

# Student Performance Q&A: 2006 AP® Music Theory Free-Response Questions

The following comments on the 2006 free-response questions for AP® Music Theory were written by the Chief Reader, Ken Stephenson of the University of Oklahoma in Norman. They give an overview of each free-response question and of how students performed on the question, including typical student errors. General comments regarding the skills and content that students frequently have the most problems with are included. Some suggestions for improving student performance in these areas are also provided. Teachers are encouraged to attend a College Board workshop to learn strategies for improving student performance in specific areas.

### Question 1

### What was the intent of this question?

- To assess students' ability to transcribe a melody into written notation
- To test students' skill with minor-mode melodies, especially the varied chromatic inflections of scale degrees 6 and 7
- To test students' ability to hear characteristic features of the melody, including:
  - o mainly stepwise motion with occasional skips of a third
  - o dotted rhythms
  - o clear structural framework of tonic and dominant.

### How well did students perform on this question?

Students did not do as well on question 1 this year as last year; the mean score (3.28 out of a possible 9 points) went down about 8 percent from the 2005 mean score.

- Omitting accidentals in minor mode
- Leaving the stem off the first note, G
- Forgetting the ledger line on the climactic C (measure 3)
- Notating the final half-note G incorrectly as a whole note

• Quite a lot of metric shifting (Some students fortuitously were awarded 1 point for the "half-measure" segments G–F or F–E from segments 2 and 3, even though much else was incorrect in the response.)

## Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

- Be sure to integrate minor key examples, beginning early in the course; avoid the common bias of overemphasizing major mode.
- Give students strategies for recalling the spelling of the chromatic 6th and 7th scale degrees, etc.
- Emphasize clear, accurate notation (stems, accidentals, ledger lines, dots, and all the details for which students might lose credit for carelessness). If the teacher is tolerant of sloppy notation, it will show up on the exam.
- Don't overlook practicing rhythmic dictation. Highlight for students the distinctions between simple and compound meters; develop a vocabulary of common patterns in each meter.
- Play dictation examples at various tempos. Avoid super-slow tempos that may train students to listen to discrete individual details rather than meaningful patterns in the key and meter ("chunks").
- Integrate singing with dictation, using it as a tool for developing short-term memory and reinforcing tonal context.
- Help students to learn strategies for dealing with a wide range of tonal melodies: focus on scale-degree awareness, common pitch and rhythmic "chunks," characteristic phrase structures, expected cadential patterns, and so forth.
- Tell students to use the green insert to record overall aspects of the melody, such as contour, cadence points, etc., but then to work mainly in the actual exam booklet (pink cover). There is not enough time during this portion of the exam to recopy notation from the green insert to the exam booklet.

### Question 2

#### What was the intent of this question?

- To assess students' ability to transcribe a melody into written notation
- To test students' ability to hear:
  - o the tonic-to-leading-tone relationship
  - o compound meter
  - o chromatic inflection
  - o triadic outline
- To test students' ability to process an aural melody in "chunks"

### How well did students perform on this question?

Students performed a little better on this question than they did last year. In fact, the mean score this year (3.28 out of a possible 9 points) was virtually equal to the mean score of question 1.

#### What were common student errors or omissions?

- Poor rhythmic notation was common. In particular, many students missed the characteristic rhythmic gestures of  $^6_8$  meter.
- Raised leading tones, despite the major mode of the melody
- Many students missed the leap from tonic to subdominant from the first into the second measure.

## Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

- Teach students to hear melodies in harmonic context.
- Concentrate more on compound meter and give particular attention to its most characteristic rhythmic motives.
- Have students conduct while singing in compound meter in order to reinforce the sense of the "big" beats.
- Remind students that they should transcribe ANY part of the melody they hear, even if only a single note.

## Question 3

## What was the intent of this question?

- To assess students' ability to hear, analyze, and transcribe the harmonic progression
- To determine how well students can use a number of theory skills together, including perceiving separate lines and processing harmonic function (that is, to hear with both linear and vertical orientation)
- To test students' ability to hear scale degree function and altered tones
- To test students' understanding of the implications of minor keys
- To test students' ability to hear an entirely diatonic progression

### How well did students perform on this question?

The mean score for question 3 (12.05) changed little from 2005, remaining right around 50 percent of the total possible score of 24 points.

- Lack of understanding of the bass clef
- Responding with a iii chord
- Hearing iv rather than ii<sup>o6</sup> for the second chord in the progression
- Lack of understanding of harmonic progression
- Problems identifying pitches in the melody

- Teach cadential harmonic chunks.
- Spend more time on the cadential six-four chord.
- Encourage students to play piano (or harp, organ, etc.) in order to hear more voices at once.
- Have students work on writing clear notation.
- Emphasize that minor is not a viable system without the leading tone.
- Tell students to put a visual reminder regarding the leading tone on the page.
- Practice hearing a dominant-seventh chord, with the seventh in an inner voice.
- In minor, practice hearing the difference between the iv and the ii<sup>o6</sup>.
- Help the students learn harmonic syntax.

