

How to be a Musical Genius at Sight Reading

Ellie Hallett ellie367@gmail.com

All the ideas in this article are the result of several decades of studying for many, many exams; specialist class music and private piano teaching; choral singing; choir tutoring; orchestral concert management; composing; accompanying; playing stacks of sight reading pieces for pleasure - and doing lots of thinking.

Becoming not just a good, but a phenomenal sight reader depends on how you go about it. Sight reading skills can be learnt, just like learning to walk is learnt.

Music is all to do with sound. Yes, the written symbols are important, but they are not the main game. From our earliest days, we hear sound, we learn to speak using sound, we sing and play an instrument using sound. Learning this instrument works best when it is based on sound. Aural is its other name, but this sort of aural is not a test. It is bringing together the pleasures of hearing and producing sound.

The ability to read and enjoy the compositions of those who have come before us is a door the instrumental teacher is being paid to open. We may not all be able to play Rach 3, but as in life, it is the journey rather than the destination that counts. Intervals make this journey more accessible and more scenic.

Brain Training

No-one plays a piece of music by saying or thinking the names of notes one by one because it would be tedious in the extreme and slower than a wet week. The best sight-readers are able to keep their eyes on the music with just an occasional glance at their fingers because they are reading the notation like musical stepping stones that show the fingers which keys the composer wants you to press down to re-create what they have written. Wider steps are needed for 'stones' further apart; shorter steps for closer-together ones.

In music-reading, you not only need your eyes and brain, but you have to be in control of ten fingers to do the stepping. And as if this isn't enough, in keyboard music, the brain has to also learn how to read the notational road map, not only horizontally from left to right, but vertically left to right.

This highly complex information-gathering eye-movement reading factor can be assumed to happen, by itself, ('Just practise, dear!'), but there are many aspiring pianists who have trouble reading a single line of story-book text, let alone music lines with odd splotches dotted all over them.

The piano and the way it works – a teacher-to-student travel guide to understanding sound

Below are some specific ideas the instrumental teacher can use, adapt and fiddle with to suit all ages and stages of students under their tutelage. And, you will be happy to know, this method will fit the books and systems you are currently following. No extra expense is necessary.

So - let's talk intervals from a piano teaching perspective, realising that the ideas below are graded in very wide steps to allow the teacher to fill out or jump ahead the tuition to fit each student.

Sit at the piano with no music. Press down any two notes one after the other using two different fingers of one hand. Do several of these. What do you notice? (high/low)

Doodle with intervals. Give them their numerical number as you play so that you can match their scale up or down sound distance. The notes C up to G are a fifth because you count up the scale 1 2 3 4 5.

Play any note and sing a third above, a third below, an octave above, a fifth down etc. Self-check.

Make up fancy patterns with intervals.

Sing songs and ID each interval in your mind as you sing.

Audiation and sight reading

If I say the name of a piece of music to you, for example, Ode to Joy, and you immediately hear it silently playing it in your head or inner ear, you are using audiation.

If I hand you a musical score of a piece you have never heard or seen before, but as you read it, you are able to hear all parts, you are using audiation.

'Hearing' a piece before playing it is audiation.

Improvisations happen because the performer hears in their mind whole phrases of what comes next.

In a letter to his father, Mozart said, 'I must finish writing this letter now, because I've got to write at breakneck speed. Everything is composed, but not written yet.' (This is surely audiation at its highest level.)

Good sight readers use audiation to know what's up ahead for the fingers.

Fluent, accurate and hesitation-free playing is the happy result.

Interval terminology

There are different flavours of the same interval called major, minor, augmented, diminished that you will learn in your theory lessons. However, the music staff space/line relationships between notes are the purpose here. The key signature and accidentals in notated music will look after any black notes needed.

Interval recognition is the aural-visual key that will open the door to reading confidence. The easiest way to demonstrate how intervallic reading works is to look at the first five bars of this famous piece by Christian Perzold (formally and incorrectly attributed to J. S. Bach).

Minuet in G

Christian Perzold

Recognising intervals can be calculated quickly by observing their line/space distances. Apart from unison or repeated notes, intervals go from low to high, or from high to low in pitch.

A musical interval visual analysis

Repeated notes are easy to miss because they sit on the same line or in the same space. Be ready for them!

2nds: line to the next space, or space to the next line

3rds: space to the next space, or line to the next line

4ths: line to a space or space to a line, with an unused line and space in between

5ths: space to space with an unused space between, or line to line with an unused line between

6ths: line to a space or space to a line; slightly wider than a 5th

7ths: space to space or line to line; almost looks like an octave

8ths or octaves: space to line or line to space; is a 'thumb to pinky' distance for a fully grown hand.

Can vertical music-reading be taught?

The answer is not only 'yes', but it is an imperative 'yes, it is a necessity'. A struggling student, with the best will in the world and encouragement from all parties, may remain struggling forever unless they are taught how to read vertically.

