Resources for PMLD/SLD pupils using iPads
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For further information and technical support: contactus@transformancemusic.org
1. Checklist

a) Make it as easy as possible for pupils to use their own movement to play the iPad.

You can do this by:
- Supporting the pupils' wrist so that they only have to move a tiny amount to trigger a sound.
- Using alternative parts of their body, e.g. nose, chin, back of the hand, to trigger a sound.
- Changing the set-up of the app to allow pupils more options with the same amount of movement (see below).

b) Make it easy for the pupil to understand that it is them that is making the sound.

You can do this by:
- Making sure the volume is appropriate
- Putting a speaker close to their ear or using vibrating speakers on the skin
- Cutting out other noises in the room.
- Choosing apps that are very visual to reinforce the sound, and moving the iPad to where the pupil can easily see it.

- Make sure that 'Multi-tasking gestures' is turned off, and Guided access is turned on if necessary (see below)

- Give pupils plenty of time to respond. Don't feel pressured to get the 'right' sound straight away.
2. Set up the iPad

a) Turn off 'Multitasking Gestures'

Multitasking gestures allow users to do things like ‘swipe with four fingers to switch between apps’ and ‘pinch the screen to return to the home menu’. SEN users often trigger them by accident, interrupting the music, and it is usually best to switch them off.

1. Open the 'settings' app.
2. Press 'General', then 'Multitasking'
3. Swipe the 'gestures' setting too off (from green to white)

b) Turn on 'Guided Access'

Guided access allows the iPad to be fixed in a single app, and can deactivate any part of the screen. It works on all apps. This has two main uses: Firstly, it enables pupils with limited fine motor control to only trigger the parts of the screen that are appropriate. Secondly, it prevents pupils leaving the app to play on games, surf the internet etc.

To turn on Guided access (you only need to do this once),
1. Open the Settings app
2. Press 'General> Accessibility > Guided Access.
3. Switch on Guided Access, tap Passcode Settings then 'set your four-digit passcode.'
4. Choose a password. We use '0000'

To use Guided Access:
1. Open the app you want to use (e.g. Thumbjam)
2. Triple-click the 'home' button (the physical button on the front of the iPad). This will open up the guided access menu
3. Draw around the areas you want to disable - they will turn grey - then press ‘start’.
4. When you want to exit Guided Access mode, triple-click the home button again and enter your passcode.

Tip: If you forget your passcode, do a ‘hard reset’ by pressing the power button
and the home button at the same time for 5 seconds. This switches the iPad off, allowing you to restart it with Guided Access turned off.

c) Lock Rotation

The 'lock rotation' feature stops the iPad from changing orientation (i.e. from portrait to landscape) when moved. It is useful when the iPad is on a flat surface or moving around a lot, but not often not needed.

To start 'Lock Rotation'

1. Swipe up from the bottom of the screen (can be fiddly!) to open the 'control centre'
2. Tap the 'lock rotation' icon- a picture of a padlock with a circular arrow around it.

Tip: You can also use the switch on the side of the iPad (above the volume control) to toggle lock rotation, though you may have to turn this feature on in the 'Settings' app: General > Lock Rotation
3. PMLD 20 minute Music activities  
(suitable for non-musicians)

1. RELAX: BLOOM

**Aim:** Create one or more 'soundscapes'. Develop focus and understanding of cause and effect.

**Good for:** Pupils with very limited movement. Pupils who respond well to colour.

*Bloom is a peaceful, atmospheric app. The whole iPad becomes a colourful playing surface that plays repeating notes when touched by a pupil.*

1. Open 'Bloom' and press 'create'. (if the app is already open, skip to step 5)
2. Find the best place for the pupil to play the iPad. This will depend on pupil's movement and eyesight.
3. Encourage pupil to make first contact with the app on their own (even if you have to support their arm).
4. Allow pupil to create a repeating soundscape.
5. After a while, reset the app by tapping in the bottom right hand corner to open the menu, then press 'clear', followed by the button with the four arrows.
6. Repeat the playing process, reinforcing the idea of cause and effect.

**Extension:** This app is great to use in pairs. One person uses this app, and another uses a complimentary app, like Bebot or Thumbjam. Or you could add atmosphere yourself by playing a xylophone or chime bar (easier than it sounds!)

**VOCALISE: Microphone with Garageband**

*You will need either a microphone or speaker to use this app.*

**Aim:** Encouraging pupils to vocalise, understanding cause and effect.

1. Open Garageband, create a new song with the 'voice recorder'
instrument. Plug in the microphone and/or speaker. Make sure 'monitor' is turned on.

2. Demonstrate (and experiment with!) the microphone using the echo and fun voices settings.

3. Bring the microphone to the pupil's mouth and encourage and reinforce vocalisation. Adjust the volume if necessary.

4. Alternatively, pupils can tap on the microphone (good with the delay effect)

**Extension:** Try and develop a 'call and response' pattern, whereby you copy the pupil's vocalisations, then they copy yours.

