Oide

Tacú leis an bhFoghlaim Ghairmiúil i measc Ceannairí Scoile agus Múinteoirí

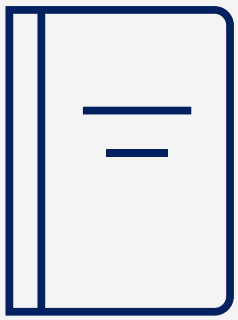
Supporting the Professional Learning of School Leaders and Teachers

Digital Learning Technologies

in **MUSIC**

Book 1

Contents



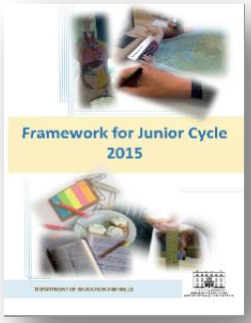
Section 1
Key Documents

Junior Cycle Music Learning Outcomes

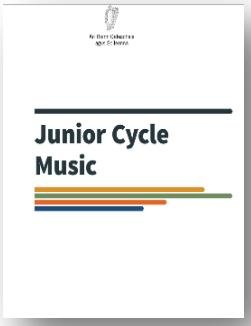
Strand: Procedural Knowledge	Strand: Innovate & Ideate	Strand: Culture & Context
Elements — Creating and Exploring		
1.1 compose and perform or play back short musical phrases and support these phrases by creating rhythmic/melodic/harmonic ostinati to accompany them 1.2 create and present a short piece, using instruments and/or other sounds in response to a stimulus 1.3 design a harmonic or rhythmic accompaniment, record this accompaniment and improvise over this recording 1.4 indicate chords that are suitable to provide harmonic support to a single melody line	2.1 experiment and improvise with making different types of sounds on a sound source and notate a brief piece that incorporates the sounds by devising symbolic representations for these sounds 2.2 create a musical statement (such as a rap or an advertising jingle) about a topical issue or current event and share with others the statements' purpose and development 2.3 adapt excerpts/motifs /themes from an existing piece of music by changing its feel, style, or underlying harmony	3.1 collaborate with fellow students and peers to produce a playlist and a set of recordings to accompany a local historical event or community celebration 3.2 examine and interpret the impact of music on the depiction of characters, their relationships and their emotions, as explored in instrumental music of different genres 3.3 make a study of a particular contemporary or historical musical style; analyse its structures and use of musical devices, and describe the influence of other styles on it
Elements — Participating and Music Making		
1.5 read, interpret and play from symbolic representations of sounds 1.6 listen to and transcribe rhythmic phrases of up to four bars and melodic phrases of up to two bars 1.7 perform music at sight through playing, singing or clapping melodic and rhythmic phrases 1.8 rehearse and perform pieces of music that use common structural devices and textures 1.9 demonstrate an understanding of a range of metres and pulses through the use of body percussion or other means of movement	2.4 rehearse and present a song or brief instrumental piece; identify and discuss the performance skills and techniques that were necessary to interpret the music effectively 2.5 prepare and rehearse a musical work for an ensemble focusing on co-operation and listening for balance and intonation; refine the interpretation by considering elements such as clarity, fluency, musical effect and style 2.6 design a rhythmic or melodic ostinato and add layers of sound over the pattern as it repeats, varying the texture to create a mood piece to accompany a film clip or sequence of images 2.7 create and present some musical ideas using instruments and/or found sounds to illustrate moods or feelings expressed in a poem, story or newspaper article	3.4 compose and perform an original jingle or brief piece of music for use in a new advertisement for a product, and record the composition 3.5 devise and perform examples of incidental music that could be used in a variety of contexts or environments
Elements — Appraising and Responding		
1.10 discuss the characteristics and defining features of contrasting styles of music represented in the local school or community 1.11 illustrate the structure of a piece of music through a physical or visual representation 1.12 indicate where chord changes occur in extracts from a selection of songs 1.13 compare different interpretations or arrangements of a piece of Irish traditional or folk music, paying attention to musical elements and other influences 1.14 compare pieces of music that are similar in period and style by different composers from different countries	2.8 analyse the chordal structure of excerpts from a range of songs and compile a list of songs with similar chord structures and progressions 2.9 distinguish between the sonorities, ranges and timbres of selections of instruments and voices; identify how these sounds are produced and propose their strengths and limitations in performance 2.10 develop a set of criteria for evaluating a live or recorded performance; use these criteria to complete an in-depth review of a performance 2.11 evaluate the impact that technology is having in how we access music; propose ways that their music, and that of their fellow students, can be shared to reach a global audience	3.6 associate/match music excerpts to a variety of texts (words, film, language) and justify the reasons as to why this piece of music was chosen to match the text 3.7 compare compositions by two or more Irish composers or songwriters; use listening, background reading, and scores (where appropriate) to explain and describe differences and similarities in the compositions 3.8 select a particular advertisement and analyse the role music plays in supporting the message and promoting the product 3.9 investigate the influence of processing effects (e.g. distortion, reverb, compression) on the recording process; select some recordings and evaluate the use and effectiveness of such effects within them 3.10 discuss the principles of music property rights and explain how this can impact on the sharing and publishing of music 3.11 explore the time allocated to Irish artists and performers on a variety of local or national Irish media and present these findings to your class

Using Digital Learning Technologies in Junior Cycle Music

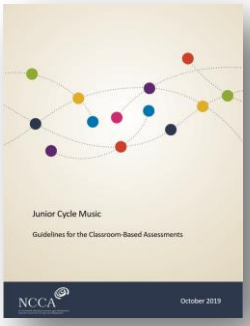
Key Documents



Framework for Junior Cycle 2015

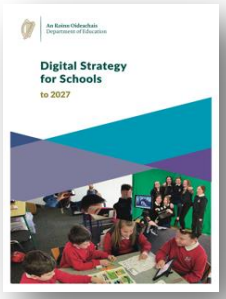


Junior Cycle Music Specification

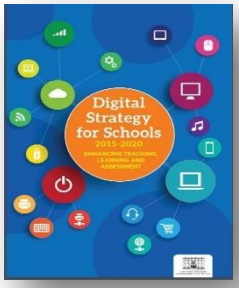


Junior Cycle Music Assessment Guidelines

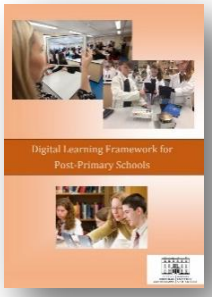
Position Digital Learning Technologies in the context of Junior Cycle Music



Digital Strategy for schools to 2027



Digital Strategy for schools (2015 – 2020)



Digital Learning Framework for Post-Primary Schools

Digital Learning Planning Guidelines

- **Why** are we using digital technology to support the learning?
- **How** might these tools support the learners and the learning?
- **What** technology do we need to realise this learning?

Digital Strategy Vision

'Empower schools to harness the opportunities of digital transformation to build digital competence and an effective digital education ecosystem so as to develop competent, critically engaged, active learners while supporting them to reach their potential and participate fully as global citizens in a digital world'

Digital Strategy for Schools to 2027, P.11

Section 2
Software and Hardware

Software to support the learning

Musescore	Cross-platform notation software and open source. Supports a wide variety of file formats and input methods	**Enables students to…** • Create, input and notate their own music • explore speed, time signatures, instruments, repeats, loops • add melody, bassline and accompaniment • listen to what they have created and make musical edits
Audacity	Cross-platform audio recorder and editor Free and open source	**Enables students to…** • record live audio through a mic or mixer • import, edit and combine sound files • export recordings in many different file formats • cut, copy, paste, splice or mix sounds together • add processing effects including changing speed and/or pitch
Garageband	Garageband is Apple's sound recording and mixing software Compatible for macOS and iOS devices	**Enables students to…** • explore realistic smart instruments • create loops and explore existing loops • build their own original arrangements • Create using virtual drum kits and drag-and-done Smart Drums • Add processing effects
Chrome SongMaker	Song Maker in Chrome Music Lab, is a simple way to make and share a song	**Enables students to…** • sing live into computer microphone. SongMaker will recognise the pitch and notate accordingly • create loops using a variety of rhythms and melody instruments • set length, number of beats per bar and split beats
Creatability Google Experiments	A simple musical keyboard you can play with your face, body, mouse or keys	**Enables students to…** • play and hear notes using the keys, mouse, face or body • customise a scale and the number of notes on the screen • control other instruments using a MIDI device
Soundtrap	Soundtrap is a digital audio workstation accessible directly in any browser Free cross-platform music software	**Enables students to…** • collaboratively create and edit music projects • select from a choice of inputs: computer mic, importing sounds, connecting MIDI devices or Soundtrap's built in instruments • explore and create with a range of loops • record, playback, change tempo and key signature • experiment and apply a range of processing effects including distortion, reverb, compression, vibrato, chorus, delay etc
solfeg.io	Web-based audio player that simultaneously enables chords, rhythm and melody to be played	**Enables students to…** • pick a song and practice the skill of performance • decrease speed. Loop parts • use lead sheets, tablature and lyrics • create Backing Tracks for performance practice
Flat.io Flat	Flat.io is a web-browser composition programme that allows you to create, edit and share music scores	**Enables students to…** • collaboratively create and edit music • search for arrangements of music in the library • Create, input and notate their own music • explore speed, time signatures, instruments and effects • listen to what they have created and make musical edits • export music to Soundtrap

Please note the software listed here and its uses are not prescriptive or exhaustive

Using Digital Learning Technologies in Junior Cycle Music

Guide to Cross Platform Software

Below you will find software separated by function and what hardware this software will work on

	ANDROID	CHROMEBOOK	iOS: iPhone/ iPad	iOS: Mac	WINDOWS
NOTATION	NotateMe Now Flat Score Creator	Flat noteflight sescore Chrome OS's Linux machine (Crostini) only	Flat NotateMe Now NOTION Score Creator Symphony Pro	finale noteflight sescore Flat Sibelius	NotateMe Now finale sescore noteflight Flat Sibelius
AUDIO	FLStudio Mobile BandLab Soundtrap	BandLab Soundtrap	FLStudio Mobile BandLab Soundtrap Garageband	FLStudio Audacity Soundtrap Ableton Garageband Logic Pro BandLab	Audacity BandLab Ableton FLStudio Soundtrap
VIDEO	Flipgrid Microsoft Stream loom Adobe Spark weVideo	Screencastify Adobe Spark loom Flipgrid weVideo	Adobe Spark Flipgrid loom Microsoft Stream weVideo	weVideo Adobe Premiere Pro Adobe Spark loom Flipgrid Quicktime Microsoft Stream Screencastify iMovie	weVideo Windows Movie Maker Microsoft Stream Adobe Spark Flipgrid loom Adobe Premiere Pro Screencastify

Using Digital Learning Technologies in Junior Cycle Music

Apps to Support the Integrated Nature of Learning Music

Creating & Exploring

Develops students' understanding of how music is created through experimenting, improvising, understanding and searching

Loopy HD	Create music by recording, looping and layering inputted tracks (iOS)
Music Memos	Capture song ideas by recording voice or instrument using iPhone or external microphone (iOS)
Clapping Music	Create rhythms inspired by the game challenging them to play Steve Reich's Clapping Music (iOS)
GrooveMaker	Create music by recording, looping and layering inputted tracks (iOS/Android)

Participating & Music Making

Students perform as a method of demonstrating their understanding of music through communicating fluency, technical control, rehearsing, revising, refining and interpreting

iReal Pro	Interactive, play along chord charts with changeable styles, transposition, practise loops Practise with accompaniment (iOS/Android)
Smule	Social karaoke singing app which enables a cappella, solo or group singing in a gamified recording studio (iOS/Android)
NomadPlay	Play along with an orchestra! Choose your instrument, adjust the rhythm, loop, annotate sheet music (Android/iOS)
Acapella	Students can record, synchronise, collaborate and share songs (iOS)

Appraising & Responding

Develops students' aural skills of analysis, comparison and evaluation of music through critiquing, reproducing, justifying opinions, informing decisions, expressing feelings and refining performance

Clapping Music	A game that improves your rhythm by challenging you to play Steve Reich's Clapping Music (iOS)
Sound Rebound	Produce beat patterns through colour and sound by orchestrating bumps and bounces and ricochets (iOS)
Young Persons Guide to the Orchestra	Engage with Benjamin Britten's work through illustrations, games, quizzes, score, narration and more (iPad only)
Staff Wars	A game that helps students to practise and identify the note names of the treble, alto and bass clefs (iOS/Android)

