



By Mark McKergow

Scoring with Music

Music has never been easier to use. For hundreds of years if you wanted music in your home, you had to make it yourself or hire someone in to perform it. Even fifty years ago, gramophone records were mostly 78s, there were a mere three domestic radio stations, recording tape was for professionals only and music in pubs came from the 'old joanna' in the corner.

Now in 2004, we have music everywhere. CDs make excellent sound quality commonplace, while .mp3 and other formats allow us to carry our music with us in ways unimaginable even ten years ago. Pirate radio, the Sony Walkman and the Apple iPod have all marked turning points in the availability of music to enhance our lives.

The power of music

All this music around us sometimes hides the fact that music has always had an enormous influence on us – at an individual and group level. Cultures all over the world use music as a key part of group activities, rituals and celebrations. So how can we use it to help our own mini-cultures – our classrooms and learning sessions?

Experiments from the late 19th century have shown that music affects us in many ways – physiological, emotional and cerebral. How many times have you wanted to change the pace and mood of your classroom, to encourage a certain atmosphere or lead the way to the next challenge? This article will describe what's known of music's power, and will help you to make useful choices about the times to use music in your classroom and how to choose it.

"Shhhhhhhh...?"

But surely, music is a distraction from the serious business of learning? For a few learners, yes. Whole-brain learning expert Eric Jensen estimates that 10%-20% of learners really prefer total silence. But are we to ignore the other 80%? By judicious timing and selection, the occasional use of music for designed purposes can enhance the learning experience and atmosphere in the room – for everyone's benefit.

Speeding up and slowing down

Have you ever drifted off to sleep to a lullaby, or driven aggressively to crunching rock music? If you have, you've just been doing what your autonomic nervous system wants you to. The body, led by the heart, has a natural resting state corresponding to a heartbeat of around 80 beats per minute (bpm). If we listen to music faster than this, our bodies will naturally start to speed up to try to match it – increasing pulse, breathing, blood pressure and metabolism. If you like the music concerned, the speeding up happens faster – but it happens in any case, and there's next to nothing you can do about it. Similarly for slower music – your body's functions will start to slow down.

This principle is in use all around us. In supermarkets, slowish music is used to encourage shoppers to walk slower and thereby spend more time looking at the shelves. In postal sorting offices, fast music means the post gets sorted faster – without the workers realising. Athletes use fast music to warm up before important races – American Michael Johnson used gangsta rap to set new and unparalleled world records at 200m.

This is an important consideration in using music in the classroom – fast will speed things up, slower will calm them down. Next time you want the chairs tidied up, put on the William Tell Overture at high volume and watch the results!

Emotional Rescue

Music affects our mood. Research in Australia has shown that people from different cultures can recognise the same emotions in happy or sad music. In classroom use, we can use music to amplify the mood we seek, or to help learners move from one state to another.

Even though all music has an emotional quality, some pieces have more than others! Music for celebrations will usually be overflowing with emotion. If we seek quiet concentration and reflection, a much more understated tone is good. It's worth noting that most pop music is designed to grab attention, and may therefore be less good as a



Developing Soundtracks for your classroom



background than instrumental music – either classical or dance/chill-out.

Taking sides – the brain and music

In the usual left brain/right brain metaphor, music is placed firmly as a right brain function. How true is this? The latest research shows that both halves of the brain are involved in listening to music (See table below).

These results also support another idea – that trained musicians listen to music ‘differently’ to the rest of us. It seems that musical training brings a lot of the left-brain listening to the fore, resulting in more concentration and analysis.

When I do seminars on music in schools, it’s often the musicians as well as the music teachers who say they are not very comfortable with ‘background’ music – they want to focus on it and enjoy it at all levels, rather than letting it pass them by in a pleasant haze. This can result in the musicians being sceptical of the power of music as one factor in a rich learning environment, rather than a very special thing on its own.

Remember that most learners (and most teachers too) are not in this situation, and will be enjoying the music as a small yet key part of the classroom environment.

