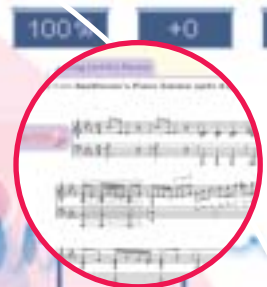


Using **web-based resources** in Primary Music



Using web-based resources in Music lessons

Using web-based resources is one of a number ways to contribute to a pupil's entitlement to ICT in music lessons. Using ICT in music lessons is not statutory at Key Stage 1, but the National Curriculum Order for music does encourage worthwhile use of ICT. There is a statutory requirement to use ICT in music at Key Stage 2 and it should be used to '(recall), capture, change and combine sounds'. The examples given here describe a number of lessons in which web-based materials were used to help Key Stage 1 and 2 pupils to develop their musical knowledge and understanding.



MIDI and vocal work - KS1 & 2

This is a Becta online area with several suggestions and resources for using MIDI material to support class singing from KS1 to KS3. The chosen example supports the title song of unit 20 of the QCA scheme.

URL: <http://forum.ngfl.gov.uk/WebX/top-music/forums/midi>

Relevant to the following:
NC: KS2 1a,b,c
SoW: KS2 unit 20



Keyboards in Context - KS2 & 3

This Becta online area has several suggestions and resources for using music keyboards from KS2 to KS3. The chosen example supports unit 12 (Dragon Scales) of the QCA scheme, which concerns pentatonic music.

URL: <http://forum.ngfl.gov.uk/WebX/top-music/forums/electronickeyboards>

Relevant to the following: NC: KS2 1b, 2a SoW: KS2 unit 12

Having read the curriculum suggestions on this page, a Year 4 teacher chose to use a keyboard to provide a drone.

Children were put into teams of six:

- One team member would play a slow ostinato rhythm on a drum to keep everybody in time.
- A second team member would play a keyboard drone using notes C and G using a sustained timbre of their choice.
- The remaining four children would then take turns to improvise melodic phrases (2 bars each) on xylophones using the pentatonic scale of C.

A Year 6 teacher downloaded the vanBasco player and watched the viewlet about how to work it. She also downloaded the karaoke file of 'Stars, hide your fires' and practised varying the pitch, tempo and combination of musical strands on playback.

With her class, she used a data projector so that pupils could read the synchronised words as they sang. She rehearsed them with various combinations of track mutes and at a slower tempo to help make their singing more secure, especially in sections with two vocal parts.

Some web-based resources are intended for direct use by pupils, and these are often most suitable when they focus on targeted musical learning objectives in an intuitive point-and-click way. You may find it easier to bookmark them and use them offline. In other cases, especially where streamed audio is concerned, a live connection is necessary. You will need to check which sites will work offline.

Other web-based resources are more suited to adult-led situations, using a screen projector or electronic whiteboard with the whole class. These can often be downloaded in advance and adapted to meet specific learning objectives. The teacher or classroom assistant can use ICT to unpick musical textures, to model musical concepts, to support class singing and other performances, to demonstrate, explain and question, stimulate discussion and ask individual children to make a suggestion or judgement, or give an opinion.

Some creative music applications are designed to allow free, unguided manipulation of musical material. These often promote educational progress only when teachers set a well defined task in advance and intervene regularly to ensure that pupils are addressing learning objectives according to their needs.

Remember that specialised equipment may be necessary when accessing music-based websites. For example, headphones are an important consideration in a networked computer room; adequate amplification is important in whole-class situations. Also bear in mind that a site that works well on your home computer may fail at school if the necessary browser plug-ins (see below) have not been installed. Always check in advance using the actual classroom computers.

Soundwalk in Queen Elizabeth Park - KS2

The screen shows a sketch map of a public park in Vancouver. You can hear natural soundscapes recorded in any of the areas by clicking the named link beneath the map (MP3 format sound files).

URL: <http://www.emf.org/artists/mccartney00/walk.html>

Relevant to the following:
NC: KS2 1b,c, 2b
SoW: extends KS2 unit 9

Sometimes it is not right to insist that pupils work quietly at the computer. They need opportunities to discuss their ideas with their teacher and their peers, to test things out and to listen to how other children arrived at their solutions. They may need to try something out on a classroom instrument.