Apps to Support the Integrated Nature of Learning Music continued…

Incredibox 	Create music by dragging and dropping icons into the avatars (iOS/Android)
LaunchPad 	Create a piece of music by remixing samples (iOS)
Loopseque Lite 	Create music by moving quickly between patterns and arrange compositions (iOS)
Real Percussion 	Create music and experience percussion instruments (iOS/Android)
Tenuto 	Tenuto is a collection of 20 highly customisable exercises designed to enhance your musicality (iOS)
GroovePad 	Beat-making app to explore and create in almost any genre from dubstep to hip hop (Android)
Groovebox 	Music studio app with synth and drum machines (iOS)

Anytune 	Students can learn, transcribe and practise by slowing down the tempo, adjusting the pitch and repeating loops (iOS/Android)
Amazing Slow Downer Lite 	Students can learn new songs and techniques by slowing down the song, changing the key and setting up loops to play along to (iOS/Android)
Ultimate Guitar 	Chord resource for guitar/bass/piano thar has tutorials embedded for how to play the chords/strum patterns. (iOS/Android)
Superpads 	Create and perform to beats (iOS/Android)
Metronaut 	Tailor-made musical accompaniment app for classical musicians. Control the tempo and transpose pieces to suit all levels (iOS)
Add Music to Voice 	Record voice and this app allows you to select and add backing music to the recording (Android)
ChoirPlayer 	Hundreds of ready-to-use choir arrangements, adjust each voice and backing track part, slow down songs, cycle and loop sections (iOS /Android)

Capo Touch 	Analyses songs from audio files (key, time signature & and creates chord tabs). A great tool for ear training (iOS/Android)
Spotify 	A digital music, podcast, and video streaming service that gives access to artists worldwide (iOS/Android)
PlayIrish 	A radio player aimed at giving Irish music more airplay (iOS/Android)
Edpuzzle 	Edpuzzle allows you to engage every student, one video at a time. The process is simple - find a video, add questions and assign it to your class
Flipgrid 	Allows for video discussion. Pose questions called "topics", and students post responses using any camera-enabled device (iOS/Android)
Air Conductor 	Become the conductor of an orchestra with this app which turns your phone into a virtual conductor's baton (iOS/Android)
MSO Learn 	Discover orchestral families with the Melbourne Symphony Orchestra's MSO Learn app (iOS/Android)

Further Apps to support Teaching and Learning

MiniTool MovieMaker	A free and easy-to-use video editor without a watermark	• create movies easily • apply transitions and filters in multiple clips • add text and motion effects • export videos smoothly
Anchor by Spotify	Anchor is a free app which allows you to create and distribute your podcast	• record and upload from a phone, tablet, or computer • sync across all devices • combine music and conversation to explore audio possibilities • collaborate with co-hosts, guests and listeners
mote	Mote is a free Chrome extension for recording voice	• record and add voice notes and/or feedback to documents, assignments and emails • receive feedback and comments
NPU An Píobairí Uilleann	An arts organisation dedicated to Sharing the Sound of Ireland through Access, Education, Performance & Preservation	• research Irish music and the music of the uilleann pipes • learn some tips for playing the uilleann pipes • investigate the different parts of the uilleann pipes
showbie	Showbie is an app that combines tools for assignments, feedback and communication	• access shared documents, images, instructions and comments • receive comments, links, and voice notes • be notified of assignment deadlines • ask questions and submit an assignment
smartmusic.	A web-based suite of music education tools and home to a large, interactive music library	• suite includes accompaniments, tuner, metronome, etc • play along to pre-recorded accompaniments • track progress in an online gradebook
splice sounds	A music-making app which offers royalty-free samples, software and tutorials	• access sounds made by artists, labels and sound designers • watch tutorials on how to start and advanced techniques • explore a collection of presets to build a digital studio • back up project files in the cloud

Other DLT Supports

BOOK CREATOR · Forms · Experiments with Google · Kahoot! · CHROME MUSIC LAB · Quizlet · genially · Google Sites · padlet · thinglink. · Google Forms

Support Websites

- The Session — https://thesession.org/
- Foley Artists: How Movie Sound Effects are Made — https://youtu.be/U_tqB4IZvMk
- How to translate the feeling into sound | Claudio — https://youtu.be/q5yxIzs5Wug
- Fossils Carnival of the Animals listening map — https://bit.ly/2QdWnuI

All logos are hyperlinked. To access an application or software, please click on the relevant logo

Using Digital Learning Technologies in Junior Cycle Music

Guide to Cross Platform Hardware


Chromebook


PC


iMac


Tablet


Phone


iPad

Using Digital Learning Technologies in Junior Cycle Music

Guide to Extension Hardware

Audio-Interface 	**PreSonus Audiobox iTwo** • is used to make good quality home recordings. It is an external sound card with inputs for mics and instruments • USB 2.0/iPad/Audio/MIDI Interface & Accessory Bundle • 2x XLR/Audio jack inputs • 2x Balanced ¼" TRS Line Outputs • Stereo Headphone output • 24-bit, 96kHz digital converters • Class A Pre-Amplifier & +48V Phantom Power	**Enables student to…** • create quality recordings • record instruments • mix and master their recordings • create Podcasts • create sound effects for video • connect to MIDI controller • reduce recording lag time
Microphone  Three main types of microphone and each has its own unique sound and strengths	**1.DYNAMIC:** Versatile and will take wear and tear. Not particularly sensitive which makes them perfect for loud sources. Useful for snare drums and guitar amps. They are cardioid meaning the mic picks up sound in the direction it is bring pointed and cancels out any sound coming from behind it. Can use dynamic mic on almost everything but be aware the sound will not be as accurate or 'pretty' as a condenser mic **2.CONDENSER:** Powerful, more balanced, accurate and 'sweeter' sounding. Much more sensitive, which makes them perfect for softer and brighter sounds. Condensers give extra 'air' to what they pick up, making them sound less muffled than a dynamic. They have switches that change their patterns. Cardioid as before. Bidirectional, which picks up sound from the front AND back, while cancelling out sounds on the sides. Omnidirectional which picks up sound from all over, cancelling nothing. Two types: ***Diaphragm*** for full-bodied instruments and ***pencil*** for brighter instruments. **NOTE**: they need 48V of power to work (PhantomPower), make sure your interface has this option. **3.RIBBON:** Most sensitive so meant to be used on softer sounds, like voice or strings. Fragile and can be expensive. They are bidirectional so better used in a room that is well treated to lower the amount of room sound that is captured. For 'home' recordings dynamic and/or condensers mics should be sufficient.	
MIDI Keyboard 	**M-Audio Keystation 49 MK3** • USB powered 49 Key MIDI controller • Software Addition: Pro Tools, Ableton lite etc • A MIDI keyboard or controller keyboard is a piano-style electronic musical keyboard	**Enables students to…** • record and input music into music software
Headphone splitters 	• A headphone splitter is a device that allows two or more headphones to be connected through to one audio jack	**Enables students to…** • Listen to, collaborate and edit pieces of music on the same computer

Guide to Microphones

DYNAMIC Microphone: Versatile and will take wear and tear

- Not particularly sensitive which makes them perfect for loud sources e.g., snare drums and guitar amps
- They are cardioid meaning the mic picks up sound in the direction it is bring pointed and cancels out any sound coming from behind it
- Can use dynamic mic on almost everything but be aware the sound will not be as accurate or 'pretty' as a condenser mic. Suitable for classroom or home recordings

CONDENSER Microphones: Powerful, more balanced, accurate and 'sweeter' sounding

Diaphragm

Pencil

- More sensitive, which makes them perfect for softer and brighter sounds. Condensers give extra 'air' to what they pick up, making them sound less muffled than a dynamic
- They have switches that change their patterns. Cardioid (see Dynamic Microphone). Bidirectional, which picks up sound from the front AND back, while cancelling out sounds on the sides. Omnidirectional which picks up sound from all over, cancelling nothing
  Two types: ***Diaphragm*** for full-bodied instruments and ***pencil*** for brighter instruments
- **Note**: they need 48V of power, Phantom Power, to work so make sure your interface has this option. Suitable for classroom or home recordings

RIBBON Microphone: Most sensitive so meant to be used on softer sounds, like voice or strings

- Fragile and can be expensive
- They are bidirectional so better used in a dry room that is well treated (with baffles/foam) to lower the amount of room sound that is captured

EXTERNAL Microphones: plug directly into your phone / device for better audio quality

e.g., Rode VideoMic ME (iOS and Android)

- Plug direct or via a TRRS audio jack
  Note: This avoids the need to use an interface and DAW technology
- Open the camera and the audio will be captured directly or use the app specific to the external mic you are using
- The audio will export to an uncompressed lossless format (See *Guide to Audio File Formats*)

TS Audio Jack

3.5mm/6.35mm connector is used for connecting an instrument to an amplifier, pedalboard, audio interface, mixer, or DI box. It captures an unbalanced mono sound

TRS Audio Jack

3.5mm/6.35mm connector is used for earphones, connecting to a mixer/ audio interface or computer. It has three conductors capturing a balanced mono or unbalanced stereo sound

TRRS Audio Jack

3.5mm connector is used for earphones with a built-in microphone or connecting to an external recording device. It has four conductors capturing a balanced mono or unbalanced stereo sound

Using Digital Learning Technologies in Junior Cycle Music

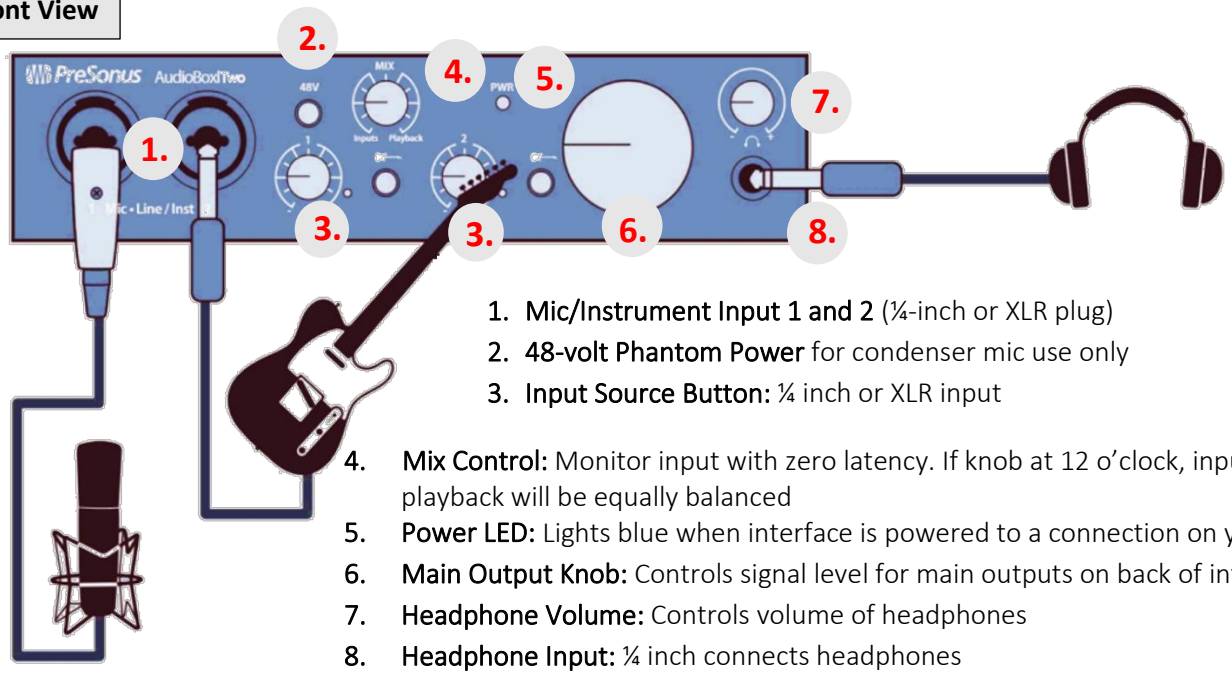
Guide to Setting up an Audio Interface

An Audio Interface allows you to connect and record a variety of instruments playing live into a computer. Essentially, it is an external sound card which enables you to connect musical instruments and other equipment to a computer.

By using audio editing software, you can record students playing instruments live and then edit or process these recordings. Connecting to computer speakers and/or headphones will enable you to listen to the recorded or real-time (live) audio. This is useful when a number of musicians are recording the same piece.

There are a wide variety of audio interfaces available.
The interface featured in this resource is for illustrative purposes only.

