African American	3	15%	2	11%
Hispanic or Latino	1	5%	0	0%
Asian or Asian American	0	0%	1	5%
Multiracial	0	0%	1	5%
Gender				
Female	13	65%	8	42%
Male	7	35%	11	58%
Which of the following best describes your music education specialty?				
General Music Education	7	35%	7	37%
Instructional Music Education	7	35%	10	53%
Vocal Music Education	4	20%	2	11%
Other	2	10%	0	0%
Are you currently certified as a music teacher?				
Yes	16	80%	16	84%
No	4	20%	3	16%
At what K-12 grade level are you currently teaching music				
Elementary (K - 5 or K - 6)	4	20%	4	21%
Middle School	4	20%	3	16%
Elementary and Middle School	2	10%	1	5%
High School	2	10%	3	16%
Middle & High School	2	10%	1	5%
All Grades	0	0%	1	5%
Not currently teaching at the K-12 level	6	30%	6	32%

Table D1 (continued)***Panel Member Demographics (By Panel)***

	Panel 1		Panel 2	
	N	%	N	%
How many years of experience do you have teaching?				
3 years or less	2	10%	3	16%
4 - 7 years	5	25%	1	5%
8 - 11 years	1	5%	10	53%
12 - 15 years	3	15%	3	16%
16 years or more	9	45%	2	11%
Which best describes the location of your K-12 school?				
Urban	6	30%	5	26%
Suburban	2	10%	6	32%
Rural	6	30%	3	16%
Not currently working in a K-12 school	6	30%	5	26%
If you are college faculty, are you currently involved in the training/preparation of music teachers?				
Yes	6	30%	5	26%
No	0	0%	0	0%
Not college faculty	14	70%	14	74%

Table D2**Passing Score Summary by Round of Judgments — Panel 1**

Panelist	Round 1	Round 2
1	65.50	66.40
2	76.80	77.00
3	70.75	70.75
4	72.60	72.75
5	81.10	81.05
6	68.55	70.85
7	70.60	70.30
8	66.70	67.10
9	76.40	77.30
10	79.65	79.95
11	84.30	84.00
12	68.90	69.60
13	75.90	78.50
14	72.85	73.15
15	59.10	60.20
16	49.35	49.35
17	69.10	71.50
18	70.45	72.50
19	75.20	78.55
20	69.25	68.35
Average	71.15	71.96
Median	70.68	72.00
Lowest	49.35	49.35
Highest	84.30	84.00
SD	7.75	7.82
SEJ	1.73	1.75

Table D3**Passing Score Summary by Round of Judgments — Panel 2**

Panelist	Round 1	Round 2
1	59.55	61.10
2	65.20	69.90
3	64.05	65.45
4	67.40	69.90
5	70.75	71.35
6	57.30	58.40
7	70.50	73.20
8	68.80	68.90
9	65.80	65.20
10	58.65	67.70
11	55.05	56.95
12	71.05	72.35
13	76.90	77.60
14	63.30	64.40
15	73.35	71.60
16	73.40	74.10
17	71.90	72.90
18	60.25	61.45
19	64.55	65.45
Average	66.20	67.78
Median	65.80	68.90
Lowest	55.05	56.95
Highest	76.90	77.60
SD	6.14	5.62
SEJ	1.41	1.29

Table D4

Specification Judgments — Music: Content Knowledge

		Very Important		Important		Slightly Important		Not Important	
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
I.	Music History and Theory	30	77%	9	23%	0	0%	0	0%
	• Understands the history of major developments in musical style and the significant characteristics of important musical styles and historical periods	26	67%	12	31%	1	3%	0	0%
	• Is familiar with the style of a variety of world musics and their function in the culture of origin	12	31%	23	59%	4	10%	0	0%
	• Understands and analyzes music in aural and written forms and demonstrates aural skills through recognition of melody, harmony, and rhythm	37	95%	2	5%	0	0%	0	0%
	• Knows and applies basic music theory concepts when composing, orchestrating, and arranging instrumental and vocal parts	28	72%	10	26%	1	3%	0	0%
	• Understands how musical sounds vary	30	77%	9	23%	0	0%	0	0%
	• Knows various sources of printed and electronic information on music history and literature	11	28%	20	51%	8	21%	0	0%
II.	Performance	33	85%	6	15%	0	0%	0	0%
	• Demonstrates critical listening skills by identifying errors	37	95%	2	5%	0	0%	0	0%
	• Understanding basic conducting techniques	25	64%	13	33%	1	3%	0	0%
	• Understands the interpretation of notation and expressive elements for performance in relation to score markings and style periods	27	69%	11	28%	1	3%	0	0%