Most of these sites contain more activities and content than we have room to show. It may be worth investigating to see whether they have something that is not shown here that would be suitable for a different year group.

What are browser plug-ins?

Special 'plug-ins' are sometimes necessary to allow a web browser to interpret certain kinds of musical information on the internet. The best websites will detect whether your browser lacks a necessary plug-in. If so, they automatically redirect to the web page from where the plug-in can be downloaded and installed (usually free of charge). Unfortunately, often only the network manager has privileges to install such plug-ins. In music, plug-ins allow you to do things like listen to live radio from all over the world, listen to archived BBC recordings, listen to streaming audio files (which start to play within a few seconds instead of waiting for the whole file to download), see music notation on the screen as it plays back, use interactive Shockwave or Java based animations, composition tools and learning games, etc. Without these plug-ins a browser can seem very limited for music education use. For more details, visit <http://forum.ngfl.gov.uk/WebX/top-music/forums/musinternet/1>

As a stimulus, a Year 3 teacher explored and discussed this page with her class. Working in groups of four, children drew a slip of paper naming one area of the school. Over the next week, they recorded short soundscapes of their areas using a portable minidisk recorder. (A cassette recorder could be used instead.)

Next music lesson, they listened to all the recordings and were asked which area was which, saying why the sounds were descriptive/suggestive of that area.

Using only classroom instruments, each group then composed a short section of music that matched the characteristics of their soundscape. Then they put these together in an order that suggested a musical tour of the school.

You can view all of the web-based resources online at:

www.ictadvice.org.uk/webbasedresources

Cyclic patterns - KS2

This Becta web page contains a lesson plan for a 60-minute module on cyclic polyrhythms in African and Indian music, in which children develop understanding and performing skills concerning rhythm, pulse, stress and syncopation. It contains links to other websites.

URL: <http://forum.ngfl.gov.uk/WebX/top-music/forums/musicinternet/teaching/3>

Relevant to the following:
NC: KS2 1b SoW: KS2 unit 16



A Year 5 teacher took her class into the networked computer room so that they could navigate web pages independently. First they visited the ancient-future site at <http://www.ancient-future.com/africa.html> (pictured above) and followed the six progressive stages to being able to clap two-against-three. They found the MIDI file very helpful.

Then they visited other linked web pages to listen to musical examples from different cultures, all using similar cross-rhythm techniques.

In the second part of the module they returned to the music classroom and used instruments to compose and perform their own cyclic rhythm patterns.



Virtual Theremin - KS1

The theremin is an early electronic instrument controlled by moving your hands nearer to or further from sensors. This web page has a downloadable 'virtual theremin' environment that gives musical output under mouse control. The downloaded file could be saved to floppy disk and installed onto other computers with no internet access.

URL: <http://www.bbc.co.uk/science/playground/theremin1.shtml>

Relevant to the following: NC: KS1 3a SoW: KS1 unit 2



Jabberwocky! - KS2

This is sample online material from Cumbria's Learning Support Service for music. Children use the computer's sound recorder to manipulate their recordings of words and other sounds inspired by Lewis Carroll's nonsense poem 'Jabberwocky!'.

URL: <http://www.tuned-in.org/sample/alice/>

Relevant to the following:
NC: KS2 2b
SoW: extends KS2 unit 18

A Year 1 teacher prepared four cards saying 'high', 'low', 'loud' and 'quiet'. She asked children to position them in a 'North-South-East-West' pattern that matched the effect of moving the mouse up and down and from side to side on the virtual theremin screen.

When they had done this, she took control of the mouse herself and asked them to describe and compare sounds she produced by clicking the other sliders and buttons in the theremin environment. In this way she was able to introduce them to other musical concepts and vocabulary.



BBC Radio 3 on-line software - KS1 & 2

There are currently 15 different interactive sound activities available in the Radio 3 online software collection. Only the first is shown separately. The remainder take a similar fun approach, but address different areas of musical learning across both key stages.