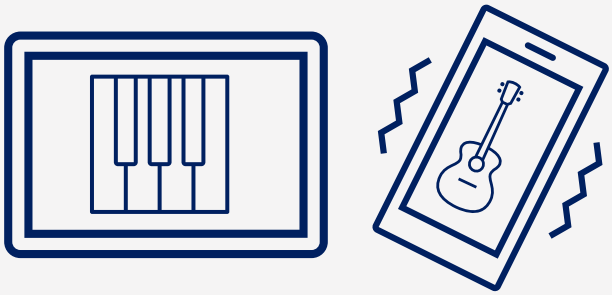
Front View



1. **Mic/Instrument Input 1 and 2** (¼-inch or XLR plug)
2. **48-volt Phantom Power** for condenser mic use only
3. **Input Source Button:** ¼ inch or XLR input
4. **Mix Control:** Monitor input with zero latency. If knob at 12 o'clock, input and playback will be equally balanced
5. **Power LED:** Lights blue when interface is powered to a connection on your device.
6. **Main Output Knob:** Controls signal level for main outputs on back of interface.
7. **Headphone Volume:** Controls volume of headphones
8. **Headphone Input:** ¼ inch connects headphones

Back View

1. **MIDI In/Out:** Midi inputs and outputs allow connection to external MIDI equipment
2. **Power:** Connect USB cable (supplied) to computer to power interface. No external power supply required
3. **Device port**: Allows an Apple cable to connect to interface
4. **Main Outputs**: To connect speakers to interface

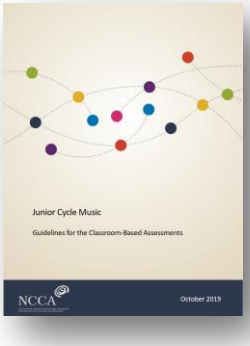


Section 3
Create Music

Create Music

Creating Music provides opportunities for students to…

- collaborate with others on creative endeavours
- express themselves in a non-verbal context
- communicate effectively and with confidence
- develop an understanding of the relationship between music and societies
- reflect on their progress and their musical choices



Underlying and informing the Composition Portfolio is a focus on the developmental nature of creating and composing, and on developing student's understanding of this creative and often imaginative process

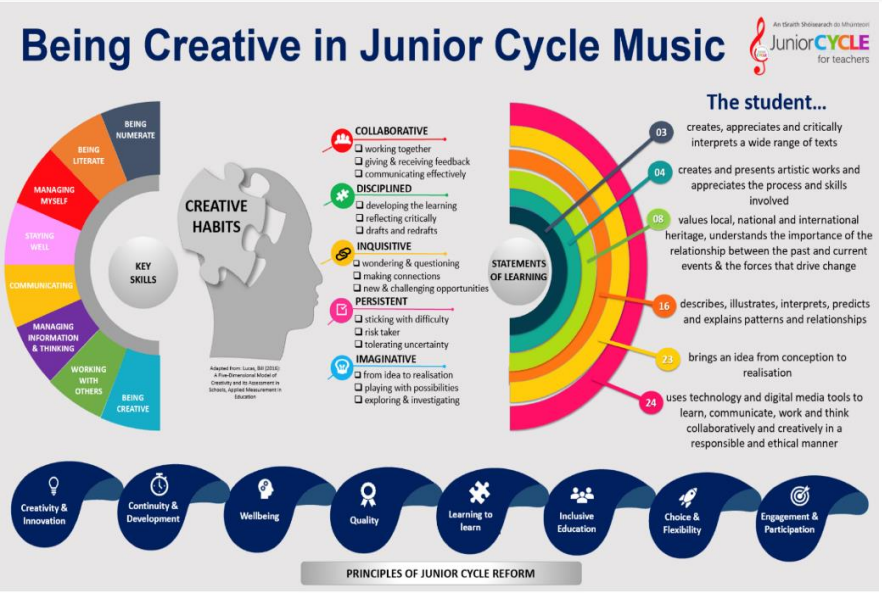
…Assessment Guidelines, p.13

The collection of student compositions promotes engagement when students…

- draw on their personal experiences and perspectives to develop, refine, showcase and seek feedback on their musical ideas
- identify and choose the stimulus for the creative work
- choose the format(s) in which to create the piece of music
- develop their ideas through engagement with other aspects of the music course
- collaborate through the discussion and exploration of ideas and motifs

Being Creative in Junior Cycle Music

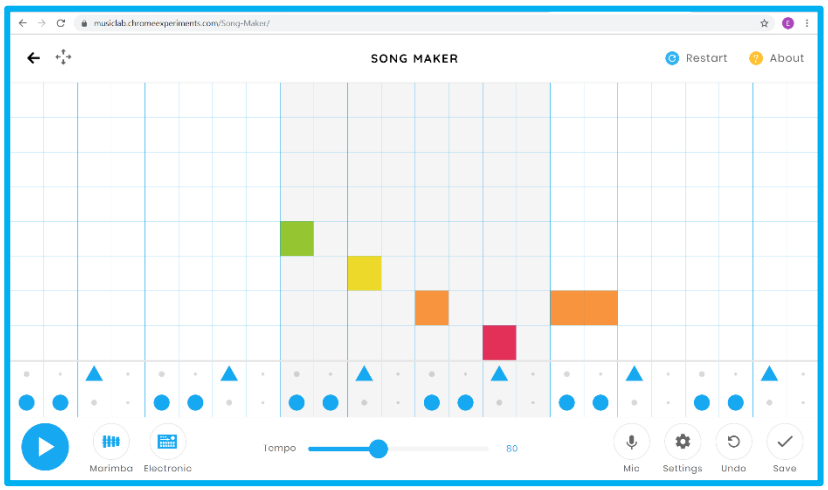
Click the image to link to the poster on jct.ie



Evidence of Learning

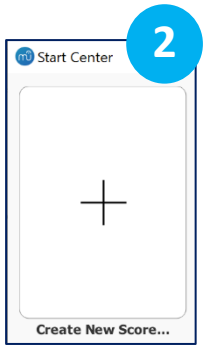
Task: Create and play back a short musical phrase with an accompanying rhythmic ostinato

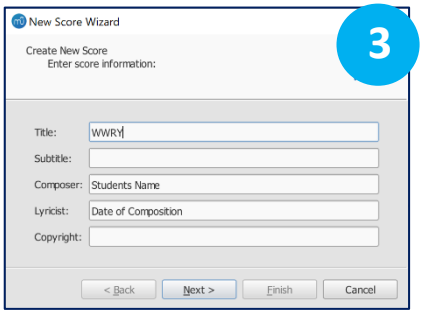
g.co/songmaker

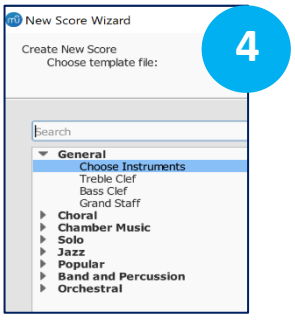


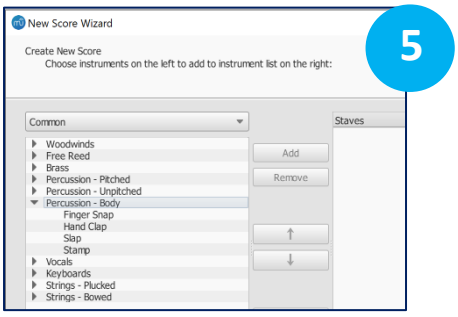
1.1 compose and **perform or play back** short musical phrases and support these phrases by creating rhythmic/melodic/harmonic ostinati to accompany them
1.5 read, interpret and play from symbolic representations of sounds
1.6 listen to and **transcribe rhythmic phrases of up to four bars and melodic phrases of up to two bars**

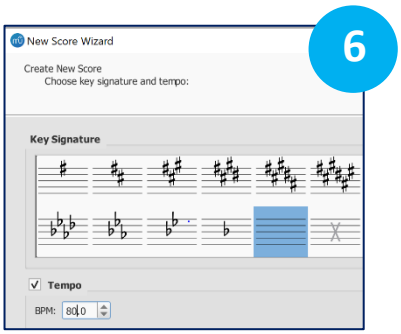
1

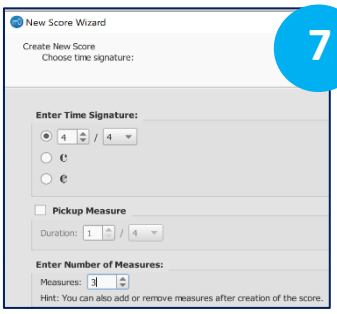


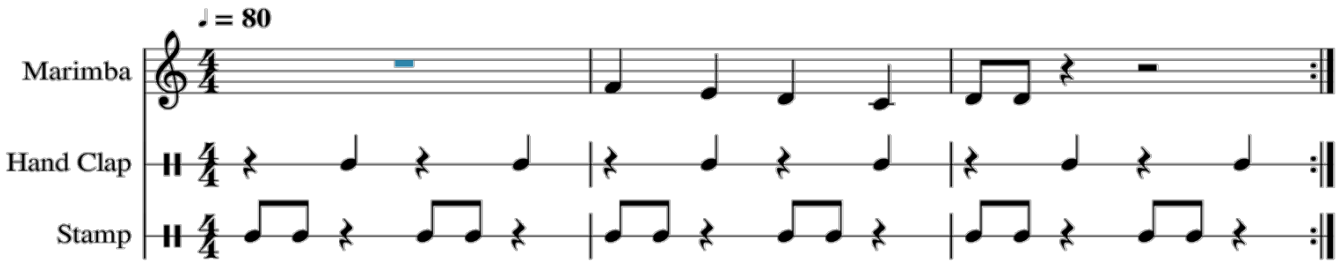




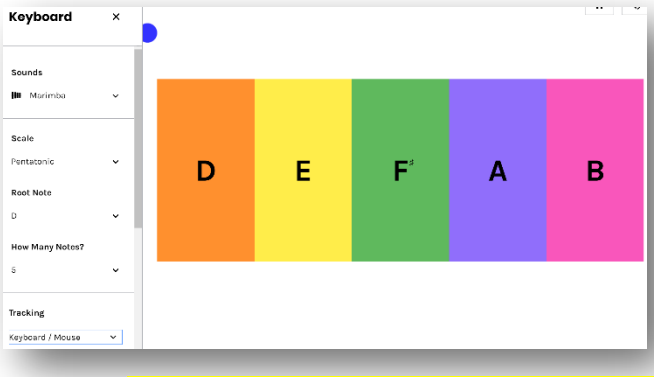








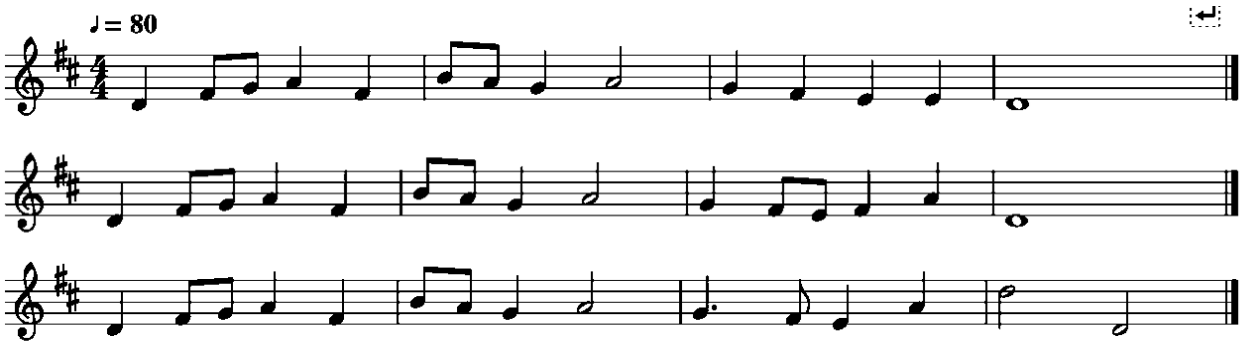
2.1 experiment and improvise with making different types of sounds on a sound source and notate a brief piece that **incorporates the sounds by** devising symbolic representations for these sounds


Keyboard ×
Sounds: Marimba
Scale: Pentatonic
Root Note: D
How Many Notes?: 5
Tracking: Keyboard / Mouse

experiments.withgoogle.com

- Set Root Note to D
- Number of notes to 5
- Colour coded notes
- Play notes using the keys, mouse, face or body
- Notate using Musescore / Manuscript

1.6 <u>listen to</u> and **transcribe rhythmic phrases of up to four bars and melodic phrases of up to two bars**



Musescore

1. Input four-bar melody using Mouse, Qwerty or MIDI interface
2. File – Export – Save as type mp3 – Save into named Class Folder e.g., JC 2021 Aural Skills
3. Open Audacity / Garageband – Create Click Track
4. Import mp3 (see page 17)
5. You can now share mp3 with your students via email and/or virtual learning environment (VLE) for students to independently practise their aural skills
6. For student aural skills worksheet, go back into MuseScore - Make notes in Bar 3 invisible – select note + press V
7. Students will use this file while listening to their MP3 file to fill in the missing melody and rhythm in bars 3 and 4

