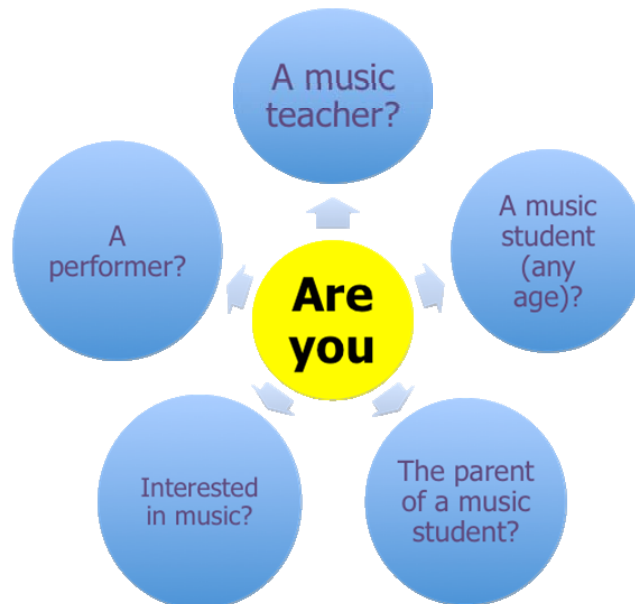


Music and inclusive teaching: information from the British Dyslexia Association Music Committee

This booklet will help you to answer questions such as:

1. What is dyslexia? (p.2)
2. How might I recognise that I, my student, relation or friend is dyslexic? (p.3)
3. What are some commonly reported difficulties with music? (p.5)
4. What strategies can be employed to help? (p.6)



Do you, your pupil, or someone you know find music strangely challenging and you can't work out why?

Maybe the reason is dyslexia.

"I think I understand it but it seems to go in one ear and out of the other"

- Some people do not discover that they are dyslexic until later in life.
- Not all dyslexics have problems reading music; some non-dyslexics do.
- If you are a teacher and you think your student is dyslexic – put yourself in their shoes...

1. What is dyslexia?

Dyslexia is a Specific Learning Difficulty (SpLD) which means that an individual learns differently. Dyslexia may be inherited and research suggests that it affects up to 10% of the population. Dyslexia can affect the processing of information, both aural and written; short-term memory; organisation and the sequencing of material into a logical order.

The dyslexic mind also often has **areas of strength** such as creative thinking.

One feature of dyslexia often, but not always noticed, is a disparity or mis-match between a person's intellectual ability and that person's perceived or actual ability when performing tasks, particularly those to do with the written or spoken word, music or manipulation of numbers. Dyslexic individuals and their teachers should not lower their expectations as they are capable of learning well if taught differently from the standard approach. A highly intelligent dyslexic person may have a low reading ability.

Alongside dyslexia, commonly co-occurring difficulties can include visual stress which affects about 50% of dyslexic people (see p.11) and anxiety/depression (see p.14).

2. How do I know if I'm dyslexic? How do I know if my student, or someone I know might be dyslexic?

Look out for these things.

In relation to music, does this person?

- Have difficulty with the fluent reading of words, numbers and/or music.
- Have difficulty with spelling and/or the organisation of musical material.
- Find that, when reading text or music, it blurs or swirls, making it even more difficult to read.
- Get right and left mixed up ("I get confused in music lessons when my teacher asks me to play right hand only").
- Have difficulty remembering lines of pitch or rhythm in aural tests.

Generally, does this person?

- Have difficulty in getting ideas 'out' – especially on paper.
- Have difficulty with the sequencing of information.
- Feel 'overloaded' with information.
- Read or hear instructions and other information over and over again but doesn't remember them.
- Get confused about dates and times and organisation generally.
- Find it hard to do two things at once, such as listening to someone speak while writing the information down.
- Find it hard to follow instructions easily.
- Find it hard to get information out of text books – if you do understand the text, it's almost impossible to work out what to leave out when making notes.

- Get words muddled up when they're trying to explain something.
- Sometimes have difficulties finding the word they need to say
- Find it hard to get ideas in the right order.
- Have problems with memory.
- Learn something one day and then seem to have to start from scratch again the next day.
- Know they can do things but nothing seems to turn out right.
- Take much longer to do tasks than others and it all appears to be a huge effort.
- Feel they've been told all along in school that they're 'thick'; they may have been bullied.
- Have very poor self-esteem ("Sorry, sorry, sorry...")
- Often feel depressed and anxious about things they try to do.