URL: <http://www.bbc.co.uk/radio3/games>

Relevant to the following:
NC & SoW: Various



BBC teaching packs - KS1 & 2

There are 22 printable teaching packs available from this page that suggest how to incorporate use of the Radio 3 online software collection in music lessons. They contain step-by-step 'prompt' cards and are aimed at the non-music specialist.

URL: <http://www.bbc.co.uk/radio3/teachers/classroom.shtml>

Relevant to the following:
Learning focus is not mapped to NC & SoW in these teaching packs.

A Year 5 teacher linked this musical activity with literacy work on nouns, verbs, adjectives, onomatopoeia and portmanteau words, as described in the downloadable teacher's notes.

The children recorded their own portmanteau words and animal calls into the computer's sound recorder. They investigated the effect of reversing them and playing them back at a slower speed.

Eventually, they combined these processed sounds with other music and sound effects into an imaginative Jabberwocky soundscape composition.

A Year 2 teacher divided her class into groups of five. Each group member chose a sound pictogram from one of the vocal collections, knowing that they would later have to perform it.

The group then devised a grid in which each person's sound was used twice, either as a consecutive pair or on two separate occasions. They used Sequenza to help them refine their grid and to support them while they practised it. They copied it into a paper grid the teacher had printed off from the teacher's support pack and they practised performing their grid using just their own voices (with one member also adding a tambourine pulse). Some groups also performed by taking different routes through their grid.

Sequenza - KS1

This page is the first drag-and-drop sound-making activity taken from the Radio 3 collection (see above). Up to 10 pictograms, representing different sounds, can be selected from a very large pool. The user drags pictograms from the store on the left into the central grid and the corresponding sounds will then be played in grid order.

URL: <http://www.bbc.co.uk/radio3/makingtracks/sequenza.shtml>

Relevant to the following:
NC: KS1 1c, 2a, b, 3b SoW: KS1 unit 6



BBC Audio on demand - KS1 & 2

Some popular radio broadcasts (but not schools programmes) are available on demand during the week immediately following their broadcast. For copyright reasons, you can't locate particular items in the programmes (but you can skip forward in five-minute chunks).

URL: <http://www.bbc.co.uk/radio3/>

Relevant to the following:
Curriculum enrichment

On wet days, when children are allowed to stay inside at playtime, a Year 4 teacher sometimes sets up the computer to play a recent edition of the daily Radio 3 programme for children, 'Making Tracks', which is introduced by Blue Peter presenters. Children are not forced to listen, but any who want to can sit by the computer to broaden their musical knowledge.



Playing with Tempo and Dynamics - KS1

The on-screen standard music notation makes this application look more complex than it is. This is actually a very simple tool for exploring dynamics (soft and loud) and tempo (slow and fast). The top left button starts and stops the music. The bottom right sliders affect the dynamics and tempo as you move the mouse over them.

URL: <http://www.creatingmusic.com/playing/play2.html>

Relevant to the following:
NC: KS1 3a
SoW: KS1 unit 7

A Year 2 teacher had already explained the concepts of tempo and dynamics when she used this web page with her whole class. First, as one child controlled the slider, she asked the others what the p and f labels might mean.

Next, she asked different children to position the tempo slider so that the music sounded 'frantic', 'sleepy', 'grand', 'tiptoeing', etc.

Finally, she controlled both sliders herself and asked the children, individually or in pairs, to move their hands and arms in a way that matched the feeling of the music.



Sketch Pad - KS2

Using a pencil tool, users can sketch a graphic (pianola roll type) score for up to four preset timbres. Sections of the score can then be selected and moved, copied, inverted, reversed or erased. Slow, medium or fast tempo can be chosen before playing the score. This program uses the computer's MIDI sounds.

URL: <http://www.creatingmusic.com/mmm/mmm.html>

Relevant to the following:
NC: KS2 2b, 3c
SoW: KS2 unit 21



Virtual Keyboard - KS2

This page provides a simple keyboard that is controlled by clicking the mouse. You need to be online so that different timbre sets can download when selected. You may also experience a time lag ('latency') between clicking a key and hearing the note, depending on the speed of your processor.