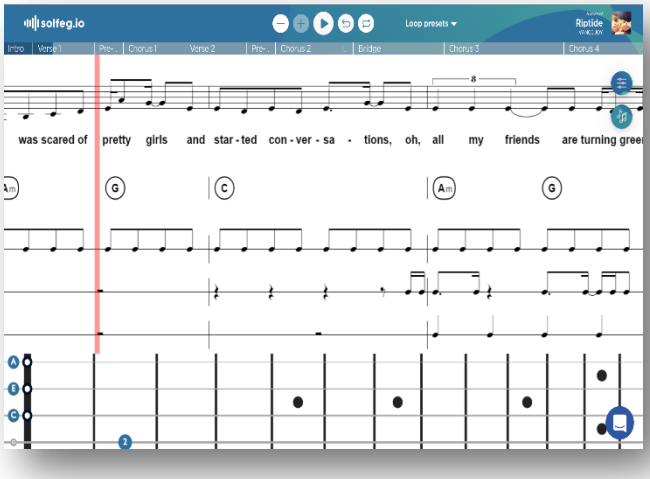
Video Support Available on Website

To progress the Learning: Students may…

- transcribe the complete four bars into their music manuscripts
- apply plug-in to colour code notes in Musescore
- go on to create their own 4-bar melody through listening and transcribing
- build up a database of melodic dictations and their own created melodies for their portfolios

1.12 indicate where chords changes occur in extracts from a selection of **songs**

2.4 rehearse and present a song or brief instrumental piece, identify and discuss the performance skills and techniques that were necessary to interpret the music effectively

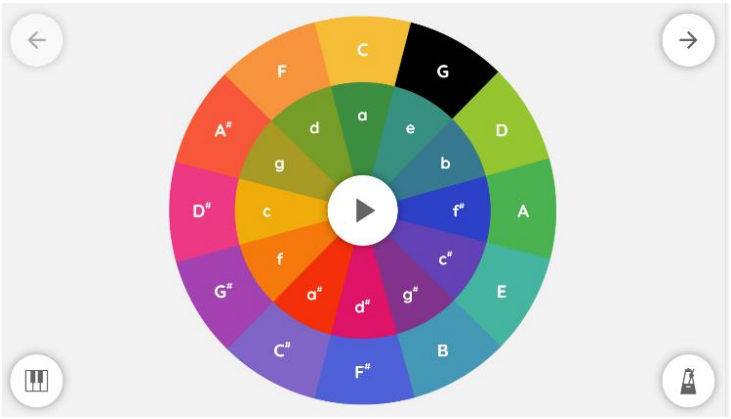


Solfeg.io

1. Choose **Song** – Search by name or filter
2. Select **Instrument** – rhythm, chords, vocal
3. Select ***Visual Controls*** to confirm instrument visuals and chords
4. Select ***Sound Controls*** to mute tracks for backing track use
5. Start **Play**ing

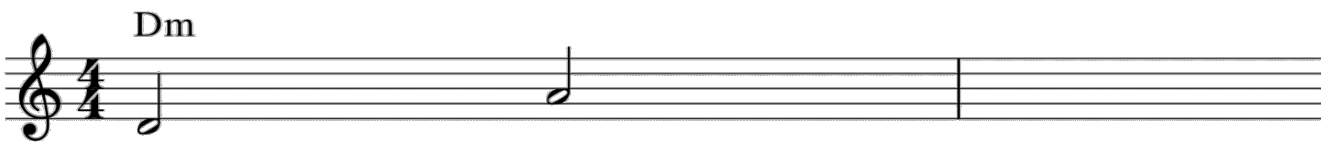
2.8 analyse the chordal structure of excerpts from **a** range of **songs** and compile a list of songs with similar chord structures and progressions

Evidence of Learning
Task: Listen to your favourite song. In pairs choose chords to fit your song. Perform or Play back your chosen chords.



musiclab.chromeexperiments.com

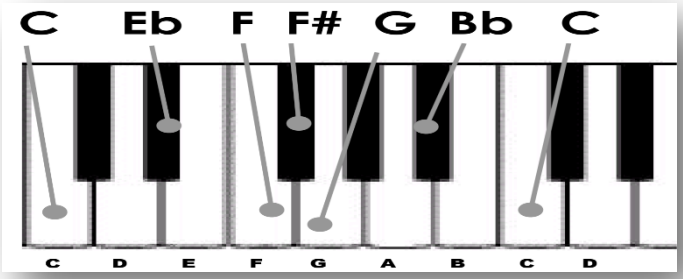
Support understanding of how to create music



Evidence of Learning
Task: Compose the next note. Choose a chord to play with this note.

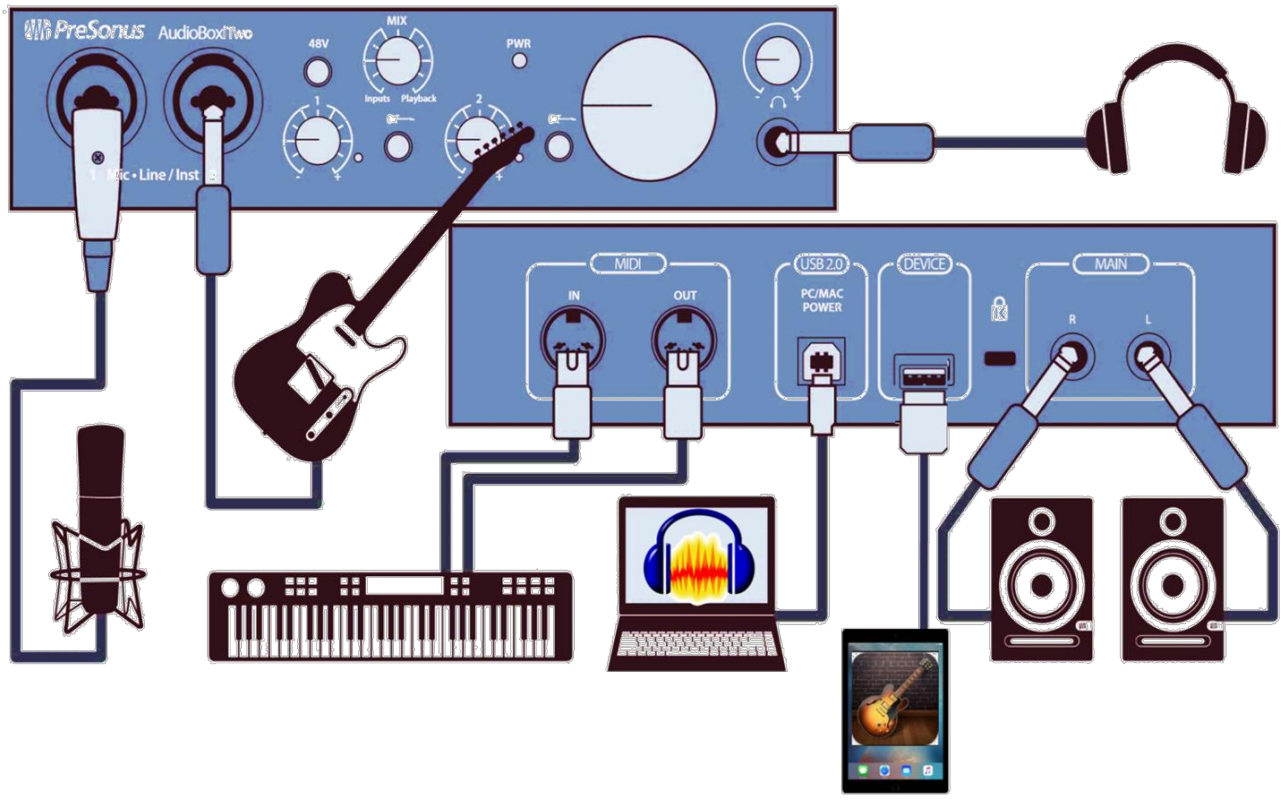
3.3 make a study of a particular contemporary or historical **musical style**; **analyse its structures** and use of musical devices, and describe the influence of other styles on it

Evidence of Learning
Task: Create and record a piece of music in the style of the blues



I	I	I	I
IV	IV	I	I
V	IV	I	I

Experience this learning using Extension Hardware

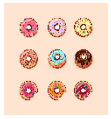


Support the Development of Creative Ideas

Evidence of Learning

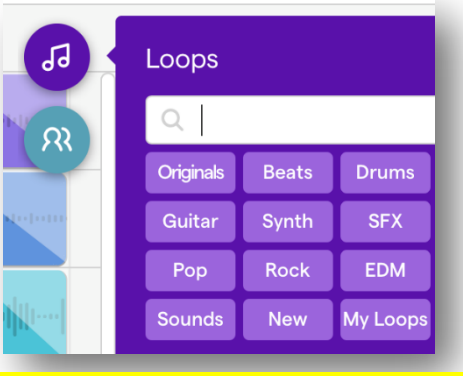
Task: Compose and record an advertising jingle for radio (15 secs) or TV (30 secs) for *'Krispey Kreme'.* Record your jingle.





3.4 compose and perform **an original jingle** or brief piece of music **for use in a new advertisement for a product**, and record the composition

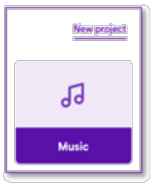
2.6 design a rhythmic or melodic ostinato and add layers of sound over the pattern as it repeats, varying the texture to create a mood piece to accompany a film clip or sequence of images



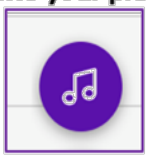
1.2 create and present a short piece, using instruments and/or **other sounds in response to a stimulus**

1

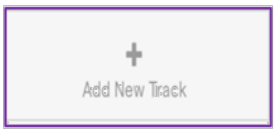
2



3 **Select loops - drag and drop into your piece**

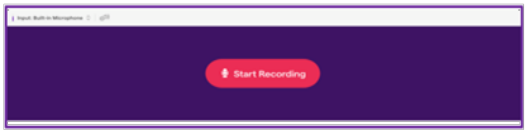


4 **Add track for vocal line**

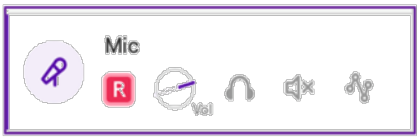


5 **Select voice & microphone**

6 **Record your vocal track**



7 **If you are recording into the track, make sure that R is ticked**



8 **You can place in fade in & fade out**

9 **Save Project**

1.3 design a harmonic or rhythmic accompaniment, record this accompaniment and improvise over this recording

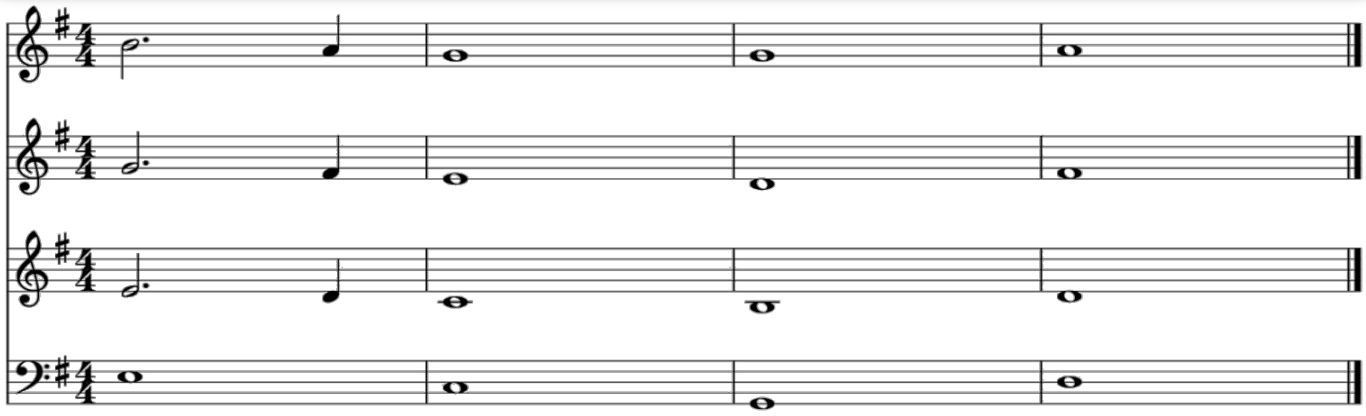
Evidence of Learning
Task: Underline the identified learning from the following learning outcomes evident that is evident in this video

Click For Video KT Tunstall - Black Horse & The Cherry Tree

1.1 compose and perform or play back short musical phrases and support these phrases by creating rhythmic/melodic/ harmonic ostinati to accompany them	**1.3** design a harmonic or rhythmic accompaniment, record this accompaniment and improvise over this recording	**1.11** illustrate the structure of a piece of music through a physical or visual representation
2.6 design a rhythmic or melodic ostinato and add layers of sound over the pattern as it repeats, varying the texture to create a mood piece to accompany a film clip or a sequence of images	**3.9** investigate the influence of processing effects (e.g.,distortion, reverb, compression) on the recording process; select some recording and evaluate the use and effectiveness of such effects within them	**3.10** discuss the principles of music property rights and explain how this can impact on the sharing and publishing of music

Click For Video Ellie Goulding - 'Burn'

Evidence of Learning
Task: Perform, record and improvise over this harmonic accompaniment



Section 4
Import and Export Audio

Guide to Audio Recording Formats

What is an audio recording format?

