Improving Sight-Reading on Marimba

By Dr. Ming-Hui Kuo

ight-reading ability directly affects the speed and quality of a student's learning, especially for those at the beginning and intermediate levels. In 1972, Thomas B. Gregory wrote, "A prime educational goal of any discipline is the development of an independent learner." A teacher should keep this idea in mind: the goal of teaching music is to transform a student into an independent musician. Fast, accurate sight-reading is one of the skills that will help a student reach this goal. Sight-reading is also an indicator of one's level of musicianship and a gateway to learning a larger body of literature. For this reason, many universities, orchestras, and other professional ensembles require sight-reading in their auditions. Students who develop better sight-reading skills will learn new music faster, improve accuracy on the instrument, and increase their level of self-confidence.

Sight-reading on keyboard percussion instruments is typically very challenging for percussionists because the player uses mallets rather than physically touching the instrument while playing. Furthermore, the difficulty of sightreading on the concert marimba increases due to the varying size and width of the bars from different manufacturers. The result is that percussionists must have a level of proficiency on the marimba that involves coordinated body movements. Understanding how to successfully employ sight-reading strategies and methods will be of great benefit to students who wish to increase their proficiency on the marimba.

COMMON PROBLEMS EXPERIENCED BY STUDENTS

Students who have a piano background are typically good sight-readers on the marimba because they already have some experience in reading music of a certain complexity. But it is common to find percussion students without piano backgrounds who do not like to sight-read. Instead, they spend long hours memorizing new literature before they feel comfortable performing in front of others. These students are often faced with a series of obstacles that hinder their development

as functional musicians. Some common problems that students encounter during sight-reading training are:

- 1. Fear of making mistakes.
- 2. Stopping after the first few wrong notes and trying to fix it.
- 3. Looking up and down between the music and the marimba.
- 4. Trying to memorize on the first attempt.
 - 5. Starting the tempo too fast.
- 6. Writing the note names above each note.
- 7. Using learning tools (e.g., "Every Good Boy Deserves Fudge") to identify note names.
 - 8. Focusing too much on technique.
- 9. Inability to determine if they are playing the correct pitch.
- 10. Inability to transfer piano skills they may have already learned.

Given these common obstacles, it is understandable that students are not self-motivated to practice sight-reading daily. This article provides strategies for the percussion student who wants to become a better sight-reader.

LEARNING ANOTHER LANGUAGE

Many percussionists begin learning their instrument family with the introduction of drums. If they do not have piano or any other instrumental background, reading melodic and harmonic music on the staff is like learning a new language. Many musicians who fall into this category typically stop playing if they make a mistake or when they reach a difficult spot when reading a new piece of music. An article by Thomas Wolf discusses the problems of a pianist who is a gifted performer, but a poor sight-reader. He describes how skilled sight-readers would simply guess the notes or skip them.²

This is similar to the development of reading skills in a second language. People can read their native language much faster than their second language, a situation often amplified because they are constantly referring to a dictionary to find the meanings of unfamiliar words. Many language teachers suggest that students read through a passage first without

worrying about unfamiliar words, because the definition is often made clear through context. Generally, the more you read, the faster your reading becomes.

A good reader does not focus on reading single letters in a word; instead, the word turns into a "picture" that he or she can identify rapidly. Also, instead of reading a single word, a good reader focuses on a sentence, a phrase, or even an entire paragraph. This strategy can be applied to reading music. A note-by-note reading habit will slow the sight-reading process. While sight-reading music, the musician should keep looking ahead to see the larger picture: the measure, motive, or even the entire phrase.

