



Rehearsal Break

The Music Literacy Conundrum

by Adam Kluck

“Many parents are simply unable to believe that music can and should be understood by all children because they, themselves, were not given the opportunity to learn to understand music as children.”

—Edwin Gordon

As conductors and teachers of music, we face many challenges to sustained success. Many of these challenges stem from issues surrounding music literacy. My experience, and the experience of many colleagues, is that young singers are becoming less adept and perhaps even less interested in reading music, and long-term effects can be seen even in collegiate ensembles. This problem is not new, but it has arguably become more pronounced. Middle school and secondary teachers are doing remarkable things every day to bring music literacy to as many of their students as possible,

and in the article I recommend some ways to address the problem efficiently and creatively.

Background

Maybe we should begin with the question, “Do we need to be able to read music at all?” Technology has made many things possible and solved some problems in the field of music. While many can compose music without any piano skills or even much knowledge of music theory, I think most music educators would agree that the ability to perform from and understand musical notation is our goal. As David Waller notes, “The public assumes that music teachers teach students how to read music.”¹

Furthermore, literacy is an essential hallmark of democracy.² We all understand that repeating pitches and rhythms from exclusively aural sources comes before connection to the written notes, and so I am of

course not discounting the importance of this aspect of musicianship. However, music notation will not cease to be the way in which we communicate musical ideas. I believe we can improve the structure of our ensemble rehearsals—no matter the level of ensemble—in order to achieve better literacy for each and every one of our students.

If we define music literacy as “The ability to convert musical sounds into signs and musical signs into sounds,”³ then we can begin discussing audiation as a key component of music literacy. Musicians cannot achieve a deep understanding of music without the ability to converse in musical language. Music literacy is not just sight reading, nor is it simply the ability to read notes. Music literacy encompasses all aspects of musical language, including the ability to read and write, communicating spontaneous, independent musical thought. Any discussion of how music is acquired

must include the concept of audiation. Christopher Sommerville's study and others have shown that audiation is the most important skill for any musician. Audiation is the assimilation and comprehension in one's mind from written notation or from aural memory.⁴

Skill in audiation is essential for real music literacy, but many trained musicians do not possess this essential skill. The central concept of tonal understanding—audiation—is the ability to understand the musical sounds without the score, and

the score without the corresponding musical sounds. Kodály, Orff, and Suzuki all recognized the importance of developing audiation as the foundation of music performance expertise. Studies of composers such as Mozart, Schumann, Berlioz, Wagner, Tchaikovsky, and a host of others suggest that they thought and processed music with this level of fluency; they all had the ability to hear and read complex notation, understanding it in a similar way as they would the text of a book in their native tongue. In Beethoven's case, a further—yet still essential—step is illustrated: that of recognizing and understanding music without the ability to physically hear it.⁵

Every human brain comes equipped with two separate sound processing systems: linguistic and musical. Research suggests that music is as natural for humans as language. Every element of music is present and important in both systems. Indeed, by the time we are born, we already can process, group, and even differentiate between a remarkable number of sounds. Music is as natural for humans as language.⁶ Interestingly, as psychologists have found, "Music acquisition keeps pace with linguistic development, even in Western cultures where it is not on an equal educational footing with language. If musical development appears to be slower and more effortful than language acquisition, it seems to be largely a product of culture, not biology."⁷

The way that we acquire expertise in music is very similar to the way we acquire expertise in language. This has been asserted many times

before, by many researchers, and it is widely accepted that there are a large number of parallels between music and language acquisition and performance. The process of listening and copying remains the dominant method through which humans learn language and music in most world cultures, and within these cultures, there is often no distinction between musician and non-musician. This was true even in the western classical tradition until a significant shift in music performance expertise occurred toward the end of the nineteenth century, in correlation with print music's exponentially greater prevalence. As a result, the approach to acquiring music performance expertise fundamentally changed.

The way we teach students in the music academy is now centered on reading and executing notated music, but lacks opportunities to create or converse in musical language. In our training of music teachers and performers, there exists a limited writing component and audiation training that sometimes lacks useful context. Furthermore, these important aspects of literacy are addressed outside of ensemble rehearsals at the collegiate level and are often inadequately addressed in methods classes. Our music education systems at every level are now almost exclusively based upon performing pre-composed works in ensemble formats. This naturally de-emphasizes the importance of individual self-expression and prioritizes the replication of a composer's ideas.