An audio format is a file format which stores music on your computer. This document provides a brief explanation of some of the main format types.

Audio formats belong to either *Compressed* or *Uncompressed* formats, depending on how they store the data. Where possible when recording, record in 44,100Khz and 16 bit (minimum) for studio grade recording.

Compressed Audio Formats

… compress the digital audio quality to produce a smaller file which takes up less space on your storage drive.

There are two types of compressed audio formats:

Lossless Compressed Audio Format: no loss of data during compression process.

Lossy Compressed Audio Formats: Will reduce audio quality by eliminating certain information and frequencies to reduce file size.

Uncompressed Audio Formats

…are bulky files and take up a lot of space on your storage drive.

The advantage of this format is that the digital audio is unchanged, so the quality remains intact no matter how many times you process it.

Commonly used audio formats include the following:

AAC The Advanced Audio Coding (AAC) format stores lossy compressed audio. It is an alternative to mp3 as it offers better quality than mp3 at lower size files.

AIFF The Audio Interchange File Format (AIFF) is an uncompressed audio format. Commonly used for professional audio application.

ALAC The Apple Lossless Audio Codec (ALAC) format used on iTunes and iOS has no loss in quality when compressing data.

FLAC Free Lossless Audio Codec (FLAC) is an audio format similar to mp3, but lossless, meaning that there is no loss in quality when compressed.

M4A MPEG 4 Audio (M4A) is an audio-compressed file. File quality is better than MPEG format. Programs that open M4A files include iTunes, QuickTime, Windows Media Player.

MP3 The MPEG Audio Layer 3 (MP3) format uses a lossy compressed format. It reduces the file size by omitting data from the file. It is useful when storing large quantities of music without taking up too much storage space and has adequate quality.

MPEG Moving Picture Experts Group (MPEG) is an audio file format used on cross-platform software and is a suitable format for video editing. It is possible to transfer this file into audio editing software and edit the audio only.

WAV The Wavform or WAV audio format stores uncompressed audio data. There is no loss of audio quality using this format. This format can be easily edited and processed.

WMA The Windows Media Audio (WMA) format is a lossy compressed audio format used with Windows Media Audio. It retains the original audio quality with no removal of data when decompressed and played back.

How to Import an MP3

GARAGEBAND

On iPhone/iPad

- Open Garageband and select **+** sign
- Create new song and Select **Audio recorder**
- Switch to track mode by tapping the **Track** sign at the top of the screen
- Click the **loop** sign
- Go to **Files,** browse items in the files app to locate the mp3 track
- Hold down the mp3, drag and drop into Garageband

GARAGEBAND

On Mac

- Open Garageband and start a new track
- If the MP3 is on the desktop simply click, drag and drop into the new track
- If the MP3 is in Garageband/Apple Music library - go to media browser - locate and select the MP3 file you are looking for

---

AUDACITY

- Open Audacity
- **Option 1**: Click, drag and drop the MP3
- **Option 2** for multiple MP3s: Select **File > Import >** and **Select Audio**
- Hold CTRL + SHIFT and Select your chosen multiple MP3 tracks
- Click **Open**

SOUNDTRAP

- Open Soundtrap and click **Enter Studio**
- Start a **new music project**
- Click **Import file**
- Locate audio (MP3) file on your computer and click **Open**

How to Export an MP3

GARAGEBAND

On iPhone/iPad

- Press and hold down the file you wish to export
- Options dialogue will open
- Select **Share**
- Choose a format to send your audio fie as **Song**
- Select **High Quality**
- Export your MP3 to the required location

GARAGEBAND

On Mac

- Locate the file you which to export on Garageband
- Select **Share**
- **E**xport the file to the relevant location you want it to go to

---

AUDACITY

- Open the file you wish to export
- Select **File > Export > Export as MP3**
- Find and select the folder in which to save the MP3
- Click **Save**

SOUNDTRAP

- Select the file which you wish to export
- Go to **File > Export > Export project to mp3 file**
- File will appear on the bottom of the computer screen
- Click on and **Save** to the relevant location

MUSESCORE

- From the menu select **File > Export**
- In the Save as type drop down menu select **MP3 Audio (*.mp3)**
- Click **Save**

FLAT.io

- With your project open select the export button
- Select **Audio (.mp3)**
- This mp3 is now saved in the downloads folder

Section 5
Edit, Mix and Record Audio

Using Digital Learning Technologies in Junior Cycle Music

How to Record Audio

Preparation:

- Carefully choose your recording space to reduce environmental sounds where possible
- Identify where the microphone is located on your device and ensure there is nothing obstructing it
- For best recording, position the device so it is static and at mouth/instrument level
- When recording vocals, position the microphone at a slight angle to avoid 'pop' sounds
- A dry space (curtains/fabric) is the optimum environment for recording audio
- Before you start recording, mute all notifications to avoid interruptions

On iOS/Android:

- Open **Voice Memo (iOS)** or **Voice Recorder (Android)** app
- Press the to start, timer will begin and the audio will begin recording
- To pause, press the red button once, to end select **Done** (iOS) or **Stop** (Android)
- Enter a name for your audio recording and select **Ok**

This audio is now stored on your Smartphone as an M4A audio format (See *Glossary of Audio File Formats)*

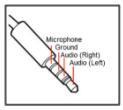
On WhatsApp:

- Open WhatsApp and create message
- Press and hold the mic icon to record. Release to stop recording and immediately send message
- To email…
  Option 1 Android: Press and hold the audio recording, when highlighted select **Share > Email**
  Option 2 iOS: Open WhatsApp desktop version, click on top right-hand corner of audio recording, download the message and send via email

The audio recording is a lossy audio format which can be opened by a wide variety of media players.

Using an External Microphone Plugged into your Smartphone:

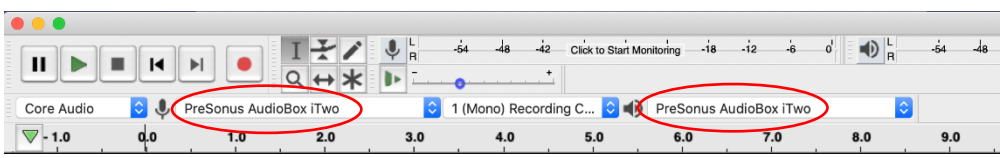
- **Option 1:** Connect wirelessly via Bluetooth. Switch on Bluetooth microphone or transmitter. Open the Bluetooth menu on smartphone and ensure phone is discoverable. When devices are in range, phone will indicate mic device. Select the microphone in the Bluetooth device list to connect mic and smartphone.
- **Option 2:** Connect Via Headphone Jack using a 3.5mm (1/8") TRRS Tip, Ring, Ring, Sleeve connector cable. Please note you may require an adaptor for this.
  1 **black insulator** on headphone connector = Mono Sound, 2 **black insulators** = Stereo sound or Balanced Mono and 3 **black insulators**= Stereo sound or Balanced Mono plus microphone
- **Option 3:** Connecting via Charger Port



TRRS Cable

Using a Computer:

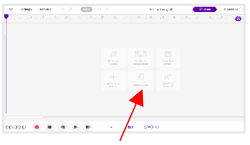
- **Option 1:** Using the internal microphone, open your chosen digital audio workstation (DAW) e.g., Audacity, Soundtrap etc and press record
- **Option 2:** Using a plugin USB microphone, select **System Preferences (iOS)** or **Sound Settings (Windows)** and select your **Input** device (Microphone (USB Audio Device)
- **Option 3:** Using an Audio Interface, open your chosen digital audio workstation (DAW): i.e. Audacity change the recording channel to the name of your interface e.g., Presonus Audio Interface (See *Guide to Setting up an Audio Interface)*



Changing the Recording Channel to Name of Interface on Audacity

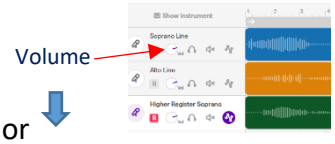
How to Edit and Mix Audio in Soundtrap

Step 1: Import the Backing Track and multiple Vocal Tracks



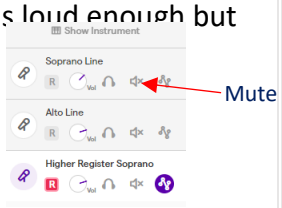
- **Option 1**: Click, drag and drop the MP3 files into Soundtrap
- **Option 2:** Enter studio. Start music project. Select **Import File > Select MP3(s)>Open**

Step 2: Adjust Volume levels for playback to avoid distortion

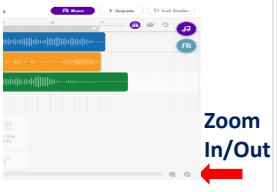


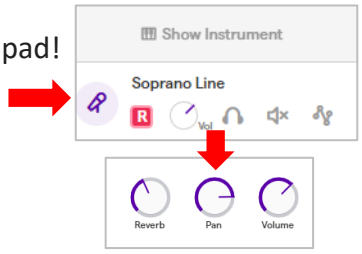
- Select required audio files
- Using the **Volume** knob designated to that instrument/voice, click and slide ⬆ or ⬇
- **Note:** Select **'Save':** SoundTrap will auto-master your project to a volume level which is loud enough but without distortion in your final mix.

Step 3: Align Vocals



- Set the volume of your backing track
- Delete all unwanted silence at the beginning of each track. To do this highlight the track. Move the timeline marker to the point at which you want to split the track. **Ctrl+E** or right click and select **Split region.** Delete unwanted section or backspace.
- Use your ear to align each vocal track, one at a time
- Click **Mute** on all unrequired tracks
- Click and drag the vocal track you wish to align until in desired position.
  You may wish to zoom in to the track for accuracy.
  To zoom: (a) Use the zoom in/out lower right corner in the studio
  (b) Shortcut: Use **Cmd/Ctrl+arrow** left/right
  (c) Touchpad: Use two fingers to zoom in/out if you have a touchpad!





