

# A Version of Guided Notetaking for Use in Music History Courses: Fostering Engagement and Achievement through Critical Thinking and Writing

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Between 2012, when I began teaching in the School of Music at the University of Utah, and 2015, when we restructured our undergraduate curriculum, I taught the nineteenth-century portion of the required four-semester undergraduate survey of music history each fall semester.<sup>1</sup> During my first semester of teaching this course, I saw my students' learning and success impeded by several factors, including spotty attendance, lackluster participation, and minimal notetaking skills. Many students came to class without having completed the reading and listening assignments for the day, which in turn deprived them of opportunities during class to hone critical-thinking abilities essential for all musicians, whether they are performing or writing about music. When students came to my office hours to seek help, I would ask them to bring their notes with them, and in many cases, these consisted only of scanty jottings of keywords and foreign terms I had written on the board. My observation that students generally took few notes about the ideas, information, and interpretations I presented in class—or those shared by their classmates—was confirmed. Students often told me they did not know what was important to write down.

My search for pedagogical techniques that would emphasize and encourage active learning, greater engagement with course material, and more effective notetaking led me to the literature on guided notetaking. In guided notetaking, the instructor prepares in advance an outline of the class including spaces and prompts for students to write concepts, facts, and examples. As I describe in more detail below, studies show that guided notetaking is associated not only with more complete notes and better academic achievement, but also with greater participation than unassisted notetaking. Yet, as education specialists

I thank Matt Cecil, Elizabeth T. Craft, Emily H. Green, Jane Hatter, Sarah Projansky, and the journal's editor and anonymous reviewers for their helpful feedback on this article.

1. I had previously taught a similar course at a different institution.

have noted, apart from research involving students with learning disabilities, this method has been relatively little studied among postsecondary students, and even then investigations have been restricted largely to social science disciplines.<sup>2</sup> Furthermore, despite current misgivings about the traditional “sage-on-the-stage” approach to teaching, almost all published studies of guided notetaking have focused on the application of this technique in lecture settings; one notable exception is Kristine Montis’s research on its use in a highly interactive college mathematics course.<sup>3</sup> Perhaps in part for these reasons, guided notetaking has traditionally led students to write relatively little and has focused instead primarily on recording factual information and examples presented by the instructor.

Because I favor a “guide-by-your-side” pedagogical approach that blends lecture and discussion activities, emphasizing writing and critical thinking as skills central to the discipline of music history, I have developed a version of guided notetaking that stresses these skills to a greater degree than does traditional guided notetaking.<sup>4</sup> In this essay, I present this expanded version of

2. See Jennifer L. Austin, Melissa Lee, and Jeffrey P. Carr, “The Effects of Guided Notes on Undergraduate Students’ Recording of Lecture Content,” *Journal of Instructional Psychology* 31/4 (2004): 314–20; and Moira Konrad, Laurice M. Joseph, and Elisha Eveleigh, “A Meta-Analytic Review of Guided Notes,” *Education and Treatment of Children* 32/3 (2009): 421–44. Richard T. Boon, Cecil Fore, and Saleem Rasheed, “Students’ Attitudes and Perceptions Toward Technology-Based Applications and Guided Notes Instruction in High School World History Classrooms,” *Reading Improvement* 44/1 (2007): 23–31; and Shobana Musti-Rao, Stephen D. Kroeger, and Karin Schumacher-Dyke, “Using Guided Notes and Response Cards at the Postsecondary Level,” *Teacher Education & Special Education* 31/3 (2008): 149–63, call for more studies in different subject areas and at different educational levels. Jennifer L. Austin, Melissa Gilbert Lee, Matthew D. Thibeault, James E. Carr, and Jon S. Bailey, “Effects of Guided Notes on University Students’ Responding and Recall of Information,” *Journal of Behavioral Education* 11/4 (2002): 243–54, encourage research with students with varying levels of familiarity with a given subject or topic. Furthermore, Konrad, Joseph, and Eveleigh, “A Meta-Analytic Review,” call for more investigations into optimal approaches and formats for guided notetaking. I have cited Boon, Fore, and Rasheed’s research on guided notetaking in a high-school setting precisely because so few studies have been published about its use among the general population of college students, especially in disciplines in the arts and humanities.

3. Kristine Montis, “Guided Notes: An Interactive Method for Success in Secondary and College Mathematics Classrooms,” *Focus on Learning Problems in Mathematics* 29/3 (2007): 55–68. Perhaps for this reason, Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information,” draw attention to the need for studies that would “discern whether teaching style or class structure affects the impact of guided notes” (253).

4. My own experience—both as a teacher and as a scholar—is that critical thinking and writing skills improve through consistent practice, which may take many forms for students, from notetaking and short writing assignments to longer term papers and capstone projects. Furthermore, because these skills are at the core of our discipline, music history courses are often explicitly designated (through qualifications such as “writing intensive,” for example), at least in traditional school-of-music curricula, as those in which students are expected to hone them.

guided notetaking, which includes prompts for use in class as well as short writing assignments to be completed outside of class. Guided notetaking, I contend, is successful in improving student engagement and achievement in music history courses while fostering discipline-relevant competencies. Although for reasons of space I refer primarily to my experiences in a single course, guided notetaking is a flexible and beneficial pedagogical practice that can be profitably adapted to a variety of music history courses.<sup>5</sup>

