

We Know It's Important, But How Do We Do It? Engaging Beginning Aural Skills Students Through Meaningful Improvisation Activities

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Improvisation as a core component of music curricula has been a topic of great interest in higher education in recent years. Articles on the subject are numerous and music theory and musicianship textbooks increasingly incorporate improvisation activities within their pages. The immediacy of improvisation tells us something about the way in which the inexperienced student assimilates essential bits of musical vocabulary in real time, and in the service of aural skills training is an effective tool for evaluating musicianship development. Recognizing that this learning tool was only a peripheral aspect of my own first-year aural skills curriculum, I retooled my courses to include more meaningful, graded improvisational exercises. This paper details my structured approach to introductory improvisations in beginning aural skills, how I assess them, and what I've learned by placing emphasis on improvisation as an integral learning activity.

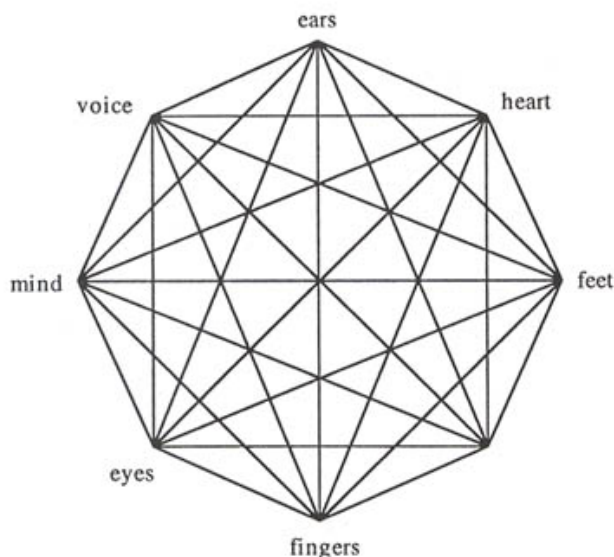


In a 1995 article in *College Music Symposium*, renowned theorist and pedagogue Steve Larson, referring specifically to music theory teaching, reminded us that “*learning should be fun*” (emphasis added). He correlates “fun” with “a sense of play,” and suggests that one meaningful way in which a sense of play is achieved is through improvisation.¹ While some students may not equate improvisation with “fun,” or feel inclined to “play” in this way, there is compelling research that supports the incorporation of improvisation into the curriculum. The integration of improvisation in music theory curricula, in particular its integration into musicianship or aural skills curricula, has been a topic of great interest in higher education research for quite some time.² Larson further indicates that improvisation “foster[s] integrated music learning,” by requiring students to access, in real-time, multiple ways of knowing, both to enrich their learning and also to embed concepts more firmly in their minds. Larson’s diagram is reproduced as Example 1.

Like Larson, Kate Covington has also argued that improvisation should be a focal point because of its effectiveness as a “catalyst for aural synthesis” by creating an “active environment” that aids in the encoding of musical data and essential schemata

1 Larson (1995, 80).

2 See, for instance, Azzara (1999), and Larson (1993).

**Example 1**

Larson's Diagram Depicting Multiple Ways of Knowing. From Larson (1995, 77); reproduced by permission.

in the minds of students.³ Both Larson and Covington, drawing on research from the fields of perception and cognition, recognize that improvisation is well-suited for this purpose since its focus is on core music skill development.

Recent music theory and musicianship textbooks have also responded by incorporating improvisation-based activities. Representative texts that feature a wide range of improvisation exercises coinciding with chapter topics include *The Musician's Guide to Aural Skills*, *Aural Skills in Context*, *The Complete Musician*, and, since the seventh edition, *Music for Sight Singing*.⁴

Alongside the research that supports providing a robust improvisation curriculum, a recent document generated by a College Music Society task force calls for a more deliberate infusion of improvisation into music training.⁵ A follow-up response to

3 Covington (1997, 49).

4 Clendinning, Marvin, Murphy, and Philips (2016); Jones, Shaftel, and Chattah (2013); Laitz (2016); and Rogers and Ottman (2019 [2007]).