Mozart on the brain

The ‘Mozart Effect’ makes its way into our newspapers from time to time. Research in the 1990s showed that preparing for a spatio-temporal IQ test by listening to ten minutes of Mozart resulted in scores 8-9 percentage points higher than

listening to silence, a spoken relaxation tape or other kinds of music (dance and Philip Glass were tried). However, the effect faded after about 20 minutes.

This is of itself a fascinating but not very useful result – it shows an unexpected link between music and brain activity. But why Mozart? This same question has been posed for decades by music therapists, including Professor Alfred Tomatis, who have found that the compositions of the 18th century child prodigy consistently produced superior results.

Some say that Mozart’s music lies on a cusp of simplicity and complexity – simple, but not too simple. Others suggest that Mozart himself suffered from Tourette’s syndrome, yet was always calm when playing his music. Perhaps he was treating himself in his own way, and this same way is now available to us.

Whatever, Mozart’s music has certainly stood the test of time and can be used in many practical situations – I use it to help concentration for solo and small group working (slow to medium speed) and for gentle energising before the start of a lesson (faster speeds – the operatic overtures are particularly good).

Finding your soundtracks – selecting music

Have you ever noticed how much music is used in films? The answer is – more than you think. Film makers know a great deal about how music can build the context and emotion of a scene. Can you imagine the opening scene of *Jaws* without John Williams’ dramatic score? The music amplifies

Left brain	Right brain
Analysing and recognising form and sequences	Interval judgements and harmonies
Identifying familiar tunes	Perfect pitch
Recognising and repeating rhythms (temporal sequencing)	Implicit cognition, perceiving the big picture
Pitch judgements	Processing new melodic sequences and implied harmonic relationships
Perceiving overtones to distinguish between timbres	Imagining or mentally generating music

and builds the emotion and movement of the scene. A change of music can then lead to a very quick shift in emotion and state for the next scene. Exactly the same principles apply to making your own classroom soundtracks. Consider:

Tempo/pace Fast, medium or slow – are we energizing, calming, preparing...?

Emotion Calm reflection, excited activity, positive preparation...?

Genre Classical sophistication, funky fun, smooth soothing...?

Using music with specific learning content

So far we've been using music to underpin learning processes. You can also use it to support specific subject content:

Setting the scene:

Relay historical, geographical and cultural contexts with music.

Underscoring key points:

Create songs and rhymes for key learning points.

As a theme tune:

For certain aspects of a subject or types of activity.

Enhancing creativity:

Research shows positive influence on creative writing accompanied by appropriate music.

Musical concepts:

I once saw a teacher convey key ideas of geometry by teaching pupils to dance!

Practicalities

When using music in the classroom, I usually prefer CDs to tapes as they are much easier to cue up. Get the best sound quality you can – sometimes the very cheapest systems are best avoided. Always fade music in and out, rather than cut it

abruptly (unless you want a certain dramatic effect). Rotary volume controls allow much greater control than push-buttons.

Always know and preview your music – sometimes moods can change very quickly, so make sure you choose pieces long enough to support your activity. Specially compiled CDs of music for certain moods can prove very useful here – you can use the 'random' button to create great variety from one disc.

Use music in small doses, to support activities and transitions. Whole-brain learning expert Eric Jensen suggests using music for a maximum of 30% of the class time. Never compete with it – if you are talking to the whole class, switch it off.

It's important to remember that the learners don't have to like the music for it to have an effect. Some teachers like to encourage pupils to bring in their own CDs – these can be played in breaks or at certain times when the soundtrack doesn't much matter. Rules about respecting all the music played, including yours, can be useful.

Lights, music, action!

We'd never think of using a room without lights... now's the time to introduce sounds as well. Have a go. Remember to use the music to actively support your learning activities – always use it with a purpose. Use your creativity, and perhaps bring a little of your own preference into your choices.

In future issues of Teaching Expertise I will be offering specific and practical ideas on music choices for certain kinds of learning soundtrack. If you have questions or situations for which you'd like some guidance on using music, please send them in. **TEX**



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