Below are five graded beginner suggestions teachers might like to try:

i) On a treble or bass stave (home-made lines-wide-apart manuscript paper is best) - and while the student is watching, draw two known notes separately. The student plays them one at a time. Now draw the same two notes one above the other. Ask the student how they think they should be played because they can't be sounded one after the other any more. Elicit the answer of 'at the same time'. The student plays them together. Talk about the difference between the sounds of separate and together notes. Repeat this process for many other notes, gradually building chords. If both hand are needed, all the better.

ii) On wide-line manuscript paper and on bass and treble staves, write in semibreves a mixture of root position and inversion chords of notes already known to the student. (Most benefits are gained if this learning is done in tandem with interval-reading – see more on this later.)

iii) Again, on wide MM lines and in semibreves, write a series of six chords for one hand (to begin with). Make a piece of card wide enough to hide the six chords. Cut a section out in the upper left side that will show each chord one at a time. The student plays chords vertically, reading from low to high using interval-reading method rather than note letter names. You move the card along a chord at a time so that only one vertical line of notes is visible at a time. If it is too hard to hold still, use a paper clip and slide the card over the MM paper.



iv) Play SATB hymns once a day to train your eyes to read vertically. The horizontal will more or less look after itself. Interval reading vertically and horizontally can help the eyes because it teaches how to see the not just the trees in the forest, but the leaves on the trees like a musical arborist.

v) The Vesper Hymn (below) suggests a way to teach interval reading without tears.

Vesper Hymn - notated in four different keys and written by Ellie Hallett

Teaching the eyes to read vertically and horizontally

Each system on this page has the first four bars of Vesper Hymn by Bortnianski (written in 1818). The unitalicised writing in the treble clef area teaches you how to read the intervals of both clefs **horizontally**. (The written notes provided demonstrate how to analyse and observe any notation in any piece. Space restrictions here are the only reason for two different sets of notes.)

The *italicised* writing under the bass shows how to read and - with practice - hear in the mind each hand's notation as **vertical** intervals. With both the horizontal and vertical reading techniques gathering information, the eyes can send a bigger package of information to the brain, which then can send better Get Ready messages to the finger muscles. The more information the brain receives, the easier it is to sightread. Audiation (aural understandings) and finger memory are additional information packages. (*See more on audiation later.*)

Hasten slowly and look carefully for intervallic patterns in the music, because they will always be there. Enjoy learning your new skill!

Up a third V-down up Down a 3rd, up a 3rd then down a 4th, up a 4th Down a 3rd, up a 3rd Down a 2nd, down a 3rd V-down up

Thumb has three repeated notes then goes down a 2nd Thumb has three repeated notes then goes down a 2nd Three note scale down Repeated notes Repeated notes

5th 3rd 5th octave 5th 3rd unison octave 5th 3rd oct. oct. 6th 5th 3rd

Finger memory: Teach your fingers to automatically stretch sideways to suit the intervals you are playing.

A narrow stretch is all you need for 2nds and 3rds; a bit wider stretch for 4th and 5ths and do on. An octave is (mostly) the widest stretch in music. Eyes, ears and the muscle memory tactile sense comprise this multi-sensory approach to music reading.

Help your brain by bringing in your ears and eyes i.e. multi-sensory

Your eyes are the main helpers for your brain to do all it has to do when reading musical notation, but when your ears are also involved, the process of sight reading becomes magnificently more panoramic.

Being able to hear the pitch of the notational stepping stones in your mind is a skill that will save the day not only when sight-reading as a part of an exam or when learning a new piece with your teacher, but it will make decoding and learning new pieces MUCH easier, more accurate and infinitely quicker.

Good reading also takes the pianist through a door into a new and wondrous place. This place is being able to play music you haven't seen before, unaided and purely for enjoyment - because you can.

Adding the tactile sense

The sideways finger-spread from wide to narrow (e.g. when playing a second to a sixth, for instance) is another aspect of intervals playing that receives scant attention, but which is an important extra dimension in the multi-sensory world of reading music. When not looking at the fingers, it is a handy extra piece of information when the fingers 'know their place' and can reach this sixth without the eyes needing to supervise the action. Being able to automate finger distance-estimation in the mind comes with practice, but this awareness puts the player on a multi-lane highway rather than a bumpy track.

The all-important sight reading checklist - things to look for before you start playing.

Note: Many of these will also be learning points made in general lessons rather than being exclusively for sight reading.