### **Traditional Guided Notetaking: Motivation, Method, and Benefits**

Although students generally bring notetaking materials to class—whether pen and paper or laptop—and write something down during the class period, a still influential study conducted by Linda Baker and Bruce R. Lombardi in an introductory psychology course and published over thirty years ago found that most students included only half of the most important ideas in their notes.<sup>6</sup> Yet even though research shows undergraduates generally are not skillful notetakers, virtually all of them believe taking notes in class is crucial to their academic success.<sup>7</sup> Difficulties may be attributed to a variety of factors, which likely differ to a certain extent from one student and learning environment to another: limited or even non-existent instruction in how to take notes effectively; lack of familiarity with the subject matter of a course, especially at the introductory level; and/or “a classroom environment that does not consistently prompt the behaviors necessary to produce a complete and accurate set of notes”—perhaps the still-common lecture setting within which Baker and Lombardi conducted their study.<sup>8</sup>

5. The suitability and success of any pedagogical strategy is at least partly contextual; although the version of guided notetaking I have developed has worked very well with my students at my particular institution, different students at a different institution may react differently to it.

6. Linda Baker and Bruce R. Lombardi, “Students’ Lecture Notes and Their Relation to Test Performance,” *Teaching of Psychology* 12 (1985): 28–32. Baker and Lombardi’s study remains widely cited in more recent scholarship, including William L. Heward, “Four Validated Instructional Strategies,” *Behavior and Social Issues* 7/1 (1997): 43–51; Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information”; Austin, Lee, and Carr, “The Effects of Guided Notes on Undergraduate Students’ Recording of Lecture Content”; and Nancy A. Neef, Brandon E. McCord, and Summer J. Ferreri, “Effects of Guided Notes Versus Completed Notes during Lectures on College Students’ Quiz Performance,” *Journal of Applied Behavior Analysis* 39/1 (2006): 123–30.

7. In one formal questionnaire, for example, 99% of college students said they took notes in class and 96% said it was “essential to their success.” See Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information,” 217.

8. The quotation is from Austin, Lee, and Carr, “The Effects of Guided Notes on Undergraduate Students’ Recording of Lecture Content,” 314.

Students are correct in their assessment of the importance of notetaking, for Baker and Lombardi found a strong positive correlation between the amount of information recorded in students' notes and their success on exams as well as in a course overall, as measured by final course grades.<sup>9</sup> Although they admit that "it may be that students who take better notes in class also engage in more effective study strategies or have higher levels of achievement motivation," the authors conclude that "the frequent failures to record even the main points of the lecture further emphasize the need to help students differentiate the important information from the less important."<sup>10</sup> David S. Kreiner concurs: "there may be no benefit of merely requiring students to take notes" if they cannot separate key ideas from less significant ones.<sup>11</sup>

Guided notetaking alleviates this problem through instructor-provided cues for students to record important material; an example of a traditional template for guided notes is reproduced in **Figure 1**. Unsurprisingly, such templates increase students' notetaking accuracy, completeness, and organization;<sup>12</sup> and they improve both performance on exams and final course grades.<sup>13</sup>

9. Similarly, Robert L. Williams and Alan Eggert, "Notetaking Predictors of Test Performance," *Teaching of Psychology* 29/3 (2002): 234–37, found the best predictor of students' performance on exams is the accuracy of their notes. Kenneth Kiewra, "Notetaking and Review: The Research and Its Implications," *Instructional Science* 16/3 (1987): 233–49, agrees that "notetaking and review are positively related to academic achievement, but many students record too few notes to benefit fully from these activities" (233).

10. Baker and Lombardi, "Students' Lecture Notes," 32.

11. David S. Kreiner, "Guided Notes and Interactive Methods for Teaching with Videotapes," *Teaching of Psychology* 24/3 (1997): 183–85, at 185.

12. Patricia M. Barbetta and Cindy L. Skaruppa, "Looking for a Way to Improve Your Behavior Analysis Lectures? Try Guided Notes," *The Behavior Analyst* 18/1 (1995): 155–60; Austin, Lee, and Carr, "The Effects of Guided Notes on Undergraduate Students' Recording of Lecture Content"; and Konrad, Joseph, and Eveleigh, "A Meta-Analytic Review."

13. Austin et al., "Effects of Guided Notes on University Students' Responding and Recall of Information"; Montis, "Guided Notes"; and Konrad, Joseph, and Eveleigh, "A Meta-Analytic Review." The benefits I summarize have been observed among the general student population as well as among those with learning disabilities. Furthermore, Brian Kai Yung Tam and Michael L. Scott, "Three Group Instructional Strategies for Students with Limited English Proficiency in Vocational Education," *The Journal for Vocational Special Needs Education* 19/1 (1996): 31–36, suggest that guided notetaking is also particularly beneficial to students whose first language is not English. As college classrooms increasingly include students with a range of abilities, guided notetaking may be an effective strategy to promote academic success for all students.

A few studies have found that guided notetaking does not lead to greater student success, but these studies are outweighed by the number of those that have demonstrated the beneficial effects of guided notetaking on student achievement, as well as by students' own perception of its usefulness and their reported preference for guided notetaking over unassisted notetaking or being given their instructor's complete class notes (discussed below). For further elaboration, including discussion of the effect of study-design limitations on measures of notetaking effectiveness, see Megan W. Blankenship, "Comparing Note Taking and Test Performance in Methods and Modes of Note Taking Conditions" (PhD diss., Ball State University, 2016).