5 Shehan Campbell et al. (2016). It should be noted that the report generated by the task force (which was appointed by the past CMS president) was not peer-reviewed.

this report by a panel of music theorists entitled, “Current Status of Music Theory Teaching,” noted that “more can be done in regards to instruction in improvisation.” An accompanying table illustrated that only 10% of instructors polled integrated improvisation into their curriculum frequently, while 20% polled indicated that they never did. 30% responded that there was a “fair amount” of improvisation integration in their curriculum.⁶

Why do some instructors struggle with the implementation of improvisation, especially since the materials and resources are available in abundance? Do some doubt the efficacy of improvisation’s role as a foundational element of musical training and its potential to create a special synergy between concepts and skills? Does it really make a meaningful impact on student development? If instructors are going to make improvisation an integral part of our aural skills curriculum, they must first buy into the idea that it is worth the time and energy to give it a prominent position—maybe even replacing other learning activities that they are accustomed to using.

Confronted by the research and the gnawing curiosity arising from these questions, I resolved to include more deliberate improvisation activities into my curriculum in the Fall of 2016. I recognized that improvisation was only a peripheral component of my first-year aural skills courses, usually as part of supplemental warm-up activities. My motivation was also connected to departmental objectives. It was a stated learning objective in our program goals that all students be introduced to improvisation, yet we had never determined where in our curriculum it was occurring, or how we might measure it.

This article presents a reflective look at my own curriculum, as I attempted to move improvisational activities from their location on the sidelines, to occupy a more central, structural role. I offer ideas for incorporating and assessing improvisation in the first-year, first-semester aural skills classroom by sharing the learning activities that I use, the specific objectives for them, and how I evaluate student progress. Finally, I will provide anecdotal evidence that the systematic implementation of improvisational activities does in fact stimulate meaningful student development in a creative, immediate way.

6 For a response to some of the assertions of made by the CMS “task force report,” see Snodgrass (2016).

Description of Improvisation Checkpoints

For my first-semester aural skills course, I chose four fundamental topics to evaluate via improvisation that typically need additional reinforcement, are integral to student development early on, and that represent essential learning objectives in my curriculum. Each of these topics form the basis of my approach to aural skills, which relies considerably on Gary Karpinski's aural skills text.⁷ Here are the four topics for which I chose to create improvisation assessments (called "improvisation checkpoints"):

- 1) tonal pitch patterns in the major mode,
- 2) tonic triad leaps in the major mode,
- 3) leaps to "ti" and "re," and
- 4) tonal pitch patterns in the minor mode.

All of these improvisation exercises are to be performed vocally, without the aid of an instrument, and using a solmization system—in my case, moveable-do solfège syllables. The purpose of the improvisation exercises is to help students map the solfège syllables onto scale steps so they become one and the same in their mind. Students' application of solfège is paramount, serving as an indicator for accurate recognition of scale degrees. I want them to know what scale degree they are singing relative to the key, so as to heighten their awareness of function. Solfège acts as the synthesizing tool. At first, students may struggle with the mechanics of applying solfège in real time, but solfège externalizes their thinking, and allows me to measure their musical understanding instantaneously. Therefore, I insist that students improvise using solfège. When I evaluate these activities, solfège accuracy is a principal factor. It is not enough for students to *hear* and *sing* the right pitch while incorrectly applying the solfège. Students *hear* and *sing* a pitch and they instantly demonstrate that they *know* and understand its function by singing the correct syllable. Students may already have an implicit sense for scale degrees and rely on their ear for the correctness of a pitch, but immediate musical understanding is the objective.

Improvisation Checkpoint no. 1

Description: To improvise using only pitch patterns in the major mode

Perhaps the most important first task for my students is the assimilation of common pitch patterns of tonal music, specifically those patterns introduced in

⁷ Karpinski (2017).

Karpinski’s *Manual*, which are similar to those that Larson identifies as fundamental to all types of tonal music [Example 2].⁸

1			Mi						Mi		
		Re									
	Do			Do					Do		
2					Sol				Sol		
				Fa							
			Mi								
		Re									
	Do						Do		Do		
3	Do				Do				Do		
		Ti									
			La								
				Sol					Sol		
4	Mi			Mi					Mi		
		Re									
			Do						Do		
5	Sol						Sol		Sol		
		Fa									
			Mi								
				Re							
					Do				Do		
6	Sol			Sol					Sol		
		Fa									
			Mi						Mi		
7			Sol						Sol		
		Fa									
	Mi			Mi					Mi		
8				Do					Do		
			Ti								
		La									
	Sol				Sol				Sol		

Example 2
Pitch Pattern Chart Adapted from Karpinski (2017, 10).

