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Correlating Methods of Teaching Aural Skills with Individual Learning Styles

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An Introduction to ATINER's Conference Paper Series

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Dr. Gregory T. Papanikos
President
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Abstract
For the musician, aural skills mean training our ears to identify the basic elements of music. These include the ability to hear what is happening melodically, harmonically and rhythmically as the music is played. As music educators, we instruct our students on how to hear the grammar of this medium we call music. It is arguably this process of active listening that is the most important part of being a musician. Unfortunately, it is also one of the most difficult skills to acquire and subsequently, the teaching of aural skills is generally acknowledged to be demanding, laborious, and downright punishing for faculty and students alike. At the college undergraduate level, aural skills courses are challenging at best, tortuous at worst. Surprisingly, pedagogy in this area is hugely underdeveloped. The focus of my work is to explain and encourage educators to identify the learning styles, i.e. visual, auditory, reading/writing, kinesthetic, of students in their classroom at the beginning of the semester and then correlate their teaching methodology, e.g., solfeggio, rote, song list, playing keyboard, etc., to each learning style. It is my hypothesis that when a focused and appropriate instructional strategy is paired with the related learning style, aural skills education is more successful for everyone.
Introduction

Active listening is arguably the most important skill a musician must possess. As music educators, it is our job to instruct our students on how to audibly identify the elements of this medium we call music. An integral part of the college music curriculum, our courses in aural skills, or ear training as they are more commonly referred to, provide students with the tools necessary to hear what is happening melodically, harmonically and rhythmically in a musical composition.

Aural skills are some of the most difficult to acquire. At the college undergraduate level, aural skills courses are generally acknowledged to be challenging at best and tortuous at worst by both students and faculty. Surprisingly, the study of pedagogy in this area is hugely underdeveloped. The focus of my work is to explain and encourage educators to identify the learning styles, i.e. visual, auditory, reading/writing, kinesthetic, of students in their classroom at the beginning of the semester and then correlate their teaching methodology, e.g., solfeggio, rote, song list, playing keyboard, etc., to each learning style. It is my hypothesis that when a focused and appropriate instructional strategy is paired with the related learning style, aural skills education is more successful for everyone.

Agreement of Goals and Content but Not Methodology

Music educators do not argue about the goals of ear training courses. It is universally understood that a well-trained ear enables the listener to concentrate, examine, and discuss sound. More specifically, after successful completion of a sequence of aural skills courses, the student will be able to:

- Identify the instruments that are creating the sound
- Understand how the elements of music are utilized in a composition
- Distinguish among various cultures, genres, styles, composers
- Listen to a musical score with their inner ear
- Transcribe
- Sight read
- Detect and correct errors
- Expand their repertoire by embracing unfamiliar music
- Perform a more challenging repertoire

Likewise, the contents of ear training courses are not up for debate. At the introductory level, the skills taught include:

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1 Amy Aline Beckman, Aural skills pedagogy: from academic research to the everyday classroom (Texas State University-San Marcos). Retrieved from goo.gl/2ff4S8.
• Timbre recognition, i.e. the ability to correctly identify the musical instrument creating the sound by the sound quality. The trained ear can name instruments playing simultaneously, even at the same volume and pitch level.

• Relative pitch recognition, i.e. the ability to correctly identify a note by comparing it to a reference note and identifying the interval, which is the tonal distance, between the two notes. For example, given Middle C on a keyboard, the fifth white note higher should be aurally recognized as G.

• Melodic and harmonic interval recognition, i.e. the ability to correctly identify the distance between two notes played in sequence or played simultaneously. An example would be, without any reference pitch given, if C were to be followed by the next higher G, the interval should be heard as a Perfect Fifth. This would also be the case if C and G were to be played simultaneously.

• Chord recognition, i.e. the ability to correctly identify three or more pitches understood as a simultaneous unit, the position (inversion) of these pitches, as well as the scale degree of the chord root. For example, if C, E, and G are played simultaneously and in that exact order, the listener should hear a Major triad in root position. In addition, CEG was followed by GBD, the latter chord would not only be identified as a Major triad in root position but, more specifically, as a Dominant Major chord in root position (root G is fifth scale degree of C Major.)

• Rhythm recognition, i.e. the ability to correctly identify the basic pattern of strong and weak pulses, as well as being able to identify the length of a note played in this pulse pattern. At the introductory level, this would include distinguishing duple from triple meter as the underlying rhythmic framework, and a mix of whole, half, eighth and sixteenth notes and corresponding rests.