URL: <http://www.bgfl.org/bgfl/primary/ks1/index.htm> (click on Learning Activities, then Music and Virtual Keyboard)

Relevant to the following:
NC: KS2 1b SoW: KS2 unit 10

One Year 3 teacher divided her class into groups of six for this activity. Using class percussion, they were told to play four-beat patterns as follows:

No.1: Play on every beat (1, 2, 3, 4)

No.2 & 3: Play on alternate beats (1, 3)

No.4: Invent your own repeating pattern

Then she rotated the roles round the members of the group.

Two children who were left used the Virtual Keyboard as follows:

No.1: Use the VK, choosing any timbre and any drum beat (but not no. 4). Play C exactly on beat 1.

No.2: Using percussion play on beats 3 & 4.

No.1 managed to compensate for the latency by clicking half a beat early. Other children tried this too.



Pattern Builder - KS1

You start with an empty grid. Clicking on the keyboard adds a symbol representing that note to the next vacant grid cell. You can then play the pattern of cells (they lift slightly when they sound). You can also click on a cell to erase the sound in it. There is a choice between bell, dog and frog soundsets.

URL: <http://www.harcourtschool.com/activity/pattern/pattern.html>

Relevant to the following:
NC: KS1 1a, 2a, 2b
SoW: KS1 unit 4

In preparation for a longer composing project, a Year 6 teacher asked pupils to explore how they could use a short melodic shape as a starting point for building a longer section of music.

She used Sketch Pad to demonstrate how a simple idea could be passed from one instrument to another, turned upside down and played backwards. Then the children tried it for themselves, using their own simple shapes.

A Year 1 teacher used this web page with the whole class. First of all, she chose a child to randomly fill all eight cells in the grid. They listened to the result, noticing the pitch contour as it played.

Then symbols were progressively removed from the grid, leaving gaps that resulted in a different rhythm. The children copied (and later predicted) the rhythms, mimicking the dog-bark and frog-croak soundsets.

Alfy Music Mania - KS1 & 2

This American site has several areas. You access the sing-along feature by clicking the beat-box in the centre bottom of the first screen in the Music Mania area. There is a list of about 50 songs for younger children, many of which are familiar in Britain. Choose a song title and the words are then shown on the screen, synchronised to a musical backing as in karaoke.

URL: http://www.alfy.com/Music_Mania/

Relevant to the following:

NC: KS1/2 1a

SoW: KS1/2 ongoing units 1/8



A Year 1 teacher chose the song 'The Ants Go Marching'. To reinforce the work they had been doing on pulse in QCA unit 4, he asked the children to march on the spot while they sang. Two children were given percussion instruments to play on alternate pulses, to mark 'left' and 'right' steps.

They noticed the different effect when the tempo slows temporarily and the strong pulse stops just before the final section.

The teacher had discovered that with a succession of right-clicks the words could be made to fill the whole screen, making them clear for all to read on the data projector they were using.

Playmusic orchestra - KS2

This American site is designed for children who are interested in playing an orchestral instrument, or who have perhaps just started learning. There is basic information about the instruments and a jukebox of relevant short orchestral excerpts.

URL: <http://www.playmusic.org/stage.html>

Relevant to the following:

NC: KS2 3a, 4a

SoW: KS2 unit 13



After exploring the emotive potential of sounds available from their own percussion instruments, a Year 4 teacher went to the Playmusic site. She started with the 'back stage' percussion jukebox. They all listened to the short excerpts (some of instruments which they did not have in class) and compared their mood and effect. They visited the 'stage' section about percussion instruments to find out more.

Some children were allowed to play the Molly Mallet game, which helped to develop their musical memory while familiarising them with the sounds of orchestral percussion.

You can find practical suggestions for using other technologies in primary music lessons in Becta's online Primary Music Entitlement document on the ICT Advice site (go to <http://www.ictadvice.org.uk>, click on Teaching and Learning, then Curriculum, then Primary and finally on Music, or type http://www.ictadvice.org.uk/downloads/entitlement_doc/entitle_music_prim.doc).

All URLs were correct at the time of printing but may be subject to change.
For enquiries relating to this booklet, email: pep@becta.org.uk

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