8 Larson (1992).

Not only do Karpinski's patterns represent common melodic pathways through the major scale found in all styles of tonal music, but they are also the basis of melodic dictation exercises and sight-singing melodies that I assign. Learning to quickly recognize these patterns takes time for students, so I ask them to memorize the patterns over the summer prior to the start of their first term of study.⁹ We sing and play the patterns at the piano in various keys at the beginning of most classes. In week two, we begin improvising with pitch patterns. Then, after we have practiced for three or four weeks through recognition drills and in-class improvisation activities, and they have been tested on their aural recognition of the patterns on the first dictation quiz, I evaluate how well they've encoded these patterns in their first improvisation checkpoint.

Improvisation Checkpoint no. 2

Description: To improvise using leaps in the major-mode tonic triad

The second improvisation checkpoint evaluates how well students differentiate between leaps and steps, specifically training their ear to better audiate the distinctive leaps of the tonic triad. Students are expected to continue using pitch patterns as basic stepwise melodic pathways, but they must also demonstrate that they can comfortably improvise leaps through the tonic triad, in any direction, between any two members of the chord. Preparatory activities for this checkpoint include familiar melody memorization; melodic dictation and sight-singing exercises; and point and sing exercises, where the solfège chart is displayed while they hold down the tonic triad at the keyboard.

Improvisation Checkpoint no. 3

Description: To improvise using leaps to "ti" and "re"

In addition to basing their improvisations around pitch patterns and leaps within the tonic triad, the third checkpoint also introduces the first non-tonic leaps that students encounter in this system as prefix neighbors, and helps them recognize *ti-do* and *re-do* resolutions. I find this is a useful next step in the process of vocabulary building, as students must show that they can improvise leaps from any scale degree,

9 At the institution where I teach, new students meet with their advisors in the spring prior to the start of the first semester to set up their schedule. During this meeting, I give students a handout with the pitch patterns (See Example 2 above) and a solfège guide with instructions for practicing over the summer. Later in the summer, I send them a link to video demonstrations of how to practice that I created.

ascending or descending, to either of the prefixes before resolving to tonic. It also serves as a precursor to improvising leaps in the dominant triad, a topic that I reserve until the second semester of the sequence. Sequential exercises found in the corresponding chapter of Karpinski’s *Manual* and memorizing familiar melodies help prepare students for this checkpoint.¹⁰

Improvisation Checkpoint no. 4

Description: To improvise using tonal pitch patterns in the minor mode

In Karpinski’s system, the minor mode and its variations are treated separately as topics apart from the major mode.¹¹ Consequently, it is not addressed in my curriculum until close to the end of the first term. This final checkpoint builds on the previous three. Students must transfer what they have learned about pitch patterns, the tonic triad, and leaps to *ti* and *re* from the major-mode improvisations to the minor mode using the corresponding minor-mode solfège. I allow them to use either the natural or melodic forms of the scale while improvising. This checkpoint also requires students to improvise in compound meter.

Testing Format and Evaluation

Students meet with me individually about every two weeks for a five-minute singing test, which typically includes a prepared melody, a sight-singing melody, and one additional exercise. It is in some of these tests that the additional exercise is one of the four improvisation checkpoints. For each checkpoint, I have created accompaniment tracks using GarageBand to which students sing along.¹² These tracks are similar to the accompaniments we perform for in-class “jam sessions” (described below) and are made available for students to practice with one to two weeks prior to the test on our online course management system.



Improvisation 1

¹⁰ Karpinski (2017, chapter 14).

¹¹ Ibid., chapters 17-19.

¹² I make no claims of being an expert when it comes to GarageBand. For these tracks, I relied almost exclusively on the preset sounds and loops available in the program. I simply composed an ostinato and accompaniment.



