

Notes

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Exploring Sound and Creativity with iPads

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Midnight Music

MadPad HD how-to	4
What is MadPad HD?	4
Opening and playing a sound set	4
Accessing menu options	5
Creating your own sound set	5
Sound set tips	6
Playing Tips	6
Recording a performance	6
Save or share	6
Ostinatos with the looping feature	7
Editing sounds	7
MadPad HD - projects	7
The 12-sound challenge	7
Stomp-style recording	8
The remix project - 4-chord song	8
Literacy Activities	8
Sol-fa scale and pentatonic compositions	8
Performing the 12 bar blues	8
SFX boards for stories Create and trigger sound effects	8
Storytelling and Podcasting in GarageBand	8
Composing Program Music and Digital Storytelling	9
Program music project overview	9
Getting started	9
Build your story in Sonic Pics	10
Create music and sound effects	11
Practice performing your story	12
Record your performance	12
QR Codes	12
What is a QR code?	12

How to scan a QR code	12
How to generate a QR code	13
101 uses for QR codes in the classroom	13
Useful links	15

MadPad HD how-to

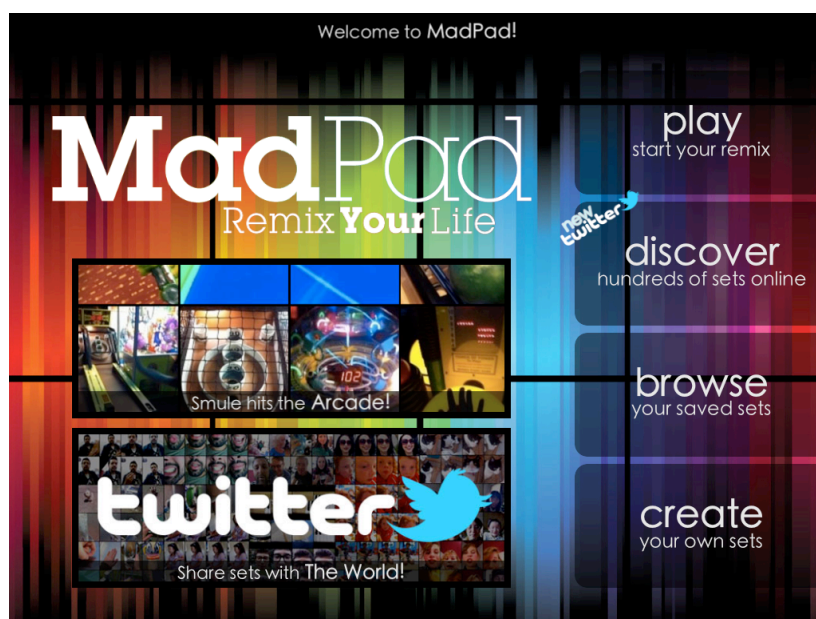
What is MadPad HD?

With MadPad HD you are invited to “remix your life” by recording sights and sounds from your everyday surroundings to make into your own original percussive (or melodic) instrument.



Opening and playing a sound set

From the main screen you can open an existing sound set by tapping **Browse your saved sets**. MadPad comes with 7 existing sound sets including a collection of car sounds, sounds from a coffee shop, soda pop sounds and more.

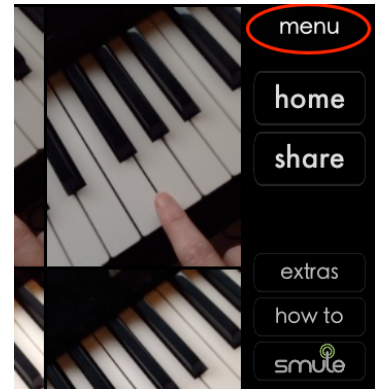


You can preview each sound in a set by tapping on images. When you find a set you want to open, tap **Open** on the top right of the sound set.

Once the sound set has loaded, you can play it and if you wish, record your performance (see below for more detail).

