

## Tocatta and Fugue in D minor by Johann Sebastian Bach

### SECONDARY CLASSROOM LESSON PLAN REMIXING WITH A DIGITAL AUDIO WORKSTATION

For:

- Key Stage 3 in England, Wales and Northern Ireland
- Third and Fourth Level, S1-S3 in Scotland

*Written by David Ashworth*

#### *Learning outcomes*

Learners will:

- compose their own piece using samples, mixing organ/orchestral and other sounds using a digital audio workstation [DAW]
- become familiar with Bach's iconic piece, in the original organ version and the orchestration
- engage in critical listening by comparing the two versions of the piece

#### *Curriculum checklist*

The following aspects of the KS3 and 3<sup>rd</sup> Level music curriculum (for England, Scotland, Wales and N. Ireland) are encountered in this project:

- Listen and evaluate/appraise
- Performing/playing/rehearsing and reviewing
- Composing/improvising
- Singing
- Technology
- How music is created (i.e. pitch, tempo, timbre etc.)
- Notation (staff or other relevant notations)
- Identifying musical devices and concepts
- Aural skills (imitating, understanding pitch)

#### *Required kit/space*

- A digital audio workstation [DAW] – in schools, this is likely to be Cubase, Logic, Mixcraft or GarageBand. However, any DAW or loop based sequencer will do (online DAWs, such as Soundation, allow students to access their work at home)
- Apps such as GarageBand may also be used for these activities

- Downloadable sample .mp3s (provided in the DAW remix kit)

### *Time needed*

The project may span several sessions. In most cases 4 – 6 lessons should be sufficient.

## 1. Introduction

A remix is a composition that's been edited or recreated to sound different from the original. There are many reasons why musicians remix music. For instance, it might allow the music to reach a different audience. In this case, by taking small fragments [samples] from a classical piece, and putting them together in a framework with rock/pop/techno sounds, we can make connections between familiar and less familiar music.

Before beginning the creative process, play the recordings of the orchestral version or the original organ version of Bach's *Toccatà and Fugue* to students (both audio tracks are included in Remix zip). Ask students to think about which sound they prefer, organ or orchestra?

Play the clip from the Ten Pieces film presented by James May to students (available on [bbc.co.uk/tenpieces](http://bbc.co.uk/tenpieces)), explaining the context and background of Bach's famous piece with an orchestral performance.

## 2. Listen/discuss

Ask students to listen to the samples provided and ask them to select just ONE sample they would like to work with (this can be done as a class or in small groups of pairs). Then ask them to think about how they might want to use their chosen sample. For example:

- Might it be a looped sample, providing an ostinato-like backing?
- Would it be used more sparingly as a 'one-shot' solo sound?
- What sort of sounds would you put with it – would it work well with some tight rhythmic sounds, or something more spacey and ambient?

## 3. Try out some ideas

Having had these preliminary discussions, students should take their chosen single sample and try combining it with two or three other sounds in their DAW. These can be samples from the DAW library, or clips they create themselves using midi and/or audio.

Example: Here is a one bar phrase from the Toccata, which has been looped [listen1.mp3](#)



Here it is again, combined with some samples from a DAW sound library:



Students should repeat this exercise a few times, saving their best ideas for use in the project.

Ask students to consider:

- Does their sample 'knit' together well musically with the other sounds?
- Have the tracks been balanced so that all sounds can be heard clearly? (Students can do this by making adjustments to the volumes of tracks, panning or adjusting the EQ settings).

#### 4. Planning a structure

Explain to students that remixing is no different from any other approach to composing music. The sounds have to be combined in ways that sound musically satisfying when played together. As a bare minimum, pieces need a beginning, a middle section and an ending. These need to run smoothly into one another. Students should now map out their sections on their DAW and label them accordingly.

Here is one simple possible scenario:

<b>Description</b> [numbers in brackets = length in bars]	<b>Intro</b> [4]	<b>Section A</b> [16]	<b>Section B</b> [16]	<b>Section A rpt</b> [16]	<b>Ending</b> [4]

#### 5. Putting it all together

Breaking the piece into these bite size chunks allows students to focus on one section at a time, whilst not losing a sense of the bigger picture.

Section B should contrast in some way from the sections on either side. It might be significantly quieter or louder, or may feature some different instruments and sounds.

The repeat of Section A could employ some small variations, but not necessarily.

Note: there is a great opportunity here to compare and contrast the orchestral and organ versions of this piece by using samples from both pieces in different ways. The main differences are to do with timbre and texture. As a broad generalisation, the organ has a fatter, fuller sound which contrasts with the more clearly defined sounds of the orchestra.

Listen to this example that phrases from both organ and orchestra recordings, together with some drum and bass loops:



#### 6. Tidying up

Less is sometimes more. There can be a temptation to cram as many sounds as possible into the framework. There's often an assumption that the more sounds we add, the more interesting the piece will be. However, the danger is that the music can start to sound muddy and cluttered. Consider leaving spaces between repeats of phrases to allow the music some 'breathing space'. Think about the texture and have some sections where just one or a few instruments are playing.

There will be times when some sounds are too loud, perhaps drowning out other sounds [which may be too quiet]. Each track will have its own volume control. Adjust these until you get a good balance between relative volume levels.

Finally, think about panning the sounds. The pan controls will allow you to move some sounds over to the left hand speaker and some to the right, making for a less cluttered mix.

Adding some effects or EQ to some of the sounds might be worth considering, as a way of adding extra interest or depth to a track.

## 7. Sharing the finished work

The 'problem' with work produced digitally is what to do with it once completed. So often, the music created just sits on a hard drive or an online space, and is only usually shared with those engaged in similar activity. Performing digital works in front of an audience can be dull and boring if all you are doing is pressing the 'play' button. Consider giving your piece some added visual context – perhaps working with others to add projected visuals or a live dance element? An online remix competition is another possibility with students across the community voting for their favourite remix.

## 8. Homework

Homework can centre on listening and should take place before beginning the project. Students should be encouraged to listen to and review the two different versions of Bach's Toccata and Fugue (the original organ version and the orchestrated version), both of which students will be able to download from or listen to on the Ten Pieces website. They can also be encouraged to find the composer profile on the Ten Pieces website to learn about the composer and the music.

## Key vocabulary

<b>DAW</b>	Digital Audio Workstation – computer software for recording and editing audio files
<b>Samples/clips</b>	Short audio recordings, usually just a few bars long
<b>Loops</b>	Created by repeating a sample continuously
<b>Ostinato</b>	A repeated musical phrase, used as accompaniment
<b>One shot</b>	A single hit of a sample i.e. non repeated
<b>EQ</b>	Altering the bass/treble frequencies of a sound
<b>Panning</b>	Moving sound to the left or right in a stereo field
<b>Effects</b>	Modifying sounds by use of delay, reverb, compression, phasing etc.

## **Applying the remix approach to other pieces**

The remix approach can be applied to any piece of music.

Create a new library of samples either from extracts of existing pieces or by creating original samples (which can be a very rewarding musical activity, encouraging really close listening).

Listen out for qualities in orchestral music which make them suitable for further remix work - for example driving rhythms for a very lively, beat-filled mix or slower, melodic passages that can be combined with ambient sounds to create a soundscape mix.

The following of the Ten Pieces have sections that make them particularly suitable for remixing:

Shostakovich – Symphony No. 10, 2nd movement – driving rhythms that can be easily isolated

Bizet – Habanera – the bass ostinato at the beginning

Vaughan Williams – Lark Ascending - samples from the solo violin sections could be worked into a soundscape mix

Students can be encouraged to choose their own samples from any of the ten pieces.