

Teaching Melodic Dictation in Advanced Placement Music Theory

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Abstract

This study approaches to teaching melodic dictation skills of Advanced Placement (AP) Music Theory were examined. Twelve high school teachers from four states were interviewed. Four themes emerged from the interview transcripts: cognitive frameworks, processing strategies, rhythm, and course design. Participants generally confirmed established understandings of aural skills pedagogy, particularly in areas of pattern instruction, connecting aural and written theory, connecting sight-singing and dictation, incorporating scale degree function, targeting melodic “bookends,” focusing on the big picture, sequencing curricula, and incorporating familiar melodies. Unique to the findings of this study were participants’ positive attitudes toward a standardized test and their concern for the students’ psychological barriers inherent in learning aural skills. A general indifference to rhythm counting systems and a common acknowledgment of students’ difficulties with rhythmic notation also was found. Recommendations for further research include a large-scale survey of melodic dictation strategies taught by AP Music Theory teachers, empirical investigation of the efficacy of specific counting systems, comparison of students’ reported dictation strategies and their success with dictation on the AP exam, and exploration of the influence of psychological fortitude on the dictation process.

Keywords

aural skills pedagogy, melodic dictation, music theory

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Aural skills experts consider melodic dictation a good indicator of musicianship: “When properly taught [it] can be the best means of developing [essential music] skills as a preliminary for applying them to a variety of listening situations at more advanced levels” (Karpinski, 1990, p. 192). Accredited music schools at the university level must include dictation instruction in their undergraduate degree programs. According to the National Association of Schools of Music [NASM] Handbook (NASM, 2012), “students must acquire . . . the ability to take aural dictation” (p. 101).

Melodic dictation remains a challenge for students to learn and for teachers to teach:

Dictation is often the most difficult activity for students, for indeed the complexity of skills needed to be successful is great. The students who are good at taking dictation have well-developed inner ears with a strong sense of tonality, a good musical memory, a knowledge (conscious or unconscious) of common patterns, and a knowledge of basic notational procedures. (Foulkes-Levy, 1997, pp. 21–22)

The diverse skills and knowledge required, and the difficulty in acquiring them, make dictation a priority in collegiate and high school music curricula.

Advanced Placement (AP) Music Theory courses in high schools across the United States parallel introductory college-level courses and culminate in a standardized exam (College Board, 2011a). In 2011, 18,124 students from 2,271 U.S. schools took the AP Music Theory exam (College Board, 2011b, 2012a). The exam is divided into three sections: multiple-choice questions (45%), free-response questions (45%), and sight-singing (10%). From 2002 to 2011, two out of the seven items in the free-response section of the AP Music Theory exam were melodic dictations, for a total of 20% of that section (College Board, 2012b). These items require students to notate the pitch and rhythm of recorded examples sung on the syllable *ta* or played by a solo wind or string instrument.

Our review of exams from 2002 to 2011 indicated that these dictation melodies were (a) usually four measures long; (b) placed on the treble and bass clefs (one of each on each exam); (c) written in 3/4, 4/4, or 6/8 meter; (d) composed of typical rhythms including sixteenth-note divisions and dotted rhythms; and (e) composed of diatonic pitch content, with occasional accidentals. AP teachers are able to access this information directly through the College Board website, where all exam questions and sample answers since 2002 are available. With a clear picture of which melodic parameters likely will constitute the test questions, teachers are left with the real challenge: helping students develop the skills necessary to take melodic dictation successfully.

Previous exam instructions reveal a consistent pattern in administration procedures: students hear the first item three times and the second item four times. In both cases, they are given 30 seconds to work after the first listening and 1 minute to work after each subsequent listening. Students must develop efficiency in “the wedding of the aural experience to abstract musical constructs” (Telesco, 1991, p. 179).

Researchers have reported strategies music students used in taking dictation. Karpinski (2000) described “protonotation,” in which students first sketch contours, dashes, and other quick symbols that can later be translated into standard pitch and

rhythm notation. Research on memorizing melodies (Madsen & Staum, 1983; Oura, 1991; Potter, 1990) confirmed the effectiveness of chunking, a process defined by Rogers (2004) as “the efficient grouping of large numbers of small events into a smaller number of large events so that fewer bits of information are needed” (p. 116). Mikumo (1994) reported a kinesthetic approach to internalizing pitch information, in which piano fingerings were used to activate cognition. Mikumo also reported that some students decoded pitch information using visual imagery of contours, notation, or piano keyboard.