Learning music now consists of reading while playing. We call performances of music "recitals," and

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indeed this term is appropriate—it is akin to literary work recitation. In language expertise, there is a clear distinction between the ability to recite existing words and the ability to

illustrates the need for a change in our understanding of sight-reading versus tonal understanding. In the choral domain, we have what could only be described as an “ad hoc”

able to react to it with the full capacity of our emotions. Intellect and emotion are inextricably linked, as any performer or audience member knows. If, in our rehearsals, we can strive for an understanding of the essential building blocks of music as we prepare our repertoire, we will create more rewarding experiences for all of our students. There are many amazing composers writing music that sequences repertoire with musical concepts; however, we can do more to prepare our music for our students by deconstructing it into its essential parts in order to foster critical thinking and problem solving in rehearsal.

One of the main goals of content area literacy instruction is to produce students who can read and think critically.¹⁰ If we have established that written music is vitally important, this should be one of our main goals. Even if the vast majority of our students leave our ensembles never to major in music or pursue it as a career path, we must value music enough to give them the tools they need to be competent readers. If students are able to read for themselves, to audiate music and not simply to mimic, it stands to reason that more and more of them will continue advocating for music and music instruction as they go about the rest of their lives.

Jerome Bruner stated that instruction is not a matter of committing results to mind. Rather, we should teach students to participate in processes that establish knowledge.¹¹ This is simply impossible without music literacy. We must find ways to give our students the tools to find

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The most obvious advantage of musical literacy is the ability to engage in independent exploration of music.

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spontaneously express oneself, which arises from a mastery of language. We have come to assume that learning and playing written notes on a page causes a musician to become musically literate; this, however, is not necessarily the case.

So, how is this essential skill taught? Our undergraduate music curricula always seem to contain some form of ear training, designed to develop aural skills. However, if you are not in college and not majoring in music, you probably do not receive much training in aural skills. Additionally, many researchers have rightly questioned the effectiveness of this particular type of training in developing audiation skills. Our current teaching methods—both in the academy and, if students are lucky, in secondary ensembles—encourages a mechanical approach to producing sound by decoding symbols rather than teaching and developing genuine audiation.

As David Butler puts it: “Aural training is still a patchwork in American colleges and universities.”⁸ This

approach to aural pedagogy.⁹ This issue will be discussed later, but for now, be encouraged that there are ways to improve your students’ audiation in every level of ensemble without taking more than five minutes each rehearsal.

Creating Independent Musicians

The most obvious advantage of musical literacy is the ability to engage in independent exploration of music. If our perception of music is so colored by its hearing rather than our investigation of the written notes, we are doomed to imitation and may completely miss the deeper meanings available to us through score study. Illiterate listeners, according to Aelwyn Pugh, “are at the mercy of others, since [they] have no means of making an independent assessment of the relative authenticity of successive interpretations.”

This is an important point to remember. If we are unable to truly understand music, we are also un-

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notes, rhythms, dynamics, and other expressive markings. In this way, we are empowering them to discover and engage with what we all agree is a life-changing and indispensable part of our human lives.

Others might proclaim that those musicians who play only or mostly by ear have better tonal understanding than those who are tied to the written notes. Sommerville's 2015 study found that only six percent of these musicians showed tonal understanding—or evidence of clear skill in audiation—compared with fifty percent of classical musicians. In the words of an esteemed colleague, “there is nothing to be gained by having poor musicianship skills.” Musicianship and music literacy are completely tied together.

Leaving students limited in the area of music literacy restricts not only their development and poten-

tial, but that of the ensembles in which they participate. Great composers craft music that is meaningful and presents opportunities for self-expression; we should not settle for mimicry, but for profound understanding when performing these works of art. Estelle Jorgensen describes what perhaps we may have forgotten: “True expression is achieved only through the ability to engage intellectually and emotionally with music. To emphasize literacy in our ensembles at every level gives way to the kinds of intellectual engagement and criticism required in humane and free societies.”¹²

In speaking with many wonderful musician colleagues, I began to wonder if we are often unable to define and articulate what it is, exactly, that we teach. Are we teaching music, or are we giving students an experience as ensemble members? Both

are important. Making only the latter choice inevitably puts us in the category of “extracurricular.” We continually laud the benefits of music and have all given our lives over to pursuing it, but when it comes to defending it to an administration or others in charge, we are often left playing defense. We can and should teach our students to become independent, fluent musicians, which ensures that the ensemble experience is something they are able to pursue long after they leave our classroom. .