5. **SOLO AND IMPROVISE: BEBOT**

**Aim:** Create exciting melodies.

**TUTORIAL VIDEO AVAILABLE ON THE INSPIRE MUSIC WEBSITE**

**Good for:** Pupils who like big sounds, pupils who have small, repeating gestures (e.g. tapping). The best thing about bebot is that the whole iPad is a playing surface, with no unnecessary buttons. Good for thinking about pitch and sliding between notes.

1. Open the app
2. Explore the sounds. This is a good app to plug a speaker into and put near the pupil's ear or against their skin.
3. Change the sound by double clicking in the bottom right hand corner and moving through the preset sounds.
4. Find a sound that the pupil enjoys.
5. Consider adding a backing track or soundscape to the solo.

**Extension:** You can change the type of scale and amount of notes available to play in the 'scale settings' menu. Pupils with small movements should have a large amount of notes available to them, and vice versa.

**PLAY (ALMOST) ANY INSTRUMENT!: THUMBJAM**
**Aim:** Explore the sounds of high quality instruments. Play along to the backing track.

**Good for:** Pupils who are good listeners. Pupils with limited motor control, pupils with very limited movement.

*Thumbjam has a library of instruments: saxophones, cellos, pianos and many more. The whole playing surface is an instrument, making it easy to play.*

Solo playing:
1. Open thumbjam.
2. Explore the instrument.
3. Change the instrument. Go to 'Sound' in the top left corner, then 'Change Instrument'. Choose a new instrument by tapping on it, then press 'done'.
4. Change the amount of notes on the playing surface by pressing '+' and '-' on the 'span' setting on the left hand side. Pupils with small movements should have lots of notes and vice versa.
5. Experiment with instruments with sounds that do not keep playing when the finger stays on it (e.g. hammered dulcimer, acoustic guitar, bass plucked), and those that do (e.g. flute, trumpet, cello). Which gives the pupil more control and satisfaction?

**Playing along to the 'Improvise Approach' backing tracks:**

1. Choose a instrument
2. Change the scale to 'Major Pentatonic' by pressing 'Sound' then 'Change Scale'.
3. Change the key to C by pressing the button next to 'Sound' that looks like a hashtag, then pressing 'C'.
4. Choose a backing track from the 'Improvise Approach'
5. Play along!

**VIDEO SAMPLES: MADPAD**

**Aim:** Access a range of sounds by triggering video samples.

**TUTORIAL VIDEO AVAILABLE ON THE INSPIRE MUSIC WEBSITE**
**Good for:** Allowing pupils without speech to trigger words, or play high quality instrument riffs.

**Part 1 – Create the samples**

a) Open Madpad

b) Press 'create your own set' then 'try this'

c) Record one sound in each of the 12 squares. These could be
   • Pupil vocalisations
   • The name of the pupil (how about in a funny voice?) or things they like.
   • Found sounds or familiar sounds (e.g. sounds from the dinner hall)
   • Body percussion/beatboxing.
   • Acoustic instruments
   • Sampled sounds of professional musicians.

Make the videos very visual (you can turn the camera around if you want).

d) Press 'save and play'

e) Find the best position for the iPad so that pupil to access as many of the sounds as possible.

f) experiment with the different sounds, possibly with a backing track!

**Sample 30 Minute PMLD Session Outline**

As pupils enter- Ambient music(e.g. from 'Tanpura' app, or accordion drone, or Bloom app).

5 mins – Hello song – with space for each pupil to play an instrument or vocalise within the song. Don't worry about taking a long time for them to respond.

10-15 mins – individual work with apps. This could include multi-sensory aspects, using backing tracks, creating soundscapes.

10 mins – Bring ppls back together to play together e.g. with one pupil creating a soundscape or rhythm, and the other soloing. Music specialist can also play at this time.
5 mins – goodbye song, feedback.

4. List of apps

PMLD + (listed in order of how much we use them)

Bebot Polyphonic synth with more depth than first appears.
Bloom – See above
Thumbjam Powerful instrument emulator.
Aquasonic – Similar to bloom, but with water background. Shake to make the water move.
Madpad Video sampler.
Beatwave – Create layers of melodies by using a grid system. Pupil needs to have good grasp of cause and effect for this one to be meaningful, but it sounds great.
Thicket – Moody and very visual soundscape creation that some pupils love.
Soundprism – Create organ- like sounds. Big playing surface. Good for using in duets with a melody app like Bebot.
Airvox Uses the iPad camera to generate pitches based on the distance between you and the iPad.

SLD +
Garageband Songwriting app with virtual instruments, sequencer and easy to use sampler. We use it for the microphone settings also.
Loopseque Cyclical beat-maker with fantastic potential for exploring rhythm.
Figure Intuitive dance music creator.
Loopseque Kids - As above, but more child-friendly interface and sounds.
Drumjam – Cousin of Thumbjam, easily drag in instruments to create a groove then improvise on top with a range of great sounds.