Accessing menu options

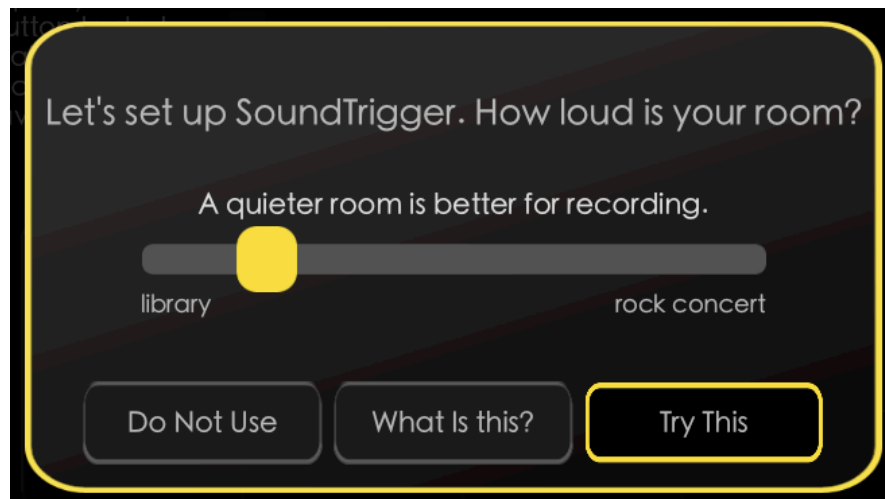
In any screen, tap on the word **Menu** to see the menu options. Then tap **Home** to return to the original home screen.



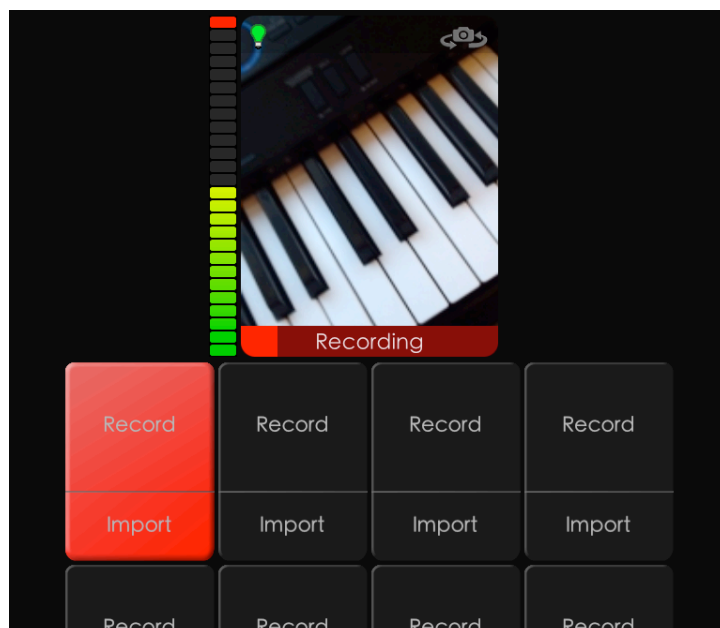
Creating your own sound set

iPad 1 users please note: because the iPad 1 does not have a video camera, you're unable to create a sound set from scratch. You can however, open and play the existing sound sets, or others that are available online.

- On the **Home** screen, tap **Create your own sets**
- On the next screen, choose the noise level setting and tap **Try This**



- Record some sounds! Tap a **Record** square, position the camera and make a noise



Sound set tips

- You need to record a full set of 12 sounds in order to save the set and then play or record it
- MadPad only records the actual sound - not silence - so it doesn't matter if you don't make a sound straight away after hitting record
- Make sure you line the camera up first, before making the sound
- Think about the background of the picture - bright, plain colours look good, as does a clear view of the object itself
- If you want to record a sound that you will make yourself, you can flip the camera view around so that it is facing you
- Students might find it easier to record sound sets by working in pairs - one person holds the iPad and the other makes the sound. It can be awkward doing both things yourself!