Choosing carefully from a variety of possible strategies for dictation is vital to success. Thompson (2004) outlined six approaches to pitch decoding in a qualitative study of undergraduate aural skills students: (a) the “follower,” who listens to other musicians for musical cues; (b) the “button-pusher,” who connects notes to the kinesthetic experience of playing an instrument; (c) the “contour-singer,” who deciphers melodic shape but not specific intervals; (d) the “tonal-thinker,” who relies predominantly on the tonic scale and triad; (e) the “builder,” who thinks in isolated intervals and often goes off track; and (f) the “pitcher,” who possesses absolute pitch. Some of these approaches may be helpful to certain students during dictation, but not all are helpful to all students.

Some strategies may actually hinder the efforts of students who employ them. Pembroke (1987) found that singing back melodies decreased participants’ memory for those melodies, because they were unable to sing them accurately. When participants did sing back melodies completely accurately (only 11% of 597 total responses), their memory for those melodies was statistically higher than for responses not sung. Teachers may need to encourage this approach with caution.

In summary, previous studies have recommended using protonotation before traditional notation (Karpinski, 2000), increasing memory capacity by chunking (Madsen & Staum, 1983; Oura, 1991; Potter, 1990), and using a variety of tools to decode dictation melodies (Mikumo, 1994; Pembroke, 1987; Thompson, 2004). Music theory teachers may benefit from knowledge of a wide range of options when guiding students in developing and using strategies during dictation tasks. AP Music Theory teachers, in preparing students for the exam, gain extensive experience with dictation teaching strategies that could help inform others. Thus, the purpose of this qualitative study was to investigate, through structured interviews, melodic dictation strategies taught by AP Music Theory teachers in high schools across the United States. Our research focused on two central questions: (1) What strategies do AP teachers offer to help students with melodic dictation? and (2) What are similarities and differences among strategies reported by participants?

Method

Design

For this study, we investigated how participants (AP teachers) approached melodic dictation in the AP Music Theory curriculum. We employed phenomenological methodology (Finlay, 2009; Moustakas, 1994) in our gathering of “in-depth interviews

with people who have *directly* experienced the phenomenon of interest” (Patton, 2002, p. 104). The teaching of melodic dictation in AP Music Theory classes was the central phenomenon around which the research questions and interview protocols were organized.

Participants

Participants ($N = 12$) were state-certified music teachers from large (more than 1,000 students) urban and suburban public high schools in Pennsylvania, Tennessee, Texas, and Utah. In order to conduct in-person interviews, we limited our sample to participants within close range of our professional responsibilities (Abeles, 2009). Participants were selected based on experience teaching AP Music Theory (ranging from 1 to 20 years) and geographic location, to provide a representative sample of high schools across the United States. All participants had undergraduate degrees in music, and 10 had completed graduate degrees.

Interview Questions

We developed interview questions based on our research questions and piloted them with two instructors of undergraduate music theory. The resulting interview prompts included questions about participants’ approaches to melodic dictation within the course and their responses to a researcher-provided dictation example (see Figure 1, available online at <http://jrme.sagepub.com/supplemental>). We purposefully avoided wording the interview questions as leading questions, because we wanted to find out how teachers were actually approaching the task in their classes. The creation of the melody prompt as part of the interview also was intended to serve that end.

We asked participants about tools they teach students to use (e.g., counting systems, solfège, scale degree numbers), common problems students encounter, how they help students overcome those problems, and how they assess whether students are ready for the AP exam. They then reviewed a four-measure melody (see Figure 1, available online at <http://jrme.sagepub.com/supplemental>) and described how they would want their students to approach it. The interviews ended with questions regarding materials used in class, how many students were enrolled, and the teachers’ experience teaching the course.

Collection and Analysis

We received institutional review board approval for this project from both of our institutions in the spring of 2012. We then collected and digitally recorded interview data in person between May and July 2012 at the schools of the individual participants. Interviews were conducted in private, to maintain confidentiality of participants’ responses. Each interview lasted approximately 30 minutes.

We transcribed each of the interviews and conducted member checks to ensure that transcripts matched participants’ intentions (Lincoln & Guba, 1985). Participants

corrected some spellings and clarified some contexts not evident in the transcripts. We uploaded all final transcripts to Google Docs for ease of collaboration, independently read each interview, and independently labeled salient data using the “comments” feature in Google Docs. We then analyzed each interview together, integrating comments on each participant’s responses into a combined, cowritten, annotated document.