But what about the teaching method? The internet explodes with advertisements for textbooks, websites, YouTube videos, and smartphone apps that lay claim to the ultimate ear training formula. With this seemingly limitless number of choices, why have we been punishing our students and ourselves for all these years? Surely, some of these techniques should work. Many of these offers even promise fun while ear training. The questions we fail to ask, however, are: "Have I tried to address different learning styles in my classroom?" and "What methods of teaching aural skills are compatible with my students’ styles of learning?" Instead, we often proceed with one method that fits all mentality and most likely choose the one that best correlates with our own method of learning.
Learning Preferences

By identifying the learning styles of our students, we can respond by adapting our method of teaching. The most popular and extremely accessible system used to identify an individual’s learning preference is known by the acronym VARK: Visual, Auditory, Read/Write, and Kinesthetic. Developed by New Zealand educator Neil D. Fleming in 1987, VARK is a simple survey that asks 16 questions and determines an individual’s learning preference. By having knowledge of the learning preferences of the students in our ear training courses at the very beginning of the semester, we have the ability to develop the most suitable approach for teaching that student. VARK defines the learning modes as:

- **Visual**: Information is best presented by graphs, charts and diagrams, patterns, designs, and shapes. It does NOT include power point presentations, videos, or photographs. Learning strategies for the visual learner include translating the words into symbols and diagrams, color coding and limiting the amount of words.
- **Auditory**: These learners prefer to listen and discuss information. They are keenly attuned to changes in pitch, volume and speed. They may talk aloud or talk to oneself. Learning strategies for the auditory learner include group discussion, lectures, and listening to recordings.
- **Read/Write**: This preference is for the written word, most especially lists, manuals, reports and essays. This includes power point presentations and use of the internet via Google. Learning strategies for the read/write learner include rewriting notes, making hierarchical lists, and translating charts and diagrams into words.
- **Kinesthetic**: The hands-on approach is best here. Kinesthetic learners like to incorporate more than one of their senses in the absorption of knowledge. They prefer to walk while studying, take frequent breaks, and sit in front of the class. Learning strategies include field trips, case studies, making models, and working in labs.

Surprisingly, use of a tool like VARK in the teaching of music is rare. Cynthia Paperniak, a piano teacher at The Suzuki Music School of Lincoln Park, discovered VARK when she was trying to understand why some of her piano students embraced musical notation while others purposely ignored it.

I have been using the Suzuki delayed reading approach to learning piano, which means that a student plays the piano for several months, and then formal note reading is introduced. By the time that reading is introduced, these students have demonstrated good focus, posture, and hand position. They play with good tone, fairly good balance, and can play an Alberti bass comfortably. They have a repertoire of about 10 songs they can easily perform. Then I

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introduce reading. For some children, it is like they have been handed the keys to the kingdom, for others they look at me like, like "do I really have to do this?" Some students flourish, some students fizzle. Paperniak administered the VARK questionnaire to students and teachers at the Music School and then observed learners in each of the four categories looking for commonalities within each group. Her understanding of the different learning styles informs her teaching today. Paperniak presented her finding at the Illinois State Music Teachers Association conference in 2011.

What does all this mean for college music curriculum and ear training courses in particular? In September of 2016, I asked the twenty students in my Fundamentals of Music course to complete the VARK questionnaire so that I might have a clearer understanding of their particular learning styles. I then calculated the VARK scores and used this information in order to create a more suitable approach to the teaching of Aural Skills. Specifically, I worked to accommodate the learning styles of these students and would like to share my findings as they relate to the teaching of aural interval recognition, historically the most difficult of skills to obtain.

**Correlation of Learning Styles and Aural Interval Identification Teaching Methods**

Intervals are one of the fundamental building blocks of music, and, therefore, the ability to identify intervals is critical for the musician. In music theory, an interval is identified by distance, in scale steps, between two pitches (unison, second, third, etc.) and by the quality (perfect, major, minor, augmented, diminished). The quality is used as a prefix; hence, the interval C to G is recognized as a Perfect Fifth. Taking all four learning styles into consideration, what might be some strategies for teaching aural interval identification?

The most common way to teach aural interval identification is to associate each one with a song that you are very familiar with. For example, the first notes of "Amazing Grace" are an ascending Perfect Fourth, while the first two notes of "Maria" are an ascending Augmented Fourth. "Yesterday" begins with a descending Major Second and so does "Mary Had a Little Lamb," "The First Noel," and "Three Blind Mice." The internet is filled with websites that can help the student generate their own personal list of reference songs complete with an audio clip. This method for teaching intervals works well for the Read/Write and Auditory learners. The latter also benefit from apps where intervals are drilled over and over until they become familiar.