It is important to have an assessment for dyslexia as this will allow access to support and allow for reasonable adjustments in examinations.

Such an assessment may be arranged through a school, F.E. or H.E. establishment or arranged privately:

The B.D.A. has a list of specialist teachers with the correct accreditation; request this by email to accreditation@BDAdyslexia.org.uk.

Dyslexia is not a disease. It cannot be 'cured' and it won't go away. **But...**

The effects of dyslexia can be helped by

Dyslexia friendly teaching

Intervention

The development of strategies

Finding a dyslexia friendly context/environment in which to work

and REMEMBER

The dyslexic mind has strengths

‘Music performance is [thought to be] ... one of the most complex and demanding cognitive challenges that the human mind can undertake’

(Zatorre, Chen and Penhune, 2007).

3. Commonly reported difficulties with music

- Difficulties in the reading of music, particularly sight-reading without adequate preparation.
- Aural tests, particularly those involving memory, such as dictation.
- The understanding and production of written material (text/language and music).
- Work in music theory: understanding and de-coding information; organisation of examination answers.
- Analysis of music and the use of examples in written work.
- The organisation of evaluative written work: evaluation of performances by self and others.
- Difficulties with the sequencing of material; decisions about what is important/relevant; choice of wording for answers, both verbal and written.
- Organisation of complex and non-regular timetables of lessons, rehearsals and concerts and organisation of relevant material: music, strings, reeds etc.
- Organisation of personal practice.

4. What strategies can be employed to help?

Seek advice from:

- A class teacher or the S.E.N.Co. (Special Educational Needs Coordinator) at a school
- The Disability Officer¹ at a Higher Education Institution
- The British Dyslexia Association and its Music Committee:
<http://www.bdadyslexia.org.uk/>

Some ideas that might help within music activities

Note: these are not 'one size fits all'. Find out what suits you or your student

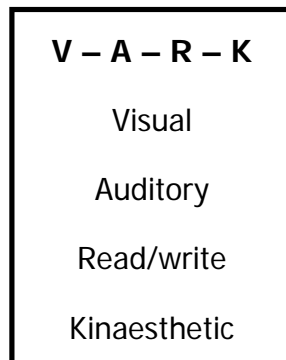
- Choose a private instrumental or singing teacher with an understanding of dyslexia.²
- Find out the dyslexic person's strengths in relation to preferred learning styles. There are various ways of doing this, including the V.A.R.K.³ questionnaire. See: <http://www.vark-learn.com/english/page.asp?p=questionnaire>
- Decide **which areas** of music are proving difficult, e.g. integrating everything together quickly enough; keeping the rhythm going when playing at speed. Work out strategies based on this analysis.
- Use **multi-sensory approaches**: do things aurally, visually, kinaesthetically (in a tactile way) and/or using read/write approaches. The more approaches the better.⁴

¹ S/he may have an alternative title such as Student Support Officer

² Ask the Incorporated Society of Musicians for advice: <http://www.ism.org/>

³ VARK = visual, aural, read-write and kinaesthetic learning styles

⁴ See: Christine Brown (2012), *Let's Read Music*. Available at: <http://www.christinebrowntrust.org.uk/contact-christine-brown-trust.php>



Visual: pictures; diagrams; mind-maps⁵; colour; demonstrations

Auditory: explanations; repetition; recordings; discussion

Read/write: use text (yes – some dyslexic people like it!)

Kinaesthetic: hands-on; tactile; exploration

- Make plans: before/during/after a lesson.
- Keep notes of work: using notebook, iPhone, laptop etc.
- Help with time management: make sure the following are known:
 - Date and time of lessons, rehearsals and concerts.
 - Equipment needed (instrument, music, files, strings, valve oil, rosin...)
- Reminders: use text, email, phone call etc; remind yourself by putting an alert on your phone, iCal etc.
- Put a luggage label on a music/instrument case with information about times and places of lessons.
- Use colour coding for information on music and notes; the colour should be of the dyslexic person's choice and be done by him/her.

⁵ For examples of mind maps see material by Tony Buzan and others online.