**Figure 1:** Example of a traditional template for guided notes reproduced from Shobana Musti-Rao, Stephen D. Kroeger, and Karin Schumacher-Dyke, “Using Guided Notes and Response Cards at the Postsecondary Level,” *Teacher Education & Special Education* 31/3 (2008): 149–63, at 161.

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Learning Objectives:

- \* Teacher candidates will gain an understanding of the ordering systems: (1) Discriminate the difference between spatial and temporal ordering systems, (2) articulate different applications of the ordering systems, (3) understand how difficulties in either ordering system can impact learning, and (4) be able to problem solving with strategies to support learning.
- \* Example: Teacher candidates will list at least three strategies and interventions for students who experience problems in areas influenced by the spatial and temporal-sequential ordering functions.

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📖 Note 📖

Spatial Ordering and Temporal-Sequential Ordering are based on Levine’s Neurodevelopmental Framework (Recall the four big ideas that include the following: attention controls, memory, ordering systems, and language)

**A. The Human Brain**

- The human brain naturally attempts to create order. Two ordering systems work together to facilitate learning:
  1. spatial ordering (i.e., \_\_\_\_\_) and
  2. temporal -sequential ordering (i.e., \_\_\_\_\_ chunks).

**B. Levels of Operation**

- When one or both are impaired, significant learning obstacles evolve.
- There are five distinct levels of operation:
  - (a) processing (or perception)
  - (b) memory
  - (c) \_\_\_\_\_
  - (d) organization
  - (e) \_\_\_\_\_

**C. Spatial Ordering**

Activity

Take a look at the next image on the screen.

- Without talking to your neighbor, write down your ideas of what the image might be.
- Ready . . .

👁️ ⚡ \_\_\_\_\_

- What do you think?
- What was your first guess?

C1. *Definition:* Our minds’ ability to understand, remember, and use information arranged in \_\_\_\_\_.  
 Consider: facial recognition, key recognition in your pocket or purse  
 ⚡ Write your own examples: ⚡

C2. *The Facts*

- Pattern recognition is processed as one simultaneous array.
- Size, space, position, three-dimensionality, foreground, background are aspects of spatial ordering
- Spatial memory allows us to remember what things look like and serve as a backup for spelling or remembering directions.

C3. *Strategies and Interventions*

- Emphasize \_\_\_\_\_ when reading or listening.
- Pair visual schemata with vocabulary and language.
- Use models, paired with instructions for project assignments.
- \_\_\_\_\_
- Allow extended time for processing.
- Emphasize the use of technology for visual esthetics.



Moreover, guided notetaking leads to what Kreiner refers to as “improved general processing rather than just attention to specific points.”<sup>14</sup> Kreiner’s study, as well as work by Montis and research by Moira Konrad, Laurice M. Joseph, and Madoka Itoi, suggests that guided notetaking can encourage students to think critically, apply knowledge, make connections, and generate new ideas.<sup>15</sup> In his study, Kreiner had students watch a videotape about language development, after which they took a test that included equal numbers of “explicit” questions (requiring them to recall information presented in the video) and “implicit” questions (requiring them to make inferences based on information presented in the video). Kreiner divided the students into four viewing groups: one group completed guided notes while watching the video (guided notes group); a second group of students answered questions orally at several points throughout their viewing (interactive group); a third group was instructed not to take notes while watching the video (control group); and a fourth group was told to take notes without guidance while viewing it (unassisted notes group). Regardless of the group they were in, students scored comparably on explicit test questions, but students in the guided notes and interactive groups scored significantly better on implicit test questions than those in the control and unassisted notes groups.

In addition, two studies have found that guided notetaking increases the number of oral student responses in class,<sup>16</sup> and as William L. Heward summarizes, a substantial body of research has demonstrated that active student responding (answering a question, for example) is correlated more strongly with academic achievement than passive responding (listening to the instructor, for instance).<sup>17</sup> Patricia M. Barbetta and Cindy L. Skaruppa speculated that guided notetaking indirectly encourages students to speak more in class because it increases students’ confidence in their notes as a basis for asking questions, and because when students spend less time writing, they have more time to think and participate in class discussion.<sup>18</sup> A later study, however, found that when they are guiding their students’ notetaking, instructors actually prompt their students for a greater number of verbal responses, which in turn

14. Kreiner, “Guided Notes,” 185.

15. See Montis, “Guided Notes”; and Moira Konrad, Laurice M. Joseph, and Madoka Itoi, “Using Guided Notes to Enhance Instruction for All Students,” *Intervention in School & Clinic* 46/3 (2011): 131–40.

16. Barbetta and Skaruppa, “Looking for a Way”; and Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information.”

17. William L. Heward, “Three Low-Tech Strategies for Increasing the Frequency of Active Student Response during Group Instruction,” in *Behavior Analysis in Education: Focus on Measurably Superior Instruction*, ed. Ralph Gardner III (Pacific Grove, CA: Brooks/Cole., 1994), 283–320. Guided notetaking is one of three effective “low-tech” strategies Heward discusses for increasing active student responding; the others are choral responding and response cards.

