

Music Theory Undergraduate Core Curriculum Survey: a 2017 Update

BARBARA MURPHY AND BRENDAN MCCONVILLE

In 2000, Richard Nelson conducted a survey of undergraduate music theory curricula at the request of the College Music Society (CMS). His survey included questions on faculty loads and leaves, and issues of undergraduate theory curricula (e.g., years required, class sizes, textbooks, solmization systems, topics covered, placement exams, and fundamentals and accelerated courses). A total of 248 responses were collected and reported in the College Music Symposium (2002). The results indicated prevailing tendencies in the teaching of music theory at the time.

The present article provides a seventeen-year update to Nelson's survey. It reports on a new survey that included many of the questions asked in the first survey as well as additional questions on new trends in the teaching of music theory. The new survey included questions on the inclusion of technology and online learning in theory and aural training classes; questions on the integration of writing, composition, improvisation, and performance in theory classes; and questions on content shifts, such as the inclusion of non-western music (e.g., film, jazz and popular music) and other types of notation and analytical systems (e.g. lead sheet symbols, Nashville numbers, Neo-Riemannian theory and Schenkerian analysis). The article compares the results of both surveys and reflects on changes and trends while considering other important scholarship on the state of the curriculum. Overall, this article provides useful information for music theory instructors as well as lays a foundation for future surveys on the state of the curriculum.



In 2000, Richard Nelson conducted a survey of the undergraduate core curriculum for the College Music Society (CMS). His survey included questions about music faculty and their loads; curriculum, especially undergraduate music theory, aural skills and keyboard harmony classes; topics covered and textbooks used in theory classes; placement exams in music theory; accelerated theory sequences;¹ and fundamentals classes. The results of the 248 responses, which were published in Nelson 2002 and posted on the CMS website, provided much useful information for those teaching core music courses, particularly the music theory core classes. Since the information that Nelson collected is now seventeen years old, we thought that it was time to update his survey. This paper will present the results of a survey that not only recreated much of

¹ As will be shown, accelerated theory sequences can refer to designs that cover more material in the same number of terms, the same amount of material as regular theory classes yet in more depth, and the same amount of material in less time.

Nelson's survey, but also integrated more specific questions in some areas (e.g. tasks and topics covered in theory classes) and added new questions on timely topics (e.g. online teaching).

Background Literature

Because the purpose of this research is to compare Nelson's findings with the current study, the results of his survey will be discussed later when being compared to the results of the current survey. Since Nelson's survey in 2000, other surveys have gathered information on how institutions teach theory and aural skills. These surveys have had various goals; they have engaged general and specific topics in aural skills and have inspected the way we teach written theory courses. Though our survey does not attempt to duplicate these other surveys, it intersects to some degree with the topics in this literature. The surveys all share the common goal of gathering information from teachers on trends in theory and aural skills pedagogy.

Andrew Paney and Nathan Buonviri (2017) conducted a study on various approaches to teaching melodic dictation. They sent a survey to 633 college music theory instructors at NASM institutions and collected 270 responses from 45 states. Their results showed that most teachers chose a movable do system of solfege (81% total, 67% do-based minor, 14% la-based minor) and 59% of respondents used the 1-e-&-a system of rhythmic counting.² They also found that instructors taught students to listen for common pitch and rhythm patterns, to look at the "big picture" of the melody before writing, and to use their theoretical knowledge when taking melodic dictation.³ The results of this 2017 survey, along with Nelson's survey, provide information for comparison with the results of the aural skills portion of the present survey.

In a broader study conducted in 2012, Elizabeth Marvin interviewed 14 theory faculty on the function of the music theory core curriculum. Although a small sample, she discovered six main themes, or trends, that emerged from her discussions:⁴

1. "Engagement of professional music theorists in designing and teaching the core."
2. "Focus on analysis and repertoire, somewhat less on part-writing"
3. "Integration of aural and written skills and increased time devoted to aural training"

² Paney and Buonviri (2017, 3-4).

³ Ibid., 4-5.

⁴ Marvin (2012, 256-61).

4. “Increased use of technology in teaching.” Technology here includes course management systems, the use of public domain musical scores, and digital projection of material in class including PowerPoint presentation and YouTube videos. She also points out that there has been “no CAI revolution.”
5. “Remedial classes are growing”
6. “Two challenges: improvisation and music outside the Western Canon”

The present survey includes questions that can provide more information about some of the trends Marvin found in her interviews.

Jennifer Snodgrass reported on a survey she conducted in 2015 in response to the CMS *Manifesto*’s assertion that more creativity, integration, and improvisation need to be included in music curriculum. Because Snodgrass did not agree with some of the assertions made in the *Manifesto*, she conducted a survey that sought to “better understand current teaching practices in theory and aural skills classrooms” and to determine the level of creativity, integration, and improvisation already included in theory and aural skills classes.⁵ Over 350 participants responded to the survey as a whole, with approximately 250 responses to most of the open-ended questions. A majority of the respondents (257, 73%) include a great deal of integration between their theory and aural skills classes. Fewer than half (45%) of instructors incorporate frequent composition exercises, with another 32% including some composition. Her results indicated that students are receiving more exposure to jazz music than early music, and that many instructors (over a quarter of those responding) are including popular music in classes. Topics found in theory classes were more traditional, however, with the exception of part-writing. She reported, “Topics such as fundamentals, sight singing, harmonic function, modulation, and formal structures were evaluated as very important. Topics that include jazz harmony, extended chords, and part-writing were deemed less important.”⁶ It is interesting to note that twentieth- and twenty-first century topics were ranked as very important by only 57.31% of respondents. Improvisation is not frequently taught; on a scale of 1-6 with 1 being never taught and 6 being frequently taught, 19.74% ranked their teaching of improvisation at a 1, with another 33.66% at a level 2. Creative assignments were described by 235 respondents, and included examples of “composition, improvisation, student led discussions, open-ended analytical questions, technology based teaching, and performance activities.”⁷ Snodgrass concluded that teachers are, in fact, already doing much of what the *Manifesto* calls for, but that more can be done.

5 Snodgrass (2016a).

6 Ibid.

7 Ibid.

Another survey, conducted by Anna Vezza (2013), was very much like Nelson's original survey. Her survey was sent to 29 "large, public, Midwest institutions," and representatives of only 17 schools responded.⁸ The survey covered many of the questions asked by Nelson and the current survey, but also included questions on theory and aural skills diagnostic and placement exams and student placement based on the exam results, minimum passing grades, student retention, and supplemental instruction/tutoring. Respondents indicated a normal requirement of four semesters of theory and aural skills, with class sizes of 11–20 students.⁹ Vezza found that up to 25% of students do not pass their theory classes and up to 20% do not pass aural skills, with as many as 20% of college music majors changing majors after the first year.¹⁰ Most schools required a diagnostic/placement exam (60%) and used the results as part of their admission process or to place the students into the appropriate theory class. Her results also showed that most schools (60%) offered a separate written fundamentals class, but few offered an aural fundamentals class.¹¹ For advanced students, 35% of institutions provide the option of placing out of a theory course via an exam. Even students who took the Advanced Placement Music Theory Exam did not automatically place out of a theory class at many institutions; "about half" of the institutions still required incoming students to take their diagnostic exam. At 61.5% of the schools, students who scored well on the AP exam or on a placement test were allowed to take fewer credits in theory.¹² Finally, Vezza reported on software used in theory classes, noting that MacGamut was the most common application.¹³

All of the surveys conducted since Nelson's 2000 survey resulted in useful information about music pedagogy and the teaching of music theory and aural skills in particular. For our study we chose to recreate Nelson's survey and add new questions (e.g., technology, online instruction) in regard to the general college-level music theory curriculum. The purpose of the current research was to compare our results to those of Nelson's survey, and to expand Nelson's survey on the undergraduate core curriculum both in scope and numbers.

8 Vezza (2013, 20–21).

9 Ibid., 36–38.

10 Ibid., 26–27.

11 Ibid., 32–33.

12 Ibid., 35.

13 Ibid., 38.

The 2017 Survey on the Undergraduate Music Theory Core Curriculum: Data and Comparisons

Survey Design and Methodology

The 2017 Survey aims to provide information on the current landscape of the music theory curriculum. Nelson's 2000 Survey set the precedent for the present survey; the 2017 Survey adopted the topical design and foundational questions of his survey, but added more questions with further detail.

Although the resulting sample sizes were somewhat similar, the two surveys used slightly different methodologies in soliciting responses and collecting data. The 2000 Survey was posted on the Cleveland Institute of Music website and was advertised through the CMS mailings and listserv announcements.¹⁴ Nelson states that the "endeavor turned out to be far from scientific": in some cases, questions were left unanswered; in other cases, more than one response was selected. Here and there, he found that colleagues from the same institution sent conflicting responses to the survey, which were reconciled. In addition, Nelson acknowledged that, "In retrospect, some items were clumsily or inappropriately presented, thereby rendering the responses to those items of little use to this Survey."¹⁵ The 2017 Survey tried to avoid some of these issues by forcing participants to answer questions and by rewording questions to make them clearer. The 2017 Survey was created in Qualtrics software and distributed through the *Journal of Music Theory Pedagogy's* (JMTP) social media site, through email sent to participants in the 2017 Pedagogy in Practice conference, and through email to CMS members via the society's survey service. The survey accumulated 338 responses though many (95) did not finish the survey. The resulting usable sample size of 275 responses was determined by including only those who answered theory-specific questions, i.e., those who went beyond question 15. Like Nelson, the 2017 Survey also found several responses from the same institution in the initial list (of 338 schools), but multiple responses from the same institution were almost completely eliminated when the sample size was reduced to 275. In the final dataset, there were nine schools that had two people respond, and one school that had three respondents. There were also 40 participants that did not identify their schools, so we cannot be sure these are not duplicates from schools that were identified.

¹⁴ Nelson (2002, 1).

¹⁵ Ibid., 1.