Playing Tips

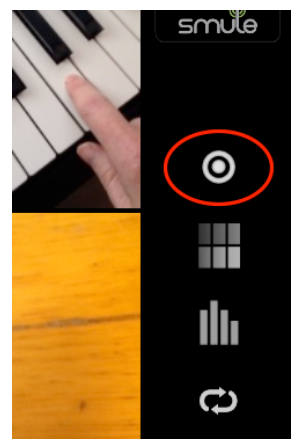
When you've finished recording your sound set:

- tap the **Save and Play** button and give your set a title
- your sound set will open and it's ready for you to play!
- tap a square to make it play back
- you can play more than one square at the same time
- swiping two fingers up a square will speed the video up (and the pitch will rise)

Recording a performance

To record a performance:

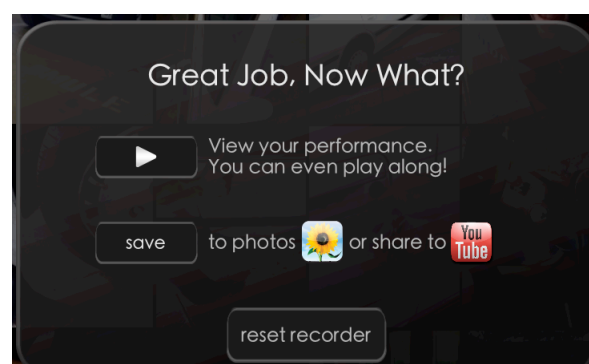
- Tap **Menu** to display the extra buttons
- Tap the **Record** button (the circle)
- Play your piece
- Tap the **Record** button a second time to end your recording



Save or share

Once you've finished, you can choose to view, save or share your performance. You can also discard the recording by tapping **Reset recording**.

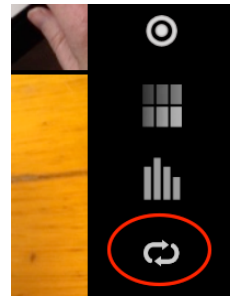
If you choose to save the performance, it will end up as a video file in your iPhoto library.



Ostinatos with the looping feature

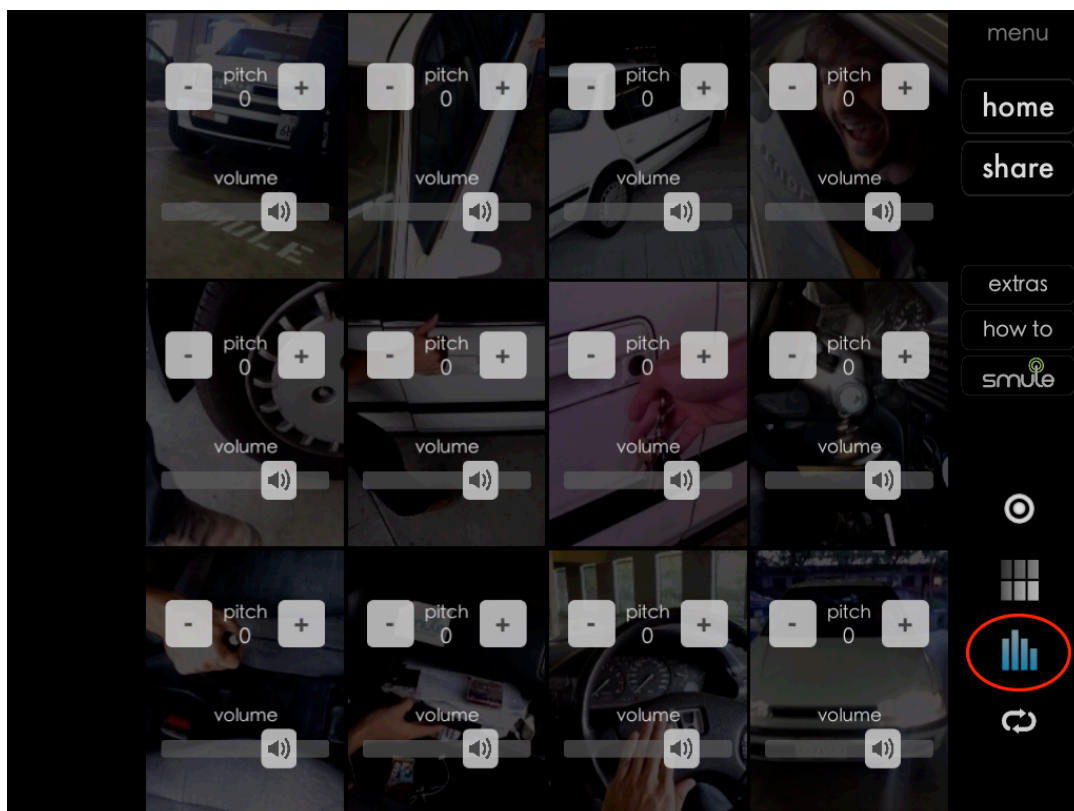
One of the extra buttons that is displayed when you tap Menu is the **Loop** button. To record a loop:

- Tap the **Loop** button to arm the loop recorder. The button will turn blue
- When you start playing your loop, the recording will start
- Tap the loop button again to complete the loop. You must tap the loop button **on the downbeat of the following bar** in this step, so that the completed loop plays back in time
- If you need to record the loop again you can reset the looper by tapping and holding on the loop button. It will return to white



Editing sounds

By tapping on the edit button (see image below) you can fine-tune the sound of each recorded clip. Once in edit mode you can adjust the clip volume or the playback speed (which affects the pitch of the clip).



MadPad HD - projects

Some ideas for using MadPad HD in the classroom:

The 12-sound challenge

Challenge students to record 12 different sounds from a single object or a limited space:

- 12 sounds from a chair
- 12 sounds from your hands
- 12 sounds from the desk
- 12 sounds from the playground equipment
- 12 sounds from items in your pencil case

Stomp-style recording

Using the 12 sounds recorded in the 12-Sound Challenge, students can then perform and record a rhythmic composition in the style of the Stomp performing group.

The remix project - 4-chord song

Older students can use their analysis and arranging skills to create a remix of a known song. Use each of the 12 squares to recording snippets of the bass line, melody or inner parts of the song.

Four-chords songs such as those performed by the Axis of Awesome in their well-known Youtube video clip work well for this activity.

Literacy Activities

Have students draw pictures of concepts or words they are learning. Record each one in a separate MadPad square - the students can position the camera to video the picture and say the word at the same time - for example: draw numbers 1-12 and say the French names. Can also use for science terms, maths concepts or spelling.

Sol-fa scale and pentatonic compositions

Students can record a different scale degree in each square. They could sing or play a sol-fa scale or a pentatonic scale and then perform improvised melodies with the sound set.

Performing the 12 bar blues

Students can use three of the squares to record chords I, IV and V and the remaining squares to record the notes of the blues scale.

SFX boards for stories Create and trigger sound effects

Each of the 12 squares can be used to record a separate sound effect which can be utilised in story-telling activities.

Storytelling and Podcasting in GarageBand

Please see the GarageBand notes booklet for extensive GarageBand for iPad notes.

Special instructions for storytelling or podcasting projects in GarageBand for iPad:

- Start a new Project
- Select the Audio Recorder
- Go to the Settings menu and turn off the Metronome and Count-in options

- Change the length of the song section: tap on the Song Sections button (looks like a plus sign in the top right corner)
- Tap on Section A and increase the length to 40-50 bars.
- Tap the record button and record the narration
- Add music and sound effects to enhance your story. Please note that when you add a loop from the library into your project, it will automatically fill the entire section. Once you've added the loop you can adjust the length by dragging the end.

Composing Program Music and Digital Storytelling

Using iPads, students can compose their own program music, or record stories that include images, narration, music and sound effects.

This is a flexible activity that can be done in groups or individually.

- groups of 3-5 students can create an “enhanced” story and/or compose their own program music using one or more iPads. One iPad can act as the recording device and record the group’s performance
- a student working individually can put together their own program music and/or storytelling project using a single iPad. Using an app like GarageBand allows them to multitrack and record narration, music and sound effects on different tracks

By combining 2 or 3 different apps, you can also incorporate images or video. Here’s one example of a program music activity that combines GarageBand, MadPad and Sonic Pics.