18. Barbetta and Skaruppa, “Looking for a Way.”

leads to increased participation.<sup>19</sup> Students themselves have underscored that guided notetaking allows them more time to think about and comment on class material, as well as ask and answer questions.<sup>20</sup>

### A Version of Guided Notetaking for Use in Music History Courses

In Fall 2013 I implemented two new and related strategies for improving student engagement and achievement when I taught the survey of nineteenth-century music course (henceforth SNCM) again: notetaking prompts for each class period (called “daily learning objectives”) that I post to our online course management system (Canvas) several days before each class; and weekly short writing assignments, which act as notetaking prompts for selected reading and listening assignments.<sup>21</sup> As I explain to my students on the first day of the semester, I provide the prompts for classroom notetaking as Word documents they can open on their laptops, or print out in advance—with added spaces for their responses—and bring to class to complete by hand, as they choose. The goals of both strategies (guided notetaking in class and in conjunction with reading and listening assignments) are to focus students’ attention on key course material and to provide opportunities for critical interpretation and writing on a very regular basis. These strategies are aligned with but differ from the broader learning outcomes I identify on the course syllabus (exploring how music influenced and was influenced by larger social, political, and artistic contexts; expanding musical vocabulary; examining the development of musical forms, aesthetics, performance practices, institutions, and audiences; etc.), which students work toward over the course of the semester rather than necessarily on a daily basis.

The notetaking prompts I have developed differ from traditional templates for guided notes in two notable ways: they encourage more writing and more critical thinking on my students’ part. Although students can respond to some of the prompts in just a word or two, many elicit more extensive writing, as well as thinking and speaking, all of which work hand-in-hand. (I have included several examples of the notetaking prompts I created for SNCM in **Appendix I**.) One of the principles of traditional guided notetaking, in contrast, is that it

19. Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information.” The authors of the study note, however, that “guided notes might be beneficial in getting students who already speak in class to speak more, but might do little to prompt less vocal students to contribute actively to class discussions. Future research might explore how these less active students could be prompted to make more verbal responses through the use of guided notes or some other instructional method” (253).

20. Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information”; and Montis, “Guided Notes.”

21. Konrad, Joseph, and Itoi, “Using Guided Notes,” also suggest guided notetaking in the context of reading assignments.

requires enough responses to maintain student attention, but these responses are very brief, often simply filling in blanks (see **Figure 1**), so that the act of writing itself does not detract from listening and participating.<sup>22</sup> However, Pauline A. Nye et al.'s study conducted in an introductory psychology course found the strongest predictor of exam success is the sheer number of words a student writes in his/her notes.<sup>23</sup> Although this research did not involve *guided* notes, the authors stress that the correlation between quantity of notes and academic achievement contradicts much advice given to students to take only brief notes, giving them only "secondary attention" during class.<sup>24</sup> Their findings suggest that such advice may not be sound, whether in the context of unassisted note-taking or, I contend, guided notetaking.

I phrase my notetaking prompts as questions, some of which are more objective and others more interpretive. This balance is one I believe is important, because unfortunately students are often conditioned through their undergraduate music history courses to think that musicologists do nothing more than compile and memorize various facts. In notetaking prompts and in class discussions that ensue from them, I emphasize that knowledge leads to and supports interpretations that are crucial to our understanding of music and that inform our decisions about how to perform it. As Sara Haefeli and others have argued, students should graduate from college having learned how to ask good questions, and many of those I include in the notetaking prompts model the kinds of questions professional musicologists pose.<sup>25</sup>

Like traditional prompts for guided notes, mine provide students with background information; organize class content; focus student attention on important concepts, terms, and issues; and foster active and cooperative learning by encouraging students to think about and respond to specific questions, both orally and in writing. Nonetheless, I don't require or directly incentivize students to use the prompts in class (through extra credit, for instance). Furthermore, neither I nor the students are strictly beholden to the prompts; we ask many questions of each other, offer and discuss additional examples, and pursue related topics of interest as they arise. In that respect, as in traditional

22. Barbetta and Skaruppa, "Looking for a Way"; Montis, "Guided Notes"; and Konrad, Joseph, and Eveleigh, "A Meta-Analytic Review."

23. Pauline A. Nye, Terence J. Crooks, Melanie Powley, and Gail Tripp, "Student Note-Taking Related to University Examination Performance," *Higher Education* 13 (1984): 85–97. As with Baker and Lombardi's study from the 1980s, Nye et al.'s research continues to be cited in more recent literature; see, for example, Austin, Lee, and Carr, "The Effects of Guided Notes on Undergraduate Students' Recording of Lecture Content." And again, as with Baker and Lombardi's study, Nye et al. acknowledge the possibility that students who take more notes may also be more motivated to succeed and may have better study skills in general.

24. Nye et al., "Student Note-Taking," 95–96.

25. See Sara Haefeli, "From Answers to Questions: Fostering Student Creativity and Engagement in Research and Writing," this *Journal* 7/1 (2016): 1–17.



guided notetaking, the prompts for the students' notes provide a scaffolding of key ideas, information, and discussion points, not a complete encapsulation of everything that takes place during a class period.