- Once aligned, delete silence at the end of each track

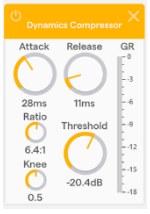
Step 4: Apply Processing FX

- **Panning**: Use the Mic symbol or **Show Instrument** to open effects
- Set Sopranos to left / Altos centre / Bass to right etc. Click and slide ⬆ or ⬇
- **Reverb:** to add to Vocal tracks only
- Select each vocal track by clicking the Mic symbol or **Show Instrument** to open effects
- Click and slide the reverb knob ⬆ or ⬇ until the desired effect has been reached
- **Compression**: enables you to smooth out the dynamics of the tracks
- Select **Show Instrument > Effects > Add Effects**. A range of additional effects appear
- Select **Compressor 1**: for use on bass instruments, adjusting to 1 o'clock adds a punch!
- Select **Dynamics Compressor**: For vocals, apply this compressor as it smooths the volume while still sounding natural. Having the tracks set as shown gives a smooth yet powerful vocal sound

Additional Effects

Final Step

- **Note:** Select **'Save':** SoundTrap will auto-master your project to a volume level which is loud enough but without distortion in your final mix
- Select **File > Export.** SoundTrap allows you to **Export as….mp3, wav** or export as

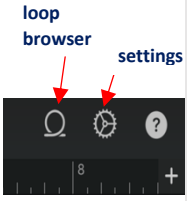


Dynamic Compressor Settings for Smooth Vocals

Using Digital Learning Technologies in Junior Cycle Music

How to Edit and Mix Audio in Garageband (iPad)

Step 1: Import the Backing Track and multiple Audio Tracks



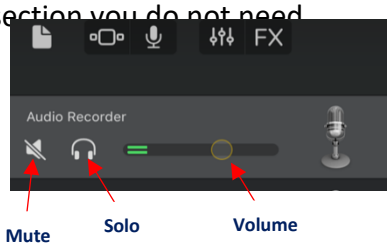
- Start in Projects Browser: **Tracks > Audio Recorder > Instrument**
- In track view **> Settings**, set up your project with the relevant bars, time signature, key, bpm
- Click **Loop Browser** in the control bar **> Files**
- Click ***'Browse items from the files app'*** **>** locate and tap **Audio > Import** it (click, drag and drop into track)

Step 2: Adjust Volume levels for playback to avoid distortion

- Select the **Track Controls** button in the control bar
- Turn down volume for each track by dragging the **Volume Slider** e.g., by -20 decibels
- You can automate volume changes throughout a track using automation curves Tap the **Track Header > Automation.**

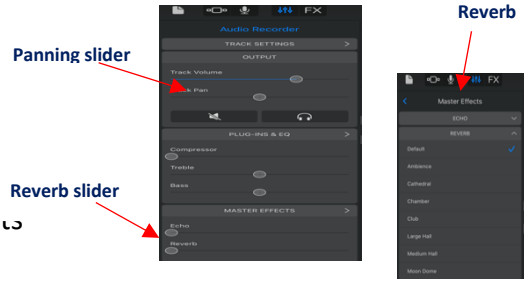
Step 3: Align Vocals

- Set the volume of your backing track
- Delete all unwanted silence at the beginning of each track. To do this double tap on the **Track > Split >** drag the scissors icon down to create two separate regions. Delete the section you do not need
- Use your ear to align each vocal track, one at a time
- Click the **Solo button** on the backing track to hear just this track
- Select the **Solo button** on the vocal track you wish to align
- Once aligned, get rid of the silence at the end of each track



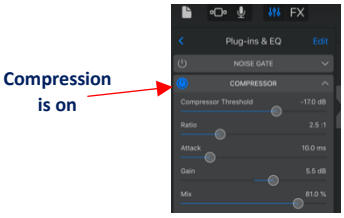
Step 4: Apply Processing FX

- **Panning**: Use the panning control for each track
- In **Track Controls**, drag the **Track Pan** Slider left or right e.g., Set Sopranos to left / Altos centre / Bass to right etc



- **Reverb:** adds definition and presence to voices and instruments
- Select the **Track**
- In **Track Controls** > tap **Master Effects**
- Tap **Reverb** and select the type of room you want it to sound like. Then drag the **Reverb Slider** to where you would like to place it

- **Compression**: enables a fuller sound and can add punch and definition to a tr
- Select the **Track**
- In **Track Controls** > tap **Plug-ins & EQ**.
- In the Plug-ins & EQ, tap the down arrow for compressor
- Choose the preferred compression you wish to achieve in the panel by adjusting
- Make sure to turn on the compressor



Video Available on Website

Final Step

- To export: Go to ***My Songs Browser***. Tap the Piece > **Share > Song > Title &**

Step 1: Import the Backing Track and multiple Vocal Tracks

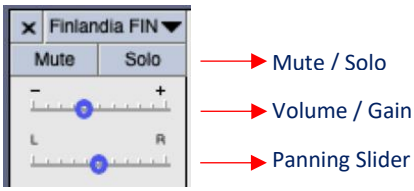
- **Option 1**: Click, drag and drop the MP3 files *or*
- **Option 2** for multiple MP3s: Select **File > Import >** and **Select Audio**

Step 2: Adjust Volume levels for playback to avoid distortion

- Hold **CTRL/CMD + A** to select all the audio files
- Select **Effect > Amplify >** and turn down volume e.g., by -20 decibels

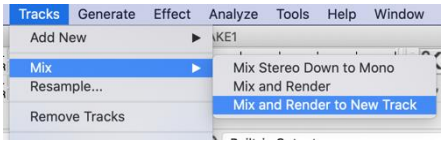
Step 3: Align Vocals

- Set the volume of your backing track
- Delete all unwanted silence at the beginning of each track
- Use your ear to align each vocal track, one at a time
- Click **Solo** on the backing track to hear just this track
- Select **Shift & Click on Solo** on the vocal track you wish to align
- Once aligned, get rid of the silence at the end of each track

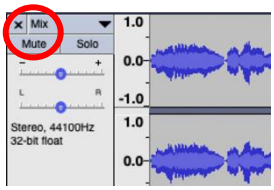


Step 4: Apply Processing FX

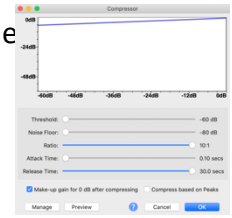
- **Panning**: Use the Slider
  - Set Sopranos to left / Altos centre / Bass to right etc

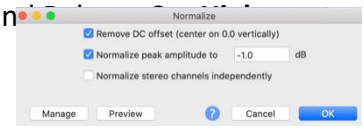


- **Reverb:** to add to Vocal tracks only
- Select all the audio by holding and dragging the cursor across the vocal tracks
- Click on **Tracks > Mix >** and **Mix and Render to New Track**
- All your vocals are now in a **NEW** track which audacity will call **Mix**
- Click on this new track: Select **Effect > Reverb > Manage >** and **Factory Presets**
- Choose your preferred reverb e.g., Church Hall, Medium Room
- If you want to add more reverb, adjust **Wet Gain** – Click **Ok**



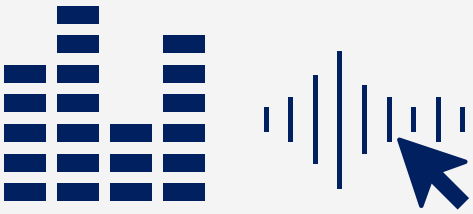
- **Compression**: enables a more fuller sound
- Select the New Vocal Mix track and the Backing Track by holding and dragging the
- Select **Tracks > Mix >** and **Mix and Render to New Track**
- Your choir and accompaniment are now in another new **MIX** track
- **CTRL/CMD + C** to copy this new **Mix** track
- Create New Stereo Track: **Tracks > Add New >** and **Stereo Track**
- **CTRL/CMD + V** to paste your new **Mix** track into this Stereo track
- Click on **Effect > Compressor:** Threshold, Noise, Attack **Set low** and Ratio an
- **Mix and Render** both these tracks in the same way as before





Final Step

- Click on this final track - Select **Effect > Normalise > Amplitude** to -1.0dB
- Select **File > Export >** choose WAV or MP3, **Title** and **Save your Master Audio Track**

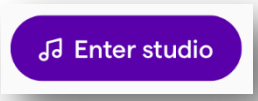


Section 6
Processing FX

Support Understanding of How to Edit Music

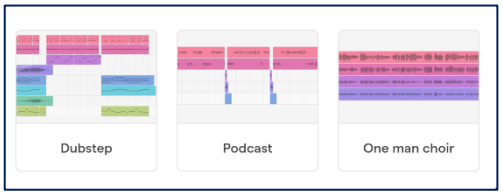
3.9 investigate the influence of processing effects (e.g., distortion, reverb, compression) on the recording process; select some recordings and evaluate the use and effectiveness of such effects within them

1 Soundtrap



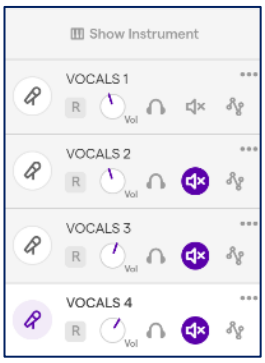
2 Demos

One man choir



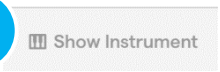
3 Play and listen

4



Mute tracks 2, 3 & 4

5



6

7

- **Processing effects**

  A series of mechanical or technological operations on a recording process that modifies the original sound inputted

- **Compression**

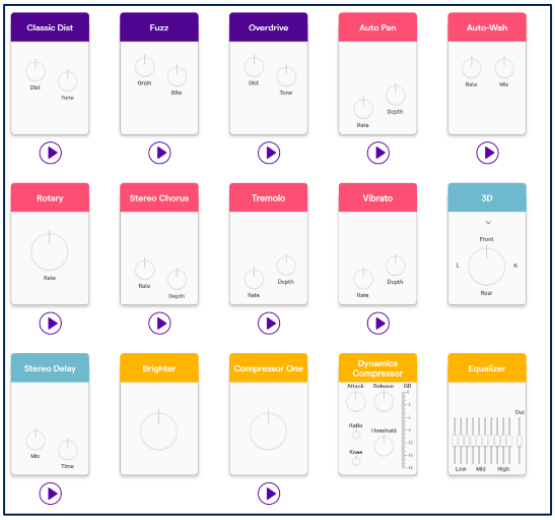
  A processing effect used in mixing or recording to control and reduce the dynamic range of the music

- **Reverb**

  A processing effect where the sound produced by an amplified musical instrument is made to reverberate; an echo effect used to recreate the natural effects of room reverberation

- **Distortion**

  Change in the form of an electrical signal or sound wave during processing; alter the sound of amplified electric music instruments and most associated with the electric guitar



3.9 investigate the influence of processing effects (e.g., distortion, reverb, compression) on the recording process; select some recordings and evaluate the use and effectiveness of such effects within them

GARAGEBAND

On iPhone/iPad

- Click on the track you wish to add the FX to
- Select the **Track Control** button and open the Track Controls for the selected track
- FX include **Track Volume**, **Track Pan** (Left/Right), add **Compression, Treble, Bass**, increase/decrease **Echo** and **Reverb**

GARAGEBAND

On Mac

- Select **Mix**
- Select **Show Automation**
- Select **Automation Parameter Control**
- FX include reverb/panning/compression/echo/distortion

AUDACITY

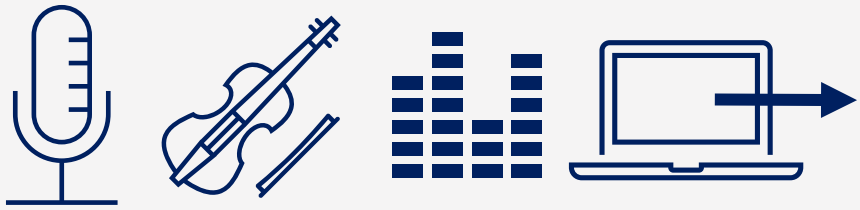
- Click on the track you wish to add the FX to
- Select **Effect**
- Select the **processing effect.** Edit as necessary and click **ok**

SOUNDTRAP

- Select **song/piece**
- Select **individual track** and click on **Show instrument/instrument icon**
- In **viewer** edit the FX using the up and down slider
- For more effects, click **Add Effects** and select **effects**

MUSESCORE

- Select **View > Mixer** or **> Synthesiser**
- **Mixer –** altering volume/pan/add reverb/chorus
- **Synthesiser > Master effects –** delay/damping etc.



Section 7
Virtual Practical Projects

Design a Virtual Practical Project

2.5 prepare and rehearse a musical work for an ensemble focusing on co-operation and listening for balance and intonation; refine the interpretation by considering elements such as clarity, fluency, musical effect and style

1. What you will need

- Notational software, e.g., Flat, Sibelius, Musescore
- Audio software, e.g., Audacity, Soundtrap, Garageband
- Video / presentation software, e.g., iMovie, WeVideo, PowerPoint
- File sharing storage for uploading files, e.g., OneDrive, Dropbox, Google Drive

2. What your students will need

- Headphones, Instrument, Score
- Smart Phone / Microphone / Camera
- Dry space for recording

3. The Recording Process

- Provide students with score and guide backing track
- Share how to record audio
- Share how to record video
- Agree how to upload / share files

4. The Production Process

With Audio…

- Separate audio from video and insert audio files into your audio editor
- Align, edit and mix tracks
- Export master audio track and save for use in video editor

With Video…

- Upload video files and master audio track into video editor
- Select chosen background and populate timeline
- Mute/ Delete the audio from the video files
- Align and edit the video visuals to the Master audio track
- Save and Export project

5. Final Steps

- Save your project in whatever video editing software you are using
- Export your file in your chosen format
- Share with your students by uploading to your chosen platform

How to Edit and Mix Video in iMovie

This support is a guide to mix and edit one video onto a background with a synced backing track on a Mac

Preparation: Create your Master Audio Track for aligning the video visuals

- Separate the audio from the student videos:
  For iPad users: separate using the MP3 Converter app
  For Mac users: separate using QuickTime player **Open video > Export audio only**
  Note: this will not delete the audio from the original video
- Edit and mix your audio in Garageband to create your Master Audio Track
- Align video visuals to this Master Track throughout this video editing process

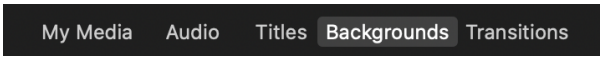
Step 1: Choose a project type from the Dashboard

- Click **Create New** and choose Movie

Step 2: Import media

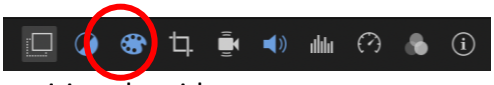
- Click, drag, and drop your video and Master Audio Track (Note: *AAC audio format works best for iMovie*) *or* click **File** > **Import Media**

Step 3: Populate the timeline



- Click on **Backgrounds** and drag your chosen background to the timeline on bottom panel of the screen
- Drag the video and Master Audio Track to the timeline
- You will now see three layers here

Step 4: Edit video



- Select the video track
- Click on **Video Overlay Settings** > **Picture in Picture**. Resize and reposition the video on the background
- Click on **Cropping > Style: Fit** to change the default Ken Burns animation
- Click on **Modify > Mute audio** or **Shift CMD M**
- To delete unwanted sections…
  at the beginning or end of the video: **Trim** by dragging the edge left or right
  in the middle of the video: place the playhead at the start of the unwanted section click **Modify > Split tool**. Then, place the playhead at the end of the unwanted section click **Modify > Split tool.** Delete section
- Sync muted video to Master Audio Track
- For further edits e.g., Fade in/out: click **Modify**

Step 5: Export

- Click on the share symbol at the top right of the screen and **Export File**

Note: Only two visual layers along with audio can be edited at one time. To mix edit and layer another video into this project you will now create a new project, import the mixed video and follow steps 3 – 5.