- ✓ What is the time signature? (Take a moment to feel the beat by tapping your knee while reading the rhythm of each hand to work out how they fit the beat. 'Play' the beginning of the piece or tricky bits silently on your knees.
- ✓ What is the key of the work?
- ✓ Where is the main melody?
- ✓ What L and R fingers will be most logical to use for the beginning?
- ✓ Are you able to feel the beat and work out how the rhythms of L and R hands fit this beat?
- ✓ Do scale passages need a thumb-under or finger-over movement?
- ✓ Can you spot any V-shape note-down/a note-up patterns?
- ✓ Are you ready for one-note-per-bar scales such as in the dotted minims for the left hand as in the left hand of Minuet in G?
- ✓ Did you know that observing fingering numbers will help you avoid finger tangles and bumpy reading?
- ✓ Can you quickly and fluently read through the treble and bass clef intervals in a simultaneous L to R and vertical eye movement? (Train your eyes to keep going rather than stopping/starting/reversing by visually following your finger moving smoothly left to right across a page.)

- ✓ Are you also able to teach your eyes to jump quickly R to L from the end of one system to the beginning of the next? (Practise these eye movements without playing, just as an eye-training step.)
- ✓ Does it look as if the left hand is given the melody at any point? How will you enable this melody to be more pronounced so that it can be easily heard?
- ✓ Is there a key or time signature change anywhere?
- ✓ Do know how to shape phrases?
- ✓ Are there staccato notes, accents, pauses, expression marks, Italian words, mordents etc to include in your playing?
- ✓ Are you able to scan the piece with your eyes to road-map the sound contours of the left and right-hands and simultaneously hear in your mind the general melody and harmonies?
- ✓ Are there accidentals throughout the piece or a section of it (e.g. G#) that could indicate the A minor key? Imagine the scale of this key in your mind to help your fingers find their notes.
- ✓ Will you need a hand position change anywhere?
- ✓ Are you familiar with the technique of positioning your fingers over the piano keys about to be played a moment before they are needed to avoid the risk of rushing or being late and thus losing the beat and fluency of the piece?
- ✓ For repeated notes, do you know the 'get off to get on' technique to maintain sound clarity?
- ✓ Are there any sequences that enable you to put your fingers on 'automatic pilot'?
- ✓ Are there wide intervals (e.g. octave) that require a spread-out hand span?
- ✓ Are there any chromatic sections or finger-squashy bits?
- ✓ Do the left and right hands cross over each other at any point?
- ✓ Is there an 8va section or repeats anywhere?
- ✓ Are there short scale passages, and do they need a thumb under/finger-over action?
- ✓ Are there V-shaped sets of three notes e.g. C D C B A B for easier instant reading?
- ✓ Are there any block/broken chords/arpeggios? What inversion/pattern are they?
- ✓ For chords, have you learnt how to prepare the hand shape needed to play them (some fingers lower; some higher and out of the way) so that all you have to do is lower them evenly onto the notes required?
- ✓ Where are the highest and lowest notes?
- ✓ Can you quickly work out the leger line note locations?
- ✓ Is there parallel, contrary or oblique movement anywhere?
- ✓ Did you know that rests, after a slur or the ends of phrases are good places to change hand-position?
- ✓ Can you look mostly at the music and not at your hands?
- ✓ Have you trained yourself not to stop for a mistake? (Make a mental note of the trouble spot for later practising if this is a piece to learn.)
- ✓ Do you know that it is a good idea to play at the tempo of the most difficult bar?

- ✓ Do you listen to yourself in your sight reading practice to maintain the note to note connecting flow of the music?
- ✓ If the music is always too small or blurred, have you had your eyes checked?
- ✓ Do you have to lean forward to see the notes clearly? If so, an eye test is a good idea - or the music needs to be enlarged for you, especially if you play on a grand piano where the music stand is higher.
- ✓ Are you able to look ahead of your hands to allow your brain time to message your finger muscles so that they are ready for action a nano-second before they have to press down the required keys?

Speed-read the score without playing a note

After you are familiar with the above steps, work with a music buddy (another student at your level of experience) and/or your piano teacher to look at and find these sight-reading checklist clues together. Hunt for them in as wide a variety of notated music as you can. Open a music book at random and put your eyes and ears to work.

Teach yourself how to shorten the time for this visual scan by just pointing to each clue rather than describing it. This will indicate to your buddy or teacher that you have seen it and made a mental note of it.

Go from simple pieces to more complex, training yourself to read detail. When playing, only look at your hands to start off and for checking wide interval leaps etc. Train your eyes to glance at your hands rather than linger. This will help you not lose your place on the music as well!

A musical genius at sight reading? Yes, I know 'genius' is too strong a word - unless of course you can sightread at performance level anything put in front of you. Franz Liszt played the Grieg piano concerto at sight, helped in no slight way by his astounding technique, so he may claim our gold medal for being a sight reading genius.

And as a musical treat to say thank you for reading this article, listen to Yuja Wang play the Prokofiev Concerto 2 Scherzo on YouTube www.youtube.com/watch?v=1RqGnTRKBEY

(My guess is that Yuja is a phenomenally good sight reader ...)



Yuja Wang reading a score. Photo from Yuja Wang's Facebook Photos (Public Images)

Worth reading for teachers:

<http://www.keyboardpedagogy.org/2015handouts/beyondthekeyboard>