### **Question 4**

## What was the intent of this question?

- To assess students' ability to hear, analyze, and transcribe the harmonic progression
- To test students' ability to hear the secondary dominant, diatonic seventh chords, and an imperfect authentic cadence
- To test students' ability to hear with both linear and vertical orientation, including hearing outer voices and chord syntax
- To test students' ability to recognize chord function

### How well did students perform on this question?

Although students found the secondary dominant chord challenging, most students recognized the chromatic nature of chord 4. Many students did well on the cadence, and it appeared that many relied heavily on their knowledge of harmonic function even if they were unable to transcribe specific notes correctly. Still, the mean score (9.73 out of a possible 24 points) was slightly lower than last year.

- Writing IV–V–I at the cadence, which is typical but wrong in this instance
- Writing ii<sup>6</sup> instead of ii<sup>6</sup>
- Writing V<sup>7</sup> instead of V
- Writing too many iii chords
- Missing the chromatic ascent in the bass
- Notating the chromatic shift in the soprano instead of in the bass
- Writing all chords in root position

- Emphasize aural distinction between functionally equivalent chords, specifically IV and ii§.
- Teach melodic patterns in harmonic context.
- Cover all secondary dominants, not just V/V.
- Remind students that all progressions on the AP Music Theory Exam will be conventional and functional.
- Emphasize the roles of sharps and flats.
- Teach students that iii is the rarest of the diatonic harmonies.

## Question 5

## What was the intent of this question?

- To test students' ability to:
  - o realize figured-bass lines
  - o part-write in a minor key
  - o resolve the leading tone properly
  - o resolve the dominant to the submediant in the deceptive cadence
  - o use seventh chords in inversion
  - o spell harmonies correctly
  - o recognize Roman numerals
- To test students' understanding of the way harmonic music of the Classical era flows through time
- To test students' understanding of the relationship between Roman numerals and figured bass

### How well did students perform on this question?

The mean score was 14.03, about 56 percent of the total possible score of 25 points.

- Many students spelled the submediant chord correctly but labeled it as the tonic (I or i).
- The soprano and alto parts often had voice-leading mistakes near the middle of the exercise.
- Students frequently forgot to raise the seventh.
- Students often avoided doubling the third in the VI chord where the resolution of the dominant made it necessary. This may be the result of being trained by their teachers to never double the third in major chords.
- Augmented seconds frequently occurred between  $ii^{\varnothing}$  and V (G-A#) and V and V (A#-G), as did tritones between iv and V (G-C# or E-A#) and  $ii^{\varnothing}$  and V (also G-C# or E-A#).
- Parallel fifths often occurred between V and VI due to incorrect resolution.
- The seventh in the ii<sup>86</sup> often did not resolve correctly.
- Students sometimes forgot to include the seventh in ii 5.
- Students often did not maintain common tones between adjacent harmonies in the same voice, causing unnecessary and awkward leaps.

- The seventh was often added to the V at the cadence.
- Some students tried to modulate to G or C major.
- Many students labeled the ii<sup>86</sup> as V/V.
- There were many unnecessary leaps.

- Teach students to double the third of the VI chord in the deceptive cadence.
- Strongly drill the raised seventh in the minor key.
- Teach students to spell chords correctly in the key.
- Have students play or sing all of their exercises.
- It is important to teach all aspects of figured-bass notation—many students do not know what slashes mean in the figured bass.
- Teach students to literally count all of the intervals of the figured bass above the bass note.
- Compel students to use common tones and to tie them for reinforcement.
- Teach students to connect common tones first, then move by step where possible, and, if neither is possible, move by the smallest leaps available.
- Emphasize the linear aspect of part-writing in order to avoid unsingable leaps.
- Many students may be forgetting to put necessary accidentals in the music because they put
  off writing them until they have completed the entire realization. Have them write the
  accidentals in the music as they go from chord to chord.
- It is possible that when some students see accidentals and slashed notes in the figured bass, they assume that they do not need to put them in the music itself. Remind them that they must write them in.

### Question 6

### What was the intent of this question?

- To test students' ability to:
  - o realize Roman numerals
  - o write a secondary dominant chord and its resolution
  - o handle unequal fifths
  - o write vii<sup>o6</sup>–I<sup>6</sup>
- To test students' knowledge of basic harmonic formulas and of patterns such as cadential six-four— $V^7$ —I
- To test students' knowledge of standard voice-leading procedures

### How well did students perform on this question?

The mean score was 7.76, about 43 percent of the total possible score of 18 points.

- Incorrect doubling of the cadential six-four chord
- Attempted modulation to the flat submediant

- Incorrect resolution of the seventh
- Failing to write a correct bass line
- Failing to hold a common-tone seventh
- Parallel octaves in vii<sup>o6</sup>–I<sup>6</sup>
- Unnecessary leaps in the lines
- Forgetting the accidental and other spelling errors in the secondary dominant chord
- Misspelling and missing the inversion of the vii<sup>o6</sup>

- Teach students how to resolve the dominant-seventh chord.
- Teach students to use common tones as often as possible.
- Remind students that tripled root and third is the best final sonority.
- Teach students that when vii of is a passing chord, the voice leading should have no leaps.
- Emphasize that inner parts are actually melodies that need to make linear sense.
- Have students write the accidentals as they spell every chord.
- Teach students that V/V can resolve to the cadential six-four.
- Have students sing what they write.
- Help students to know the elements very well; drill automatic response.
- Teach students that inversions are used to provide an interesting, smooth bass line.
- Don't forget to teach chord progression by third as well as by fifth and by second.