As comments were compiled, we assigned codes jointly to themes that emerged, based on frequency of comments across participants’ interviews. The open nature of our research questions enabled us to identify these codes based directly on participants’ responses and to reduce the potential for introducing our own biases into the analysis. For the same reason, we purposefully attempted to avoid allowing the conceptual base to influence our development of codes. After all interviews had been coded, each researcher independently read them again to check for missed or mislabeled codes. Each researcher confirmed revisions suggested by the other. Occurrences of codes were organized in a spreadsheet to expedite analysis. We included only the codes representing a majority of participants ($n > 6$) in the results of this study.

Results

The purpose of this qualitative study was to investigate melodic dictation strategies taught by AP Music Theory teachers. Four main themes, each with two to four sub-themes, emerged from analyses of responses. These include cognitive frameworks (building a musical vocabulary, connecting aural and written theory, sight-singing and dictation), processing strategies (grasping the big picture, applying scale degree function, targeting melodic bookends), rhythm (notation challenges, counting system indecision), and course design (teaching to the AP exam, sequencing instruction, using familiar melodies, psychological influence).

Cognitive Frameworks

Participants described how they helped students develop ways of thinking about music and applying their understanding to music notation. Students learned patterns of pitches and rhythms, used knowledge of music theory, and built dictation skills through sight-singing. Participants explained how they helped students develop these three cognitive frameworks for better memory and understanding.

Building a Musical Vocabulary. Ten participants described how rehearsing common rhythmic and pitch patterns played an integral role in their AP curriculum. They referred to these as “predictive patterns,” “tendency tones,” “cliché musical figures,” or simply “musical vocabulary.” They taught students to recognize what they heard:

If you can give them a vocabulary to relate to, they might be able to pick up on the patterns. . . . If they have heard the melodies, and can sing them *a cappella*, if they can look at them and then sing them again, they own that pattern.

Another said, “You have to learn as many of these patterns as you can, and then just hook them together.”

Knowing that cadential patterns exhibit common tendencies can help students eliminate options in taking dictation:

There’s only so many ways you can leave the tonic pitch. Can you recognize a scale pattern or a neighbor pattern or an arpeggiated pattern? There are only so many ways to end, especially if it’s a perfect authentic cadence.

Participants challenged the practice of using songs to learn isolated intervals:

My teachers taught me that *do-la* was ‘My bonnie lies over the ocean,’ but the fact of the matter is, it ain’t. It’s *sol-mi-re-do* [in moveable-*do* solfège]. To teach out of context [is] very dangerous. . . . If you think about [perfect fourths] *do-fa, re-sol, mi-la*, those all sound different because they’re in a different context.

Pattern recognition can also make decoding compound meter music less complicated. “There are about six patterns [in compound meter] that are [used] over and over and over: quarter eighth, dotted eighth/sixteenth eighth, you know. I think it’s strategies that we need to work with people on; that’s part of music literacy.” Participants wanted their students to hear a melody in compound meter and immediately recognize patterns practiced in class. Melodies that included unknown patterns could be compared to the learned patterns for greater understanding. According to one teacher,

Sometimes I think what separates a really good dictation student from an average student is, a good one’s going to say, “I recognize the dotted-eighth sixteenth-eighth.” The weaker one’s going to look and say, “Which one did I just hear?” It just takes a little more time, [more] fluency with notation.

Connecting Aural and Written Theory. Eight participants encouraged students to use written theory knowledge. Before listening, students could already make some decisions about a dictation melody:

My students are trained to look at their staff and make musical decisions: What key? Where’s the tonic triad? What’s the starting [solfège] syllable? What’s the opening interval? If minor, what pitches may I expect with raised sixth and seventh scale degrees?

Participants believed that students who took advantage of this information could better make sense of dictation melodies.

Some participants taught students to predict which pitches would occur in a melody:

We talk about prediction a lot. I mean, melodies, what are they going to end on? Well, they’re going to end on *do* a lot of the time. . . . So go over there and write a *do* for yourself, and then prove yourself right or wrong.

Helping students develop these musical expectations takes time. One participant described a process he used at the beginning of the year:

So I'll sing *do* and they'll sing back *do*. I'll sing something like *do-re* and they'll sing it back. *Do-re-mi* and they'll sing it back. Then I ask, "OK, well, what do you expect to happen next?" . . . "I think *fa*." We're going up the scale, that makes sense. *Do-re-mi-fa*. "OK, what do you expect to happen next?" "Go up the scale." "Okay, *sol* is more of an open note, we can really go anywhere, so it's not as easy to predict. But where might it go?" . . . Even though they know there are seven notes in the diatonic scale [and] it could go to any of them, they start understanding that there are better choices for certain ones in certain contexts.