The short writing assignments my students complete outside of class on an approximately weekly basis, answering two or three specific questions about reading and/or listening material, are an extension of guided notetaking in the classroom and similarly emphasize the importance of writing to learning.<sup>26</sup> And because for many students, taking notes on reading or listening assignments presents challenges similar to taking notes in class, the short writing assignments guide them in distinguishing essential from less important ideas and information. (I have included several examples of these assignments in **Appendix 2**). In designing the assignments, I tend to focus on material that I feel is representative of larger trends, whether with respect to a particular composer's style or broader aesthetic and social issues. A further goal of the short writing assignments is to prepare students for participation in class discussion, since we take up the questions (and/or closely related ones) as a large group and/or in pairs. This helps clarify students' understanding and expand upon it, while honing our ability to think critically about music, from small compositional details to far-reaching influences and impacts. To this end, the assignments, like the notetaking prompts for in-class use, include some questions that are objective and others that are more interpretive.<sup>27</sup>

In order to encourage improved attendance without resorting to giving students points simply for coming to class (or taking them away for absences), assignments (graded on a scale of zero to five points) must be turned in to me in person at the beginning of class and students must remain in class for the rest of the period in order to receive credit for their work.<sup>28</sup> When I first began requiring my students to complete short writing assignments in Fall 2013, none of them had been expected to turn in written work on a regular basis in the two music history survey courses that were prerequisites to mine. Nonetheless,

26. I don't specify the length of students' answers; depending on the question, answers typically vary from a sentence or two to a paragraph. I also require students to complete one or two longer essay assignments, the topics of which vary from semester to semester.

27. For an example of an alternative approach to regular writing assignments also emphasizing critical thinking and preparation for class discussion (albeit responding to open-ended prompts in lengthier prose), see Sara Haefeli, "Using Blogs for Better Student Writing Outcomes," this *Journal* 4/1 (2013): 39–70.

28. I ask students to complete twelve short writing assignments throughout the semester and as a whole they account for 15% of the final course grade. This means each assignment is worth 1.25% of a student's final grade, and I drop the lowest assignment score at the end of the semester. Individual assignments therefore affect a student's final course grade only minimally, but they encourage consistent engagement with course material throughout the semester and offer students feedback from me on a regular basis. Not completing a large number of assignments, however, has a serious adverse effect on a student's success in the course.

most students responded positively to them, perhaps in part because they were already used to doing daily or weekly written exercises in their music theory and aural skills courses. Furthermore, the short assignments improved some students' final course grades directly, and they undoubtedly improved almost everyone's performance on exams since I included some of the questions from the assignments or very similar ones.<sup>29</sup>

My experience using this version of guided notetaking (in class and through short writing assignments) in SNCM supports the positive findings of many studies about the benefits of traditional guided notetaking: I have observed that students are generally better prepared for class and participate more fully in discussions. Furthermore, because the notetaking prompts specify what material is most important in each class meeting, students know exactly when they are not understanding something that is central to the day's topic and when they need to ask for clarification—or when they need to tell me that we have forgotten to address something that is included in the prompts!

Outcomes since I implemented guided notetaking in SNCM in Fall 2013 were correlated with measurably positive improvement on several levels, as summarized in **Table 1**.<sup>30</sup> First, absenteeism declined modestly. Moreover, attendance became increasingly polarized between the majority of students who came to class on a very regular basis and a small minority of students who were repeatedly absent (in some cases, appearing only to take exams). Second, student success in the course, as measured by final course grades, increased markedly, even though the course content did not change; assuming that final course grades are a reliable indicator of learning, students simply learned more of the course material. The average final course grade rose from a B- in Fall 2012 (the year before I introduced guided notetaking) to a B in Fall 2013, 2014, and 2015. Although this improvement might appear modest, it does not fully reflect the dramatic increase in the number of students doing exceedingly well in the course: only 19% of students earned a final course grade of A or A- in Fall 2012, whereas 43%, 45%, and 46% achieved such success in Fall 2013, 2014,

29. The overall short writing assignment grades of approximately 35% of students in Fall 2013, 2014, and 2015 combined was higher than their cumulative final course grades.

30. I wish to emphasize that increased student success and satisfaction in SNCM are *correlated* with the new pedagogical strategies I implemented, but since I did not do so in the context of a scientific study (with control groups, etc.), I cannot establish that these strategies are the *cause* of the improvements I observed. It is of course possible that other factors may also have contributed to these improvements, but the most likely factors of which I am aware—such as the SAT/ACT scores of incoming students, and instructors for prerequisite courses as well as the instructional methods they used—remained stable from Fall 2012–Fall 2015. To be clear, I do not formally examine my students' class notes, nor have I gathered quantitative data that would allow me directly to measure the effectiveness of the strategies I have developed. I did not set out to conduct a study of guided notetaking in a music history setting, but rather to find ways to help my students learn.

Table 1. Summary of outcomes in SNCM before guided notetaking (Fall 2012) and with guided notetaking (Fall 2013, 2014, 2015).

	No. of students in course (2 sections)	Avg. no. of absences (class periods)	Avg. final course grade (letter)	Avg. final course grade (%)	% of students who earned a final course grade of A or A- (90% or higher)	% of students who earned a final course grade lower than C (lower than 73%)	Avg. student rating for all course questions on end-of-semester evaluation (out of 6)	Avg. student rating for all instructor questions on end-of-semester evaluation (out of 6)
Fall 2012	55	8	B-	81.54	19	17	5.03	5.20
Fall 2013	70	7	B	84.68	43	14	5.56	5.47
Fall 2014	57	6	high B	86.63	45	7	5.57	5.43
Fall 2015	54	6	B	85.47	46	8	5.59	5.61

and 2015, respectively. And whereas 17% of students in Fall 2012 earned a final course grade too low for the course to count toward their degree requirements (defined by the university as a final grade below C for any course required by a student's major field of study), only 14%, 7%, and 8% of students who took the course in Fall 2013, 2014, and 2015, respectively, failed to receive credit for it. Thus, much like with absenteeism, a distinct polarization developed between a very large percentage of students doing very well in the course and a minority of students doing extremely poorly, most often because they were repeatedly absent and failed to complete assignments. Third, student satisfaction increased notably, as measured by ratings for both course and instructor questions on end-of-semester student course evaluations.<sup>31</sup>