Since the 2000 and 2017 Survey designs are similar, the data comparison is relatively straightforward, albeit with a few problems. Though 248 people responded to the 2000 Survey, the total number of responses to each question is not always known since Nelson did not report the number of participants answering each question. The 2017 Survey did force some responses, making the total number of respondents known. However, the 2017 Survey's response totals fluctuated because it used skip logic (i.e., branched questions) and some respondents also dropped out along the way. Therefore, the *N* in both surveys is variable depending on the question. The present article makes every attempt to make the most logical comparisons possible; some questions compare 2000 Survey counts to 2017 Survey counts, while, at other times, a percentage is reported since the total *N* in the 2000 Survey can be determined by summing the number of responses for the options.¹⁶ The seven sections below divide the data into topical categories resembling those from Nelson's survey.

I. Survey Respondents: Institution Types and Music Theory Faculty

As shown in Table I-1, more respondents in both surveys were from 4-year colleges (80.56% of 216 reporting in 2000, 88.36% of 275 in 2017) than from 2-year institutions (19.44% and 11.64%). The mean number of students at the participating schools in 2017 was 151.5 undergraduate students and 40.8 graduate students, while the average number of undergraduate students at schools involved in Nelson's survey was 119; the graduate student mean was not given in the 2000 Survey. Nelson reported that 84 schools offered Master's degrees and 39 schools doctoral degrees. In the 2017 survey, 152 schools offered a Master's while 73 offered a doctoral degree. These numbers can be a bit misleading as schools that offer a doctoral degree would most likely also offer a Master's degree. Therefore, the highest degree offered was determined for respondents in the 2017 Survey (Table I-2) indicating that most schools' (32.4%) highest degree is the master's degree followed closely by the bachelor's degree (29.1%) and the doctoral degree (26.5%).

¹⁶ See Table I-5 for an example of this approach. The first question in this table, "Is the teaching load more or less than music history faculty?" asks a question that respondents can only answer with one option (i.e., same, more, less), and, as such, an *N* can be determined. The second question in the table, "Are administrative or research duties factored into theory faculty loads?" could be answered by selecting either, both, or neither of the options "administrative" or "research", which makes it difficult to determine an *N*.

Total Responses & Institution Types				
	2000	% of total	2017 (N=275)	% of total
2 year	42 (N=216)	19.44%	32	11.64%
4 year	174 (N=216)	80.56%	243	88.36%
master's offered	84	N/A	152	55.27%
doctorate offered	39	N/A	73	26.55%
avg # UG	119	N/A	151.5	N/A
avg # of G	N/A	N/A	40.8	N/A

Table I-1
Institution Types

Highest Degree Offered	Frequency	Percent
	N = 275	% of total
Associate degree	33	12.0%
Bachelor's degree	80	29.1%
Master's degree	79	32.4%
Doctoral degree	73	26.5%

Table I-2
Highest degree offered, 2017 Survey

The number of theory and aural skills faculty has grown slightly over the years. In the 2000 Survey, Nelson reported an average of four total faculty who taught music theory and an average of just one person teaching theory only. Both of these averages rose in the 2017 Survey (Table I-3).

Number of Theory/Aural Skills Faculty (2017 Survey)					
	N	Min.	Max.	Mean	Standard Deviation
Tenured/tenure-track faculty (i.e., theory only)	274	.00	40.00	2.9798	4.17972
Full time lecturers	270	.00	12.00	.6997	1.34709
Adjunct/part-time faculty	274	.00	65.00	2.3867	6.30014
Total number theory + aural skills faculty	268	.00	86.00	6.1086	9.39203
Valid N (list wise)	268				

Table I-3
Number of theory/aural skills faculty

The most common faculty teaching load is higher in 2017 than it was in 2000 (Table I-4). In 2000, most faculty indicated that they taught three classes each semester (27.6%); in 2017, most faculty teach four classes each semester (24%). One problem with these numbers is not knowing the number of credit or contact hours for these courses; the courses taught could include aural skills courses, which may have fewer credits and contact hours per week. The number of contact hours per week was asked in the 2000 survey, but the responses included such a wide range of answers that they could not be put into categories. The amount of contact hours per week was not asked in the 2017 survey; this question will be added to a future survey. The number of classes taught each semester compares to the teaching load of musicology faculty (76% in 2000 and 72.73% in 2017; see Table I-5). The number of schools including administrative duties (47 in 2000, 162 in 2017) and research (95 in 2000, 105 in 2017) into faculty loads rose,¹⁷ although the percentage of schools in 2017 including them varies (administrative duties: 58.9%; research: 38.1%; neither included: 33.82; see Table I-5). Sabbaticals are still available, most often every seven years (59.9% in 2000 and 59.27% in 2017), but the percentage of schools not giving sabbaticals at all rose from 9.9% in 2000 to 14.91% in 2017 (Table I-5).

Music Theory Faculty Loads				
	2000 courses per term	2000 Percent (of 188)	2017 teaching load	2017 percent
Full time faculty average teaching load	6	8		
	5	11.2	more than 4+4	17.09
	4	21.3	4+4	24
			3+4	7.27
	3	27.6	3+3	20.73
	2+3	7	2+3	12.36
	2	13.3	2+2	13.45
	2+1	5.4	2+1	1.45
	1	6.4	1+1	3.64

Table I-4
Theory Faculty Loads

¹⁷ The questions in Table I-5 replicated the 2000 survey, which did not clarify if administrative or research duties factored into the number of reported courses (e.g. 4+4), or simply into “faculty load” (more generally). A future survey will attempt to clarify how administrative and research duties interact with course loads.

Music Theory Teaching				
Is the teaching load more or less than music history faculty?				
	2000 (N=233)	% of total	2017 (N=275)	% of total
same	179	76.82%	200	72.73%
more	45	19.31%	70	25.45%
less	9	3.86%	5	1.82%
Are administrative or research duties factored into theory faculty loads?				
	2000 (N=?)	% of total	2017 (N=275)	% of total
administrative	47	N/A	162	58.91%
research	95	N/A	105	38.18%
neither	?	N/A	93	33.82%
How often are sabbaticals offered at your school?				
	2000 (N=192)	% of total	2017 (N=275)	% of total
not given	19	9.90%	41	14.91%
less than every 7 years	40	20.83%	59	21.45%
every 7 years	115	59.90%	163	59.27%
greater than every 7 years	18	9.38%	12	4.36%
Do grad students teach in your theory program?				
	2000 (N=193)	% of total	2017 (N=275)	% of total
yes	32	16.58%	54	19.60%
no	161	83.42%	221	80.40%

Table I-5
Theory Faculty Loads

In both surveys, over 80% of the respondents indicated that graduate students do not teach in the theory program (83.42% in 2000 and 80.4% in 2017, see Table I-5). The number of classes that graduate students teach was expressed in different ways on the two surveys so direct comparisons are difficult to make. In the 2000 Survey (Table I-6a), respondents indicated whether graduate students taught first, second, third or fourth-year classes in different teaching areas. For instance, it was reported that at 27 schools, graduate student teachers taught first-year sight singing/aural skills courses and at 19 schools, graduate students taught second-year sight singing/aural skills classes; it is not known if graduate students at any of these schools taught both first- and second-year classes. In the 2017 Survey (Table I-6b), respondents just stated the type and not the level of classes taught by graduate students. The results show that graduate students most often teach aural skills classes, less often theory

classes.¹⁸ Graduate students most often had full responsibility for their classes in 2017 (79.62%); this question was not asked in the 2000 Survey.

Graduate Student Teaching					
Classes	1st year	2nd year	3rd year	4th year	Total
Written music theory	21	12	1	0	34
Sight singing/aural skills	27	19	2	0	48
Music theory keyboard	10	7	0	0	17
Fundamentals	21	0	0	0	21
Analysis	0	1	1	0	2
Theory for non-majors	2	0	0	0	2

Table I-6a
Graduate Student Teaching; 2000 Survey

Graduate Student Teaching Responsibilities		
	2017 (N=54)	% of total
Full class responsibility	43	79.62%
Lead recitation/discussion sections only	21	38.89%
Do grading only	17	31.48%
Other	8	14.81%

Graduate Students Teaching Courses		
	2017 (N=54)	% of total
Have students that teach aural skills	48	88.89%
Have students that teach written skills	41	75.93%
Have students that teach tech-related courses	14	25.93%
Have students teaching other courses	9	54%

Table I-6b
Graduate Student Teaching; 2017 Survey

II. General Undergraduate Requirements and Class Sizes

Though the theory curriculum requirements are similar in the two surveys, there may be a few trends to monitor in future studies. Tables II-1 through II-4 and Tables II-6 and II-7 show the results of questions on the overall undergraduate core recreated

¹⁸ This is true of the 2000 Survey only if “Fundamentals” courses overlap with “Written music theory” courses, which is difficult to determine from his raw data (Table I-6a).

from Nelson’s survey;¹⁹ “N/A” in a column indicates that a particular response category was not offered. Nelson’s responses can be summed to determine the total number of respondents answering each question. Much of the response data was similar across the two surveys in Tables II-1 and II-2, although the 2017 Survey shows a potentially trending increase in schools requiring two and a half years for both theory overall (from 12.89% in 2000 to 24.73% in 2017) and written music theory courses (from 9.25% in 2000 to 20.15% in 2017). Aural skills requirements (Table II-3) present very consistent numbers across the two surveys, with two years being the most common amount of time to complete the sight-singing portion of requirements (Table II-4). Most schools prefer separate written and aural skills courses (82.85%), a question not asked by Nelson (Table II-5).

How many years of music theory does your school require?				
	2000 (N=225)	% of total	2017 (N=275)	% of total
not required	N/A	N/A	3	1.09%
less than 1 year	N/A	N/A	3	1.09%
1 year	11	4.89%	7	2.55%
1.5 years	9	4.00%	8	2.91%
2 years	125	55.56%	148	53.82%
2.5 years	29	12.89%	68	24.73%
3 years	35	15.56%	33	12.00%
greater than 3 years	16	7.11%	5	1.82%

Table II-1
Years of Music Theory Required

¹⁹ Tables II-1, II-2, II-3, and II-4 include questions that were replicated from Nelson’s survey. We realize confusion may arise regarding the difference between II-1 and II-2; we consider II-1 means the total years of music theory in a school’s curriculum (aural plus written) and II-2 means written music theory only. We consider questions in II-2, II-3, and II-4 as sub-questions of II-1. We cannot confirm all respondents used this same reading of these questions.