If we truly believe that our content is of high value to all students, we must be able to demonstrate its academic benefits. I am not speaking of the studies or quotes that assert music's benefits to other areas; I am speaking of music itself: the written notes. Much like the written word, the invention of the written note is one of the most amazing and incredible feats of humankind.¹³ The stewardship, promulgation, and celebration of this music should be our priority. As Jorgensen so eloquently points out: “If preventing the extinction of natural species is a matter of public policy, then surely preventing the extinction of music among other cultural traditions is at least as important.”¹⁴

Jorgensen goes on to cite findings of the Yale Seminar report of 1964. Among them are assertions such as our underestimation of children's potential and the choice of repertoire in ensembles. This resonates at least as loudly today as it did then. Perhaps the most notable point made in this report contends that repertoire is not connected to “the development of theoretical and his-



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torical insights.” In other words, directors were not using choral repertoire in ways that advanced students’ musical understanding, or were not connecting this repertoire to foundational musical concepts. My conversations with current music teachers have yielded many productive ideas, but the one that stands out and is universally discussed is just this: we must continue to develop ways to connect repertoire to foundational musical concepts and to successfully articulate these concepts.

Challenges to Literacy

Sommerville’s study revealed that only a small proportion of highly trained musicians were able to identify and discriminate between sounds in music. Even when asked to notate a simple, short melody, almost two-thirds of these musicians could not do so successfully for two bars, and many could not even follow the contour correctly at all. Edwin Gordon himself remarked in 2011 about the “paucity of graduates’ musical understanding.” This speaks to our failures specifically at the collegiate level in creating well-versed, independent, literate musicians. If this is indeed the case, we cannot expect these musicians to go and correctly teach skills they themselves do not possess.

I would imagine that most of us use the piano in rehearsal quite regularly in order to teach notes to the ensemble. Many—perhaps even most—of us also engage in regular sight-singing exercises with our ensembles. This may increase the chances that students will be able to

sing a given interval correctly with fewer attempts, but they still need the piano in order to know what their line sounds like. Even in many college situations, music is still taught this way—by rote. This illustrates the need for us as music educators to

The second major disconnect in our music pedagogy centers around the writing of music. Consider the fact that we ask our ensemble members to read music while almost never asking them to write even simple melodic or rhythmic passages. The

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define and articulate a unified music curriculum. What is the content we are teaching in choir? We advocate for music, but are we really teaching ownership of music? Are we giving our students the building blocks they need to discern what a written line of music means?

Our music pedagogy is arguably disconnected from our desired outcomes in a number of ways. The first is in the fact that our standards for music education at the national and state levels vary widely. Additionally, there is a difference in understanding between *standards* and *curriculum*—one is not the other. We do not have a universally agreed-upon music curriculum. Now, this is not our fault; students come to choir at all levels, often with little or no previous singing or music experience, or with varying degrees of success in previous musical encounters. This disparity is perhaps our greatest challenge as music teachers.

literature regarding music pedagogy is rife with references to the similarities between language literacy and music literacy, but even incredibly astute and experienced authors completely ignore the writing component.

Compare this to other fields with clear standards of reading and writing. In our choir rehearsal, we give them notes from the piano, dictate to them how they are to sing certain parts, and then together we mimic, but do not create, question, or investigate. Sometimes, we forget to, “emphasize student activity over passivity, empowerment over compliance, and creativity over cultural reproduction.”¹⁵ Whether we mean to or not, the way we do things in the choral rehearsal encourages meekness and compliance—traits opposite those we want to foster in young musicians.