Indeed, many published studies of guided notetaking have investigated its “social validity”—that is, whether students like it—and students’ reactions are overwhelmingly positive. In five separate studies, students indicated on questionnaires that they preferred guided to unassisted notetaking.<sup>32</sup> The margin of students who prefer this method, moreover, is substantial: fully 96% of respondents in Jennifer L. Austin et al.’s survey.<sup>33</sup> And the majority of student respondents to Shobana Musti-Rao, Stephen D. Kroeger, and Karin Schumacher-Dyke’s questionnaire recommended that instructors other than those who participated in the study should implement guided notetaking as well.<sup>34</sup>

Interestingly, Nancy A. Neef, Brandon E. McCord, and Summer J. Ferreri also found that most students prefer guided notetaking to receiving their instructor’s complete class notes, even though students’ overall performance on exams in the two situations was comparable.<sup>35</sup> This research confirms that students expect to play an active role in their learning and enjoy collaborating with their classmates and instructors rather than merely being passive recipients of

31. This outcome may be particularly significant to junior faculty members, since at many institutions student evaluations of teaching are accorded substantial weight in decisions regarding faculty retention, promotion, and tenure.

32. Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information”; Neef, McCord, and Ferreri, “Effects of Guided Notes”; Montis, “Guided Notes”; Musti-Rao, Kroeger, and Schumacher-Dyke, “Using Guided Notes”; and Konrad, Joseph, and Eveleigh, “A Meta-Analytic Review.”

33. Austin et al., “Effects of Guided Notes on University Students’ Responding and Recall of Information.”

34. Musti-Rao, Kroeger, and Schumacher-Dyke, “Using Guided Notes.”

35. Neef, McCord, and Ferreri, “Effects of Guided Notes.” Because the notetaking prompts I have created are phrased as questions, they also allow students to test themselves or each other when studying for exams. If students are given complete class notes, they likely have to create questions from these when they are studying. Furthermore, posting complete class notes on a course management system may well negatively affect class attendance, and when students are absent, they miss important learning opportunities, including participating in class discussions and asking and answering questions. Handing out hard copies of complete notes in class is neither environmentally sound nor budget friendly.

knowledge. I have noticed that most of my students use the notetaking prompts in class, and some students come to class having already answered some of the questions on their own. Furthermore, several students have told me—personally, in e-mail correspondence, and in comments on end-of-semester course evaluations—that the notetaking prompts are very helpful to them and that they enjoy this learning method.<sup>36</sup> Undoubtedly the high social validity of guided notetaking coupled with the greater academic success it fosters are responsible in large part for the correlation Montis draws between its use and a substantially lower rate of attrition in her college mathematics sections—less than half the rate of attrition of the sections in which guided notetaking was not employed.<sup>37</sup>

### **Paths for Further Research, Suggestions for Implementation, and Conclusions**

One of the most important questions yet to be answered fully about guided notetaking—or one of the strongest objections to its use, depending on one's perspective—is the extent to which it improves students' independent notetaking skills rather than simply increasing reliance on the instructor; students themselves are divided on the issue.<sup>38</sup> Donna McDonald White's study provides limited evidence that over time, guided notetaking does improve students' ability to take notes without assistance, but much more research is needed to assess fully the conditions under which this is the case and how best to help students become accurate and independent notetakers.<sup>39</sup> However, instructors who are reticent to adopt guided notetaking should also reflect on why they feel proficiency in unassisted notetaking is a desirable skill for students to develop. If, as Montis suggests, it is because they believe that being able to ferret out the main ideas in a lesson is part of what one should learn to do in college, this

36. On an end-of-semester evaluation, one student wrote that the prompts for notetaking in class ("daily learning objectives") and short writing assignments "were so helpful in order to help us be prepared for each day." Others commented that the prompts and writing assignments "worked well together in helping students learn the material" and that "the daily objectives really set the students up for success by reinforcing the most important aspects of the curriculum." Student evaluations also confirmed my belief that the prompts helped them to "think more critically on music history subjects" and that "the daily objectives really help the students [to] prepare for exams, but also to retain information for the long term, not just the test."

37. Montis, "Guided Notes."

38. Neef, McCord, and Ferreri, "Effects of Guided Notes"; and Konrad, Joseph, and Eveleigh, "A Meta-Analytic Review."

39. Donna McDonald White, "Use of Guided Notes to Promote Generalized Note Taking Behavior of High School Students with Learning Disabilities" (master's thesis, The Ohio State University, 1991), as cited in Heward, "Three Low-Tech Strategies" and Heward, "Four Validated Instructional Strategies."



position merits reconsideration. Outside the classroom, is unassisted notetaking the norm? To what extent does a meeting agenda, for example, provide a scaffolding similar to that of notetaking prompts? Outside the classroom, to what extent are adults put in situations in which notetaking is crucial but no guidance about the information to be included in their notes is provided?