How many years of written music theory does your school require?				
	2000 (N=227)	% of total	2017 (N=273)	% of total
not required	N/A	N/A	4	1.47%
less than 1 year	N/A	N/A	2	0.73%
1 year	14	6.17%	8	2.93%
1.5 years	12	5.29%	9	3.30%
2 years	147	64.76%	162	59.34%
2.5 years	21	9.25%	55	20.15%
3 years	22	9.69%	28	10.26%
more than 3 years	11	4.85%	5	1.83%

Table II-2
Years of Written Music Theory Required

How many years of aural skills does your school require?				
	2000 (N=211)	% of total	2017 (N=244)	% of total
not required	N/A	N/A	5	2.05%
less than 1 year	N/A	N/A	2	0.82%
1 year	18	8.53%	8	3.28%
1.5 years	15	7.11%	22	9.02%
2 years	163	77.25%	199	81.56%
2.5 years	6	2.84%	4	1.64%
3 years	3	1.42%	2	0.82%
greater than 3 years	6	2.84%	2	0.82%

Table II-3
Years of Aural Skills Required

How many years of sight singing does your school require?				
	2000 (N=182)	% of total	2017 (N=239)	% of total
not required	N/A	N/A	2	0.84%
less than 1 year	N/A	N/A	5	2.09%
1 year	19	10.44%	8	3.35%
1.5 years	11	6.04%	22	9.21%
2 years	143	78.57%	196	82.01%
2.5 years	2	1.10%	4	1.67%
3 years	0	0.00%	1	0.42%
greater than 3 years	7	3.85%	1	0.42%

Table II-4
Years of Sight Singing Required

Do you have separate written theory and aural skills courses?	2017 (N=239)	% of total
yes	198	82.85%
no	41	17.15%

Table II-5
Separate Written and Aural Skills

A two-year keyboard sequence is most common in both surveys (Tables II-6 and II-7). Results from the 2017 Survey also suggest that more institutions are requiring keyboard harmony than in 2000, as the percent of “not required” responses dropped significantly, from 27.81% to 8.16% (Table II-6). The 2017 Survey also reveals the percentage of keyboard classes larger than 30 students has dropped significantly, from over 20% in 2000 to 0% in 2017 (Table II-7).

How many years of keyboard harmony does your school require?				
	2000 (N=187)	% of total	2017 (N=245)	% of total
not required	52	27.81%	20	8.16%
less than 1 year	N/A	N/A	25	10.20%
1 year	41	21.93%	54	22.04%
1.5 years	3	1.60%	20	8.16%
2 years	85	45.45%	125	51.02%
2.5 years	2	1.07%	0	0.00%
3 years	4	2.14%	1	0.41%
greater than 3 years	0	0.00%	0	0.00%

Table II-6
Years of Keyboard Harmony Required

What is the average class size in keyboard harmony class?				
	2000 (N=159)	% of total	2017 (N=225)	% of total
less than 8 students	42	26.42%	45	20.00%
8 students	13	8.18%	37	16.44%
10 students	27	16.98%	44	19.56%
12 students	22	13.84%	64	28.44%
15 students	18	11.32%	27	12.00%
20 students	5	3.14%	8	3.56%
greater than 30 students	32	20.13%	0	0.00%

Table II-7
Size of Keyboard Harmony Classes

III. Placement Exams, Accelerated Sections, and Proficiency Tests

The 2017 Survey presents several notable changes in the content of placement exams for written and aural skills curricula. Table III-1 provides response information on placement exams in the surveys; unfortunately, it is impossible to determine if the percentage of freshman placement exams has increased or decreased because Nelson's total number of respondents in these questions is unknown. However, the raw numbers indicate a rise in the number that have placement exams (147 in 2000 to 218 in 2017 for written theory; 78 in 2000 to 116 in 2017 for aural skills). The 2017 data shows that many more institutions have placement exams in written music theory (80%) than in aural skills (42.96%). The results also show changes to the contents of the exams. On written theory placement tests, the percent of those including part-writing has risen by 10% and those including counterpoint

has almost doubled from 6.8% to 12.39%. On aural placement tests, the percent of those including intervals, triad type identification, and rhythmic dictation have decreased by 22%, 19%, and 9.75% respectively. It is possible that, even though questions on fundamentals are present on almost all placement exams, more recent written placement exams include fewer questions on fundamentals and more questions on advanced topics. On aural exams, melodic dictation is still the most common assessment tool and may be used to test students on the fundamental topics of intervals and rhythm.

Placement Exams				
Do you have freshman placement exams in written music theory?				
	2000 (N=?)	% of total	2017 (N=273)	% of total
yes	147	N/A	218	79.85%
no	?	N/A	55	20.15%
If so, what topics are on the exam?				
	2000 (N=147)	% of total	2017 (N=218)	% of total
fundamentals	147	100%	211	96.79%
roman numeral analysis	73	49.66%	124	56.88%
part writing	48	32.65%	92	42.20%
counterpoint	10	6.80%	27	12.39%
Do you have freshman placement exams for aural skills?				
	2000 (N=?)	% of total	2017 (N=270)	% of total
yes	78	N/A	116	42.96%
no	?	N/A	154	57.04%
If so, what topics are on the exam?				
	2000 (N=78)	% of total	2017 (N=116)	% of total
Intervals	69	88.46%	77	66.38%
Triad types	62	79.49%	70	60.34%
7 th chord types	19	24.36%	29	25.00%
Melodic dictation	62	79.49%	84	72.41%
Harmonic dictation	32	41.03%	47	40.52%
Rhythmic dictation	54	69.23%	69	59.48%
Sight singing	46	58.97%	69	59.48%
scales	N/A	N/A	65	56.03%

Table III-1
Placement Exams

Placement exams may determine whether a student takes an accelerated music theory section or not, but few schools (7.8%) have such sections (see Table III-2). Of the schools that do, most use freshman diagnostic exams and admission decisions as a means of placement. Accelerated courses most often (47%) cover the same material as the regular theory classes yet in more depth (Table III-3).

Accelerated Music Theory				
Is accelerated music theory offered for students with background in theory?				
	2000 (N=?)	% of total	2017 (N=243)	% of total
yes	25	N/A	19	7.82%
no	?	N/A	224	92.18%

Table III-2
Accelerated Sections

Accelerated Courses and Placement		
How do students place into your accelerated/honors courses?	2017 (n=19)	% of total
freshmen diagnostics	8	42.11%
based on initial admission	4	21.05%
combination of diagnostic and initial admission	3	15.79%
assessment after first semester	2	10.53%
AP scores	1	5.26%
assessment after first year	1	5.26%
Please describe your accelerated courses. Do they cover more materials in the same number of terms as your regular theory classes? Do they cover the same material as regular theory classes in more depth? Do they cover the same material in less time?	(n=19)	% of total
same material, more depth	9	47.37%
more material and more depth	3	15.79%
same material at faster pace/less semesters	3	15.79%
faster pace freshmen year; same material	1	5.26%
other	3	15.79%

Table III-3
Accelerated Sections

The 2017 Survey indicates that many schools have a mechanism for students to place out of written or aural skills courses (67.90%), such as a proficiency test or acceptance of Advanced Placement (AP), International Baccalaureate (IB), or Advanced-level (i.e., A-levels) credit (see Table III-4a). Of the 165 respondents that offer course exemptions, most (80.61%) have proficiency tests on written skills, some (58.79%) have tests on aural skills, and some (56.36%) accept AP test scores for theory or aural skills proficiency. The 93 schools that reported that they accept AP test scores had a variety of policies on how scores were used, and often didn't clarify whether or how they used subscores. Table III-4b details the numerous response categories built from the data, though many respondents were unclear or unsure of how their school equated AP scores. The table also offers information on the small number of schools that consider other types of course proficiencies (i.e., IB, A-level and other tests).

Proficiency Exams and AP Scores		
Can students exempt out of theory or aural skills classes by any means (e.g. AP, IB, A-level credit, or proficiency tests?)	(N=243)	% of total
yes	165	67.90%
no	78	32.10%
Do you have proficiency tests, i.e., exams that your school has designed to allow students to place out of theory or aural skills classes?	(N=165)	% of total
proficiency tests for written theory	133	80.61%
proficiency tests for aural skills	97	58.79%
no proficiency tests	27	16.36%
proficiency tests for other classes	19	11.52%
Do you accept the Advanced Placement (AP) test scores for theory or aural skills?	(N=165)	% of total
yes	93	56.36%
no	72	43.64%

Table III-4a
Proficiency Exams and AP Scores

Proficiency Exams and AP Scores (continued)		
If you accept the AP scores, how do you equate them?	2017 (N=93 though some did not answer)	
Score of 3 places them out of fundamentals	12	
Score of 3 places them into 2nd semester of core	10	
Score of 3 or better places them into 3rd semester	2	
Take scores 4+ (note: unsure to what level)	3	
Score of 4-5 places them out of (a separate) fundamentals	1	
Score of 4 or 5 places them out of 1 semester (theory; some still require aural skills 1)	3	
Score of 4-5 places them out of 2 semesters	4	
Score of 4 exempts theory 1 and aural skills 1; Score of 5 exempts theory 2 and aural skills 2; Some indicated sub-scores used, some did not	10	
Score of 5 places them out of 1st semester	8	
Unclear or unsure of how scores are equated	25	
Indicate other types of credit you give for theory/aural skills classes.	(N=161)	% of total
None	142	88.20%
IB Credit	9	5.59%
A level tests (UK)	2	1.24%
Other	13	8.07%

Table III-4b
Proficiency Exams and AP Scores

The present survey found that the method for placing students within the sequence is highly varied (Table III-4b). The survey used a fill-in-the-blank approach to questions, although future surveys should consider a multiple-choice approach to this question to best obtain more specific data.