Another participant described leaving out the last note of a dictation and asking students to "sing what the last note will be based on what everything else is." Giving students tools to apply their theory knowledge may facilitate their understanding and notation of dictation melodies.

Sight-Singing and Dictation. Seven teachers described a complementary relationship between sight-singing and dictation:

It's important to mirror what I'm doing with sight-singing and melodic dictation. I try to keep those on a parallel path, [to get students] to realize that it's essentially the reverse of the process. They are effectively the same thing.

Several saw sight-singing and dictation as part of a holistic approach to building musicianship. One stated, "I think of it as a full aural training program . . . in several segments: echo singing, responsive singing, sight-singing, melodic dictation practice on a graded system, and melodic dictation quizzes—a five-step approach." When asked about how much of the course was dedicated to melodic dictation instruction, 1 participant responded, "I don't know, because it's every day. Sight-singing influences [melodic dictation] directly and melodic dictation influences sight-singing directly. It's a consistent piece to the development of music literacy." Several agreed that good sight-singers were good dictation takers: "If you can't sing it, you sure can't hear it."

Some participants used the same sequence and instructional material to teach both sight-singing and dictation. They used sight-singing as a tool to build melodic dictation skills and even used melodies from sight-singing for dictation practice. "As our sight-singing skills increase, so do our dictation skills. . . . I'm a firm believer that whatever you sing is what you write. So if we are only singing two pitches, we are only writing two pitches." Another participant wanted his students "to be able to go both directions . . . the seeing ear and the hearing eye—that's what I'm after."

Processing Strategies

During dictation, limitations on time and repetitions require students to employ their cognitive skills wisely and efficiently (Karpinski, 2000). Participants in this study described coaching students through three processing strategies: grasping the big

picture, listening for scale degree function, and targeting the “bookends” of dictation melodies. Directed strategies such as these may provide students with a defined plan of attack.

Grasping the Big Picture. Nine participants emphasized the importance of grasping the big picture, helping students to direct their attention to broad melodic characteristics and overarching melodic organization, rather than specific bits of isolated information. They used terms like “parameters of the melody,” “lay of the land,” and “global” to encourage this approach to dictation, especially during the initial listening.

The teachers encouraged recognition of what one of them referred to as “major posts” in a melody: the starting note, ending note, and any additional cadential points. They described how pivotal points in the melody can help listeners break the target into smaller pieces and recognize parallel material. They also highlighted parallelism purposefully during instruction, guiding students gradually from two-measure melodies, to four-measure melodies with parallel subphrases, to four-measure melodies with little or no repetition.

Participants taught students to recognize general pitch contour, to analyze how “major posts” were approached, and to relate all pitches to the tonic. They preferred broader understanding to specific decoding. As one teacher described this,

I mean, I’m not interested in whether you got every note right, but did you hear that that thing moved up to the dominant and it kind of doodled around and then it ended on the tonic? I mean, what are you hearing?

They encouraged students to describe the general character of a passage, ultimately enabling efficient but lasting skill transfer:

I’ll ask them to describe measure one, so it’s the entire measure. Some will say “It’s *do-re-mi-fa-sol*.” “Yeah, but what is it? Describe it.” “Well, it’s an ascending scale pattern; it’s a descending arpeggio.” Whatever the measure is to them, that way they are grouping information together and trying to get multiple notes as a cliché or a common musical figure.

Participants encouraged students to note the general range of the melody, place the melody metrically according to downbeats, and compare subphrases for memory and understanding. One teacher described preparatory consideration of the typical role of each measure in a four-measure melody before listening: “Measure 1 sets you up. Measure 4 is a ‘gimme.’ Measure 2 takes you somewhere. Measure 3 is the hard one.” These examples demonstrate ways that grasping the big picture can stimulate efficient and accurate dictation completion.

Applying Scale Degree Function. Seven participants described how listening for scale degree function boosts understanding of melodies by triggering prior theory knowledge. They discussed the role of context in processing dictation content and transferring it to notation.

One of them taught scale degree function with numbers; the others all used the movable-*do* solfège system. In both cases, they consistently prompted students to relate pitches to the tonic: “What scale degree am I on?” and “Where am I relative to tonic?” One participant described how this awareness contributed to understanding the overall context of a target melody: “If they hear an interval, to know it’s a minor third is not as important to know that it’s *sol-mi*.” Another noted the necessity of guiding students in building the foundations of such a context, “teaching them where the pitches exist within the key, the distance between the pitches, and really what the pitches do, what their job is within the key.”