Sight reading

- Look through a piece before starting.
- Colour the middle line of music to give an anchor for visual processing.
- Use two colours (chosen by the student) for the tonic and dominant in a tonal piece.
- Visually mark the rhythms either with lines or colour for the main beats.
- Long term practice.
- Chunk information – practise aspects in isolation (e.g. rhythms, melodic patterns); practise recognising them and being able to play them as patterns.
- Try to get hold of music in advance.
- **Rhythm** is most important – try only playing the strong beats in the bar.

Aural

- Break down the tasks – practising how each task will be approached.
- Integrate aural practice into daily practice routine.
- Split dictation into aspects, e.g. rhythm then melody.
- Use multi-sensory approaches such as making shapes in the air to reinforce the recognition of intervals, along with singing them and writing them. Recognition of different types of seventh chords, for example, (dominant, diminished, half-diminished, major/minor and so on) can involve a breaking down of the pattern of major and minor thirds using coloured blocks and also singing up and down the chords to the words 'major third' or 'minor third'.

Long term practice of aural (which should be frequent and regular) can include:

- Recognition of harmonic patterns on piano.
- The use of Kodály training and particularly its emphasis on singing. Sing as much as possible. (For information about the Kodály approach see http://www.britishkodalyacademy.org/kodaly_approach.htm).
- Lots of listening to music in an active way, making notes and writing up short paragraphs about pieces.
- Making a timeline of the main musical features of composers and periods.

- Use of Auralia⁶ software and various websites which can be found via a search engine. The A.B.R.S.M., for examples, gives some mock test examples free at <http://www.abrsm.org/en/exams/gradedMusicExams/mockauraltests.html> and full sets of tests are also available.

Performance

When learning a new piece, some dyslexic people find it important to gain a 'whole' picture of the piece first rather than working in the conventional way, by building it up in small bits. This does not mean that final detail needs to be abandoned; it is just a different initial approach.⁷

For teachers

Many points are suitable for work at primary, secondary, F.E. or H.E. level and also for individual instrumental or singing teachers

Note that good teaching practice for dyslexic students is usually good practice for all students.

General points

- Consider using personalised teaching methods rather than one standard approach
AND...
- Consider the needs of the pupil. For example, choose to start with the scale that is the most simple on his/her instrument; this will not necessarily be C major.
- Keep instructions **short, clear** and **simple**.

⁶ Specific software for ear training and aural tests produced by Sibelius. Find details via a search engine.

⁷ See Gillian Backhouse's article, 'Dyslexia in a Professional Musician (PM)' in the *Music and Dyslexia Cambridge Conference Proceedings, April 1992*. Available from the B.D.A. Music Committee.

- Give an **overview** of the session at the beginning, **recap and repeat** frequently and a give a **summary** at the end.
- Ask students to repeat information.
- Ask students to write down key points in the way s/he will best remember (using a notebook or technology).
- Keep a record of work and any problems.
- Demonstrate alongside the pupil rather than facing them, to avoid confusion through the presentation of a mirror image.
- Take care with the use of the terms 'right and left hand' and also with 'higher or lower' on instruments. Point to the area instead at the same time.
- Use mnemonics or other aids to memorisation as discussed with the student.
- Support the student's self esteem in any way you can; praise whenever possible.
- Give breaks in sessions; encourage students to drink water.

Musical tips

- Use words for rhythms – link up age/interest: 'Sugar Puffs' = 2 semiquavers quaver; 'Higgledy Piggledy' = triplets; 'Gin and tonic' (for adults!) = 4 semiquavers.
- In schools, hard to remember words could be displayed on the music room wall, preferably with a symbol or picture to go with them. Students can also have their own set of these.
- Rhythms: Clap, stamp, shout and/or move to rhythms – whatever works.
- Point out patterns in music, both rhythmic and melodic.
- Walk around the room in large and small steps for tones and semitones when learning scales, singing the notes as well.
- Have a stave on the floor for jumping pattern of intervals.
- Decide on songs which start with different intervals e.g.
 - Perfect 4th up = *We wish you a merry Christmas*
 - Perfect 4th down = The 'Hallelujah' Chorus.

Students can come up with their own examples (e.g. using pop songs)

- Use apps, the Internet or/and YouTube. Examples include: musictheory.net; www.good-ear.com Karajan Music and Ear Trainer: www.karajan-eartrainer.com/en/ Ear trainer lite, Note training 1.2 by Chris Marks, SightRead4Piano, Rhythm in Reach, Music Theory Flashcards, Theory Lessons, Music Theory for beginners, Circle Theory, Music Sparkle, Garage Band and Notion 3.
- Break up foreign terms in a way that the student finds helpful.
- For **group or rehearsal work**: a dyslexic student can be teamed up with a competent 'buddy' who can help to point out rehearsal markings, instructions and so on.