How to Edit and Mix Video in WeVideo

This support is a guide to edit and mix videos onto a background with a synced backing track

Preparation: Create your Master Audio Track for aligning the video visuals

- Separate the audio from the student video using WeVideo: Choose *Create a new* **Video > Import media**, drag video to the timeline, click **Finish > Audio only**
- Edit and mix your audio in an audio editor e.g., (See *How to Mix and Edit Audio in Audacity) or (*See *How to Mix and Edit Audio in Soundtrap)* to create your Master Audio Track
- You will use this Master Audio Track for aligning with the video visuals

Step 1: In the Dashboard click Video

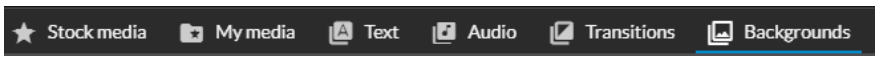
- Click **Create a new > Video** > select video size e.g., Horizontal 16:9 **> Start Editing**

Step 2: Import media

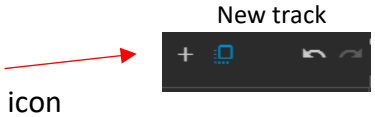
Two ways to import media include...

- Click, drag, and drop your videos and Master Audio Track into the import media panel *or*
- Click **Browse To Select**

Step 3: Populate the timeline



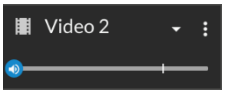
- Click on **Backgrounds** and drag your chosen background to **Video 1** on the timeline
- Drag the Master Audio Track to **Audio 1**
- Drag your first student video to **Video 2** and so on
- To add additional video or audio tracks to the timeline click the + icon



Step 4: Edit video

- Click on a specific track to access the edit panel 

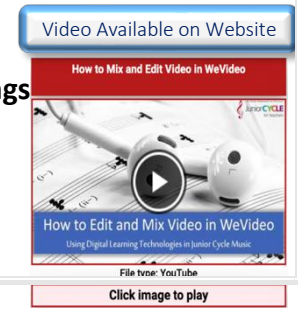
- Click on **Clip Editor**  **> Transform > Scale** video to resize. Then reposition the video on the background **> Save Changes**. Repeat this step for each video
- Mute video audio by clicking the three dots to show individual track options



- To delete unwanted sections…

- at the beginning or end of the video: **Trim** by dragging the edge left or right
- in the middle of the video: place the playhead at the start of the unwanted section click **Split**  **.** Then, place the playhead at the end of the unwanted section, split and delete section

- Sync muted videos to the Master Audio Track
- For further edits e.g., Fade in/out: click **Clip Editor > Animation > Fade: Edit Settings**



Step 5: Export

- Click **Finish** (at top right of screen) > **Title > Video > Resolution > Destination**

Using Digital Learning Technologies in Junior Cycle Music

How to Record Video and/or Use a Green Screen

How to Record Video

- Use headphones and two devices (one for listening to the guide track and the other for videoing)
- Have the music either printed out or on a screen to avoid shuffling sounds
- **Record** in landscape mode, not portrait, with the phone/ tablet on its side

- For best quality, position the device so it is static throughout your performance
- Position yourself in the centre of the frame
- Face the source of natural light in the room (e.g., window)

- **Open** the camera on your device and **Scroll to Video** mode. Press ● to start recording
- Countdown out loud '3, 2, 1, Play' (as you hit **Play** on the guide track) to help the editing process

What is a green screen? A green screen / chroma key is a visual effects technique where multiple images or video streams are layered together

Why green? Because it is considered the furthest from human skin tone. Blue is another possible colour

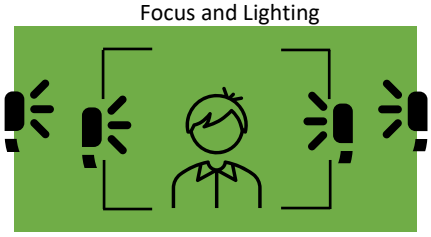
What can I use for a screen?

Option 1 Manual Green Screen: Use Fabric or painted wall or paper. Ensure the surface is as flat as possible

Option 2 Digital Green Screen: Use PowerPoint or Google Slides

Creating a Manual Green Screen

Focus and Lighting



- Light the background evenly if possible
- Light the person with extra lighting if possible
- When recording, position the frame in the centre of the green screen
- To avoid casting shadows, be sure to stand a couple of feet in front of your green screen
- Wear solid colours (avoid complex patterns, green, and white - too reflective)
- **Record** the video and **Upload** to your preferred video editing software (See *How to Record Video and Use a Manual or Digital Green Screen*)

Creating a Digital Green Screen in PowerPoint or Google Slides

- **Create** a blank slide, left click on the slide and select **Format Background**
- Choose a green / blue solid colour fill
- Insert any other graphics should you wish (e.g., school logo, prop, etc)
- **Save as** a JPEG file if the green screen is a picture
- **Save as** an MP4 file if the green screen is the background to your video
- **Upload** this picture / video to any video editing software or as a background in Teams / Zoom / other

EDITING GREEN SCREEN IN iMOVIE

A useful pre-cursor to this resource is *How to Edit and Mix Video in iMovie*

Step 1 Import Media

Two ways to do this include…

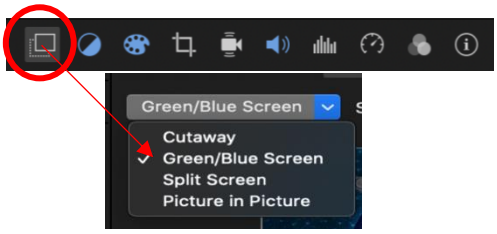
- Click, drag and drop, your background and the green screen image / footage into the import panel *or*
- Click **File** > **Import Media**

Step 2 Populate the Timeline

- Click on **Backgrounds** and drag your chosen background to the timeline found on the bottom panel
- Drag the green screen image / footage to the timeline and place it on top of your background. You will now see two layers here
- Align the image/footage to the relevant section of your background

Step 3 Enable the Green Screen Effect

- Select the green screen image/footage
- Click **Video Overlay Settings > Green / Blue Screen**
- The object/person is now visible on your chosen background



EDITING GREEN SCREEN IN WEVIDEO

A useful pre-cursor to this resource is *How to Edit and Mix Video in WeVideo*

Step 1 Import Media

Two ways to do this include…

- Click, drag and drop, your background and the green screen image / footage into the import panel *or*
- Click **Browse To Select**

Step 2 Populate the Timeline

- Click on **Backgrounds** and drag your chosen background to **Video 1** on the timeline
- Drag the green screen image / footage to the timeline and place it on **Video 2**
- Align the image/footage to the relevant section of your background

Step 3 Enable the Green Screen Effect

- Select the green screen image/footage
- Click **Clip Editor** > **Color Keying** > **Colour Picker** Click on the colour you want to remove (e.g., green) in the video preview screen **> Save Changes**

Section 8
Sightreading Tests

Using Digital Learning Technologies in Junior Cycle Music

How to Create an Unprepared Sight-reading Test for Guitar/Ukulele in Sibelius

Step 1: Create a new score. Choose blank

Step 2: Time Signature, Tempo, Key Signature and Score information. Click **Create**

Step 3: Click **I** to add instruments. Add **ukulele [notation] > Add to Score> OK**

*To delete one of the default bars added, hold down **Cmd/Ctrl & right click** the mouse. Click delete*

Step 4: Select all 4 bars by holding down **Ctrl/Cmd + A**

Step 5: In the **Home menu**, go to **Plug-ins** > **Fill Selection With Slash Notes***

Step 6: In **Notehead Style > Beat without Stem (3)** and in **Note Duration > One note per beat.** Click **OK**

Step 7: Click on the escape button to unselect all

Step 8: To input a chord, click on the slash, hold down **Ctrl/Cmd + K** and name the chord. Press the spacebar after each chord is positioned to move the cursor to the next chord

Step 9: Input Dynamics click on the slash, hold down **Ctrl/Cmd + E.** Type in the dynamic

Step 10: To share as a test for practising with students**,** go to **File** > **Export** as a PDF

Step 11: To share as a demonstration with students, before exporting as an MP3 you will need to turn on '*Realize Chord Symbols'.* To do this…

- Select All (**Ctrl/Cmd + A) > Text > Plug-ins > Realize Chord Symbols**
- In **Chord Style > Chord every chord symbol.** Click **OK**
- In **File**, export as an mp3 for your demonstration

To see this in action, see video support…

Click Here

Video Support Available on Website

*To **Install** the Plug-in for **Fill Selection with Slash Notes**:

- File > Plug-ins > Click **Install Plug-ins**

- In Show > select **All Plug-ins**

- In Notes & Rests > select **Fill Selection with Slash Notes** > Click **Install**

Using Digital Learning Technologies in Junior Cycle Music

How to Create an Unprepared Sight-reading Test for Guitar/Ukulele in Flat.io

Step 1: Create a new score

Step 2: Title the score

Step 3: Add instrument – ukulele/acoustic guitar

Step 4: Make sure to turn off '*use tablature*'

Step 5: Select **Measure >** add bars

Step 6: Select all 4 bars by holding down **Ctrl/Cmd A**

Step 7: Select **Measure** > **slash notation**

Step 8: Click on the escape button to unselect all

Step 9: Click on the note to input the first chord. To add a chord click on **Ctrl/Cmd + K.**

Press enter after each chord is positioned to move the cursor to the next chord

Step 10: Input **Dynamics**

Step 11: Export your sightreading to pdf and/or mp3 for sharing with your students

To see this in action, see video support…

Video Support Available on Website

Click Here

File type: YouTube

Click image to play

How to Create an Unprepared Sight-reading Test for Guitar/Ukulele in Musescore

Step 1: Create a new score

Step 2: Title the score

Step 3: Choose **Treble Clef** in the template file

Step 4: Choose your Key Signature

Step 5: Choose your Time Signature, enter 4 Measures & choose the BPM. Click **Done**

Step 6: Select all 4 bars by holding down **Ctrl/Cmd + A**

Step 7: Select **Tools > Fill With Slashes**

Step 8: Click on the escape button to unselect all

Step 9: To input a chord, click on the slash hold down **Ctrl/Cmd + K** and name the chord. Press the spacebar after each chord is positioned to move the cursor to the next chord

Step 10: To input Tempo, click on the slash, and hold down **Alt + Shift + T** (Mac: **Option + Shift + T**)

Step 11: To input Dynamics, click on the slash. Open the Dynamics Palette on the left and click and drag the chosen dynamic

Step 12: In **File**, export your sight-reading to pdf and/or mp3 for sharing with your students

To see this in action, see video support…

Video Support Available on Website

Click Here

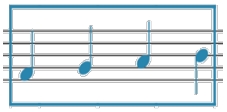
Section 9
Shortcuts

For PC users press CTRL ***For MAC users press Cmd***

INPUT NOTES

- Click the note input sign 𝅘𝅥𝅮 ***or*** the letter **N,** and select rhythm
- Input using Mouse
- Input using QWERTY keyboard by typing note names
- Input using both Mouse and QWERTY
- Input using MIDI keyboard