Participants reported that attention to scale degree function helped students identify major guideposts, understand cadential patterns, decipher harmonic functions, and track melodic contours more accurately. They also noted that teaching out of context (e.g., extensive focus on isolated intervals) can be problematic:

If they’re trying to listen for a specific skip, and it’s a skip of a fifth and they wrote a fourth, they can write the whole melody off by a step and end on the leading tone, never check their work, and [never] understand, “I know this melody ends on tonic.”

The participant who taught scale degree numbers cited the use of numbers in other applications of written music theory (e.g., “4-3” suspensions) to support that approach. No matter the specific system employed, participants emphasized recognizing functional relationships among notes and patterns, and placing them into known theoretical contexts. According to the teachers interviewed in this study, attention to scale degree function provides multifaceted benefits to dictation students.

Targeting Melodic “Bookends.” Eight participants outlined the “bookends” approach, in which students work from both the beginning and the end toward the middle of a melody. They noted students’ inability to remember the entire melody during dictation, and suggested several reasons that the bookends approach is a viable strategy. The main thrust of the approach is to;

Try to capture the first two, three, or four notes as they are occurring, then listen for the contour of the rest of the phrase, and then capture the last two, three, or four notes, so that in the first listening you have the bookends. I also try to get them to hear the last note they hear in relation to the first note in the next playing, so that they can define whether or not it ends on the same note that it starts on.

The benefits to this approach seem to include both laying a foundation on which the middle measures can later be completed, and relating the beginning and end of the melody to each other, to prepare for the start of the next listening. Participants noted both the ease and importance of recognizing the end of a melody as cadential material. Listeners can draw on common cadential patterns and can better understand the whole melody based on recognition of them.

Catching these pivotal points in the melody is dependent on students' understanding of typical tonal melody construction. As 1 participant stated,

We always know, unless something really throws you for a loop, you are going to be in the tonic at the beginning, a dominant and tonic at the end, and somewhere in the middle there is a good chance you are going to hear a dominant. So you listen to those areas, get those down, and then from that point in the subsequent playings you can just fill in the gaps.

This suggests that the bookends approach incorporates a focus on guideposts, as described earlier in this section, but also involves considering how to approach and leave them. One participant specifically asked the following series of questions in class: "Where does the melody begin? How do you leave that pitch? Where does the melody end? How do you approach that pitch?" Participants also reported actively cultivating the bookends approach in class, instructing students to write the first and last measures before working toward the middle.

Rhythm

Participants reported students' struggles with rhythmic notation. They also revealed their own reluctance to prescribe a counting system for learning and labeling rhythms.

Notation Challenges. Six participants reported students' difficulty transferring aural rhythms to written rhythms, noting that students missed pitches because they lacked a rhythmic framework on which to write them:

Sometimes the biggest challenge toward the accurate transcription of what [students] are listening to is not pitch. It is that they don't know how to space the notes rhythmically, and they get flustered, and it ends up causing them to mess up some of the pitch parts, because they are not sure how to put it down.

Several mentioned the difficulty of notating melodies in compound meter. One addressed this by isolating specific patterns: "They seem to have more trouble with the compound rhythms, so I encourage them to write down just four common rhythmic patterns they're likely to hear in most melodies: the dotted quarter, the quarter eighth, three eighths, and dotted-eighth sixteenth-eighth."

Another addressed the notation problem by giving a prewriting task:

I'll have them sketch out the first subdivision. So, if we are in common time, I'll have them write out some eighth notes. So, when they are listening to the rhythm the first time, they just tie it over if it's a quarter note.

Some had students take dictation of rhythms only: "I think spending time early in the year with just purely rhythmic dictation is very valuable because I think that's the thing that tends to throw them."

Counting System Indecision. Four of the 6 participants who mentioned students' struggles with rhythms—and 7 overall—indicated a lack of commitment to a specific counting system. They did not seem convinced about the value of any specific system.

With rhythm patterns I've done a couple things, [but now I do] what we call the "Dadada" method, where you just go, "Da duh dada." For rhythm, I really had to think about it, but I'm almost a neutral syllable person for rhythm, so you can just do the relationships.

One participant noted the disparity in approaches for teaching rhythm:

As you talk to people, you're going to find a wider variety of opinion on what's the best way to do this. And not only that, but maybe some pretty militant feelings about it. Maybe it's because we've gone our own way with this and we like our way. We don't seem to [worry] much about how to put a chord in four voices. . . . There's a good method to teach that. But here, this is very open-ended.