As mentioned earlier, there is a problem with how we discuss

sight-reading in the choral field: we equate it with music literacy, when the two are different skills. The musically literate do not bypass the aural process; they internalize what they read, play, sing, or write. Unfortunately, and perhaps ironically, the authors of many articles on this subject bemoan the fact that there seems to be almost no useful research on the specific topic of this type of music literacy.

Numerous studies have been carried out on the many sight-reading methods which exist, but conclusions are not supported by any specific theoretical basis. We have a varied and haphazard collection of empirical studies on singled-out aspects of what musicians do, rather than a holistic study centered around how musicianship is taught and acquired successfully.¹⁶ Furthermore, in the psychology literature regarding music acquisition, there are few references to audiation.

In the choral area specifically, there are unique perceived barriers to music literacy acquisition. As directors, we are constantly assessing and adjusting to those who are new to reading music or new to choir in particular. I submit that, in searching for answers to literacy in the choral ensemble, we should look to the instrumental ensemble for answers. It is very rare for a band student to join in the middle of their secondary schooling; they would be too far behind because of the band curriculum sequence. They would have to learn how to use and make sound on an instrument, and then learn how to read music for that instrument.

This is not the case in choir, be-

cause we do not have a firm, universally agreed-upon sequence. However, there is one large hurdle that does not exist for singers: the instrument. Singers can join midway through their secondary schooling and still be successful in choir, even if we adhere to a similar sequence, because they do not have to learn a new instrument. If band students in some states can learn all twelve scales along with fingerings by the end of eighth grade, certainly choir students could learn the same thing without fingerings.

Band students must learn notes and fingerings for those notes in order to play ever-increasingly complicated pieces. We do not have the same scaffolding in place for choir. Singers, uniquely, can sing things more complex than those they can read.

It is telling that music teacher friends of mine, when discussing this subject, feared they would be criticized if they said the following in the company of other choir teachers: there is too much focus on performance, to the detriment of teaching actual content. Instead of focusing on musicianship and literacy, giving students the tools they need, we are frantically trying to work up the most impressive program we can for the next performance or spring festival. I will admit that I used to do this regularly—approach each semester in terms of how many weeks between concerts.

Once I started thinking in terms of “units,” or essential concepts they need to know and produce, my ensembles improved greatly. However, the influence of choral festivals and

other concerts cannot be overstated when it comes to planning our instruction. The absence of sight reading from more and more state and regional judged festivals can be seen as both a symptom and a cause for this emphasis, but the fact remains that, at times, we are not preparing our choir students to be active learners when it comes to encountering and understanding music.

The connection between literature and literacy has been mentioned, and it is an important one. Perhaps publishers bear some responsibility for divorcing the two, but we as teachers must bear that responsibility as well. The state prescribed music lists for festivals are well and good, but the grading system for this literature is almost arbitrary. The University Interscholastic League Prescribed Music List, for example, simply has no specific grading criteria. Committees composed of, “successful, veteran educators, are established for the sole purpose of reviewing literature for potential placement on the list. Their only charge is to identify the highest quality literature and place it accordingly.” We are unable to easily connect literature to literacy if difficulty levels are not somehow tied specifically to objective musical content. We should have an objective system that weighs certain types of rhythms, intervallic content, voice splits, and other ensemble performance considerations.

All of these issues result in the average music student’s inability to approach a piece of music as a fully literate equal to its composer. Our students must be fluent in mu-

sic; they must be able to converse in its language. I ask myself if my rehearsal processes are truly enabling my students to know the language well enough to spontaneously have a musical idea, articulate it, and understand it themselves. Students who are unable to do this can develop feelings of inadequacy and habits of deference, and we all want our students to feel empowered and emboldened to make artistic decisions and have emotional reactions. It's what makes what we do so rewarding.

The Symptoms

They may be obvious at this point, but let us examine some of the symptoms of the many problems with our current state of affairs. The first and probably most apparent is the fact that, without a solid foundation in music literacy, our ensembles are limited in the difficulty of repertoire they can perform and understand. This is universally claimed by every single collegiate-level colleague with whom I have spoken. Incoming students' aptitude in reading even the simplest rhythms and intervals in their choir auditions has been noticeably declining since I began

my collegiate teaching career. Directors with much more experience than myself have confirmed that this has indeed been a noticeable trend, particularly in the past ten years. I will admit that my rehearsal process was designed to make students readers and imitators, not fully literate equals. I want to do better.