SELECT NOTES



- One note: click on note
- Full piece: **Ctrl / Cmd + A**
- One bar: click on stave
- Smaller groups of notes: click on first note, then **Shift +** →

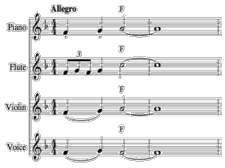
EDIT

- **CUT** **Ctrl / Cmd + X**
- **COPY** **Ctrl / Cmd + C**
- **PASTE** **Ctrl / Cmd + V**

CHANGE PITCH

- A semitone: press the ↑ or ↓ arrow
- Diatonically: press **Alt + Shift +** ↑ or **Alt + Shift +** ↓
- One octave: press **Ctrl/Cmd +** ↑ or **Ctrl/Cmd +** ↓

BUILD THE SCORE



- **INSTRUMENT** Press **I**
- **TRIPLET** Select rhythm < **Ctrl / Cmd + 3**
- **SLUR** Click **S**. Extend Slur: → or **click & drag**
- **LYRICS** Select note < **Ctrl / Cmd + L**
- **CHORDS** Select note < **Ctrl / Cmd + K**
- **STACCATO** Select note < **Shift + S**

MAKE NOTES INVISIBLE

- **View** < turn off **show invisible**
- Select notes
- Press **V**

How to Shortcut in YouTube

Make sure to have clicked on the video for these shortcuts to work

PLAY

- Full Screen — **Press F**
- Stop / Pause / Play video — **Press Space bar**
- Mute video — **Press M**
- Turn up volume — **Up arrow key**
- Turn down volume — **Down arrow key**

NAVIGATE

- Scroll forwards — **Right arrow key**
- Scroll Backwards — **Left arrow key**
- Go back to beginning — **Press HOME key or number zero**

CHANGE PLAYBACK SPEED

…for performance practise when learning using a play along video

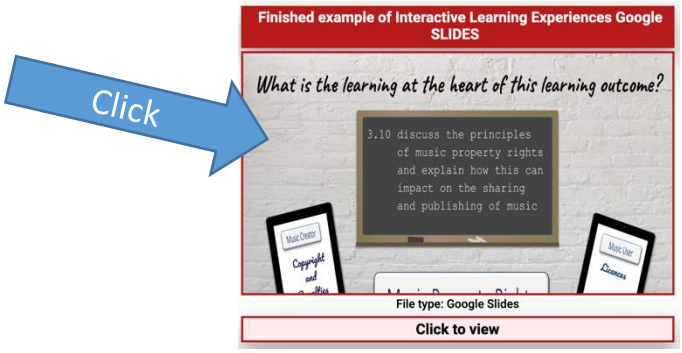
- Slow the speed — **Less than sign <**
- Quicken the speed — **More than sign >**

OR

- Click on SETTINGS  — **PLAYBACK SPEED** – select 0.75

Section 10
Interactive Learning Experiences

In demonstrating how to create an interactive learning experience in Google Slides, take a moment to explore this finished example



Step 1: Review the steps needed to engage with prior to creating the Google Slides

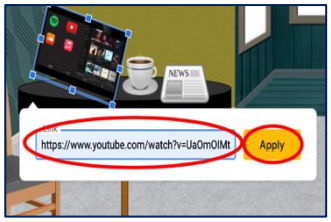
1. What Learning Outcomes will inform this Learning Experience?
2. Identify the intended learning (what will the learning be about?)
3. Decide on the Evidence of Learning (how students will demonstrate the learning)
4. Create a story board for the flow of content and look of your final visual

Step 2: Create a permanent visual by...

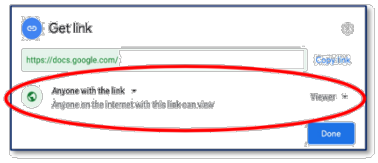
- inserting an empty background
- inserting and resizing images
- inserting and positioning text
- inserting and positioning shapes
- personalising with Bitmojis

Step 3: Create an interactive component to layer onto the permanent visual by...

- hyperlinking to images/text
- adding animated Gifs
- using transparent shapes



Step 4: Learn how to share the Interactive Learning Experience

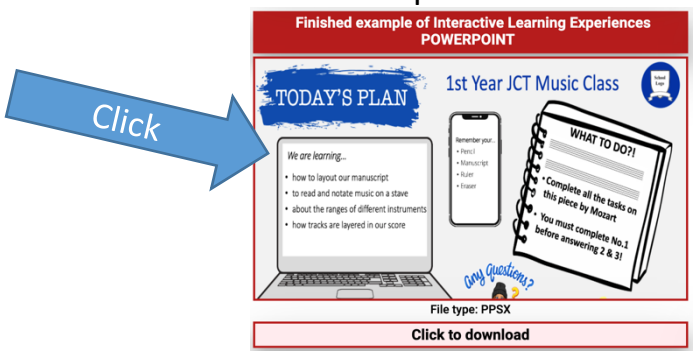


PDF Support Available on Website

Click

For more details see website support

In demonstrating how to create an interactive learning experience in PowerPoint, take a moment to explore this finished example

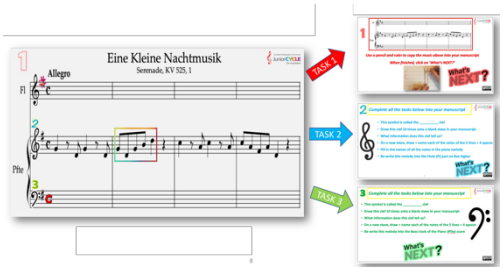


Step 1: Review the planning for learning needed to take place prior to creating the slides

1. What Learning Outcomes will inform this Learning Experience?
2. Identify the intended learning (what will the learning be about?)
3. Decide on the Evidence of Learning (how students will demonstrate the learning)

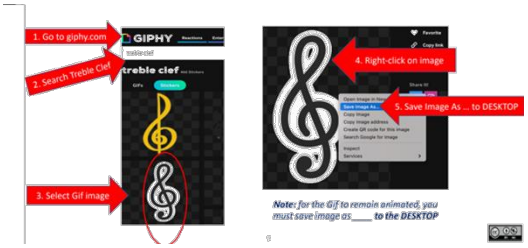
Step 2: Design the slides by creating...

- the main learning slide
- task slides around this central learning inserting and positioning text



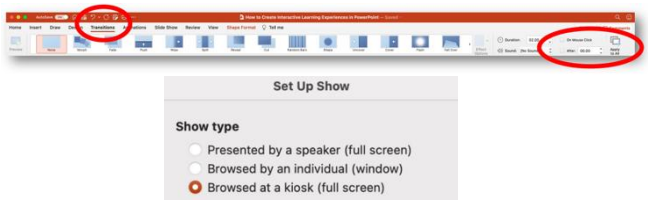
Step 3: Create the interactive components by...

- adding animated Gifs
- hyperlinking the slides



Step 4: Export this Interactive Experience by...

- setting the Transitions and Kiosk Mode
- saving as PowerPoint Show (.ppsx)



PDF Support Available on Website

Click

For more details see website support

Section 11
Further Supports

How To… Video Supports

Access these videos at www.jct.ie/music/resources

How to Input and Play Backing Chords in MUSESCORE

File type: YouTube

Click image to play

How to apply a Plugin in MUSESCORE

File type: YouTube

Click image to play

How to apply a Loop in MUSESCORE

File type: YouTube

Click image to play

How to Insert a Hyperlink in POWERPOINT

File type: YouTube

Click image to play

How to Screen Record a Website inside a POWERPOINT

File type: YouTube

Click image to play

How to Record a Slide Show in POWERPOINT

File type: YouTube

Click image to play

How to Create Visual Aids

File type: YouTube

Click image to play

How to apply Automatic Modes to Notes Heads in FLAT.io

File type: YouTube

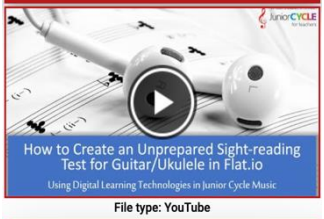
Click image to play

How to insert Kodály Solfa and Hand Signs in FLAT.io

File type: YouTube

Click image to play

How to Create Ukulele Sight-reading Tests in Flat.io



File type: YouTube

Click image to play

How to Create Ukulele Sight-reading Tests in Sibelius

File type: YouTube

Click image to play

Introduction to We Video Editor

File type: YouTube

Click image to play

How to Mix and Edit Video in WeVideo

File type: YouTube

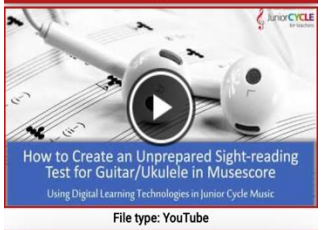
Click image to play

How to Edit and Mix Audio in Garageband (iPad)

File type: YouTube

Click image to play

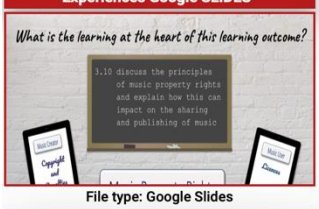
How to Create Ukulele Sight-reading Tests in Musescore



File type: YouTube

Click image to play

Finished example of Interactive Learning Experiences Google SLIDES



File type: Google Slides

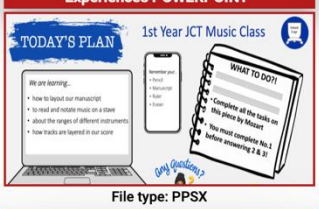
Click to view

How to Create Interactive Learning Experiences in Google SLIDES

File type: PDF

Click to view or download

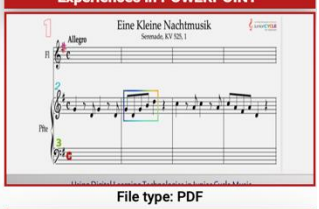
Finished example of Interactive Learning Experiences POWERPOINT



File type: PPSX

Click to download

How to Create Interactive Learning Experiences in POWERPOINT

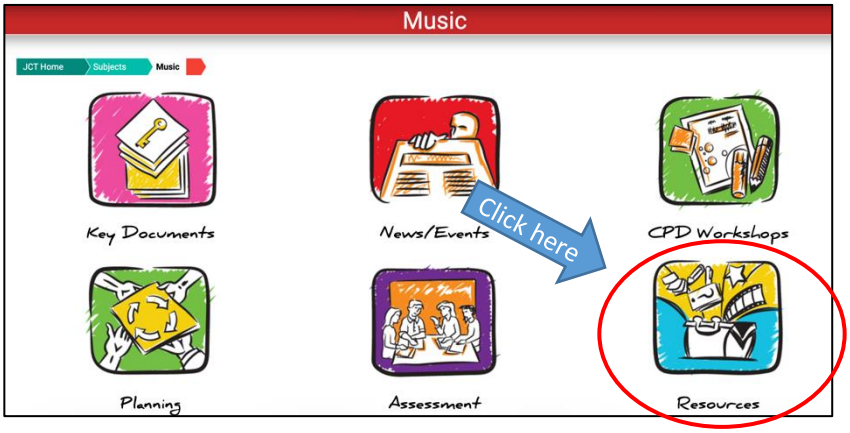


File type: PDF

Click to view or download

Further Supports on JCT Website

Step 1:
Visit jct.ie/music and click Resources



Step 2:
Click Technology

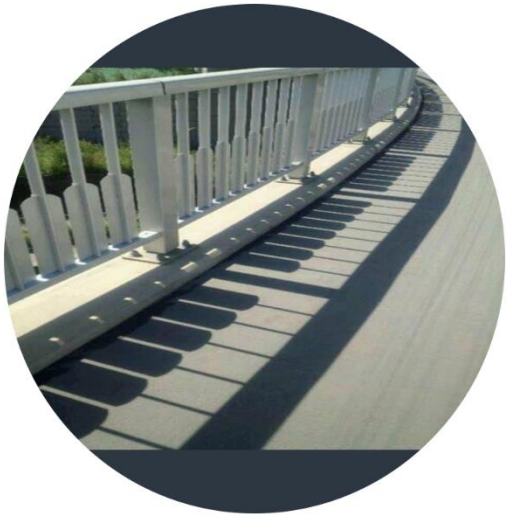
Step 3:
Browse all Technology supports
Click support to view or download

WHAT learning about Digital Learning Technologies contained in this support might be relevant for my school context?

SO WHAT learning from this support might influence my classroom practice?

NOW WHAT Digital Learning Technologies will I engage in with my students?

1st Years	2nd Years	3rd Years



Reflection without Action is as unproductive as Action without Reflection

Action to be taken

Notes