Although we heard several approaches to teaching rhythm—the traditional counting system (1 2-& 3-e-&-a), the Eastman counting system (1 2-tay 3-ta-tay-ta), the Gordon system (du du-de du-ta-de-ta), and the Galin-Paris-Chev  system (ta ti-ti ti-ri-ti-ri,)—few participants were committed even to their current approach. Some taught several approaches concurrently, while others mentioned that they were still experimenting themselves. Several allowed students to choose their own counting system, if any, rather than prescribing a single approach.

Course Design

Preparation for the AP exam was the strongest influence on participants' course design. In their efforts to stimulate fast-paced, high-quality learning, they also described sequencing instruction systematically, using familiar melodies, and attending to the psychological side of dictation tasks.

Teaching to the AP Exam. All participants described the influence of the AP exam on their courses, both in terms of curriculum development and scoring of classroom assignments and exams. They used AP Central's posted prior exams and online materials as practice exams and exercises, and found them helpful to students.

Participants based curricula contents and how they sequenced material on what was included in the exam. For example, one mentioned delaying triplets until very late in the year "because in the AP they don't do a triplet pattern in dictation—I haven't seen that." Another designed specific exercises according to AP dictations: "I've mined the melodic dictations on the AP Theory exam, and so many of them have a midpoint on V [the dominant triad]." This teacher also spent considerably more time on melodic minor than harmonic minor because the AP exam rarely contained the latter.

Several participants studied practice exams and the AP scoring rubric to offer students specific testing strategies. According to 1 participant,

The primary method [for scoring] is that you get a point for every half measure of the dictation you get correct. We also know that every AP melodic dictation ends on tonic, and it's usually some sort of sustained pitch. So, get the last measure, get the first measure, and then you get your bonus point for anything else you might get right, and then you've got 5 of the 9 points that are available to you on the exam. Five out of nine, when you look at the national average, is actually not that bad of a score to begin with. So, I tell especially my weaker students not to kill themselves on measures 2 and 3—get what you can of that—but you have to get all of measures 1 and 4, so really focus on that.

Others participants graded dictations in class according to the AP rubric so that students could see firsthand how the process works.

Although most seemed grateful for the online exam materials provided by the College Board, one mentioned the possible pitfalls of focusing a curriculum on a test. He stated, “We live in a testing world and it's sad because it thwarts creativity. I think everyone is interested in, ‘I want the answer; I've got to get the answer.’” Although “teaching to the test” has a reputation for limiting creativity in the classroom and focusing exclusively on practical concerns, most teachers in this study reported that the AP exam reliably measured students' ability to hear and write music and that the AP-provided materials strengthened their curricula.

Sequencing Instruction. Eleven participants described progressing methodically from simple to complex in classroom instruction. They applied this pedagogical approach to both the presentation of skills and concepts and the gradual increase in length of practice dictations.

At the very beginning of instruction, some participants led students through very simple pitch patterns, gradually introducing rhythms later; others did the opposite. In all cases, simplicity at the beginning was crucial—“bulletproof” examples, as one teacher described it. Another described his overall progression through dictation instruction:

I always start at the very, very beginning, where we do stepwise motion with no rhythms. We might do just six notes. . . . “Does it go up; does it go down?” It's all stepwise. . . . Then we go to skips within the tonic chord or dominant chord. Once they master that, we go to the larger leaps, a little more complicated rhythm. Down the road, it will be compound rhythms. But it's tiny little steps . . .

Another teacher, strongly dedicated to Kodály-based instruction, guided her students through the same sequence of concepts as she would use in elementary school, with a more mature approach. In her words, “My students do not sing *fa* and *ti* for literally half a semester.”

The teachers we interviewed also discussed the importance of gradually building the length of dictation examples used in class. They described, for example, working from simple, unmeasured groups of notes, to basic metric organization, to one-, two-, three-, and four-measure melodies. One noted an important intermediate step: four-measure melodies in which the first and third measures are identical.

Psychological Influence. Eight participants described the importance of attending to unique psychological needs of high school students as they learn to take dictation and prepare themselves for exam situations. They noted a common student complaint of “I can’t” and described ways of overcoming it in their course design.

The teachers reported that students’ defeatist attitudes, such as “I can never do this; I can’t do this” and “This is the hardest part of theory,” influenced their decision making. They described some students’ lack of emotional fortitude and self-confidence, leading to fear and the inability to function fully:

I think [the] emotional-psychological aspect of the adolescent mind really has to be taken into consideration in this. We, as older professionals, take that for granted, and when we think back to our own experiences in college, maybe we were a little more mature emotionally to be able to deal with those things. Some of them are not. Some of them are at that point where when they don’t get something, they just shut down, and you have to work with those kids.