At the secondary level, new music teachers in their first year or two are still learning the basics of how to teach in general: classroom management, discipline, organization, and the like. Moreover, according to many colleagues who teach at the secondary level, we are not doing a

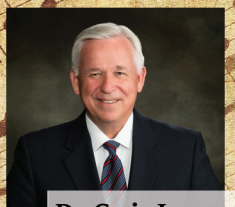
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good enough job of teaching new teachers how to teach music literacy. So, understandably, there may be difficulty implementing a long-term vision in the first few years of someone's teaching career.

I was this teacher. I realized that, as a director, I wanted to be in front of an empowered, literate group of musicians. We should be developing and using methods that impart knowledge and address comprehensive musicianship, aimed at creating a foundation that will increase students' confidence.

A choral director friend and I were chatting, and he told me that he will never forget the first time he sight-read something perfectly on the first try. Think about your own experiences. Perhaps it is difficult for some of us to put ourselves in those shoes, or perhaps a number of us still struggle to read something correctly on the first try. Whatever the case, I think we can all be excited about the possibilities of increasing every student's literacy.

The Solutions

The problems in music education have been serious enough for long enough that, for more than forty years, pedagogues and experts worldwide have called for deep educational reform.¹⁷

We must strive to create independent musicians in our ensembles. The first step is defining and committing to our content—music. When our students are empowered to become fully literate equals, the learning process will be much more rewarding for both chorister and di-

rector. Imagine a student who is given the opportunity to write the melody of *Hot Cross Buns*. That student is given the knowledge that they can reproduce this well-known melody for others to read, and can even use those three notes to create their own spontaneous idea, using their imagination to do so.

The late David Thorsen, who co-founded and helmed the California State Fullerton School of Music, said: "Do easier music better." That is, program music that you can set as a goal for your students to be able to read and understand themselves, without being fed notes from the piano first. Give them the tools to discern for themselves what the music is saying and how it sounds. I believe this will require a difficult shift in priorities for some choral directors (myself included), but will pay dividends in the long term.

Let us insist on the regular use of music as a language in which students must be conversant. To be fair, I believe rote teaching can be useful in building ensemble literacy, and scientific evidence bears this out. The key is to approach it in a purposeful, sequential way. To this end, I have found Carol Krueger's flashcards—part of her *Progressive Sight Singing* textbook and method—to be enormously helpful and perfectly paced. I use them even in my top collegiate choir; I have many music education majors singing in that ensemble, and they will draw on their own ensemble experiences when planning for their classroom.

In every choir, we have a large range of ability levels, and these ensemble literacy exercises—struc-

































tured as Dr. Krueger lays them out—have helped tremendously in bringing up the ability of those who had little to no previous music reading ability. In my higher-ability choirs, I was able to start them somewhere in the middle of the text and flash cards, and increase the pace at which we introduced new elements. This pace can be adjusted based on the audition threshold for a particular choir. Identify the key elements present in your repertoire and break them down into their foundational components during warm-ups as the semester progresses.

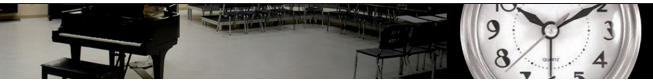
I believe we need to define our curriculum as precisely as possible and then stick to teaching it. Our field will be more respected by others and less prone to drifting off course. What is our core content? If we cannot define it, articulate it, and teach it, we cannot hope to defend it.

I will refer to Dr. Krueger once again here, with her blessing. I have included an excerpt of a curriculum map she has developed. I used a similar system for a few of the more difficult pieces of our collegiate repertoire, and it set them up for success.

I extracted the base rhythmic elements and the base melodic elements from each of the pieces, and we read through them as an ensemble, correcting them if something went wrong. I have included here a sample of Dr. Krueger's curriculum map of Hans Leo Hassler's *Dixit Maria* (Figure 1 on page 63), as well as a sample of my own map of just some of the most difficult rhythmic elements present in James MacMillan's *Domine non secundum peccata nostra* (Figure 2 on page 64).