Table D4

Specification Judgments — Music: Content Knowledge

	Very Important		Important		Slightly Important		Not Important	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
• Knows a variety of strategies on how to prepare a musical score for rehearsal and performance	30	77%	9	23%	0	0%	0	0%
• Understands basic accompaniment techniques	5	13%	29	74%	4	10%	1	3%
• Knows instrumental and choral/vocal warm-up techniques	30	77%	8	21%	1	3%	0	0%
• Knows instrumental and choral tuning/intonation technique	31	79%	7	18%	1	3%	0	0%
• Understands concert etiquette for performers and audiences and effective techniques for communicating with an audience in a performance setting	17	44%	20	51%	2	5%	0	0%
• Understands the practical relationship between acoustics and performance	8	21%	25	64%	6	15%	0	0%
III.A. Instruction, Professional Issues, and Technology:	34	87%	5	13%	0	0%	0	0%
Instruction								
• Knows instructional strategies for different class settings	29	74%	10	26%	0	0%	0	0%
• Incorporates local, state, and national standards in planning and instruction	23	59%	14	36%	2	5%	0	0%
• Understands classroom management techniques	32	82%	7	18%	0	0%	0	0%
• Understands how to plan and differentiate instruction	30	77%	9	23%	0	0%	0	0%
• Knows strategies to accommodate diverse learning styles and abilities	30	77%	9	23%	0	0%	0	0%

Table D4

Specification Judgments — Music: Content Knowledge

	Very Important		Important		Slightly Important		Not Important	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
• Understands how to modify instruction to accommodate student needs	26	67%	13	33%	0	0%	0	0%
• Understands a variety of assessment strategies that informs the instructional process	27	69%	11	28%	1	3%	0	0%
• Knows and promotes care and maintenance of instruments and materials	22	56%	12	31%	5	13%	0	0%
• Knows basic improvisational techniques and how to teach them	6	15%	28	72%	5	13%	0	0%
• Knows basic composition and arranging techniques and how to teach them	10	26%	24	62%	4	10%	1	3%
• Knows how to teach a variety of musical concepts through performance literature	29	74%	9	23%	1	3%	0	0%
• Is aware of approaches for fostering musically expressive experiences	24	62%	13	33%	2	5%	0	0%
• Understands how to integrate concepts used in the fine arts and other disciplines in music instruction	9	23%	25	64%	4	10%	1	3%
III.B. Instruction, Professional Issues, and Technology:	21	54%	17	44%	1	3%	0	0%
Professional Issues								
• Understands professional ethics and legal issues specific to teaching music	24	62%	14	36%	1	3%	0	0%
• Is familiar with the music standards in the National Standards for Arts Education	23	59%	13	33%	1	3%	2	5%

Table D4***Specification Judgments — Music: Content Knowledge***

	Very Important		Important		Slightly Important		Not Important	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
• Is aware of professional organizations and resources in music education	11	28%	23	59%	4	10%	1	3%
• Is aware of current trends and issues in music education	17	44%	20	51%	2	5%	0	0%
• Is aware of the major contributions to the history and philosophy of music education and their implications for curriculum	12	31%	20	51%	7	18%	0	0%
• Understands philosophical reasons for inclusion of and advocacy for music in the curriculum	21	54%	16	41%	2	5%	0	0%
• Recognizes that collaboration with colleagues is important for implementing the curriculum	22	56%	16	41%	1	3%	0	0%
• Supports students' learning through two-way communication with parents/guardians	23	59%	16	41%	0	0%	0	0%
• Understands basic administrative responsibilities in a music program	19	49%	17	44%	3	8%	0	0%
• Is aware of the external influences that affect the music program, curriculum, and student participation	21	54%	16	41%	2	5%	0	0%
• Is aware of career opportunities available in music and how to introduce them to students	5	13%	20	51%	12	31%	2	5%
• Is aware of strategies for promoting physically healthy performance practices for students and teachers	18	46%	18	46%	3	8%	0	0%