Participants explained that sometimes students cease to perceive new information accurately, due to overwhelming mental focus on a melodic detail about which they are unsure. This “shutdown” can affect student performance both during regular classroom dictation activities and on assessments, including the AP exam.

Participants recommended designing the course to foster small successes in class early on, to help students build confidence and avoid “can’t do” attitudes in the first place. They told us that laying out specific sequenced steps can help students realize that dictation is not as daunting as it may seem. One stated, “Good dictation takers accept that they are going to have some mistakes . . . and they are okay with it.” Another described how to encourage a process of elimination during dictation, to build confidence and make large tasks more feasible:

If you’re going to teach a kid about compound meter, to do what my teachers did to me as a freshman in college and to just go to the keyboard and [sings a compound meter melody], “Write that down.” . . . If [instead] they had said, “Well, there’s going to be quarter eighth, dotted-eighth sixteenth-eighth, quarter two sixteenths, three eighth notes, a dotted quarter note somewhere,” and had given me those choices, I think I might have been able to learn how to do that.

Using Familiar Melodies. Seven teachers incorporated familiar melodies in their curriculum, drawing on students’ internal repertoire of tunes to reinforce their dictation development. Participants generated concepts in class from familiar tunes and encouraged students to practice those concepts with other favorites outside of class. One described the central role that “dictation journals” played in her course:

At least 3 days a week, I start class by giving the name of a familiar tune. I have them grouped into meters. . . . We start with the simple 4/4 stuff, “Three Blind Mice.” Then I have them write it down; I put it in a key. I have developed a long list of familiar tunes, and ask them to write down stuff they already know. They grapple, and fight, and swear, and pull out their smartphones, and tap on the little keyboards. That’s strategy number one, the dictation journal.

This approach draws on students' prior knowledge and internal repertoire and treats it in a sequential, systematic way.

The reciprocal benefit of incorporating familiar tunes is that students may carry what they learn in class back to their routine listening. Participants expressed hope that their students would gain the ability to understand what they hear on the radio, notate parts of favorite songs, and arrange tunes for their own groups outside of school. One elaborated on how this provides relevance to the musical lives of students with diverse musical backgrounds, explaining,

Interestingly enough, a lot of the kids that take the class don't have a really strong background. They are not the kids who have been taking piano lessons their whole life. They are [garage] band members who want to know more about the structure of chords and don't always have a really great foundation to build on. I want to give them the skills to write down that "hook" for the song they are trying to cover.

Discussion and Implications

Cognitive Frameworks

Based on the responses of the teachers in this study, there are several conclusions that can be drawn about building the cognitive frameworks necessary for developing successful dictation skills. According to participants, strong dictation students are skilled at recognizing patterns. Pattern fluency appeared to help limit the number of choices that students had available when making pitch or rhythm selections and decisions. Instead of trying to decode a stream of notes, they could use chunking (Karpinski, 2000; Madsen & Staum, 1983) to reduce the amount of tonal information and improve their memory and understanding. This confirms prior research (Potter, 1990; Telesco, 1991) and pedagogical recommendations (Foulkes-Levy, 1998; Karpinski, 2000). Helping students build a strong and stable vocabulary of common patterns may be a successful way to boost their fluency with musical tasks like dictation.

Encouraging students to take advantage of their theory knowledge when making decisions and predictions about melodies in dictation was a strategy found to be useful by these AP teachers. Knowing what is likely to happen in a melody may help students eliminate other options. This could raise scores by preventing careless mistakes, like shifting the melody by a step. It also could help students who run out of time to deduce what they did not remember in the melody. Approaching dictation tasks in this manner may assist students with developing an understanding of what lies behind the task, as recommended by Klonoski (2006).

According to participants, teaching students to utilize frameworks they learned in written theory and in practicing common patterns could benefit both their sight-singing and dictation skills. Using sight-singing to reinforce aural concepts may help solidify cognitive frameworks learned in written theory and provide additional practice with common patterns.