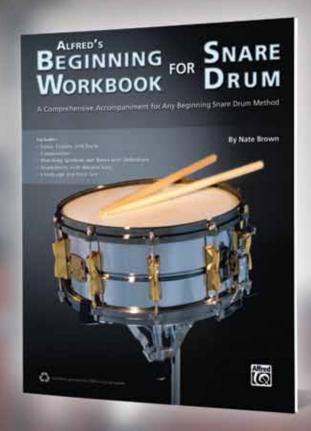
PHYSIOLOGICAL STRATEGIES FOR SIGHT-READING

Body gestures, hand positions, and eye contact can be adjusted to improve accuracy during sight-reading practice. Building a strong sense of the marimba layout is necessary for long-term performing benefits. Nancy Zeltsman states in her method book, "It's very important to get to know the layout of the marimba *by feel.*4 Improving your knowledge of the marimba keyboard by feel is, for many, a lifelong pursuit. It is gradually achieved simply by keeping aware of it as a goal. Ultimately... you have a physical connection and comfort with it."⁵

1. Body Gestures and Hand Positions

Since mallets are the connection between player and instrument, hand position and posture are important. Inconsistent body placement confuses one's sense of awareness with the marimba because the player's hands are building a sense of spatial relationship with the keyboard through muscle memorization. Remembering the shapes of fingers before and after holding the mallets will help with remembering the width of intervals. For pianists, the hand position and combination of fingerings help them to remember the sense of the intervals (Figure 1). With four-mallet marimba, the combination of mallet, finger, and arm positions is the key point (Figure 2). But there is a further challenge for learning

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intervals on the marimba: While the keys on a piano are all evenly spaced, the bars on the marimba change width and length throughout their range. The marimbist also has to develop a sense of intervals for each range of the marimba (low, middle, and upper registers).

It is very important for marimbists to use their kinesthetic sense. When playing with two mallets, the use of a "wrist rotation" technique (Figure 3) helps the body remember distances of an octave or less. Intervals greater than an octave can be achieved with greater efficiency through the use of "arm rotation" (Figure 4), as suggested by Gordon Stout. Students can decide which technical approach works best for them.

2. Eye Contact

Peripheral Vision: Lowering the music stand facilitates good eye contact with the music as well as the use of peripheral vision

on the marimba bars. While sight-reading, one should avoid looking back and forth between the music and instrument. It not only slows down the pace of sight-reading but also increases the possibility of getting lost. "You will play more correct notes by looking only at the music, and learning to trust that you know where the notes are," says Gordon Stout.6

Joseph Combs states, "If a mallet student begins to rely solely on his vision for accuracy, he becomes unable to take his eyes away from the instrument long enough to sight-read music with any degree of success... looking back and forth causes the student not only to read very slowly, but also very inaccurately."

Building a strong kinesthetic sense is easier to achieve if you avoid looking directly at the hands. This allows the muscles to remember the distance between the notes rather than using help from the eyes.⁸

Visual Tracking: Gary Karpinski's research and explanation of eye movement during music reading discusses how improving one's understanding of musical structures helps to facilitate scanning music quickly. He describes visual tracking as mental "chunking" of the information from the music such as metric groupings, rhythmic patterns, scalar passages, arpeggiations, harmonic implications, and so on. "Readers must be able to cast their eyes on metric units—individual beats, half-measures, or entire measures." He also provides an exercise to help the reader develop the habit of reading ahead:

- 1. Choose a basic unit of metric duration (one beat, one half-measure, etc.);
 - 2. look at the first unit;
- 3. cover the first unit (with a thumb, a three-by-five card, or whatever), and sing the first unit while looking at the second unit;
- 4. cover the second unit and sing the second unit while looking at the third unit; and so on, always singing the unit that has just been covered up.¹⁰

Figure 1: An octave played with the right hand





Figure 2: Sixth and octave intervals on marimba (middle range)









CORE MUSICAL STRATEGIES FOR SIGHT-READING

1. Ear Training

The most efficient way to develop a sense of pitch accuracy is through singing. The techniques are simple but significant. It is very important to strive for accuracy when sight-singing. Concentrate on the following three areas of ear training:

- 1. Sight-singing on tonal and atonal melodies;
- 2. melodic dictation after melodic singing;
- 3. four-voice harmonic dictation—not just writing down the chord analysis and outer voices but recognizing the individual notes of all four voices.