Program music project overview

In groups, put together a Spooky Music project:

- Choose 3 images from a set of provided images
- Write a spooky story that links the images together
- Create some spooky music and sound effects to accompany the story
- Record the group’s performance of the project

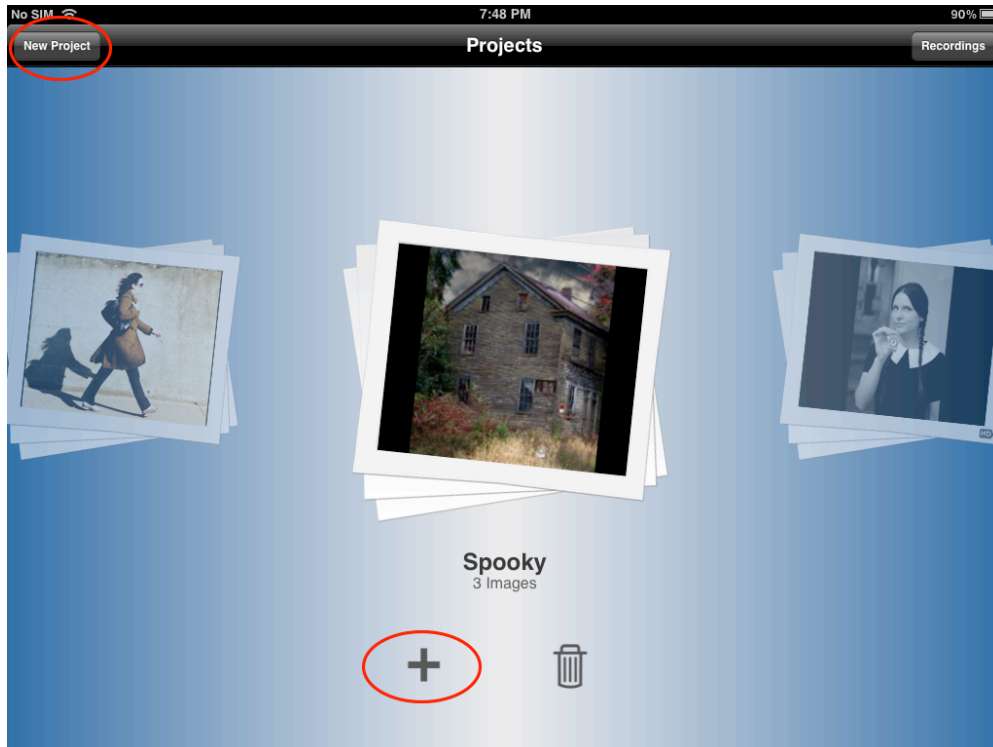
Getting started

- Form a group of 4-5 people
- Each of the iPads in the group will be used in a different way
- On **one** of the iPads, open Safari and visit www.midnightmusic.com.au. Tap on the Resources menu, then on **iPad Workshop pics** (you can gather your own set of images together when doing this project with your students at school)
- Look at the images on this page with your group members. Choose 3 that can tell a spooky story
- For each one, tap and hold on the image. A menu will appear: choose **Save Image**

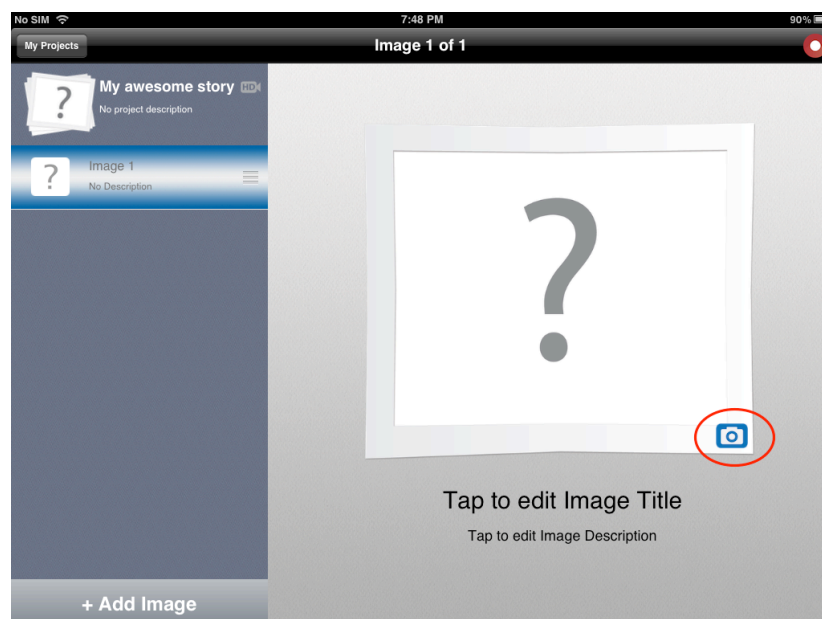
- The image will be automatically saved into your Photo Library
- Press the **Home** button and then open the Photo Library (the flower icon) to check the photos are there