Kinesthetic learners prefer a more tactile approach; so, physically playing intervals on their instrument and then visualizing their finger placement and hearing the interval in their inner ear or conversely, hearing the interval aloud

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3 Cynthia K. Paperniak, Lecture Notes, State Music Teachers Association Conference, Illinois State University, delivered 11 November 2011.
and then imagining what the correct fingering is works for many. The kinesthetic vocalist, however, poses a special problem since their instrument is internal and invisible. A course in basic piano in conjunction with, or as a prerequisite for, the beginning Aural Skills course is probably the best method for a vocalist who is a kinesthetic learner.

Teaching aural interval identification to the visual learner has been, and still is, the biggest challenge. The method we commonly use to represent music, i.e. the five line staff, can be a useful visual tool for the teaching of interval distance but not for interval quality. A staff line to the next higher staff line is always the interval of a third, for example, but the interval quality is not consistent (e.g., in the treble clef the interval of first line (E) to first space (F) is a half step or Minor Second, yet, the second line (G) to the second space (A) is a whole step, or Major Second.) In fact, traditional notation is recognized to be so problematic that The Music Notation Modernization Association was formed in 1985 in order to address the shortcomings of our current system and rework it to include visual consistency for interval quality. (It would be interesting to see if its membership is disproportionally made up of visual learners.) Proposed solutions have included color coded octaves, shaped notes, slanted notes, numbered notes, and even the renaming of notes, but for a variety of reasons, none have been well received.\(^5\)

What graph or diagram can we use that accurately portrays the semitone step pattern of traditional Western music? The Kodaly method might be one way. Developed in Hungary during the mid-twentieth century, it is a developmental approach that incorporates hand signs as a visual aid. The impressive part of this technique is that each hand sign shows a particular tonal function. The first, third and fifth degree of the scale are horizontal in appearance to signify stability, while the seventh, or leading tone, degree points up.\(^6\) Once again, however, this is a tool for interval distance but not interval quality.

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Medieval singers used the Guidonian Hand as a visual, mnemonic aid. Credited to Guido of Arezzo, the eleventh century Italian monk, music theorist, and famous teacher who also gave us solfeggio, the Guidonian Hand correlates notes of the scale with specific joints and tips of the left hand (Wikimedia). Low cost and portable, the Guidonian Hand is based, unfortunately, on the medieval hexachord or six note scale system, and thus is not relevant for Western music after that era.\(^7\)

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\(^7\) Guidonian hand. Retrieved from goo.gl/WwJSGx; See the Guidonian Hand, the medieval system for reading music, get brought back to life. Retrieved from goo.gl/UdY19E
Scholars interested in music pedagogy continue to experiment with the visualization of music and may develop the perfect visual aid someday. However, in the meantime, what is the best method for teaching aural skills to those visual learners in our classroom?

Alas, the ubiquitous piano keyboard may be our best bet. Although it is obviously not the ultimate visual diagram because of the omission of black keys between B – C and E – F, which serves to negate a visual pattern for all the intervals from half step to seventh, the keyboard as a visual tool does have some advantages. For instance, all possible notes are visible, octaves are visually consistent, the white keys form the diatonic scale, and the black keys form the pentatonic scale. I suggest that we forget about correct keyboard fingering and the circle of fifths for the first weeks of the semester. Instead, I have found it beneficial to allow my students to explore all things C Major for a sufficient amount of time until they progress beyond the physical challenges of a new instrument and begin to listen to the notes they are playing.

I also challenge the unwritten prohibition against allowing ear training students to physically identify the solfegg syllables below the notes they are singing. Students have been expected to simultaneously sing the correct pitch as well as the correct syllable. I have observed that learners who use the staff as a visual chart often struggle not with producing the correct pitch, but rather with singing the correct solfegg lyric that accompanies that pitch. Asking

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students to multitask at an early stage in their ear training study can be overwhelming.

Conclusion

Assessing my own teaching methodology, I acknowledge that I have always incorporated some elements of VARK into my teaching of aural skills, but certainly not all. Therefore, I was unconsciously forcing some of my students to adjust their learning style to my method of teaching. I was educating some of my students only some of the time. By distributing the VARK questionnaire at the first class meeting and defining and discussing learning styles, my students now begin their study of aural skills with full confidence in their ability to train their ear by understanding that they had different learning styles. This knowledge empowers them to seek the tools that are specific to their particular learning preference and not become frustrated with techniques that do not accommodate their style of learning. As the instructor, I have saved time by understanding the needs of my students from the start.

It has been my observation that when a focused and appropriate instructional strategy is paired with learning style, education is communicated in a more thoughtful and meaningful way. Ear training may never become fun for everyone, but attention to VARK in the aural skills classroom may make it less painful.
Appendix

The VARK Questionnaire (Version 7.1)

How Do I Learn Best?

Choose the answer which best explains your preference and circle the letter(s) next to it. Please circle more than one if a single answer does not match your perception. Leave blank any question that does not apply.