IV. Specific Topics Within the Written Skills Curriculum

Traditional written theory topics are strongly represented in current curricula (Table IV-1); this question was not asked in the 2000 Survey. Fundamental topics are naturally found in nearly all 259 responses,²⁰ and more specialized topics such as Neo-Riemannian theory (10.42%) and the Nashville number system (3.86%) are

²⁰ It is possible that some respondents didn't consider fundamentals topics in their sequence if they were taught in a separate, remedial fundamentals course.

rarely taught in the undergraduate curriculum. In recent years, there have been a variety of calls for the inclusion of certain topics in the theory curriculum.²¹ The 2017 Survey indicates that some of these topics, such as pop music analysis (45.56%), improvisation (26.25%), jazz theory (22.01%), and composition projects (69.5%), are present in theory classes. While scholarship continues to study the importance of these and other topics in the curriculum, future surveys should track their integration, as well as the retention of traditional topics such as part-writing and counterpoint.

²¹ See Snodgrass (2016a and 2016b).

Indicate what topics are covered in your required core written theory sequence.		
	2017 (N=259)	% of total
Analysis	253	97.68%
Seventh chords	251	96.91%
Part writing	248	95.75%
Triads	246	94.98%
Modulations	244	94.21%
Intervals	243	93.82%
Secondary/applied functions	243	93.82%
Scales	239	92.28%
Key signatures	239	92.28%
Chromatic harmony	238	91.89%
Analysis of small forms	225	86.87%
Modes	216	83.40%
Analysis of large forms	205	79.15%
12-tone & serial analysis	188	72.59%
Counterpoint	182	70.27%
Composition	180	69.50%
Set theory	170	65.64%
Analysis of inventions/fugues	134	51.74%
Writing skills (i.e. analytical papers)	122	47.10%
Pop music analysis	118	45.56%
Improvisation	68	26.25%
Jazz theory	57	22.01%
Schenkerian analysis	35	13.51%
Neo-Riemannian Theory	27	10.42%
Other (various 20 th -21 st c. techniques, history of theory, orch.)	24	9.27%
Topics in intertextuality and/or narrativity	16	6.18%
Nashville number system	10	3.86%
Transformational theory	10	3.86%

Table IV-1
Topics in the Written Theory Sequence

Fundamentals

The 2017 Survey reveals several possible trends from the questions on Fundamentals classes (Table IV-2). The 2000 Survey only reported the number of yes responses to these questions, while the 2017 Survey recorded both yes and no responses as well as response totals. Since the 2000 Survey did not give the total number of responses to each question, no percentage comparisons can be made. However, it is possible that the 2017 numbers of separate remedial (182, up from 136 in 2000) and trailer courses in fundamentals (79, up from 60 in 2000) suggest a rise in these offerings, although the number of institutions offering summer classes (39, down from 43 in 2000) seems to have decreased.²² Table IV-3 contains information on questions asked only in the 2017 Survey—questions on topics within fundamentals courses. Topics such as scales, rhythm, key signatures, note reading, intervals, triads, and seventh chords dominate courses as expected, but other topics are less often included in fundamentals classes. Perhaps most striking, just 34.82% of fundamentals courses include musical analysis. Also noteworthy is that only 60.11% of respondents include aural skills in their fundamentals courses.

²² Note: The summer remedial theory question in the 2017 Survey is only out of 178 on summer courses, making it (21.91%) *potentially* a higher percentage than in the 2000 Survey, e.g. if it were out of 248 (thus 17.3%).

Fundamentals Course				
Is there a separate remedial course in fundamentals for music majors who have little or no background in music theory?				
	2000 (N=?)	% of total	2017 (N=268)	% of total
yes	136	N/A	182	67.91%
no	?	N/A	86	32.09%
In your core, written music theory classes: are fundamentals covered/reviewed in the first quarter/semester of music theory for all music majors?				
	2000 (N=?)	% of total	2017 (N=259)	% of total
yes	214	N/A	237	91.51%
no	?	N/A	22	8.49%
If there is a separate remedial fundamentals class, does it result in an out-of-phase (trailer) music theory sequence?				
	2000 (N=?)	% of total	2017 (n=178)	% of total
yes	60	N/A	79	44.38%
no	?	N/A	99	55.62%
Does your fundamental theory course count in the hours for the major in music?				
	2000 (N=?)	% of total	2017 (N=178)	% of total
yes	60	N/A	41	23.03%
no	?	N/A	137	76.97%
Does your school offer summer remedial theory for students who need it?				
	2000 (N=?)	% of total	2017 (N=178)	% of total
yes	43	N/A	39	21.91%
no	?	N/A	139	78.09%

Table IV-2
Questions on Fundamental Courses

Fundamentals: Topics		
	2017 (N=178)	% of total
Scales	176	98.88%
Rhythm, meter, and time signatures	175	98.31%
Key signatures	175	98.31%
Reading notes in clefs	174	97.75%
Intervals	173	97.19%
Triads	166	93.26%
7 th chords	112	62.92%
Analysis	62	34.82%
Modes	61	34.27%
Composition	40	22.47%
Part writing	37	20.79%
Pop music analysis	34	19.10%
Other	15	8.43%
Improvisation	11	6.18%
Counterpoint	10	5.62%
Jazz theory	7	3.93%
Does your fundamentals class include aural skills?	2017 (N=178)	% of total
yes	107	60.11%
no	71	29.89%
Indicate aural skills topics covered in your fundamentals class.	2017 (n=107)	% of total
sight singing	87	83.31%
melodic dictation	78	72.90%
keyboard exercises	41	38.32%
harmonic dictation	39	36.45%
other	17	15.89%

Table IV-3
Topics in Fundamental Courses

Textbooks and anthologies are the most common materials used to teach fundamentals classes (Table IV-4). Duckworth's *A Creative Approach to Music Fundamentals* is the only text that appears in the top five commonly used textbooks/anthologies in each survey (Table IV-5). Newer texts such as Clendinning/Marvin's *The Musician's Guide to Fundamentals* and Straus' *Elements of Music* have replaced previously favored texts.

Fundamentals		
What types of materials do you use in your fundamentals class?	2017 (N=178)	% of total
texts/anthologies	123	69.10%
personal materials	87	48.88%
do not use any materials	12	6.74%

Table IV-4
Materials used in Fundamentals Courses

Top 5 Fundamentals Textbooks/Anthologies Used					
Top 5 Texts 2000	2000 (N=?)	# used in 2017	Top 5 Texts 2017	2017 (N=178)	% of 97 reported texts
Duckworth	7	8	Clendinning/Marvin	14	14.43%
Ottman	7	1	Straus	9	9.28%
Henry	4	1	Duckworth	8	8.25%
Hill	4	0	Kostka/Payne/Almén	7	7.22%
Lynn	4	1	Manoff	5	5.15%

Table IV-5
Fundamentals Textbook Comparisons

Diatonic Harmony

Both surveys show that two terms is the most common length of time spent on diatonic harmony, although the 2017 Survey did find a decrease in one term and an increase in one and a half terms and two and a half terms (Table IV-6).

In how many terms do you cover diatonic harmony?				
	2000 (N=203)	% of total	2017 (N=259)	% of total
0 terms	N/A	N/A	0	0.00%
less than 1 term	N/A	N/A	4	1.54%
1 term	34	16.75%	22	8.49%
1.5 terms	21	10.34%	46	17.76%
2 terms	97	47.78%	113	43.63%
2.5 terms	6	2.96%	18	6.95%
3 terms	26	12.81%	28	10.81%
4 terms	19	9.36%	26	10.04%
more than 4 terms	N/A	N/A	2	0.77%

Table IV-6
Length of Diatonic Harmony

Most diatonic harmony instructors used textbooks/anthologies (84.17%) and personal materials (53.28%) in 2017 (Table IV-7). The list of the most commonly used textbooks has changed since 2000 (Table IV-8). Like fundamentals, many older texts have been replaced by newer ones, though *Tonal Harmony* by Kostka/Payne/Almén is still the most commonly used diatonic harmony text.

Diatonic Harmony		
What types of materials do you use in your diatonic harmony classes?	2017 (N=259)	% of total
texts/anthologies	218	84.17%
personal materials	138	53.28%
do not use any materials	3	1.16%

Table IV-7
Materials in Diatonic Harmony

Top Textbooks Used for Diatonic Harmony					
Top 5 Texts 2000	2000 (N=?)	# used in 2017 (N=198)	Top 5 Texts 2017	2017 (N=198 texts)	% of reported texts
Kostka/Payne	55	67	Kostka/Payne/Almén	67	33.84%
Benward/White	45	22	Clendinning/Marvin	27	13.64%
Ottman	20	2	Benward/Saker	22	11.11%
Aldwell/Schachter	18	4	Laitz	22	11.11%
Spencer	4	1	Burstein/Straus	20	10.10%

Table IV-8
Textbooks in Diatonic Harmony

Chromatic Harmony

Both surveys discovered that both one and two terms were the most commonly reported lengths of time for teaching chromatic harmony. The 2017 Survey showed a marked increase, however, in chromatic harmony being covered in one and a half terms (Table IV-9), which may be connected to findings in Table IV-18, where the time teaching twentieth-century analysis showed a decrease in the “one semester” category and increase in “less than one semester” category. There may be a trend to increase the time spent on chromatic harmony, perhaps sacrificing time spent on twentieth-century music. Like diatonic harmony, instructors most often use texts/anthologies (Table IV-10) and the most commonly used textbooks are naturally similar to the findings on diatonic harmony textbooks (Table IV-11).