Build your story in Sonic Pics

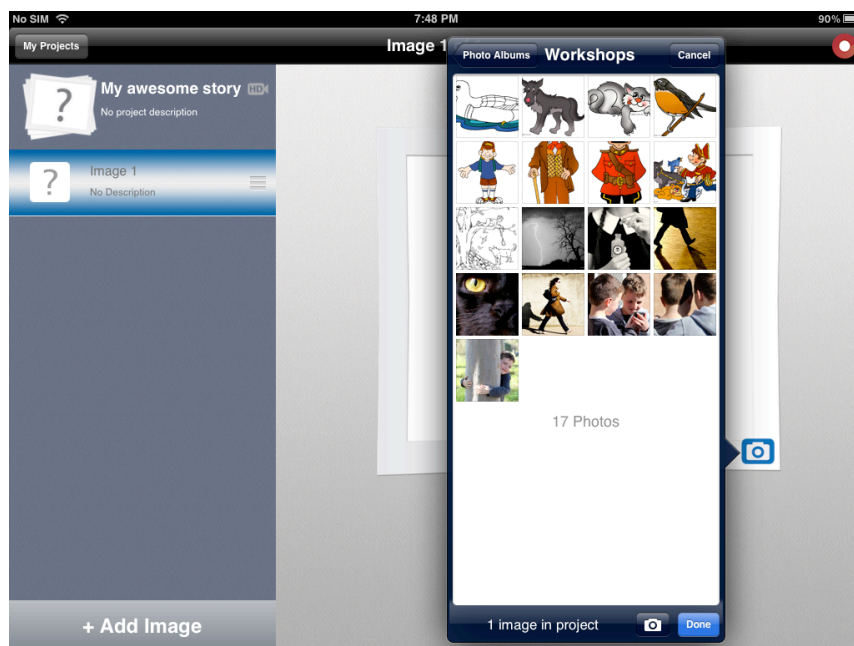
- Open **Sonic Pics** and tap the **New project** button or tap the **plus sign**



- Give your project a title and then tap **Create**
- Tap the camera icon near the big question mark to add your first photo

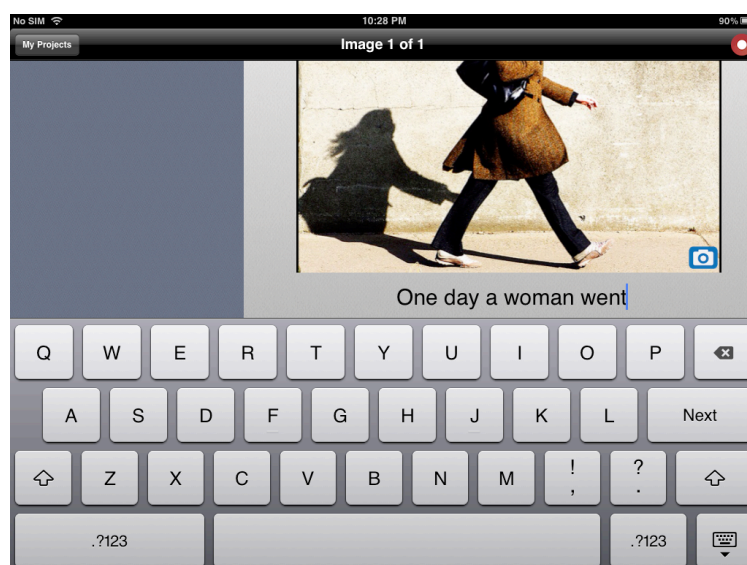


- Tap **Camera Roll** and then tap the image you want to appear first in the story



- Tap **Add Image** to add a new slide with another image. Repeat for the last image