Work slowly and steadily with plenty of encouragement

If [the student] does not learn the way you teach, can you teach in the way that he learns?
(Chasty)

It is important to **know yourself** as a dyslexic person, or to know your student.⁸

4a. Visual stress

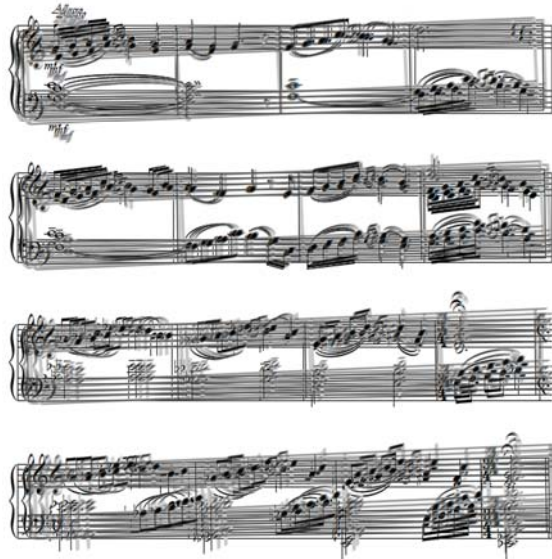
If you (or your student) find that words or music on the page swirl or go into funny lines or you get fixated by streams of white line between words (or music) or get very distracted by the lines of bar lines and phrase marks, then...

you may have 'visual stress', sometimes known as Meares-Irlen syndrome (or MISVis).

⁸ Chasty quotation cited in Chinn & Ashcroft, 1999, p.126

This often co-exists with dyslexia and can make the condition worse, although it can also exist in people without dyslexia, while many dyslexic people do not have visual stress. It is very easy to resolve with the use of coloured overlays or lenses.

A simulation of one type of visual stress applied to music is shown below:



If you can, get hold of a tinted overlay (preferably several in different colours), try some and see whether they help to make the text or music clearer to read and stop the 'swirling'. These are available as a pack of 10 filters through the B.D.A. shop at www.bdadyslexia.org.uk. This **is not a specialised test** but might give an indication of whether you or your student suffers from visual stress. Online tests are also available.

The person affected should also seek help from a specialist **optometrist**. An individual in education can ask for help from the person in charge of special needs or support, who will recommend an optometrist which may be paid for by an H.E.I. (Higher Education Institution). Otherwise you will have to find an optometrist and pay for the test, but it may be worth it. Details of suitable optometrists can be obtained from the Institute of Optometry (<http://www.ioo.org.uk/dsa-briefing.pdf>) and the section 'Eyes

and Dyslexia' on the B.D.A. site: <http://www.BDAdyslexia.org.uk/about-dyslexia/further-information/eyes-and-dyslexia.html>.

Local Dyslexia Associations (see B.D.A. website) will also be able to give information about local optometrists and a useful source of information is the Society for Coloured Lens Prescribers: www.s4clp.org⁹

The optometrist may recommend the use of **colour overlays** and/or **tinted glasses**

Tinted glasses can only be prescribed and are more expensive than standard glasses. The cost of these may be paid for at H.E. through the Disabled Students' Allowance.

However, beware of the many commercial products available which are sold, particularly online, as being 'cures' for visual stress. These are often not prescribed by specialists, and it is possible to pay a lot of money for something that isn't very useful. Further information may be obtained from 'Optometry Today' at <http://www.optometry.co.uk/visionbook>.

Eye exercises

Some dyslexic people also have tracking problems when following text an/or have problems adjusting sight from near to far, as when following a conductor in a choir or orchestra. Eye exercises can help to develop the relevant muscles. These must be prescribed by a qualified specialist. There is a range of exercises developed at the Institute of Optometry (Allen, Evans and Wilkins, 2010). These are **not** a 'cure' for

⁹ An organisation for eye care practitioners who have specialized in visual factors that may co-occur with dyslexia.

dyslexia and may not be useful for everyone with symptoms similar to those of visual stress but can be very useful for some people.