In how many terms do you cover chromatic harmony?				
	2000 (N=193)	% of total	2017 (N=254)	% of total
0 terms	9	4.66%	4	1.57%
less than 1 term	15	7.77%	18	7.09%
1 term	70	36.27%	76	29.92%
1.5 terms	26	13.47%	59	23.23%
2 terms	63	32.64%	77	30.31%
2.5 terms	0	0.00%	9	3.54%
3 terms	8	4.15%	8	3.15%
4 terms	2	1.04%	2	0.79%
more than 4 terms	N/A	N/A	1	0.39%

Table IV-9
Length of Chromatic Harmony

Chromatic Harmony		
What types of materials do you use in your chromatic harmony classes?	2017 (N=254)	% of total
texts/anthologies	203	79.92%
personal materials	127	50.00%
do not use any materials	9	3.54%

Table IV-10
Materials in Chromatic Harmony

Top Textbooks Used for Chromatic Harmony					
Top 5 Texts 2000	2000 (N=?)	# used in 2017 (N=174)	Top 5 Texts 2017	2017 (N=174 texts)	% of reported texts
Kostka/Payne	53	62	Kostka/Payne/Almén	62	35.63%
Benward/White	39	19	Clendinning/Marvin	24	13.79%
Ottman	16	1	Laitz	21	12.07%
Spencer	18	3	Burstein/Straus	20	11.49%
Turek	4	4	Benward/Saker	19	10.92%

Table IV-11
Textbooks in Chromatic Harmony

Form and Analysis

Although the 2017 Survey compared the study of formal analysis in a manner that was consistent to other aspects of the written curriculum as well as to the 2000 Survey, it also hoped to identify the ways various institutions teach this topic. As shown in Table IV-12a, one term was the most common length of time dedicated to teach the topic in 2017 (48.74%, down from 63.89% in 2000), although two, three, and four terms had marginal increases (3.4%, 8.84%, and 2.99% increases, respectively). The topic is now spread across the curriculum, perhaps due to newer textbook styles. In 2017, the largest percentage of schools teach form and analysis as part of the sequence (48.81%), while a smaller portion teach it as a separate class (30.56%; see Table IV-12b). Teachers of form rely just as heavily on textbooks and anthologies as they do on materials they prepare themselves (62.18% each; see Table IV-13). The Burkhardt *Anthology for Musical Analysis* was still the most commonly used book in 2017, though a number of broad textbooks have replaced the more topically focused textbooks of 17 years ago (Table IV-14).

In how many terms do you cover form & analysis?				
	2000 (N=161)	% of total	2017 (N=238)	% of total
0 terms	23	14.29%	26	10.92%
1 term	103	63.98%	116	48.74%
2 terms	27	16.77%	48	20.17%
3 terms	2	1.24%	24	10.08%
4 terms	6	3.73%	16	6.72%
more than 4 terms	N/A	N/A	8	3.36%

Table IV-12a
Length of Form and Analysis

How is form and analysis covered in your theory sequence?	2017 (N=250)	% of total
As part of core theory sequence	123	48.81%
In a separate class	77	30.56%
Both part of sequence and separate class	39	15.48%
Not covered	11	4.37%

Table IV-12b
Coverage of Form and Analysis

Form and Analysis		
What types of materials do you use?	2017 (N=238)	% of total
texts/anthologies	148	62.18%
personal materials	148	62.18%
do not use any materials	20	8.40%

Table IV-13
Materials in Form and Analysis

Top Textbooks Used for Form and Analysis					
Top 5 Texts 2000	2000 (N=?)	# used in 2017 (N=99)	Top 5 Texts 2017	2017 (N=122)	% of reported books
*Burkhart	29	17	*Burkhart	17	13.9%
Benward/White	17	13	Kostka/Payne/Almén	16	13.1%
Green**	15	3	Benward/Saker	13	10.7%
Spencer/Temko**	15	3	Laitz	13	10.7%
Spring/Hutcheson**	13	4	Clendinning/Marvin	12	9.8%

*anthology only

**texts focusing on form and analysis only

Table IV-14
Textbooks/Anthologies in Form and Analysis

Counterpoint

The 2017 Survey asked questions about counterpoint in the same manner as form and analysis. Notably, in 2017 only 29.15% of respondents covered counterpoint in a term (down from 48.33% in 2000) while a higher percentage of them covered it in less than one term (41.7%, up from 20.56% in 2000; see Table IV-15a). The survey results also show a decrease in the amount of schools that teach no counterpoint (from 27.22% in 2000 to 16.6% in 2017). These findings suggest a trend toward spending less time on the subject while still retaining it in the curriculum. Counterpoint is most often taught as part of the core sequence (Table IV-15b) and is primarily taught using texts/anthologies or personal materials (Table IV-16). Several texts from 17 years ago remain popular today (Table IV-17).

In how many terms do you cover counterpoint?				
	2000 (N=180)	% of total	2017 (N=247)	% of total
0 terms	49	27.22%	41	16.60%
less than 1 term	37	20.56%	103	41.70%
1 term	87	48.33%	72	29.15%
2 terms	7	3.89%	24	9.72%
more than 3 terms	N/A	N/A	7	2.83%

Table IV-15a
Length of Counterpoint

How is counterpoint covered in your theory sequence?	2017 (N=247)	% of total
As part of core theory sequence	108	43.72%
In a separate class	59	23.89%
Both part of sequence and separate class	39	15.79%
Not covered	41	16.60%

Table IV-15b
Coverage in Counterpoint

Counterpoint		
What types of materials do you use?	2017 (N=206)	% of total
texts/anthologies	132	64.08%
personal materials	111	53.88%
do not use any materials	9	4.37%

Table IV-16
Materials in Counterpoint

Top Textbooks Used for Counterpoint					
Top 5 Texts 2000	2000 (N=?)	# used in 2017 (N=103)	Top 5 Texts 2017	2017 (N=103 textbooks)	% of reported texts
Kennan	32	12	Kennan	12	11.65%
Gauldin	15	10	Clendinning/Marvin	11	10.68%
Benward/White	10	13	Benward/Saker	11	10.68%
Owen	8	6	Gauldin	10	9.71%
Benjamin	4	3	Schubert	7	6.80%

Table IV-17
Textbooks in Counterpoint

Twentieth-Century Music

The findings in Table IV-18 suggest a potential compression of time spent on twentieth-century topics in the curriculum. In 2017, the amount of institutions spending no time on the topic (4.76%) decreased from 2000 (13.57%), but the number of schools teaching it in less than a semester (36.11%) increased from 2000 (27.14%), and the percentage of programs teaching it in one semester (50.79%) decreased slightly from 2000 (55.78%). The comparisons reveal that there may be a

trend towards spending less than one term on the topic, perhaps accounting for the rise of chromatic harmony to one and a half terms (Table IV-9) or the inclusion of a partial semester of counterpoint (Table IV-15a). Materials used in twentieth-century courses were split between personal materials and textbooks (Table IV-19), with the most common textbook being a broader sequence text—Kostka/Payne/Almén's *Tonal Harmony* (Table IV-20). Topic-specific twentieth-century textbooks such as Straus' *Introduction to Post-Tonal Theory*, Kostka and Santa's *Materials and Techniques of Post-Tonal Music*, and Roig-Francoli's *Understanding Post-Tonal Music* are still frequently used, unlike topic-specific form texts (Table IV-14).

In how many terms do you cover Twentieth-Century music?				
	2000 (N=199)	% of total	2017 (N=252)	% of total
0 terms	27	13.57%	12	4.76%
less than 1 term	54	27.14%	91	36.11%
1 term	111	55.78%	128	50.79%
1.5 terms	0	0.00%	8	3.17%
2 terms	7	3.52%	12	4.76%
more than 4 terms	0	0.00%	1	0.40%

Table IV-18
Length of Twentieth-Century Music Analysis

Twentieth-Century		
What types of materials do you use in your Twentieth-Century analysis classes?	2017 (N=240)	% of total
texts/anthologies	152	63.33%
personal materials	135	56.25%
do not use any materials	23	9.58%

Table IV-19
Materials in Twentieth-Century Music Analysis

Top (Overall) Textbooks Used for Twentieth-Century Music					
Top 5 Texts 2000	2000 (N=?)	# used in 2017 (N=129)	Top 5 Texts 2017	2017 (N=129 textbooks)	% of reported texts
Kostka**	23	12	Kostka/Payne/Almén	35	27.13%
Benward/White	21	10	Clendinning/Marvin	17	13.18%
Straus**	14	13	Straus**	17	13.18%
*Burkhart	12	8	Benward/Saker	14	10.85%
Turek	11	3	Kostka/Santa**	14	10.85%
			Roig-Francoli**	11	8.53%

*anthology only

**texts focusing on twentieth-century materials only

Table IV-20
Textbooks in Twentieth-century Music

V. Specific Topics Within the Aural Skills Curriculum

The 2000 survey had only one question on aural skills, i.e., “What type of solmization is used for sight singing?” The 2017 Survey retained this question (Table V-1) and posed several others (Tables V-2 through V-5). For the one question in the 2000 Survey, it is impossible to determine percentages of each system’s use because the total number of respondents to the question is unknown, and we do not know if respondents could choose more than one answer. Percentages could be calculated for the 2017 Survey (Table V-1); these percentages total more than 100% since respondents could choose more than one answer. Since percentages could not be calculated for both surveys, raw numbers are compared. The numbers indicate that moveable do-do based minor is the most commonly used system by a large margin in both surveys, and the only system that grew in use from 2000 to 2017. Also of note is the decrease in the number of participants indicating that they used no sight-singing system (13 in 2000, 1 in 2017).

What type of solmization is used for sight singing?				
	2000 (N=?)	% of total	2017 (N=239)	% of total
Fixed Do	37	N/A	36	15.06%
Moveable do, do-based minor	107	N/A	175	73.22%
Moveable do, la-based minor	68	N/A	51	21.34%
Numbers (0-7) Nelson: "numbers" only	72	N/A	48	20.17%
Numbers (0-11)	*N/A	N/A	16	6.69%
Letter names	35	N/A	29	12.13%
No system	13	N/A	1	0.42%
Other	*N/A	N/A	12	5.02%

*not included in Nelson's study

Table V-1
Type of Solmization Used

The most common tasks (Table V-2) and topics (Table V-3) included in aural skills classes reveal many traditional concepts and approaches towards the top of the lists. Notably, the task least often incorporated into aural skills classes is improvisation (5.86%) and other topics less often encountered include the aural analysis of small and large formal designs.