Figure 1: *Dixit Maria* Rhythmic Patterns

SATB			<i>Dixit Maria</i> Motet, Hans Leo Hassler		cpdl.org
Rhythm Patterns					
Beat		Beat Division: Ties & Extension Dot		Subdivision: Ties & Extension Dots	
1 		12 		22 	
2 		13 		23 	
3 		14 		24 	
4 		Beat Division: Syncopation		25 	
Beat Division		15 		26 	
5 		16 		27 	
6 		17 		28 	
7 		Beat Division: Subdivision		Beat Subdivision: Syncopation	
8 		18 		29 	
9 		19 		30 	
10 		20 		31 	
11 		21 		32 	



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Figure 2: *Domine non secundum peccata nostra* Rhythmic Patterns (soprano only)

Score	<i>Domine non secundum</i> Rhythm Elements		James MacMillan
SOPRANO			
1.		2.	
3.			
4.		5.	
6.			
8.			
9.		10.	
11.			




Whatever method one chooses, literacy must be connected to literature. The development of an objective grading system geared toward building literacy through individual components of music would go a long way toward accomplishing this goal. Then, we can help teachers figure out how to assess literacy in their ensembles and use structured interventions that exist inside the already positive culture that teachers have fostered in their programs.

Including literacy education in your rehearsals can be achieved with small steps even mid-semester. One thing we all do is extract musical elements or phrases from our repertoire and use them in warm-ups. A literacy emphasis can be as simple as extracting those elements and writing them out for your students to see and read as they sing them. Gradually, you can introduce flash cards that contain short melodic phrases or one-measure rhythms and increase the pace at which you introduce new types of intervals and rhythms.

I also stole the idea of “rhythm sheets” from a band colleague—sets of full pages of rhythmic exercises, common rhythms found in all pieces that progressively introduce new types of rhythms. These can be any length, although I have found those between four and eight measures long to be the most effective. Reading these together as an ensemble or as individual voice sections will help your students bond, help increase their confidence, and help your assessment. I use flash cards such as these with my top collegiate choir, and their reading and intonation have noticeably improved even over

the course of one semester.

Finally, we must move away from the system of read-only literacy. Consider again the standards of literacy in every other field. The most valuable commodity that people need in the twenty-first century is creativity. Consider adding this written element as a writing warm-up, much like your students probably do in at least a few of their other core classes. Start with something you know they will all be successful at identifying, such as a simple four-note melodic or rhythmic dictation. Then, add an activity, such as taking the four melody notes you had them write and make their own four-measure melody, adding their own rhythms. They will be surprised at how well they are already able to do this!

If we give our music students the tools to be creative, to truly understand music and gain the ability to think and imagine musically, then we are fulfilling the field’s full potential. Anything less is a disservice to our students and to music itself. 

NOTES

- ¹ David Waller, “Language Literacy and Music Literacy: A Pedagogical Asymmetry,” *Philosophy of Music Education Review* (Spring 2020): 26-44.
- ² Edward P. Asmus, Jr., “Commentary: Music Teaching and Music Literacy,” *Journal of Music Teacher Education* (Spring 2004): 6-8.
- ³ Aelwyn Pugh, “In defense of musical literacy,” *Cambridge Journal of Education* (1980): 29-34.
- ⁴ Edwin Gordon, *Learning Sequences in*

Music (Chicago: GIA Publications, Inc., 2012), 4.

- ⁵ Christopher Sommerville, “Thinking in Sound: A Survey of Audiation in Australian Music Students (Ph.D. diss., University of Melbourne, 2015): 12, 52.
- ⁶ *Ibid.*, 7.
- ⁷ Anthony Brandy, Molly Gebrian, and L. Robert Slevc, “Music and early language acquisition,” *Frontiers in Psychology*, September 11, 2012.
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- ⁹ Christopher Sommerville, 17.
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- ¹¹ Carol Krueger and Jill Wilson, “Foundations of Music Literacy: Jerome Bruner’s Contributions to Choral Music Education,” *Choral Journal* (August 2018): 19-29.
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- ¹³ *Ibid.*, 131.
- ¹⁴ *Ibid.*
- ¹⁵ David Waller, 27.
- ¹⁶ Christopher Sommerville, 24.
- ¹⁷ *Ibid.*, 155.