While many students may not have a marimba at home for practice, many will have a piano or other keyboard instrument. The piano will help a percussion student learn the notes and experience ear training at the same time. In addition to learning the location of the notes, students should also sing the pitches. With experience, their ear will intuitively direct them toward the correct pitches while they are not looking at the bars.

2. Music History and Theory

A good strategy for effective sight-reading is to follow a sequence of events that organizes your approach. The first step is to survey the music: Notice the style, period, and composer information to help organize pattern recognition before playing. Skilled sight-readers will quickly be aware of the patterns and composition techniques

involved after they know the style, period, or composer information.¹¹

Regularly reading significant amounts of music is the only way to become a good sight-reader. Nancy Zeltsman encourages young musicians to play through sight-singing books, vocal lines of songbooks, classical guitar music, and easy piano music. ¹² She also says that playing transcriptions from all musical periods and styles for marimba is a valuable experience. ¹³ A strong command of music theory helps a reader to make quick analyses during the reading process,

allowing for an elimination of some likely incorrect pitches and an informed guess about which notes are likely correct.

THE SIGHT-READING CHECKLIST

Use this checklist, which is adapted from Nancy Zeltsman's Four-Mallet Marimba Playing: A Musical Approach for All Levels, while making your initial scan of the music you are sight-reading: 14

1. Look for the highest and lowest notes in the range of the music and place the music stand between these two notes in front of the marimba. Place the stand low

Figure 3: Horizontal movement of a sixth interval with wrist rotation; the wrist is the pivot point. Move the mallet left to strike C; move right to strike A.

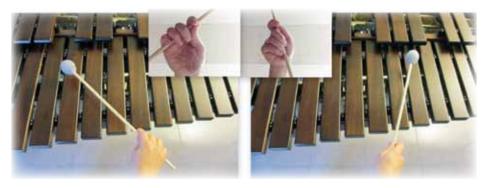
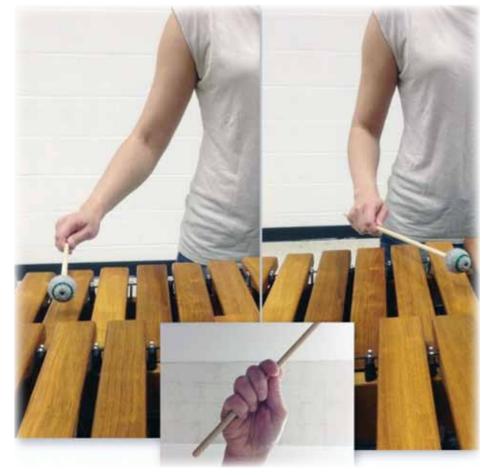


Figure 4: Arm rotation: keep the same mallet grip and move the arm to change the intervals.



so you can see the music and use peripheral vision to see the bars.

- 2. Notice:
 - a.Time signature
 - b. Key signature
- c. Frequency of accidentals—extra flats, sharps, or naturals
 - d. Dynamic changes
- e. Stylistic markings (e.g., rubato, swing, cantabile, etc.)
 - f. Tempo marking (last priority)
- 3. Organize pattern information into mental chunks
- a. Rhythmic line—recurring rhythms or complicated notation
- b. Melodic line—groups of scales, intervals, arpeggios, wide intervallic leaps.
- 4. Locate the trouble spots. Look for the most challenging passage and slowly read through it in your mind. The tempo that you can visualize playing without stopping is the correct tempo for your initial run.
- 5. Turn on the metronome. Sight-reading practice should always employ a metronome to avoid speeding up at the easier sections and slowing at difficult measures. Avoid stopping to correct mistakes.
- 6. Keep looking ahead in the music so that you are looking at the next measure while playing the previous one.

For this article, I interviewed Professor James Campbell (University of Kentucky), who is known worldwide as a performer, educator, composer, and author and who has taught students ranging from middle school to college level for over 35 years. I also interviewed internationally known marimbist, composer, educator, and PAS Hall of Fame member Gordon Stout (Ithaca College), whose method book, *Ideo-Kinetics: A Workbook for Marimba Technique* helps marimbists develop a greater kinesthetic sense on the marimba.