What tasks are included in your aural skills classes?		
	2017 (N=239)	% of total
sight singing	238	99.58%
dictation	235	98.33%
error detection	145	60.67%
conducting	121	50.63%
transcription	103	43.10%
keyboard exercises	94	39.33%
aural analysis of form	85	35.56%
instrument/timbre ID	30	12.55%
other	15	6.28%
improvisation	14	5.86%

Table V-2
Tasks in Aural Skills

What topics are included in your aural skills classes?		
	(N=239)	% of total
rhythm & meter	231	96.65%
melodic dictation	231	96.65%
scales	226	94.56%
intervals	225	94.14%
triads	224	93.72%
seventh chords	217	90.79%
harmonic dictation (3+chords)	216	90.38%
modes	172	71.97%
pitch patterns	170	71.13%
melodic error detection	146	61.09%
harmonic error detection	105	43.93%
atonal dictation/sight singing	86	35.98%
aural analysis of small forms (binary, ternary, rounded binary)	75	31.38%
tuning	61	25.52%
aural analysis of larger forms (sonata, rondo)	32	13.39%
other	27	11.30%

Table V-3
Topics in Aural Skills

Much like written diatonic and chromatic harmony topics, there is a strong preference for textbooks (Table V-4), with the most commonly used book being Rogers and Ottman's *Music for Sight Singing* (Table V-5).

Materials in Aural Skills Classes		
What types of materials do you use in your aural skills classes?	(N=239)	% of total
texts/anthologies	199	83.26%
personal materials	107	44.77%
do not use any materials	12	5.02%

Table V-4
Materials used in Aural Skills classes

Top Textbooks/Anthologies Used for Aural Skills			
Title	Author	2017 (N=202 materials)	% of reported materials
<i>Music for Sight Singing</i>	Rogers/Ottman	70	34.65%
<i>A New Approach to Sight Singing</i>	Berkowitz/Fontrier	22	10.89%
<i>Manual for Ear Training and Sight Singing</i>	Karpinski	15	7.43%
<i>Ear Training: a Technique for Listening</i>	Benward/Kolosick	11	5.45%
<i>Progressive Sight Singing</i>	Krueger	11	5.45%
<i>Music for Sight Singing</i>	Horvit/Benjamin	10	4.95%

Table V-5
Textbooks in Aural Skills

VI. Technology in the Theory Curriculum and Online Courses

Written Skills:

The 2017 Survey asked a variety of questions regarding technologies used in written and aural skills courses; 55.69% of respondents stated they use computer programs or apps in their written theory courses (Table VI-1). These included notation programs, ear training software, web-based tools, and textbook supplements. Of note is the comparison of respondents who used web-based tools—including free drill and practice websites, purchased skill-building sites, free online notation software, and Google apps (46.72%)—to those using their adopted textbook’s online supplemental material (8.03%). Most instructors seem to prefer software they choose rather than that provided for them by a textbook.

Computers & Software in Written Music Theory		
Do you use computer programs/apps in your written music theory courses?	2017 (N=246)	% of total
yes	137	55.69%
no	109	44.31%
Please describe what computer programs (i.e. tools) are used in your written theory courses.		% of total using (n=137)
total tools reported among those using programs	191	
total online program users, not using online textbook supplement	64	46.72%
total online textbook supplement users	11	8.03%
Indicate how the computer programs are used in your written theory classes.	(n=137)	% of total using
graded homework	89	64.96%
ungraded assignments/drill & practice	84	61.31%
testing	31	22.63%
composing/arranging	16	11.68%
other/various	6	4.38%

Table VI-1
Use of Computers and Software in Written Skills

The most common uses of these programs and apps are for graded homework (64.96% of users) and ungraded drill and practice (61.31% of users). Though many programs have robust assessment tools, instructors still seem reluctant to use technology for testing (22.63% of users). The most commonly reported ear training programs, notation software, and free drill and practice websites used in written skills courses are largely well-established products and websites (Table IV-2).

Top Computer Software/Tools used in Written Music Theory		
Top ear training programs reported used in written music theory courses	(N=43) programs reported	% of reported
Auralia	18	41.86%
MacGamut	18	41.86%
Practica Musica	6	13.95%
Picardy	1	2.33%
Top notation software reported used in written music theory courses	(N=69) programs reported	% of reported
Finale	36	52.17%
Sibelius	16	23.19%
MuseScore	9	13.04%
Noteflight	8	11.59%
Top free drill & practice websites used in written music theory courses	(N=23) free websites reported	% of reported
teoria.com	12	52.17%
musictheory.net	7	30.43%
emusictheory.com	2	8.70%
Tonesavvy.com	1	4.35%
theoessentials.com	1	4.35%

Table VI-2
Popular Software/Tools in Written Skills

Aural Skills:

The 2017 Survey posed similar questions regarding technology used in aural skills classes; 52.10% of respondents stated they use computer programs/apps in these courses (Table VI-3). Like written theory, the results show that most instructors (81.45%) prefer to use a program other than their textbook's resources. The most commonly used programs are *Auralia*, *MacGamut*, various mobile apps, or websites (Table VI-4).

Computers & Software in Aural Skills		
Do you use any computer programs/apps in your aural skills courses?	(N=238)	% of total
yes	124	52.10%
no	114	47.90%
Number of respondents using their textbook's ear training software component vs. another program (e.g. MacGamut, Auralia, websites, mobile apps, etc.)	(n=124)	% of total reported
using textbook component only	17	13.71%
using another program; not text component	101	81.45%
using both textbook supplement and another program	6	4.84%
Indicate how the computer programs are used in your aural skills classes.	(n=124)	% of total using
ungraded assignments/drill & practice	90	72.58%
graded homework	74	59.68%
testing	22	17.74%
other/various	11	8.87%

Table VI-3
Use of Computers and Software in Aural Skills

Top Computer Software/Tools used in Aural Skills Courses		
Overall top technologies reported used in aural skills courses	(N=134) reported technologies	% of reported
Auralia	33	24.63%
MacGamut	31	23.13%
teoria.com	9	6.72%
musictheory.net	8	5.97%
Practica Musica	6	4.48%
Music for Ear Training (online component) - Horvit/Koozin/Nelson	6	4.48%
Top ear training-specific programs	(N=97) reported pay ET programs	% of reported
Auralia	33	34.02%
MacGamut	31	31.96%
Practica Musica	6	6.19%
Music for ET-Horvit/Koozin/Nelson	6	6.19%

Table VI-4
Popular Software/Tools in Aural Skills

Online Courses:

The 2017 Survey asked several questions regarding online written theory and aural skills classes. Only 18.52% of survey participants stated that their institution offered any fully or partially online written theory or aural skills course (Table IV-5). Of these 45 respondents, 71.11% offer only one online course and 24.44% offer two courses. The survey also asked respondents to characterize the proportion of course content delivered online in each course, with the categories being web facilitated, blended/hybrid, and online; these terms were adopted from Allen, Seaman, Poulin, and Straut's report on online courses in higher education.²³ Most characterize their online courses as 80% or more online (78.33%).

Online Music Theory & Aural Skills Courses		
Do you offer any fully or partially online written theory or aural skills courses?	(N=243)	% of total
yes	45	18.52%
no	198	81.48%
How many online courses do you offer?	(n=45)	% of total
1	32	71.11%
2	11	24.44%
3	0	0.00%
4	1	2.22%
5	0	0.00%
6	0	0.00%
7	0	0.00%
8	1	2.22%
For the largest online courses, how would you characterize the proportion of the course content delivered online in each course?	(n=60)	% of courses
web facilitated (1 – 29% online)	8	13.33%
blended/hybrid (30 – 79% online)	5	8.33%
online (80% online or higher)	47	78.33%

Table VI-5
Online Theory and Aural Skills Courses

²³ Allen, Seaman, Poulin, and Straut (2016, 7).

Questions regarding online courses were limited since a more in-depth survey on online music classes was recently conducted by McConville and Murphy (2017). Because that survey covered all types of online music classes, a more in-depth study of specifically online music theory and aural skills courses would be an important next step. However, with fewer than a fifth of 243 respondents reporting they have an online course, the sample size for such a study might be limited. There is certainly room for growth in online music theory instruction.

VII. Considering Change in the Curriculum

The last section of the 2017 Survey included questions about changes to written and aural skills classes, specifically whether the participants anticipated any changes to their curricula over the next two years and, if so, what types of changes were being contemplated. Most said they were definitely or probably going to make changes to their written theory (57.2%) and aural skills classes (46.9%) in the next two years (Table VII-1). By far, the majority of those considering changes in these courses are from 4-year schools (see Table VII-2).

Considering Changes to Courses?		
Are you considering making any changes to your written theory courses in the next two years?	(N=243)	% of total
definitely yes	53	21.81%
probably yes	86	35.39%
probably not	78	32.10%
definitely not	5	2.06%
not considering any changes	21	8.64%
Are you considering making any changes to your aural skills courses in the next two years?	(N=243)	% of total
definitely yes	35	14.40%
probably yes	79	32.51%
probably not	89	36.63%
definitely not	9	3.70%
not considering any changes	31	12.76%

Table VII-1
Changes in theory-related courses

Considering Changes to Courses?					
Are you considering making any changes to your written theory courses in the next two years?	2 year schools	% of total (243)	4 year schools	% of total (243)	Total
definitely yes	1	0.4%	52	21.4%	53
probably yes	11	4.5%	75	30.9%	86
probably not	10	4.1%	68	28.0%	78
definitely not	1	0.4%	4	1.6%	5
not considering any changes	3	1.2%	18	7.4%	21
TOTAL	26	10.7%	217	89.3%	243
Are you considering any changes to your aural skills courses in the next two years?	2 year schools	% of total	4 year schools	% of total	Total
definitely yes	1	0.4%	34	14.0%	35
probably yes	10	4.1%	69	28.4%	79
probably not	9	3.7%	80	33%	89
definitely Not	1	0.4%	8	3.3%	9
not considering any changes	5	2%	26	10.7%	31
TOTAL	26	10.7%	217	89.3%	243

Table VII-2
Considering changes by 2 and 4 year schools

Participants were asked to describe the changes being considered through open-ended questions, and the resulting 135 responses for written theory changes and 112 responses for aural skills changes were then categorized; the results are shown in Tables VII-3a through Table VII-3d. Tables VII-3a and VII-3c are changes contemplated by those stating they were definitely making changes, while the changes listed in Tables VII-3b and VII-3d are changes considered by those probably making changes. For written theory courses, changes most often included overall changes to the curriculum or changes in texts. For aural skills courses, the changes included overall modification (sometimes due to regular review of the courses), integration of courses, and the inclusion of improvisation.