Table D4

Specification Judgments — Music: Content Knowledge

	Very Important		Important		Slightly Important		Not Important	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
III.C. Instruction, Professional Issues, and Technology:	23	59%	15	38%	1	3%	0	0%
Technology								
• Understands current technologies used for performance and recording production	16	41%	20	51%	3	8%	0	0%
• Is familiar with technology and instructional software and ways to incorporate them in the classroom	20	51%	18	46%	1	3%	0	0%
• Demonstrates knowledge of desktop music publishing software for pedagogical purposes	15	38%	23	59%	1	3%	0	0%
• Knows the appropriate, ethical, and safe uses for music software and internet technologies	23	59%	16	41%	0	0%	0	0%

Table D5**Final Evaluation — Panel 1**

	Strongly Agree		Agree		Disagree		Strongly Disagree	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
• I understood the purpose of this study.	19	95%	1	5%	0	0%	0	0%
• The instructions and explanations provided by the facilitators were clear.	20	100%	0	0%	0	0%	0	0%
• The training in the standard setting method was adequate to give me the information I needed to complete my assignment.	19	95%	1	5%	0	0%	0	0%
• The explanation of how the recommended passing score is computed was clear.	17	85%	3	15%	0	0%	0	0%
• The opportunity for feedback and discussion between rounds was helpful.	18	90%	2	10%	0	0%	0	0%
• The process of making the standard setting judgments was easy to follow.	17	85%	3	15%	0	0%	0	0%

Table D5 (continued)

Final Evaluation — Panel 1

How influential was each of the following factors in guiding your standard setting judgments?	Very Influential		Somewhat Influential		Not Influential			
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%		
• The definition of the JQC	17	85%	2	10%	1	5%		
• The between-round discussions	11	55%	8	40%	1	5%		
• The knowledge/skills required to answer each test question	17	85%	3	15%	0	0%		
• My own professional experience	14	70%	6	30%	0	0%		
	Very Comfortable		Somewhat Comfortable		Somewhat Uncomfortable		Very Uncomfortable	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
• Overall, how comfortable are you with the panel's recommended passing score for Praxis Music: Content Knowledge (0113)?	14	70%	6	30%	0	0%	0	0%
	Too Low		About Right		Too High			
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%		
• Overall, the recommended passing for Praxis Music: Content Knowledge (0113) score is:	2	10%	17	85%	1	5%		

Table D6**Final Evaluation — Panel 2**

	Strongly Agree		Agree		Disagree		Strongly Disagree	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
• I understood the purpose of this study.	19	100%	0	0%	0	0%	0	0%
• The instructions and explanations provided by the facilitators were clear.	15	79%	4	21%	0	0%	0	0%
• The training in the standard setting method was adequate to give me the information I needed to complete my assignment.	16	84%	3	16%	0	0%	0	0%
• The explanation of how the recommended passing score is computed was clear.	16	84%	3	16%	0	0%	0	0%
• The opportunity for feedback and discussion between rounds was helpful.	16	84%	3	16%	0	0%	0	0%
• The process of making the standard setting judgments was easy to follow.	17	89%	2	11%	0	0%	0	0%

Table D6 (continued)

Final Evaluation — Panel 2

How influential was each of the following factors in guiding your standard setting judgments?	Very Influential		Somewhat Influential		Not Influential			
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%		
• The definition of the JQC	14	74%	5	26%	0	0%		
• The between-round discussions	9	47%	8	42%	2	11%		
• The knowledge/skills required to answer each test question	15	79%	4	21%	0	0%		
• My own professional experience	14	74%	5	26%	0	0%		
	Very Comfortable		Somewhat Comfortable		Somewhat Uncomfortable		Very Uncomfortable	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
• Overall, how comfortable are you with the panel's recommended passing score for Praxis Music: Content Knowledge (0113)?	11	58%	8	42%	0	0%	0	0%
	Too Low		About Right		Too High			
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%		
• Overall, the recommended passing for Praxis Music: Content Knowledge (0113) score is:	4	21%	15	79%	0	0%		