### Question 7

### What was the intent of this question?

- To test students' ability to write acceptable counterpoint to a given melody
- To test students' ability to design counterpoint within a standard harmonic progression
- To test students' ability to recognize and harmonize the tonicization of the dominant
- To test students' ability to construct cadences properly

### How well did students perform on this question?

The mean score, 4.59 out of a possible 9 points, was slightly higher than last year's mean score. Students who knew standard melodic/harmonic formulas and students who understood cadences tended to perform better on this question. Many students did well on the "start here" and last phrases but did not correctly complete the middle phrase. More students attempted to complete this question than in previous years, and as a consequence there were very few entirely blank papers. There were fewer than 100 scores of 9.

- Failure to recognize and properly harmonize the secondary dominant
- Overuse of six-four chords
- Overuse of iii and vi chords
- Nonsensical embellishing tones

- Augmented fourth leaps
- V—IV and ii—I "non-progressions"
- V/V going to I
- Using V<sup>7</sup> to harmonize the ascending subdominant pitch

- Encourage students to write cadences first and then fill in the rest of the progression.
- Tell students to avoid all six-four chords except for the cadential six-four.
- Tell students to avoid nondominant seventh chords.
- Remind students that their answers on this question should favor simplicity and accuracy over creativity.

#### **Question S1**

## What was the intent of this question?

- To test students' ability to sight-sing in treble clef, minor mode, and simple meter
- To test students' ability to sight-sing stepwise motion, straightforward rhythms, and a *ti-do* melodic pattern

## How well did students perform on this question?

Sight-singing question 1 was slightly harder this year than in previous years, and student scores dropped slightly. The mean score was 4.24 points, about 47 percent of the total possible score of 9 points.

### What were common student errors or omissions?

- Many students sang only the opening and closing segments correctly.
- Some students had trouble with minor mode: many shifted to major or sang the entire melody in major mode.
- For those who began well in the first half, the usual stumbling point was the fifth segment.
- Quite a few students had the rhythm correct but were completely off on the pitches.
- The middle of the melody was the hardest part for most students.
- Many students sang sol-do and do-ti-do at the end. Some sang a lowered seventh at the end.
- Some students sang too fast, causing themselves more problems. Singing with "flow" does not mean singing quickly.
- A common rhythmic error was singing the first segment with the same duration on all notes.

## Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

- Don't neglect aural skills in your courses: aim for ear-training work in every class.
- Be wary of the biases in teaching: don't avoid minor, compound meter, or a variety of clefs, tempos, meters, etc.

- Tell students to analyze the basic features of the melody first and then start singing. What is the mode, meter, clef, etc.? Get oriented in the key and scale first and then sing.
- Tell students to practice aloud, not in their head and not under their breath.
- Tell students to sing instead of hum. Humming may encourage sloppy intonation and an inexact sense of pitch.
- Train the proctors adequately so that they do not end up compromising the students' performances.
- Teachers and proctors should go through a "dress rehearsal" before the actual exam is administered.
- Remind students and proctors to rewind the tape (or review the recording) to be sure that the student's AP number has been recorded. This will lessen the possibility of missing or partial recordings.

## **Question S2**

### What was the intent of this question?

- To test students' ability to sight-sing a triad and a melody featuring compound meter, simple chromaticism, and dotted rhythms
- To test students' ability to read bass clef
- To test students' ability to sight-sing rather large intervals

## How well did students perform on this question?

The mean score (3.77 out of a possible 9 points) was up about 4 percent from last year's mean.

- In the second segment, many students leapt to 7 or 8.
- In the second segment, MANY students sang Eb.
- In the fourth segment, many students did not hold the dotted quarter note for the full value, making the second measure a measure in  $\frac{4}{8}$ .
- The tonic triad was very often sung incorrectly.
- The last note was often not held long enough.
- In the seventh segment, many students began on 5 instead of 4.
- In the fifth segment, the minor sixth might be correct, but the following E was then sung as natural.
- There were many mistaken versions of the descending leap in segment 5, with students singing a fifth, an octave, or some interval other than a sixth. Very few students who missed this interval were able to recover during the rest of melody.
- In the sixth segment, students reversed the dotted rhythm or sang other incorrect variations.
- In the sixth segment, quite a few students transposed the pattern up a step.

- Have proctors practice administering the sight-singing portion of the exam. There were far too many mistakes in the operation of the recording equipment.
- Try to find ways to have students increase their endurance: this is a long, tiring exam.
- Teach strategies for analyzing unfamiliar tunes.
- Teach students solfège or to sight-sing using numbers. Singing with letter names more often resulted in incorrect performances.

## Finally, a general recommendation:

• Familiarize yourself with each type of question on the exam and with any changes to the exam questions or format each year.