Nonetheless, if encouraging students to become more skillful at taking notes independently is one of an instructor's goals, one option might be gradually to phase out notetaking prompts over the course of a semester, perhaps in more advanced courses in which students are more familiar with subject matter and disciplinary methodology and vocabulary. Conversely, guided notetaking might be particularly apt in such courses, which tend often to privilege the higher levels of thinking and learning outlined in Bloom's taxonomy. Much like the positive correlations between guided notetaking and critical thinking I have already cited from Kreiner's; Montis's; and Konrad, Joseph, and Itoi's research, Neef, McCord, and Ferreri found that "although guided notes and completed [instructor] notes produced similar results for factual questions [on quizzes], guided notes were associated with substantially fewer errors on more analytical questions. This suggests that the benefits of guided notes may be more apparent with complex material."<sup>40</sup> I have implemented my version of guided notetaking in a more advanced course (offered at the 4000/6000-level for senior undergraduates and graduate students) on music of the mid- to late eighteenth century as well as in SNCM, and the benefits of this technique have been apparent in both settings. Because I assign individual students to lead portions of each class meeting in the more advanced course, I ask them to prepare notetaking prompts for me to disseminate in advance to their classmates. They therefore participate to a greater degree than students in SNCM in determining the material and discussion questions on which we will focus, with an eye to fostering deeper engagement with the music and texts we study. This also redirects some of the burden of preparing the notetaking prompts from me to my students.

I use the term "burden" specifically because the time required to prepare notetaking prompts is one of the most frequent objections raised in the

40. Neef, McCord, and Ferreri, "Effects of Guided Notes," 129. Austin, Lee, and Carr, "The Effects of Guided Notes on Undergraduate Students' Recording of Lecture Content," question whether the greater number of examples typically included in guided notes might "affect the ease with which a student applies concepts learned in class" (319) and call for further research into this hypothesis. Similarly, Austin et al., "Effects of Guided Notes on University Students' Responding and Recall of Information," suggest that "assessing students' abilities to apply information, rather than to recall facts and definitions, might be a more useful dependent measure for exploring the degree to which students acquire concepts presented during a lecture" (251). And Montis, "Guided Notes," writes: "Ease of learning should not be confused with insubstantial learning. There is a need to look carefully at how guided notes may or may not enhance the student's ability [to] remember and apply what is learned, to become a self-motivated [learner] and to become an independent, self-disciplined learner" (66).

literature about guided notetaking.<sup>41</sup> Constructing prompts for every class meeting of a course an instructor has not taught previously is indeed time consuming, and teaching, research, and service expectations ensure that demands on instructors' time are high. In addition to the suggestions above (gradually phasing out guided notetaking over the course of the semester and/or having students prepare some of the prompts), for a new course, an instructor might formulate notetaking prompts only for select class meetings and/or topics that s/he feels might be particularly challenging.<sup>42</sup> In my experience, when I have taught a course previously and have a syllabus and many lesson plans already prepared, creating notetaking prompts is straightforward and not particularly labor intensive. Furthermore, they make devising exam questions quite easy, and the time saved in preparing exams at least partially offsets the time needed to create the prompts.<sup>43</sup> And regardless of the situation, implementing guided notetaking in my courses has improved my teaching because it has incited me to think very concretely about specific learning goals, which in turn has led me to reassess and reflect more carefully on the class topics, repertoire selections, and individual reading and listening assignments that I include on my syllabi.

Ultimately, I believe strongly that the time required to prepare notetaking prompts is time well spent because guided notetaking improves teaching and learning. As Barbetta and Skaruppa caution, it is not a magic bullet—it still doesn't make lecturing a particularly effective pedagogical approach and it can't "make a poor course a good course."<sup>44</sup> Guided notetaking does, however, directly contribute to many of the qualities José Antonio Bowen summarizes as characteristic of good teaching based on his review of several books about the subject, namely "hard work and thoughtfulness about student needs," "stimulation and challenge coupled with support," "active engagement during

41. See Kreiner, "Guided Notes"; Barbetta and Skaruppa, "Looking for a Way"; and Montis, "Guided Notes." Similarly, grading weekly short writing assignments is time consuming.

42. In addition, many textbooks include study questions, some of which may be appropriate to incorporate into notetaking prompts. However, this presupposes that an instructor's teaching is very closely tied to a particular textbook. This may be the case, especially in introductory courses, but in my own teaching I have not found textbook resources to be useful in creating notetaking prompts simply because they are not specific enough to the material I have chosen to emphasize in my courses.

43. Linking exam questions to clearly stated learning objectives is an auxiliary benefit of guided notetaking, for both students and instructors. Current best practices in writing exams emphasize that assessment questions should accurately reflect instruction and align with stated learning outcomes. See, for example, the following websites prepared by the University of Michigan's Center for Research on Learning and Teaching and Cornell University's Center for Teaching Excellence, respectively: [http://www.crlt.umich.edu/P8\\_0](http://www.crlt.umich.edu/P8_0) and <https://www.cte.cornell.edu/teaching-ideas/assessing-student-learning/asking-good-test-questions.html>.

44. Barbetta and Skaruppa, "Looking for a Way," 160.

class time,” and “[well] articulated learning outcomes.”<sup>45</sup> As Bowen reminds us, high standards are important, but high standards *alone* are not enough to help students learn and succeed. My experience adapting guided notetaking to music history courses demonstrates that it is a technique that is successful in encouraging and supporting instructors and students not only to set but also to meet high expectations for learning, engagement, and achievement within the context of our discipline.

45. José Antonio Bowen, “Review Essay: Six Books Every College Teacher Should Know,” this *Journal* 1/2 (2011): 175–82, at 182.