INTERVIEW WITH JAMES CAMPBELL

Ming-Hui Kuo: Do you require students to sight-read during their audition for the university?

James Campbell: Yes. I require just two-mallet sight-reading for auditions. I look for something where I can hear the musicianship of the students and determine their level of musicianship. I try to find music that I think they should be able to play as a freshman, because if I pick something that is too hard, I can't tell how well they sight-read. I can only tell what they can't do. I want to use sight-reading to tell what they can do. I find something that has melody in it so I can tell if they can add phrasing, style, and musicianship to it. I look for something more melodic than technical.



James Campbell

Kuo: Do you require your students to practice sight-reading?

Campbell: I don't require sight-reading of the students. But at the beginning of every semester we have a placement audition, and half of their score is sightreading. So if they don't get better at sight-reading-if they are not motivated to practice it every day as a part of their practice routine—then they will never get a higher placement in the studio for playing in an ensemble. Every freshman learns how to sight-read through a system we have of teaching sight-reading; then they are on their own to make it part of their daily routine. I think teaching them *how* to sight-read is more important than requiring it, so that it becomes a habit for them. But I can't require it, just like I can't require that they practice a certain number of hours. I think of it more as a way to motivate them, so they know that if they practice they will be rewarded later on.

Éven though I don't require sight-reading, I think that they should be reading new music every day. Virtually any piece of music—even piano, ten fingers—can be used for sight-reading for two-mallet marimba. They could just read the series of notes up and down the staves. They don't have to go horizontally. They could also go vertically and just play the pitches with a rhythm that they make up on their own.

Kuo: What barriers do you commonly encounter that prevent students from learning to be good sight-readers?

Campbell: I think it is important to know

that there is a tempo at which you can play a piece of music that is put in front of you for the first time, perfectly. You have to find that and work from there. Too many people put up a piece of music, look at it one note at a time, play it, and then correct their mistakes. But if you sight-read as if you are going to play the piece perfectly the first time, then it becomes a matter of playing slowly enough that you can see all of the musical material.

Some students try to go too fast, or they stop and try to correct their mistakes. Another thing they do is try to play every note with their strong hand, rather than having a kinesthetic system of awareness for the keyboard that gives them a better feel for the area and spacing of the keyboard.

Even if you are looking to have a career that involves having a set of repertoire memorized, the better you can sight-read, even if you are not going to ever sight-read for a living, the quicker you can learn and build your repertoire.

Kuo: Do you think there is a conflict that prevents a musician from having a high level of both sight-reading and memorization ability?

Campbell: I don't know if they conflict. I think you have to balance them. The memorizing skills are good, especially if you are going to play something with a group, such as an orchestral concerto. You have to work on that throughout your career—just like sight-reading. Some of my best sight-readers have also been able to memorize their whole recital. Memorizing comes from performing the music a lot. As a percussionist, memorizing something gives you more freedom than if you are tied to the music stand, due to the physical nature of what we do.

Kuo: Do you have any tips for reading contemporary and atonal works?

Campbell: You have to be aware of movement and gestures, not just notes and rhythms. Physical motion should be the same at fast and slow tempos. Planning movement to and away from notes is very important. It should be practiced in the same way as practicing what pitches and rhythms you are playing.

INTERVIEW WITH GORDON STOUT

Kuo: Which type of music is challenging for you to sight-read?

Stout: The most challenging for me at this point is music in a key of four, five, or six sharps or flats, because I just don't do that

very often. Much of our contemporary percussion music is not written in a key signature, so it is difficult for me when I have to occasionally do that.

Kuo: How do you deal with this challenge and improve yourself?