4b. Anxiety, stress and depression

These are typical 'secondary' features of dyslexia. The sheer amount of hard work needed to keep up with education or work can cause exhaustion: many tasks are much harder and take much, much longer leading to exhaustion, stress, anxiety and/or depression. Additionally dyslexic people may be used to being 'put down' all the time – being told that they're 'stupid', 'lazy' or 'incompetent' when, deep down, they know they're not.

It can be worth considering **counselling**. Local counsellors can be found from the British Association for Counselling and Therapy at <http://www.bacp.co.uk/> or the 'Counselling Directory' at <http://www.counselling-directory.org.uk/> or other reputable sites online. Many colleges and H.E.I.s have their own counselling services.

4c. Accessibility of material on paper and websites¹⁰

The following may help and may make the reading of music and text much easier (information from The Higher Education Academy, 2007 & The Open University, 2006).

Best practice:

Try to use off-white background/paper and avoid shiny paper. Consider photocopying music or text on to tinted paper (although of course, photocopying is only legal under

¹⁰ See: British Dyslexia Association (2012), *Dyslexia Style Guide* (online). Available <http://www.B.D.A.dyslexia.org.uk/about-dyslexia/further-information/dyslexia-style-guide.html> (19th May 2012). This gives more information about preparing a document for text-reading software and on website design.

specific circumstances and you **must** have a copy of the original).¹¹ Coloured overlays can be used for music without page turns.

The preferred colour will differ from person to person.

For text:

- Use a sans-serif font such as Tahoma (avoid Times New Roman, for example). Tahoma and Verdana are good as they differentiate between l l & 1.

A sans-serif font is easier to read than one with serifs (the 'twiddly' bits).

- 12 or 14 point font.
- 1.5 or 2.0 spacing.

Use left alignment (i.e. straight down on the left side of the text), **not** justified (i.e. **not** straight down on the right of the text).¹²

Avoid

- *Italics* (as much as possible).
- Underlining - use **bold** for emphasis
- Much text in CAPITALS.
- Lots of continuous prose.

¹¹ See the Music Publishers Association:

http://mpaonline.org.uk/faqs/Printed_Music_FAQs/Can_I_photocopy_printed_music.html. Check with their Code of Fair Practice (M.P.A., 2012).

¹² This is because justified text (also straight on the R) creates irregular spaces between words and letters which can exacerbate 'streaming' – the obsessions with the white lines between the words rather than the text.

Do

- Give PowerPoint slides plenty of room.
- Break up (all) text with visuals.
- Use plenty of clear space between text and music - consider creating music with bigger than usual spaces between the staves/systems.
- Use bullet points and/or text boxes and/or mind maps.
- Use clear language.
- Be concise.
- Use diagrams, text-boxes and pictographs.
- Provide a glossary of abbreviations and terms, in a form that is clearly understandable.
- Use 'Post its' and coloured arrows to help with finding pages or to highlight particular problem areas.
- Use coloured pencils to direct visual attention (e.g. from one end of the line to the next, or from the bottom of the page to the top of the next one – particularly good for pianists). Students can choose the colour and draw the lines themselves.
- Use highlighter pens for troublesome notes, phrases, sequences, slide positions and string positions (photocopy the music first), **but** – beware that the page doesn't become too busy.
- Use charts, symbols and images.

Examinations

All the music examination boards provide special consideration for dyslexic candidates. See their websites for specific information:

Associated Board of the Royal Schools of Music: www.abrsm.org/exams

London College of Music: www.uwl.ac.uk/lcmexams

Rock School: www.rockschool.co.uk

Trinity Guildhall: www.trinitycollege.co.uk

Find out information **well in advance** of any exam entry.

For more detailed information see *Music, other Performing Arts and Dyslexia*, published by the B.D.A. (2012); chapter 10.

Reasonable adjustments should be possible for assessment without compromising “the integrity of the examination or reduc[ing] its reliability or validity” (The London Academy of Music and Dramatic Art, 2012).



B.D.A. Music is

A group of enthusiastic, motivated music educators and researchers with wide expertise and knowledge of inclusive approaches to music teaching, particularly for those who are dyslexic or have other specific learning difficulties. Contact the group via the BDA:

<http://www.bdadyslexia.org.uk/>

For more information:

Daunt, S. (ed.) (2012), *Music, other Performing Arts and Dyslexia*. Bracknell: B.D.A.

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For general information on dyslexia:

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