Changes to written theory: definitely yes	number	% of total
overall changes	19	28%
change text	12	17%
flip classes, use of videos/online materials	6	9%
more of "other" types of music	5	7%
no fundamentals class	4	6%
less part writing	3	4%
include a fundamentals course	3	4%
include jazz/Nashville numbers system	3	4%
more composition	2	3%
new faculty	2	3%
include keyboard	2	3%
integration of classes	2	3%
include improvisation	2	3%
exclude keyboard	1	1%
changes due to regular review	1	1%
include experiential learning	1	1%
exclude counterpoint	1	1%
	69	≈100%

Table VII-3a
 Changes Considered for Written Theory Classes:
 for those schools saying they are *definitely* considering changes

Changes to written theory: probably yes	number	% of total
overall changes	16	20%
change text	14	18%
more of “other” types of music	12	15%
integration of classes	8	10%
changes due to regular review	7	9%
use online course or materials	7	9%
experiential learning and labs	2	3%
less part writing	2	3%
more composition	2	3%
new faculty	2	3%
include improvisation	2	3%
include transcription/jazz theory	2	3%
dumbing down	1	1%
make music theory for graduate study class	1	1%
placement	1	1%
make a fundamentals course	1	1%
exclude counterpoint	1	1%
	69	≈100%

Table VII-3b

Changes Considered for Written Theory Classes:
for those schools saying they are *probably* considering changes

Changes to aural skills: definitely yes	number	% of total
integration of courses	3	17%
overall change	3	17%
include improvisation	3	17%
new texts	2	11%
increase use of technology	2	11%
more types of music	2	11%
post tonal singing	1	6%
changes due to regular review	1	6%
change keyboard	1	6%
	18	≈100%

Table VII-3c

Changes Considered for Aural Skills Classes:
for those schools saying they are *definitely* considering changes

Changes to aural skills: probably yes	number	% of total
changes due to regular review	9	14%
overall change	8	12%
new texts	6	9%
change use of technology	6	9%
more types of music	6	9%
include improvisation	6	9%
integration of courses	4	6%
new faculty	4	6%
change keyboard	3	5%
change/increase sight singing	3	5%
include contextual listening	2	3%
include transcription	2	3%
change frequency of classes	2	3%
more dictation	2	3%
change solfege systems	1	2%
more composition	1	2%
	65	≈100%

Table VII-3d
Changes Considered for Aural Skills Classes: for those schools
saying they are *probably* considering changes

Reflections and Discussion

Nelson's 2000 Survey and the 2017 Survey provide a wealth of information on the teaching of music theory and aural skills. Many of the results confirm information gathered by other surveys, and some results provide opposing views. For instance, according to faculty self-reported values in the Marvin interviews and Snodgrass survey, faculty find topics in formal analysis important; Marvin cited "a focus on analysis and repertoire, somewhat less on part-writing" and Snodgrass revealed that 82.75% considered topics in formal structures "very important" and 9.41% "somewhat important."²⁴ The present survey found analysis of small forms included in 86% of schools, analysis of large forms in 79.15% of schools, and 12-tone and serial analysis at 72.59%, raising the question: is there enough analysis in the curriculum?

²⁴ Snodgrass (2016a).

Part-writing still seems prominent in the curriculum, reported at 95.75% of schools in the survey, though some schools stated they were thinking about decreasing the emphasis on part-writing in the future. Snodgrass likewise collected commentary on the mixed feelings regarding part-writing assignments. The high percentages of part-writing's existence in the curriculum also does not reveal its emphasis at each school; the percentages just indicate that students still learn to part-write. Although the percentages of schools including popular music analysis (45.56%) and jazz theory (22%) could be considered low, these numbers might actually be encouraging. That these topics are included in the core sequence at all in 2017 is important since they were not even mentioned in the 2000 survey.

The data also revealed helpful information on the extent of composition and improvisation in curricula. The *Manifesto* and the Snodgrass survey directed attention to these creative practices, and, as shown in the present survey and in Snodgrass's survey, these topics are occurring, but not in the majority of schools. Improvisation was included in just 26.25% of written theory classes, 6.18% of fundamentals classes, and 5.86% of aural skills classes. As Marvin indicated, integrating improvisation into courses can be a challenge, and the data shows this may be the case for fundamentals and aural skills courses, in particular. The 2017 Survey found composition projects were included in 69.5% of theory classes and 22.47% of fundamentals classes. These findings are similar to those in Snodgrass' survey. These percentages could be considered somewhat low, but the idea that "too many students graduate" without any experience in the creative process of composition, as suggested by the *Manifesto*, is debatable given these figures.²⁵ Growth is occurring in these creative approaches to learning,²⁶ and the inclusion of these and other pedagogies will be tracked, perhaps in greater detail, in future surveys.

Both the 2000 and 2017 surveys also revealed that singing systems emphasizing function were the most popular, with movable do-do based minor the most common system used, corroborating Paney and Buonviri's findings. Neither survey asked about systems for learning rhythm, however, which should be included in any future surveys.

Both Snodgrass and Marvin explored the current integration of written and aural skills courses; this survey also engaged this topic. Snodgrass reported that 22% of respondents stated that they had fully integrated courses,²⁷ which is close

²⁵ Task Force on Undergraduate Education (2016, 4).

²⁶ Recent textbooks are incorporating creative activities such as improvisation and composition; for a helpful article illustrating examples of these activities see Hoag (2016).

²⁷ Snodgrass (2016a).

to the 17.15% found in this survey. The present survey also showed that over half of fundamentals courses include some kind of aural skills topics. Future versions of this survey will add specific topics in aural skills to the list of topics in written courses, and vice versa, to analyze the topical integration at schools with separate courses. Melissa Hoag reminded readers that recent written theory and aural skills textbooks have worked to integrate topics;²⁸ concrete data in future analyses may help verify the extent of application of these types of textbook exercises.

Marvin reported an increase in the use of technology in teaching, although technology in her survey included the use of course management systems and public domain musical scores, and the digital projection of material. The current survey showed that technology, here defined as the use of computer programs and apps, was used by only about half (55% written, 52% aural) of respondents and mostly for homework or drill and practice, not assessment. When considering the number of programs available for both written and aural skills courses, many of which are free, the question arises, why are only (approximately) half of respondents using computer programs in their courses in 2017? In the case of aural skills particularly, drill and practice computer-assisted instruction (CAI) programs have existed for nearly 40 years, but many respondents do not use them.²⁹ Perhaps philosophical or financial reasons account for these decisions; this is a matter for possible exploration in a future survey. The 2017 Survey confirms what Marvin declared—that there has been no CAI revolution. In addition, there were very few online classes (18.52%)—most of the time (71%) only one—though most of these (78.33%) were characterized as online—meaning that at least 80% of the material is delivered online.

Marvin also found a growth in the number of remedial classes. The present survey likewise showed an increase in the number of schools with fundamentals classes (136 in 2000, 182 or 67.91% in 2017). The 2017 Survey also detected an increase in the number of schools with placement exams for both written theory (147 in 2000, 218 or 79.85% in 2017) and aural skills (78 in 2000, 116 or 42.96% in 2017). These placement exams seem to be used to place students into the fundamentals or sequence theory courses or to place out of courses. The 2017 Survey findings are consistent with what Vezza found in her dissertation, although she observed that some schools also used the results in the admission process. Schools also indicated they use proficiency exams or AP, IB or A-level scores to place students out of theory, aural skills and other

²⁸ Hoag (2016).

²⁹ For an excellent article on the history of CAI programs, though somewhat outdated, see McGee (2000).

classes; both the 2017 Survey and Vezza's survey found that over 60% of institutions accepted these results for placement in theory courses (61.5% for Vezza and 67.9% for the 2017 Survey). There are also few accelerated classes; just 19 (7.82%) schools in 2017 reported these types of classes as compared to 25 schools in 2000.

Finally, a number of schools indicated that they are considering changes to the curricula (57.2% for written theory and 46.91% for aural skills). The fact that many of these schools are considering overhauling the curriculum entirely is even more compelling. It will be exciting to see what types of changes are implemented in the next few years. One trend to follow concerns the number of required years theory and aural skills; although two years is still the most common, a growing number of schools now require an additional half year of written theory.

As in any research project, there are always aspects that we would change. We would ask more information about the faculty that are teaching the theory classes in an attempt to better determine the number dedicated to teaching theory and aural skills. Questions on which courses are considered part of the theory sequence and which courses are required of music majors would also be included. Questions such as those on the acceptance of AP, IB and A-levels credits and future changes would be formatted as multiple answer questions to make tabulation of the answers easier. Finally, we would not wait 17 years to conduct this survey again. We plan to conduct this survey again in five years to track the changing landscape of our theory and aural skills curricula. We believe that current discussions and debates will result in meaningful curricular revisions, and we hope future studies will help us understand our priorities in the face of inevitable change.