Processing Strategies

Based on the findings of this study, theory teachers may wish to consider developing broad understanding of melodic characteristics as opposed to detailed decoding of isolated notes or rhythms. Participants reported the usefulness of grasping the big picture during dictation for better understanding of the melody and more efficient processing overall, a finding consistent with Rogers (2004), who stated,

Tonal dictation . . . can be hindered, in fact, by over-reliance on a note-to-note type of hearing because it detracts from larger-scale connections that are both more important musically than surface details and also more important pedagogically because they make the learning of hearing easier. (p. 110)

Researchers have reported the efficacy of scale degree function in constructing tonal context during listening tasks (Gordon, 2007; Karpinski, 2000) and the popularity of solfège systems incorporating scale degree function for sight-singing instruction (McClung, 2001). Participants in the current study noted the usefulness of consistently comparing dictation pitches to the tonic and attending to harmonic and cadential patterns in relation to the key, to avoid errors and reinforce context. These skills depend on development of a solid music vocabulary, as described previously.

Students' ability to comprehend the target melody from multiple angles may help them work with increased efficiency, a recommendation from the findings that is consistent with Margulis (2005). Instead of thinking only left to right, and having one point of departure during any given listening, students may be able to fill in bits of information around multiple key points. Students physically hear dictation melodies from beginning to end but can process them in a variety of ways (Margulis, 2005; Povel & Jansen, 2001; Rinck & Denis, 2004; Thompson, 2004). Participants described a flexible approach to deciphering dictations, targeting the bookends first and working in both directions, chronologically, to complete the task. This approach may require extensive modeling and practicing.

Rhythm

The findings of this study were consistent with research on the challenges of rhythmic notation (Hoffman, Pelto, & White, 1996), although the participants' approaches seemed to contradict pedagogical suggestions for rhythmic learning (Foulkes-Levy, 1997; Karpinski, 2000). Although these teachers were confident in their choice of a pitch system (e.g., solfège, numbers), they were much less confident in their choice of a rhythm counting system, if they chose one at all. It is possible that students' difficulty with rhythmic notation may be compounded by teachers' lack of a clear way of teaching it. Further investigations into the efficacy of using a rhythm counting system, particularly at the high school level, could be of benefit to teachers.

Approaches to Course Design

All teachers in the study were guided by the AP exam in developing their courses. Some specifically reviewed prior posted exams and scoring procedures on the AP website to inform their classroom instruction, grading procedures, and advice to students. “Teaching to the test” remains a controversial topic in education (Cizek, 1993; Mintrop & Sunderman, 2009; Shepard, 1991) but may be beneficial in maintaining high standards of achievement in the content and skills of AP Music Theory. Teachers should consider ways to prepare students adequately for the AP exam while not limiting potential learning experiences through excessive focus on a singular test result.

Participants had a positive view of the AP exam overall. Some reasons for this may be the College Board’s transparency with what is tested and insistence on having AP Music Theory teachers involved in the writing and shaping of the exam, rather than hiring music theory experts who may not be directly involved in teaching high school students. Disseminating information about test construction and content may be helpful in improving attitudes toward existing standardized tests and guiding development of future exams in music.

Sequential instruction through small increments has long been a central tenet of music instruction (Maclin, 1993; Yarbrough, 2002). The use of “tiny little steps” both to reinforce mastery of concepts and to build students’ confidence over time seemed effective for these participants. Consistent reflection on the degree to which their curriculum employs logical steps and sequences may help instructors improve their courses.

Students’ current repertoire of favorite music has become a key topic of interest in music education circles (Allsup, 2011). Music theory teachers might follow the example of participants in this study by finding innovative ways to maximize the influence that classroom materials have on students’ casual listening, and vice versa. Fostering connections between course materials and students’ musical lives outside of class may provide more meaningful experiences in their developing musicianship (Campbell, Connell, & Beegle, 2007).

The adolescent mind experiences unique psychological, emotional, and social challenges in school (Suldo, Riley, & Shaffer, 2006). Because success in dictation depends on the relationship between perceiver and perceived, the psychological and emotional health of high school students must be considered throughout instruction. Students who approach dictation through a process of elimination may be better prepared mentally just before the dictation begins and more likely to recognize the smaller tasks within the larger challenge. Teachers might offer students opportunities to build confidence, share strategies, and provide each other with encouragement during dictation training.

Based on these findings about teaching melodic dictation, future research might focus on students and the strategies they employ. Researchers might investigate the efficacy of specific counting systems in building rhythm skills for melodic dictation. A study examining students’ dictation strategies and their scores on the melodic dictation portion of the AP exam might yield further insights. Finally, further research is

needed to explore the influence of psychological fortitude on the dictation process. These studies would add to our current findings to provide a more comprehensive view of teaching and learning melodic dictation. With greater information about current practices employed by colleagues and their students, music theory teachers will be better equipped to make pedagogical decisions about aural skills instruction.

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