## Appendix 1. Examples of Notetaking Prompts from SNCM, Fall 2015

*Monday, August 31, 2015 (on Beethoven's middle period and the "heroic" style):*

- How did audiences react to Beethoven's Symphony No. 3 ("Eroica") when it was premiered in 1805? What do their reactions reveal about the changing aesthetic understanding of music at the turn of the nineteenth century?
- What is the title of Beethoven's only opera? What are the names of its main characters and what is the basic outline of its plot?
- In what sense is Beethoven's Symphony No. 6 ("Pastoral") an example of a "non-heroic" middle-period work?

*Wednesday, September 9, 2015 (on Romanticism):*

- The Romantic concept of the artist or genius was quite new and revolutionary. How did the myth of Beethoven help to shape this concept?
- E. T. A. Hoffmann's essay "Beethoven's Instrumental Music" (1813) is one of the most important early discussions of Romanticism in music. Part of the essay is devoted to a discussion of Beethoven's Symphony No. 5—what struck Hoffmann as worthy of comment about this symphony?
- What main ideas, more generally, does Hoffmann express in this essay? Why does he believe that music, and especially instrumental music, is the most Romantic of all the arts? Do you agree with him? Why or why not?
- Hoffmann distinguishes implicitly between the beautiful and the sublime in this essay. What do these terms (as aesthetic categories) mean?

*Friday, September 18, 2015 (on Robert Schumann and his Lieder):*

- When was Robert Schumann born? When did he die? To whom was he married? What did her musical career focus on? Why?
- What year is known as Robert Schumann's "Year of Song"? What event in his personal life inspired him to write so many Lieder that year?
- "Widmung" is the first song of Robert Schumann's cycle *Myrthen* (meaning "myrtles").
- For whom and for what occasion did Schumann compose *Myrthen*?
- "Widmung" means "dedication" in German. How might we interpret the meaning of "Widmung" in the particular context of this cycle? How might such an interpretation inform a performance of this song?

*Wednesday, October 21, 2015 (on chamber music in the nineteenth century):*

- How was chamber music viewed in the nineteenth century on the spectrum of conservative to innovative? Why? What about the string quartet in particular?
- What instrument was often emphasized in nineteenth-century chamber music? Why? What are some of the genres in which it was featured?
- Name several chamber works by Schubert that quote his own Lieder.
- What instruments participate in a piano trio? Why did Clara Schumann feel this was an appropriate genre in which a woman could compose?
- What is a three-key exposition? How are the keys divided between the thematic groups in Schubert's String Quintet in C Major? What are some other innovative aspects of the first movement of this work? Why and how might you choose to highlight some of these in performance?

*Friday, November 13, 2015 (on Verdi's *La Traviata*):*

- Review the plot of *La Traviata*:
  - What happens?
  - Who are the three main characters? Make sure you know their names. How do they reflect Verdi's typical plot structure?
- What is the formal structure of Violetta and Alfredo's Act III duet?
  - Alfredo and Violetta sing the same music, first successively, then together, in the slow movement of this duet—is this dramatically significant? That is, what does it tell us, if anything, about what they're expressing?
  - The cabaletta does not provide the usual rousing close to a duet—why not? How would you describe the rhythms and dynamics? What might they express? Note how the music clearly highlights the drama and narrative.
- Whose melody does the orchestra play as Violetta is about to die at the end of Act III? How might you interpret this?



## Appendix 2. Examples of Short Writing Assignments from SNCM, Fall 2015

### *Writing Assignment No. 1*

- Explain why Beethoven's Symphony No. 3 ("Eroica") bears this name; include an explanation of what Beethoven originally intended to call this symphony and why he changed his mind.
- Describe at least three innovative features of the first movement of the "Eroica" Symphony and why you feel they are significant. You could consider how these features might (have) influence(d) the work's performance or reception, other composers, etc.

### *Writing Assignment No. 3*

E. T. A. Hoffmann's essay "Beethoven's Instrumental Music" (1813) is one of the most important early discussions of Romanticism in music. Read the first part of his essay (a PDF of it is posted on our Canvas site), then answer the following questions:

- Part of the essay (bottom of p. 1195 and top of p. 1196) is devoted to a discussion of Beethoven's Symphony No. 5; explain in your own words two characteristics of this symphony that Hoffmann found worthy of comment.
- Explain in your own words why Hoffmann believes that music, and especially instrumental music, is the most Romantic of all the arts. Do you agree? Briefly defend your position.

### *Writing Assignment No. 4*

- "Erlkönig" is a very famous ballad, or narrative poem, by the German writer Goethe; the text of the poem is posted on our Canvas site. Explain in your own words what story this ballad tells.
- There are over 100 musical settings of "Erlkönig," four of which are posted on Canvas for you (in the "Listening" folder). Compare the settings by Reichardt (1794) and Schubert (1815) by identifying two significant differences between them. For each difference you identify, briefly explain why you consider it significant.

### *Writing Assignment No. 8*

- The first movement of Schubert's String Quintet in C Major, D. 956 includes a typical feature of Schubert's mature compositional style: a three-key exposition. Identify the three main keys of the exposition: \_\_\_\_\_ . [HINT: there is a fourth key that is merely tonicized for a few measures; it doesn't count!]

- The first theme group is centered around \_\_\_\_ (give the number: either 1 or 2) key(s).
- The second group is centered around \_\_\_\_ (give the number: either 1 or 2) key(s).
- Other than the three-key exposition, explain two other features of this movement that are innovative and why you consider them innovative.