Works Cited

- Allen, I. A., J. Seaman, R. Poulin, and T. T. Straut. 2016. "Online Report Card—Tracking Online Education in the United States. Babson Survey Research Group and Quahog Research Group," Retrieved from: <http://onlinelearningconsortium.org/read/online-report-card-tracking-online-education-united-states-2015>
- Hoag, Melissa E. 2016. "Integration, Diversity, and Creativity in Current Music Theory Pedagogy Research," *College Music Symposium* 56.
Retrieved from: <http://dx.doi.org/10.18177/sym.2016.56.fr.11136>
- Karpinski, Gary. 2000. "Lessons from the Past: Music Theory Pedagogy and the Future," *Music Theory Online* 6 (3).
Retrieved from: <http://www.mtosmt.org/issues/mto.00.6.3/mto.00.6.3.karpinski.html>
- Laitz, Steven. 2016. "Current Pressure Points, Curriculum, and Moving Forward," *College Music Symposium* 56. Retrieved from: <http://dx.doi.org/10.18177/sym.2016.56.fr.11138>
- Livingston C., Ackman J. 2003. "Changing trends in preparing students for college level theory." *American Music Teacher* 53 (1): 26–29. Retrieved from Google Scholar: <https://www.thefreelibrary.com/Changing+trends+in+preparing+students+for+college+level+theory.-a0106390059>
- Marvin, Elizabeth West. 2012. "The Core Curricula in Music Theory: Developments and Pedagogical Trends," *Journal of Music Theory Pedagogy* 26: 255 – 264.
- McConville, Brendan and Barbara Murphy. 2017. "What is Online? A National Survey of Course Offerings in Music and a Case Study in Music Theory," *College Music Symposium* 57.
Retrieved from: <https://doi.org/10.18177/sym.2017.57.itm.11345>
- McGee, Deron, 2000. "Aural Skills, Pedagogy, and Computer-Assisted Instruction: Past, Present, and Future," *Journal of Music Theory Pedagogy* 14: 115-134.
- Nelson, Richard B. 2002. "The College Music Society Music Theory Undergraduate Core Curriculum Survey – 2000," *College Music Symposium* 42: 60-75.
- Paney, Andrew S. and Nathan O. Buonviri. 2014. "Teaching Melodic Dictation in Advanced Placement Music Theory," *Journal of Research in Music Education* 61 (4): 396-414.
- Paney, Andrew S., and Nathan O Buonviri. 2017. "Developing Melodic Dictation Pedagogy: A Survey of College Theory Instructors," *Update Applications of Research in Music Education* 36 : 1-8.
- Riftkin, Deborah. 2014. Cultivating Creativity in the Music Theory Classroom: Telling Tales with Texture and Timbre," *Engaging Students: Essays in Music Pedagogy* 2.
Retrieved from: <http://flipcamp.org/engagingstudents2/essays/rifkin.html>
- Snodgrass, Jennifer. 2016a. "Current Status of Music Theory Teaching" *College Music Symposium* 56.
Retrieved from: <http://dx.doi.org/10.18177/sym.2016.56.fr.11138>
- Snodgrass, Jennifer Sterling. 2016b. "Integration, Diversity, and Creativity: Reflections on the 'Manifesto' from the College Music Society," *Music Theory Online* 22 (1).
Retrieved from: <http://www.mtosmt.org/issues/mto.16.22.1/mto.16.22.1.snodgrass.html>
- Task Force on Undergraduate Education. 2016. "Transforming Music Study from its Foundations: a Manifesto for Progressive Change in the Undergraduate Preparation of Music Majors." *College Music Symposium* 56. Retrieved from: <http://dx.doi.org/10.18177/sym.2016.56.fr.11118>

Veza, Anna B. 2013. *Revising Music Theory Curricula in Response to Varied Student Backgrounds: a Survey*. PhD Diss., University of Nebraska Lincoln.
Retrieved from: <http://digitalcommons.unl.edu/musicstudent/63>

Textbooks and Websites

Aldwell, Edward, Carl Schachter, and Allen Cadwallader. 2018. *Harmony and Voice Leading*. Fifth ed. Independence, KY: Cengage.

Ars Nova Software. n.d. "Practica Musica - Ars Nova Software." Accessed April 12, 2018.
www.ars-nova.com/practica6.html

Avid Technology. n.d. "Sibelius – Music Notation Software." Accessed April 12, 2018.
www.avid.com/sibelius

Avirla, Jose Rodriguez. n.d. "teoria: Music Theory Web." Accessed April 12, 2018.
www.teoria.com

Benjamin, Thomas, Michael Horvit, and Robert Nelson. 2013. *Music for Sight Singing*. Sixth ed. Australia: Schirmer Cengage Learning.

Benjamin, Thomas. 2003. *The Craft of Tonal Counterpoint*. Second ed. New York: Routledge.

Benward, Bruce, and J. Timothy Kolosick. 2010. *Ear Training: A Technique for Listening*. Seventh ed. Boston: McGraw-Hill Higher Education.

Benward, Bruce, and Marilyn Saker. 2015. *Music in Theory and Practice*. 2 vols. Ninth ed.. New York: McGraw-Hill, 2015.

Berkowitz, Sol, Gabriel Frontrier, Leo Kraft, Perry Goldstein, and Edward Smaldone. 2017. *A New Approach to Sight Singing*. Sixth ed. New York: W.W. Norton.

Blombach, Ann. n.d. "MacGamut Home Page." Accessed April 12, 2018.
www.macgamut.com

Burkhart, Charles, with William Rothstein. 2012. *Anthology for Musical Analysis*. Seventh ed. Independence, KY: Cengage, 2012.

Burstein, L. Poundie, and Joseph N. Straus. 2016. *Concise Introduction to Tonal Harmony*. New York: W.W. Norton & Company.

Cengage Learning. n.d. "Theory Essentials Home Page." Accessed April 12, 2018.
www.theoryessentials.com

Clendinning, Jane Piper, and Elizabeth West Marvin. 2014. *The Musician's Guide to Fundamentals*. Second ed. New York: W.W. Norton & Company.

Clendinning, Jane Piper, and Elizabeth West Marvin. 2016. *The Musician's Guide to Theory and Analysis*. Third ed. New York: W.W. Norton & Company.

Duckworth, William. 2015. *A Creative Approach to Music Fundamentals*. Eleventh ed. Independence, KY: Cengage, 2015.

Gauldin, Robert. 2004. *Harmonic Practice in Tonal Music*. Second ed. New York: W.W. Norton & Company.

Green, Douglass. 1979. *Form in Tonal Music: An Introduction to Analysis*. Second ed. New York: Holt, Rinehart & Winston, 1979.

- Henry, Earl, Jennifer Snodgrass, and Susan Piagentini. 2013. *Fundamentals of Music: Rudiments, Musicianship, and Composition*. Sixth ed. Upper Saddle River, NJ: Pearson.
- Hill, Frank, Roland Searight, Dorothy Searight Hendrickson, and Steven Estrella. 2005. *Study Outline and Workbook in The Fundamentals of Music*. Eleventh Edition. New York: McGraw Hill.
- Horvit, Michael, Timothy Koozin, and Robert Nelson. 2013. *Music for Ear Training*. Fourth ed. Boston, Mass.: Schirmer Cengage Learning, 2013.
- jtheory creations. n.d. "emusictheory.com – Teach and learn music theory from anywhere." Accessed April 12, 2018.
www.emusictheory.com
- Karpinski, Gary. 2017. *Manual for Ear Training and Sight Singing*. Second ed. New York: W.W. Norton.
- Kennan, Kent. 1999. *Counterpoint*. Fourth ed. Upper Saddle River, NJ: Pearson.
- Kostka, Stefan. 2006. *Materials and Techniques of Twentieth-century Music*. Third ed. Upper Saddle River, NJ: Pearson Prentice Hall.
- Kostka, Stefan, and Matthew Santa. 2018. *Materials & Techniques of Post-Tonal Music*. Fifth ed. New York: Routledge.
- Kostka, Stefan, Dorothy Payne, and Byron Almén. 2018. *Tonal Harmony*. Eighth ed. New York: McGraw-Hill.
- Krueger, Carol. 2016. *Progressive Sight Singing*. Third ed. New York: Oxford University Press.
- Laitz, Steven G. 2015. *The Complete Musician: An Integrated Approach to Tonal Theory, Analysis, and Listening*. Fourth ed. New York: Oxford University Press.
- Lynn, Theodore. 2012. *Introductory Musicianship*. Eighth ed. Independence, KY: Cengage.
- MakeMusic. n.d. "Finale." Accessed April 12, 2018.
www.finalemusic.com
- Manoff, Tom. 2001. *The Music Kit*. Fourth ed. New York: W.W. Norton.
- MuseScore. n.d. "Musescore – Free music composition and notation software." Accessed April 12, 2018.
www.musescore.com
- Musictheory.net. n.d. "musictheory.net." Accessed April 12, 2018.
www.musictheory.net
- Noteflight. n.d. "Noteflight – Online Music Notation software." Accessed April 12, 2018.
www.noteflight.com
- Ottman, Robert, and Frank Mainous. 1995. *Rudiments of Music*. Third ed. Upper Saddle River, NJ: Pearson.
- Ottman, Robert, and Nancy Rogers. 2014. *Music for Sight Singing*. Ninth ed. Upper Saddle River, NJ: Pearson.
- Ottman, Robert. 1998. *Elementary Harmony: Theory and Practice*. Fifth ed. Upper Saddle River, NJ: Pearson.
- Owen, Harold. 1992. *Modal and Tonal Counterpoint: From Josquin to Stravinsky*. New York: Schirmer Books.
- Picardy Learning. n.d. "Picardy – Music Theory and Musicianship." Accessed April 12, 2018.
www.picardylearning.com

- Rising Software. n.d. "Auralia Ear training – Rising Software." Accessed 12 April 2018.
www.risingsoftware.com/auralia
- Roig-Francoli, Miguel. 2008. *Understanding Post-Tonal Music*. Boston: McGraw-Hill.
- Schubert, Peter. 2008. *Modal Counterpoint: Renaissance Style*. Second ed. New York: Oxford University Press.
- Spencer, Peter, and Peter M. Temko. 1988. *A Practical Approach to the Study of Form in Music*. Upper Saddle River, NJ: Pearson.
- Spencer, Peter, and Barbara Bennett. 2012. *The Practice of Harmony*. Sixth ed. Upper Saddle River, NJ: Pearson.
- Spring, Glenn, and Jere Hutcheson. 1995. *Musical Form and Analysis*. New York: McGraw-Hill.
- Straus, Joseph N. 2016. *An Introduction to Post Tonal Theory*. Fourth ed. New York: W.W. Norton.
- Straus, Joseph. 2012. *Elements of Music*. Third ed. Upper Saddle River, NJ: Pearson.
- Tone Savvy. n.d. "Tone Savvy | Music Theory & Ear Training." Accessed April 12, 2018.
www.tonesavvy.com
- Turek, Ralph. 1996. *The Elements of Music: Concepts and Applications*. Second ed. New York: Knopf.