Stout: I get out some of my old piano books, such as collections of beginning or intermediate pieces for solo piano by contemporary composers. I might get out a book of Beethoven or Mozart piano sonatas, or anything like that, and try to read those things—often on piano. I was a pianist before I was a marimbist, so to improve my sight-reading I often go to the piano and then to the marimba. Also, I love to get out Bach's Well Tempered Clavier because I love that music, and there are pieces in all the different keys. So I'll pick out the ones in the keys that I am not very good at.

I try to convince my students that they have to sight-read every day when they practice. I have a two-hour formula. The first half hour is technique and warm-up. Then they should sight-read for half an hour. During the second hour they work on their literature. If they sight-read every day, in six months they will be amazed at how much better they are.

Kuo: Do you include sight-reading for juries? **Stout:** I used to. I am not currently requiring sight-reading in the juries. I probably should start doing it again. I used to use the book *Rhythmic* Articulation by Bona. I had certain sections that they would go to as an example of what level I expected them to be able to sight-read at. I do require my students to keep a notebook. One section of that notebook has to do with their lessons. Another section is their practice log, so that should have information in it about sight-reading. The third section is about our repertoire class. I collect those notebooks at midterms, and I'll look through the practice log to see if there is any indication that they are sight-reading. At the end of the semester I grade the notebook as part of their lesson grade.

Kuo: When first browsing through a new piece during the preparation for reading, what do you see and think about besides the common things such as tempo, time signature, and key signature?

Stout: Meter changes, any difficult rhythms, form—if there are repeats, a D.S., or any other indications. I tell students to ignore any ornamentation or trills when sight-reading. I encourage my students to get as much of the musical issues as possible into their performance



Gordon Stout

when they are sight-reading. I tell them to look for the lowest note and the highest note, so that they know what range of the instrument the piece is in. Then I have them center the music in the middle of that range and stand in the middle of that range. It is very important to have the music directly facing one's head and eyes. The other really important thing is to pick a tempo so that they can get more of it right than wrong. Then I tell them to start at the beginning and go straight through without stopping. It doesn't challenge them if they pick a tempo that is so slow that they can read it perfectly. It is also not good if they go so fast that they get most of it wrong. It is okay to miss notes as long as you don't stop every time you miss one.

Kuo: How do you adjust quickly to varying lengths and widths of bars if you have to play on a marimba that you are not familiar with?

Stout: Over the years I have performed on almost all of the different [brands of] marimbas. So I hardly notice the difference, and those differences are mainly in the low octave. Malletech has the widest bars. If I use that, then it is easier to go smaller. When playing on a different marimba I will often practice a few ideo-kinetic exercises to get me tuned-in to the size of the bars on that instrument. I recommend that students keep the mallets constant in their hand and use the arm to get the mallet over the right note. I call that "arm rotation." Keep the mallets very low and just move the arm back and forth.

Kuo: *Is the pivot point from the elbow?* **Stout:** It's primarily from the elbow and the shoulder, depending on the intervals.

Kuo: Do you think is there is a conflict that prevents a musician from having a high level of both sight-reading and memorization ability?

Stout: Well, I have known some marimba players who have a high level of technical achievement and are really good sight-readers. Most of the students like that have had extensive piano background, which more than anything else helps with sight-reading. If they are technically gifted as well, then they have both.

I tell my students that it is more important to be able to sight-read than to memorize. Nobody has ever paid me to play from memory. They don't say, "We will pay you to do a recital only if you play from memory." So I often don't because I am such a good reader. I am not a great memorizer. But I have seen all different kinds of students in my years of teaching.

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Dr. Ming-Hui Kuo is Adjunct Professor of Percussion at Morehead State University in Morehead, Kentucky. She was an intern and performing member of Ju Percussion Group from 1993 to 2002. Kuo was a featured soloist with the MSU Percussion Ensemble at PASIC 2003. In 2011 Kuo and Dr. Nathan Nabb co-founded the XPlorium Chamber Ensemble, which was invited to perform at the 2011 WASBE Conference and the 20th Chiayi City International Band Festival. Kuo received a Doctor of Musical Arts in Percussion Performance degree from the University of Kentucky in December 2012.