1. You are helping someone who wants to go to your airport, the center of town or railway station. You would:
   - a. Go with her.
   - b. Tell her the directions.
   - c. Write down the directions.
   - d. Draw, or give her a map.

2. You are not sure whether a word should be spelled "dependent" or "dependant". You would:
   - a. See the words in your mind and choose by the way they look.
   - b. Think about how each word sounds and choose one.
   - c. Find it online or in a dictionary.
   - d. Write both words on paper and choose one.

3. You are planning a vacation for a group. You want some feedback from them about the plan. You would:
   - a. Describe some of the highlights.
   - b. Use a map or website to show them the places.
   - c. Give them a copy of the printed itinerary.
   - d. Phone, text or email them.

4. You are going to cook something as a special treat for your family. You would:
   - a. Cook something you know without the need for instructions.
   - b. Ask friends for suggestions.
   - c. Look through the cookbook for ideas from the pictures.
   - d. Use a cookbook where you know there is a good recipe.

5. A group of tourists want to learn about the parks or wildlife reserves in your area. You would:
   - a. Talk about, or arrange a talk for them about parks or wildlife reserves.
   - b. Show them internet pictures, photographs or picture books.
   - c. Take them to a park or wildlife reserve and walk with them.
   - d. Give them a book or pamphlets about the parks or wildlife reserves.

6. You are about to purchase a digital camera or mobile phone. Other than price, what would most influence your decision?
   - a. Trying or testing it.
   - b. Reading the details about its features.
   - c. It is a modern design and looks good.
d. The salesperson telling me about its features.

7. Remember a time when you learned how to do something new. Try to avoid choosing a physical skill, e.g., riding a bike. You learned best by:
   a. Watching a demonstration.
   b. Listening to somebody explaining it and asking questions.
   c. Diagrams and charts - visual clues.
   d. Written instructions – e.g. a manual or textbook.

8. You have a problem with your heart. You would prefer that the doctor:
   a. Gave you a something to read to explain what was wrong.
   b. Used a plastic model to show what was wrong.
   c. Described what was wrong.
   d. Showed you a diagram of what was wrong.

9. You want to learn a new program, skill or game on a computer. You would:
   a. Read the written instructions that came with the program.
   b. Talk with people who know about the program.
   c. Use the controls or keyboard.
   d. Follow the diagrams in the book that came with it.

10. I like websites that have:
    a. Things I can click on, shift or try.
    b. Interesting design and visual features.
    c. Interesting written descriptions, lists and explanations.
    d. Audio channels where I can hear music, radio programs or interviews.

11. Other than price, what would most influence your decision to buy a new non-fiction book?
    a. The way it looks is appealing.
    b. Quickly reading parts of it.
    c. A friend talks about it and recommends it.
    d. It has real-life stories, experiences and examples.

12. You are using a book, CD or website to learn how to take photos with your new digital camera. You would like to have:
    a. A chance to ask questions and talk about the camera and its features.
    b. Clear written instructions with lists and bullet points about what to do.
    c. Diagrams showing the camera and what each part does.
    d. Many examples of good and poor photos and how to improve them.

13. Do you prefer a teacher or a presenter who uses:
    a. Demonstrations, models or practical sessions.
    b. Question and answer, talk, group discussion, or guest speakers.
    c. Handouts, books, or readings.
    d. Diagrams, charts or graphs.

14. You have finished a competition or test and would like some feedback. You would like to have feedback:
    a. Using examples from what you have done.
    b. Using a written description of your results.
c. From somebody who talks it through with you.
d. Using graphs showing what you had achieved.

15. **You are going to choose food at a restaurant or cafe. You would:**
   a. Choose something that you have had there before.
   b. Listen to the waiter or ask friends to recommend choices.
   c. Choose from the descriptions in the menu.
   d. Look at what others are eating or look at pictures of each dish.

16. **You have to make an important speech at a conference or special occasion. You would:**
   a. Make diagrams or get graphs to help explain things.
   b. Write a few key words and practice saying your speech over and over.
   c. Write out your speech and learn from reading it over several times.
   d. Gather many examples and stories to make the talk real and practical.

**The VARK Questionnaire Scoring Chart**

Use the following scoring chart to find the VARK category that each of your answers corresponds to. Circle the letters that correspond to your answers e.g. If you answered b and c for question 3, circle V and R in the question 3 row.

<table>
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<th>Question</th>
<th>a category</th>
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<tr>
<td>3</td>
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### Scoring Chart

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<th>Question</th>
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### Calculating Your Scores

Count the number of each of the VARK letters you have circled to get your score for each VARK category.

Total number of Vs circled = ..........  
Total number of As circled = ..........  
Total number of Rs circled = ..........  
Total number of Ks circled = ..........  

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Bibliography