Improvisation 2



Improvisation 3



Improvisation 4

Students receive general procedures and expectations for the improvisations in their syllabus. The procedures are as follows (reproduced from my syllabus):

For each improvisation exercise, you will be performing along with an accompaniment track. These tracks will be available on Canvas for you to practice with at least one week prior to a given assignment.

At your singing test, I will provide you with the scale degree on which you will need to begin your improvisation (either 1, 3, or 5). This will help you avoid getting locked into using the same patterns in the same way each time you improvise.

You will be given approximately a 5-10 second window at the start to orient yourself in the key.

Improvised melodies must be performed continuously (with minimal rests) for approximately 30-45 seconds.

I purposely do not make the instructions for these improvisation activities overly prescriptive. My intention is to have students freely use the bits of vocabulary that they are assimilating into their improvisations without being hampered by additional tasks that they have to navigate. Mapping solfège onto the scale degrees is challenging enough. Keeping the structure of these improvisations less complicated allows students to focus on the primary objective of the exercise, so I have chosen to keep directions to a minimum.¹³ I do not restrict students to a limited set of rhythmic patterns, require that they adhere to pre-defined melodic templates to prohibit extreme ranges, or have

¹³ Pressing (1988, 141) asserts that structure is important when applying new vocabulary to improvisation, but that the structure shouldn't be too complicated, and that action sequences "get muddled when burdened with too much intellectual detail."

them alternate between pre-composed segments within their improvisations.¹⁴

Although pitch and solfège accuracy constitute the core of my improvisation exercises, students are also evaluated on rhythmic consistency and maintaining the established meter. While I avoid trying to evaluate creativity in their improvisations, I do include a category called “Variation/Mobility,” which allows me to judge the extent to which students are able to utilize the vocabulary into their performances in a variety of ways while at the same time helping them be mindful of excessive repetition. I use a simple point-scale rubric to assess these categories.

Improvisation:														Total	Weight (10%)
Pitch Accuracy	0	1	2	3	4	5	Time feel/ Rhythm	0	1	2	3	4			
Variation/ Mobility	0	1	2	3											
Combined Score:															

Example 3 Improvisation Checkpoint Rubric.

Specifically, students are evaluated on the following criteria:

- ***Accurately executing the specific bits of musical vocabulary***

Students must demonstrate that they can incorporate vocabulary in both pitch and solfège. Since precise mapping of solfège onto scale degrees is the primary objective, hearing and singing these patterns receives the most weight.

- ***Maintain Meter***

It is evident in some student performances that the pitch relations have not been internalized adequately, leading to excessive focus on the pitch domain to the detriment of the rhythmic flow. In these instances, performances are choppy and are not congruent with the established meter.

- ***Variation***

Repetition is a vital aspect of musical creation, but repeating the same patterns in the same way too frequently in 30–45 seconds suggests that the student has not yet assimilated other vocabulary bits at a level necessary for instant recall. This particular instruction accounts for this lack of flexibility, and compels students to access the many pathways available in their improvisations. I encourage each student to strive for balance and fluency in his or her melodic and rhythmic ideas by keeping the improvisations simple, refraining from jerky or complicated rhythms,

¹⁴ Some sources are more prescribed in their improvisation exercises. For an example of improvisation activities that include pre-determined rhythmic patterns and/or alternations between pre-composed and improvised passages, see the “structured improvisation” exercises found at the end of each chapter of Rogers and Ottman (2019).

and/or sudden leaps. Rather than giving them specific rhythmic patterns to use, I remind students that they can use the prepared melodies from our song packet or other melodies that they know as a guide, and the implicit understanding they already have about how tonal melodies should go from listening to music.

As detailed on the rubric, improvisation amounts to only 10% of the overall singing-test grade. My intention is to treat improvisation as a low-stakes assessment in order to alleviate pressure on the students, who must improvise in front of me for up to 45 seconds, which can seem like an eternity for some. Rarely does anyone perform flawlessly in that amount of time, given the room for error in misappropriating pitch and solfège in their improvisations. It requires a significant amount of concentration in the early stages and takes time for assimilation to occur. Therefore, I do not grade each criterion too harshly.