**APPENDIX A:
SUPPLEMENTAL ENDORSEMENTS ADDED TO A VALID MISSISSIPPI LICENSE**

**Supplemental Endorsements Added By Praxis II
Specialty Area Test**

<u>CODE</u>	<u>AREA</u>
102	Art Education
181	Biology Education
105	Business
185	Chemistry
193	Economics
119	English
130	French
134	German
143	Health Education
208	Hearing Disability K-12
322	Home Economics
135	Latin
440	Library/Media
318	Marketing
154	Mathematics
901	Math 7-8
902	Language Arts 7-8
903	Social Studies 7-8
904	Science 7-8
166	Music Education
144	Physical Education
182	Physical Science
189	Physics
192	Social Studies
140	Spanish
221	Special Ed (<i>Mild/Mod K-12</i>)
910	Special Education Fundamental Subjects
196	Speech Communications
218	Visually Impaired K-12

**Supplemental Endorsements
Added with 21 Hours of Coursework in Subject
(Course work must have a grade of “C” or higher)**

<u>CODE</u>	<u>AREA</u>
102	Art Education
104	Bible
105	Business Education
119	English
123	Drama (Performing Arts)
130	French
134	German
135	Latin
136	Italian
139	Russian
140	Spanish
144	Physical Education
149	Journalism
154	Mathematics
165	Music Education Instrumental
166	Music Education Vocal
171	Psychology
181	Biology
185	Chemistry
188	General Science
189	Physics
192	Social Studies
193	Economics
196	Speech Communications
302	Agriculture
318	Marketing
322	Home Economics

**Supplemental Endorsements
Added by Completion of Approved Program
(Institutional Program Verification required)**

<u>CODE</u>	<u>AREA</u>
111	Computer Applications
114	Driver Education
117	Elementary Education (4-6)
143	Health Education
150	Nursery-Grade 1 (N-1)
152	Elementary Education (K-4)
174	Reading
177	English as a Second Language
182	Physical Science
193	Economics
207	Gifted
208	Hearing Impaired (K-12)
218	Visually Impaired (K-12)
221	Mild/Moderate Disability (K-12)
222	Severe Disability (K-12) added to 221 only
223	Mild/Moderate Disability (K-8) added to elementary only
224	Mild/Moderate Disability (7-12) added to secondary or special subject license only
314	Vocational Guidance(added only to 436)
317	Cooperative Education(added to vocational license only)
328	Child Care (only added to 322 or 321—Home Economics)
329	Aging Services (only added to 322 or 321-Home Economics)
330	Clothing (only added to 322 or 321— Home Economics)
331	Food Production, Management, and Services (only added to 322 or 321— Home Economics)
440	Library/Media

**Added by Completion of MDE Approved
Math & Science Partnerships**

Added to Elementary or Special Education licenses only:

901 or 905	Math 7-8
904 or 908	Science 7-8

**Career Technical Education Endorsements Added by
Completion of CTE Training at Mississippi State University
Research and Curriculum Unit (RCU)**

(See Appendix E for list)

**Advanced Placement Endorsements added by Completion of
College Board Approved AP Training**

(see Appendix E for list)

APPENDIX B: PRAXIS II EXAMINATION SCORES REQUIRED BY MISSISSIPPI:

<i>SPECIALTY AREA TEST CODE</i>	<i>SCALED SCORE</i>
Art Education (0134)	158
Audiology (0341)	170
Biology (0235)	150
Braille Proficiency (0281 <i>and</i> 0631)	158
Business Education (0101)	148
Chemistry (0245)	151
Early Childhood Education (Child Development Pre-K and K only) (0021)	165
Economics (0910)	490
Elementary Education (K-6) (0011 or 5011)	158
Elementary Education (4-6) (0014 or 5014) Alternate Route Only	153
Emotionally Disturbed/Behavior Disorders (0371)	150
English Language and Literature (0041)	157
French (5174)	153
German (5183)	154
Guidance and Counseling (0420)	580
Health Education (0550)	600
Hearing Disability (0271)	151
Home Economics/Family & Consumer Science (0121)	153
Latin (0600)	610
Library Media Specialist (0311)	143
Marketing (0561)	151
Mathematics (0061)	123
Middle Grade Math (0069) <i>supplemental only</i>	140
Middle Grade Language Arts (0049) <i>supplemental only</i>	145
Middle Grade Social Studies (0089) <i>supplemental only</i>	140
Middle Grade Science (0439) <i>supplemental only</i>	135
Music Education (0113)	139
Physical Education (0091)	138
Physical Science (0481)	147
Physics (0265)	139
School Leaders Licensure Assessment (1011)	169
School Psychologist (0401)	154
Social Studies (0081)	143
Spanish (5195)	160
Special Education (0354 or 5354)	142
Special Education Fundamental Subjects HQ (0511)	142
Speech Communication (0221)	134
Speech/Language Pathology (0330)	600
Technology Education (0051)	159
Visually Impaired (0281 <i>and</i> 0631)	154