- Type your story under each image using the heading and subheading areas



Create music and sound effects

Using the other iPads in the group, create some music and sound effects to accompany your story. You might like to consider using the following:

- Untuned percussion sounds in GarageBand or other instrument apps
- Sound effects that you've recorded with MadPad
- Eerie sounds created with the strings in GB (turn on **Notes** view and slide your finger along the strings very slowly)
- Diminished 9th chords played on a keyboard in GarageBand
- Record your voice in GarageBand using the Sampler or Audio Recorder. If you use the Audio Recorder, you can add special effects such as the Monster, Robot or Dreamy effects

Practice performing your story

You'll perform your story as a group. A couple of suggestions:

- The narrator will read the story and operate the iPad that has the project in Sonic Pics. They will swipe to the next image at the appropriate time
- Other group members will perform the accompanying music and sound effect parts

Record your performance

Perform your story again, but this time hit the **Record** button in SonicPics first (see image below). Make sure all the group members are close enough to the iPad that's recording.

It's a good idea to do a test-record of your performance. Check the balance is OK - the narrator should be easy to hear over the music and sound effects.

QR Codes

What is a QR code?

You may have seen them around the place: square "barcodes" that can be found on posters, flyers, supermarket products, shop windows, magazines and real estate boards.

A QR code (quick response code) contains information that will automatically connect your iPad or other smart device to an online location: a website, an audio file, some text or a map.

In essence, a QR code allows you to combine physical world with the online world. The possibilities for education are extensive and very exciting.



How to scan a QR code

To scan a QR code you'll need to install a QR code reader app. Most QR code readers are free.

There are many options available, but one that I like is i-nigma which is very responsive.

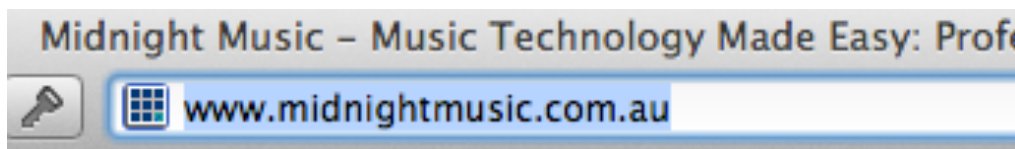
To use the app, tap to open it, and hold your iPad camera over the QR code. It will make a sound and then automatically open Safari and connect to the website to which the QR code is linked.



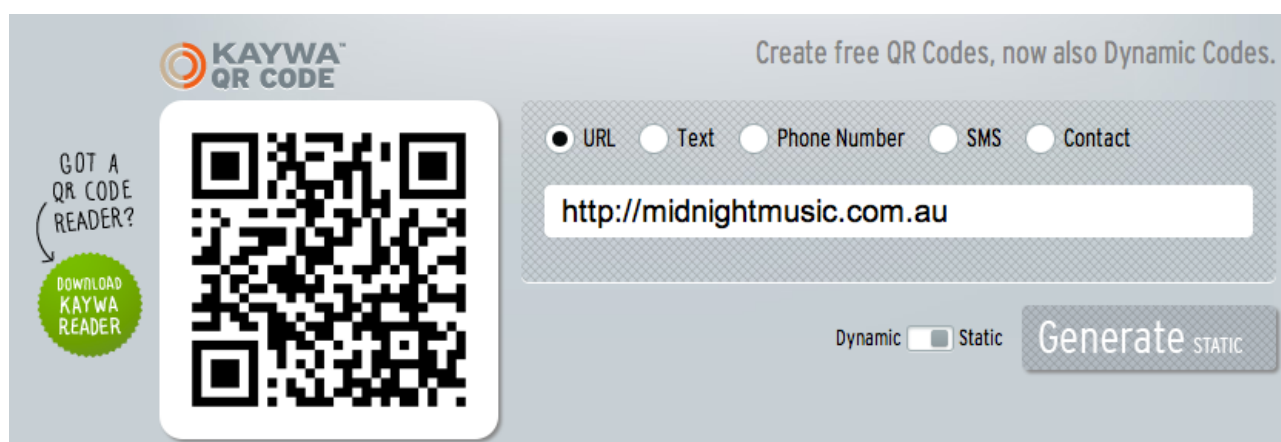
How to generate a QR code

Let's look at the process for creating a QR code yourself:

- First, visit the web page that you want to link to
- Copy the web address (highlight the address and press **Ctrl+C** on a PC, or **Cmd+C** on a Mac)



- Visit a QR code generator site such as <http://qrcode.kaywa.com> or <http://mustech.net/qr/> (there are many others)
- Paste the web address into the URL box



- Switch the Dynamic/Static button to Static
- Click Generate Static
- The Qr code will appear in the square on the left
- Next, download the QR code as an image by right-clicking on the code itself. Select a location to save the image to and name the file something sensible (!) so you can find it again

Now the QR code image that you saved is ready to be used. Read on for some practical applications in the classroom

101 uses for QR codes in the classroom

Well, not quite 101, but almost!

Bear in mind that you can link to almost anything that is located somewhere online. This includes audio files that you have uploaded to a website such as Soundcloud, videos on Youtube or Vimeo which means that you can easily share recordings of student work.

In music:

- Display sheet music of student compositions which includes a QR code that links to a recording of a performance by the composer

- Notated compositions of students can include a QR code that links to audio commentary about their thinking behind the composition
- Worksheets can include QR codes that lead to instructions, tutorial videos or further information
- Display a QR code that takes students to a collection of approved websites for their research project
- Students can create a poster of their favourite band or artist which includes QR codes that link to videos of the artist performing, a map of their birthplace and their Wikipedia article
- Orchestral and band parts can feature a QR code next to the title that links to information about the composer and history of the piece
- Orchestral and band parts could also feature two other QR codes: one that links to a recording of the complete piece and another that leads to a recording of their part played on its own
- Sheet music could have a QR code code above a tricky passage: the QR code code links to a recording or video of the teacher playing the passage
- You could create a treasure hunt or quest for the students: a series of QR codes down a hallway which each links to a clue. Each clue leads students to the next one
- You can include QR codes on printed worksheets that take students to an answer page which is not visible until the code is scanned
- Students can create a “soundwalk” (a spoken walking guide or story devised by US teacher Nick Jaworski) which is uploaded to audio-sharing site Soundcloud. They can then display a QR code at the start of the walk which links to the soundwalk audio
- For instant response class questions, you can create a QR code that links to a Google Doc survey where students need to respond to a question (or many questions). Answers can be submitted anonymously if you choose and the answers will come in in real time
- Some QR code code creators allow you to keep the same QR code but change the destination link, without having to re-print the code. These are useful for displaying a composer of the day, a quote of the day, or a song of the week
- Students can compose and record a theme to go with their favourite book or make a “book trailer”. The recording can be uploaded to Soundcloud and then a QR code can link to the recording. The QR code can be placed on the back of the book
- Students can use QR codes to explore a physical object: place QR codes on different parts of a musical instrument and discover the name of each part and what it’s function is
- Similarly, QR codes can be included on each section of an orchestral layout picture: each code links to a recorded example of that section

Other subjects (and adapt any of the ideas above!)

- You could create a treasure hunt or quest for the students: a series of QR codes down a hallway which each links to a clue. Each clue leads students to the next one

- For LOTE classes, students can draw a picture of something they have been learning - ie. names of farm animals. A QR code on the picture can lead to a recording of the students saying each word
- You can include QR codes on printed worksheets that take students to an answer page which is not visible until the code is scanned
- Students can create a poster of a historical figure which includes QR codes that link to videos about the person, a map of their birthplace and their Wikipedia article

Useful links

- QR Codes Explained By Common Craft <http://www.commoncraft.com/video/qr-codes>
- QR Codes Explained (Free Tech 4 Teachers) <http://www.freetech4teachers.com/2012/04/qr-codes-explained-and-ideas-for.html>
- Treasure hunt creator - <http://classtools.net/QR/>
- Gorillascan <http://www.gorillascan.com> - QR code stays the same, link changes
- Sharing audio online: <http://soundcloud.com>
- Sharing videos online: <http://www.youtube.com> or <http://vimeo.com> or <http://www1.teachertube.com> (if Youtube and Vimeo are blocked at your school)