Preparing Students for Checkpoints

Leading up to each assessment, I devote 10–15 minutes per class over two or three class periods before the assessment to practice improvisation in what I call “jam sessions.” For this activity, I arrange the class in a large circle and begin by singing a simple, rhythmically catchy, tonic-emphasized “vamp” that students imitate and repeat for the duration of the jam.¹⁵ Using an idea suggested by Steve Larson, for the vamp I will usually have students sing either a P5 drone or a two-bar repeated ostinato that alternates between *do* and *sol* in simple triple or quadruple meter.¹⁶ This vamp is the backdrop over which students will improvise individually for roughly a minute or so when randomly called upon.¹⁷ To break up the monotony of singing the same thing over and over again, I will periodically give cues to have students vary some aspect of the rhythmic ostinato pattern in between or during solos. Example 4a-d illustrates the kinds of vamps that I use for improvisation activities. I make these vamps similar (both in content and key) to the accompaniment tracks over which

15 I typically have between 8–15 students in each section of my aural skills classes. We intentionally keep class sizes small to facilitate more interaction.

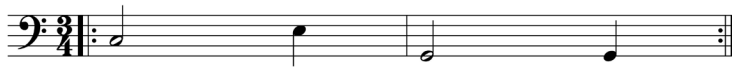
16 This is one of two-dozen suggested exercises provided in Example 14, page 17, of Larson’s report for the Center for Research on Concepts and Cognition, “Scale-Degree Function: Cognition Research and its Application to Aural-Skills Pedagogy” (CRCC Technical Report no. 67).

17 If a student is struggling with their improvisation, I will often give them more time so that I can provide real-time instruction and get them on track. Most of the time, my coaching involves reorienting them to tonic, or singing back the correct pitch that coincides with the solfège syllable they are on.

they will improvise for the checkpoints. They have all been notated in the key of C for purposes of comparison. Notice that all are simple and are flexible enough for variation.



Example 4a
Vamp Pattern for Checkpoint no. 1.



Example 4b
Vamp Pattern for Checkpoint no. 2.



Example 4b
Vamp Pattern for Checkpoint no. 3.



Example 4b
Vamp Pattern for Checkpoint no. 4 (minor mode).

The following video clips recreate how the in-class “jam sessions” work. The students are first-semester freshmen aural-skills students, three of whom are vocal majors and three who are instrumental majors.

The [first video clip](#) shows students improvising using only pitch patterns (shown in Example 2 above) in the major mode, which is the primary purpose of Improvisation Checkpoint no. 1. For jam sessions, there is no requirement for solos to start on any tonic chord member, no requirement to employ specific rhythmic patterns, just react to the ostinato. The video reveals that students instinctively do this *on their own*. Normally for these jam sessions, I let each student perform until I am satisfied that they can accurately demonstrate pitch pattern usage or other key skill for that particular checkpoint in their improvisations, in the established meter, before selecting another student to improvise.

The videos show that a fair amount of imitation occurs among student performances, which is why I use individual testing. I think that there are two reasons for this imitation: 1) students pick up on the pathways already sung by other students,

and 2) students naturally gravitate toward the same simple rhythmic patterns (often non-syncopated beat divisions) that easily lock into the pulse, anchored on strong beats. Recall that there are no instructions related to rhythms other than to maintain the meter. Certain pitch patterns seem to invite certain rhythmic patterns, like the descending tetrachord: *do ti la sol* with the rhythmic pattern, “long-short-short-long.” Initiated by Student “A,” every student used this strategy, and with the exception of Student “B,” Students “C,” “D,” and, “F,” all began their improvisations with it. Even though not a requirement for the first improvisation checkpoint, as evidenced by this clip, many students are comfortable singing leaps within the tonic triad, since the beginnings and endings of the patterns articulate the stable arrival points of this chord.