APPENDIX C: PRAXIS I & PRAXIS II PLT SCORES

PRAXIS I REQUIREMENTS FOR EDUCATOR LICENSURE

PRE-PROFESSIONAL SKILLS TEST	PASSING SCORE
Reading (0710 or 5710)	170
Writing (0720 or 5720)	172
Mathematics (0730 or 5730)	169

PRAXIS II REQUIREMENTS FOR EDUCATOR LICENSURE

(For Approved Teacher Education Program Candidates only)

PRINCIPLES OF LEARNING AND TEACHING (PLT)	PASSING SCORE
Grade Level Pre-K – K (0621)	157
Grade Level K-6 (0622)	160
Grade Level 4-6 (0623)	160
Grade Level 7-12 (0624)	157

APPENDIX B: PRAXIS II EXAMINATION SCORES REQUIRED BY MISSISSIPPI

<i>SPECIALTY AREA TEST CODE</i>	<i>SCALED SCORE</i>
Art Education (0134)	158
Audiology (0341)	170
Biology (0235)	150
Braille Proficiency (0281 <i>and</i> 0631)	158
Business Education (0101)	148
Chemistry (0245)	151
Early Childhood Education (Child Development Pre-K and K only) (0021)	165
Economics (0910)	490
Elementary Education (K-6) (0011 or 5011)	158
Elementary Education (4-6) (0014 or 5014) Alternate Route Only	153
Emotionally Disturbed/Behavior Disorders (0371)	150
English Language and Literature (0041)	157
French (5174)	153
German (5183)	154
Guidance and Counseling (0420)	580
Health Education (0550)	600
Hearing Disability (0271)	151
Home Economics/Family & Consumer Science (0121)	153
Latin (0600)	610
Library Media Specialist (0311)	143
Marketing (0561)	151
Mathematics (0061)	123
Middle Grade Math (0069) <i>supplemental only</i>	140
Middle Grade Language Arts (0049) <i>supplemental only</i>	145
Middle Grade Social Studies (0089) <i>supplemental only</i>	140
Middle Grade Science (0439) <i>supplemental only</i>	135
Music Education (0113)	161
Physical Education (0091)	138
Physical Science (0481)	147
Physics (0265)	139
School Leaders Licensure Assessment (1011)	169
School Psychologist (0401)	154
Social Studies (0081)	143
Spanish (5195)	160
Special Education (0354 or 5354)	142
Special Education Fundamental Subjects HQ (0511)	142
Speech Communication (0221)	134
Speech/Language Pathology (0330)	600
Technology Education (0051)	159
Visually Impaired (0281 <i>and</i> 0631)	154

APPENDIX C: PRAXIS I & PRAXIS II PLT SCORES

PRAXIS I REQUIREMENTS FOR EDUCATOR LICENSURE

PRE-PROFESSIONAL SKILLS TEST	PASSING SCORE
Reading (0710 or 5710)	170
Writing (0720 or 5720)	172
Mathematics (0730 or 5730)	169

PRAXIS II REQUIREMENTS FOR EDUCATOR LICENSURE

(For Approved Teacher Education Program Candidates only)

PRINCIPLES OF LEARNING AND TEACHING (PLT)	PASSING SCORE
Grade Level Pre-K – K (0621)	157
Grade Level K-6 (0622)	160
Grade Level 4-6 (0623)	160
Grade Level 7-12 (0624)	157