The [second video clip](#) demonstrates the jam session I use to prepare students for Improvisation Checkpoint no. 3. For this exercise, students are instructed to improvise leaps to *ti* and *re* from any scale degree as prefix neighbor notes to the closest tonic triad member, and are told to base their improvisations on major-mode pitch patterns (Checkpoint no. 1), and leaps within the tonic triad (Checkpoint no. 2). Student “F” begins this demonstration and, within the first few seconds, mislabels the pitch she sings, *ti*, with the syllable, *re*, but almost instantly recognizes this mistake (her facial expression betrays her error) and quickly adjusts. Student “E” similarly attempts to leap to *re*, but overshoots it, and sings *do* briefly before coyly sliding up to *re*. Student “C,” midway through his improvisation, sings *mi re do*, but misappropriates the syllables *sol fa mi*. This type of self-correction happens frequently in improvisation activities, as students recognize, in real time, when they get off track and temporarily become lost in tonal pitch space. Again, the immediacy of the learning that takes place within this kind of active environment cannot be overemphasized. In those instances when students get completely lost, and can’t reorient themselves to tonic, I guide them back to one of the tonic chord members with my own voice and allow them to continue.

Outcomes

At the beginning of this article, I indicated that the improvisation activities that I incorporated in my classroom prior to 2016 were purely supplemental, and were not something that students were expected to work on and develop. They were in-class activities used to create another pathway of knowing—and that certainly wasn’t a bad thing. However, with this new scaffolded approach to improvisation, I have seen

some fruitful results in student development. My conclusions are drawn anecdotally from observations both in the classroom and improved performance on assessments. I feel that this type of engagement has had an impact on assimilating important bits of musical vocabulary. Here are three ways in which I have observed that emphasis on improvisation has made a difference with my students:

1) **Solfège fluency.** Students are much quicker at recognizing scale degrees in context of melodic dictation, or audiating them when attempting to sight sing melodies. Musical understanding is more certain, represented by a precise application of the solfège system. Students on the whole have seemed to assimilate this system more fluidly than in years past.

2) **Test score improvement.** Preliminary data suggests that an emphasis on improvisation has made an impact on assessment performance in the areas of dictation and sight singing. When comparing a three-year span of overall testing results of first semester aural skills students, a significant leap in scores emerges. A simple averaging of approximately 45 combined dictation test scores reveal a jump from the 80% range in 2014 and 2015, to an average of 87% in 2016 and 2017. Singing test performances also improved, rising from an 83% average in 2015 over 10 tests, to an 87% average in 2016 and 2017. I realize that this may seem like armchair numbers analysis, and that there are other variables in play here, such as the background and experience of the student population from year to year, micro changes to the curriculum, the mental or emotional state of a student on any given testing day, and so forth. However, since this has been the only real change to my curriculum, there appears to be at least an indirect relationship between increased focus on improvisational activities and improved performance on test scores. For instance, in the past I included one or two in-class jam sessions at most throughout the term. Now I have approximately eight jam sessions, averaging one about every other week. This has been no small task, since it takes up a significant amount of class time to run, but the payoff has been worth it. Not only has this consistent approach confirmed the view that improvisation is an important part of the curriculum, it has also benefitted students by facilitating more supervised practice, and has consequently infused many with the confidence that they can in fact improvise.

3) **Engagement.** These activities provide an active mode of learning to which most students respond positively. Although some are apprehensive about performing in front of each other, and only reluctantly participate, most students engage in the activity and have fun with it. Often, students will move to the groove and flow, or engage intently by synchronizing simple dance moves with each other while singing

the accompaniment. Several students have indicated to me both inside and outside of class that the jam sessions were their favorite activity, and found it valuable to their skill development.

Conclusion

Meaningful improvisation exercises in the aural skills classroom, coupled with thoughtful assessment, yield positive results in student learning. Making improvisation a central part of the curriculum has helped me to determine more immediately the extent to which students have internalized important fundamental concepts, and has thus become an effective tool for evaluating musicianship development. Grappling with these musical elements encourages students to react without conscious thinking, resulting in what Covington calls an “active environment,” where real synthesis takes place.

The types of improvisation exercises that I have shared in this article are not novel in and of themselves: as noted in the aforementioned aural-skills sources, similar exercises can be found elsewhere. What is perhaps new is the way in which I’ve tried to integrate them as learning exercises that support essential skill development in a progressive manner, each building on the previous improvisation exercise. In the aural skills classroom, improvisation is a means to an end, and not just an outlet for or manifestation of a student’s creative impulse. For most of the students with whom I’ve worked, improvisation activities are enjoyable and engaging—or, as Larson put it, make learning FUN.

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