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Dr. Amanda Benson

acbkiwi@gmail.com

twitter: acbkiwi

Technology is embedded in student's everyday lives. Harnessing this interest in technology can provide students with ubiquitous learning opportunities where they can learn anytime, anywhere.

Portable devices can easily be used within physical education, health and outdoor education as learning tools within class and at home, for revision or as part of assessment.



Issue 4: Are You Mobile?



Hardware

Tablets

A number of teachers are using tablets within classes and some schools have 1:1 iPad™ programs. With some of the 'apps' available for anatomy, biomechanical and game analysis it is a fantastic opportunity to integrate these into classes. One of the challenging aspects of using an iPad™ for example in a classroom or gym setting is that having everyone crowd around a small screen is impractical. However, there are a few different ways that it is possible to connect an iPad™ to either a tv or a projector (the same sort that you use to show powerpoint slides).

In this issue:

1. Connecting an iPad™ to a projector using a VGA adapter.
2. Connecting an iPad™ to a projector using VGA and an Apple TV™.
3. Connecting an iPad™ to a projector using HDMI and an Apple TV™.
4. Connecting an iPad™ to a digital tv.
5. Connecting an iPad™ via Reflection™ 'app' on a Mac™ computer plugged into a projector.

How to get things connected

1. Connecting an iPad™ to a projector using a VGA adapter.

- This requires the purchase of a VGA adapter to connect the iPad™ directly to the projector via VGA input. <http://store.apple.com/au/product/MC552ZM/B>

- This is the simplest option and requires only 1 adapter.
- The downside is that you have to stand right beside the projector with the iPad™ as the iPad™ and projector are connected with the cable.



2. Connecting an iPad™ to a projector:

a. using VGA and an Apple TV™

This requires:

- a HDMI to VGA adapter (such as the kind that can be found at jaycar electronics)
- an Apple TV™.



Apple TV™ HDMI cable into
HDMI to VGA adapter (back)



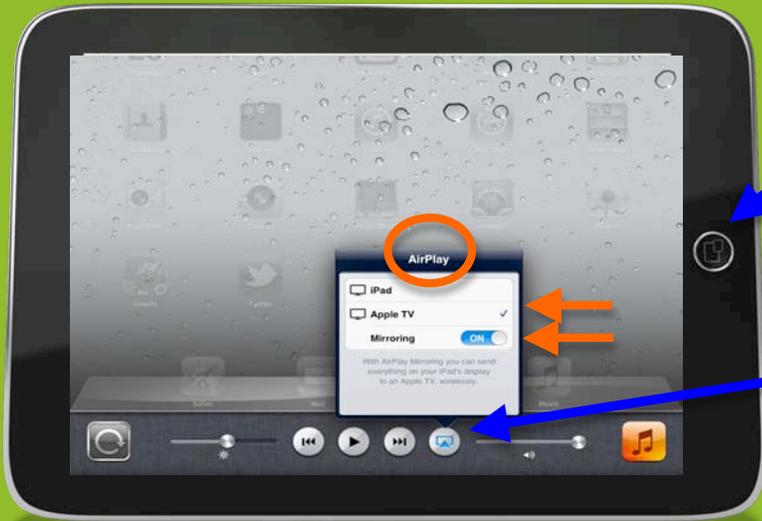
VGA cable plugs into HDMI to VGA
adapter (front) and then other end
of VGA cable into projector

- An Apple TV™ uses HDMI input only. If your projector only has VGA input, which all except the new ones have, it is necessary to downgrade the HDMI input to a VGA input using an adapter (N.B. it is important that the adapter you get is converting from HDMI to VGA and not the other way). If you think of this in terms of TV's; this is effectively the difference between the new digital TV's that are available and the old analogue TV's that are being phased out.

How to get things connected *cont.*

a. using VGA and an Apple TV™ *cont.*

- Plug the Apple TV™ HDMI cable into the HDMI to VGA adapter (photos on page 2).
- Plug the VGA cable into the VGA port of the HDMI to VGA adapter and then into the VGA port on the projector.
- This will enable you to use mirroring on the iPad™ and move around without being connected to a cable.



To get mirroring turned on:

- Click the iPad™ home key twice.
- At the bottom of the screen swipe to the right.
- There will be an up arrow beside the fast forward button for you to select the AirPlay™ and then Apple TV™ and mirroring on.

3. Connecting an iPad™ to a projector:

b. using HDMI and an Apple TV™

- This is the same as 2. above except no HDMI to VGA adapter is required.
- Plug the Apple TV™ directly into the projector HDMI port.
- Turn on Airplay™, select Apple TV™, mirroring and you are ready to go.

4. Connecting an iPad™ to a digital tv.

This is the same as 3. above except instead of connecting the HDMI cable to the projector's HDMI port you connect it to the HDMI port on the TV.



Reflection™ 'app'

5. Connecting an iPad™ via Reflection™ 'app' on a Mac™ computer plugged into a projector

A relatively new option available to mirror your iPad™ or iPhone™ onto a large screen is a new 'app' called Reflection™ <http://reflectionapp.com/>.

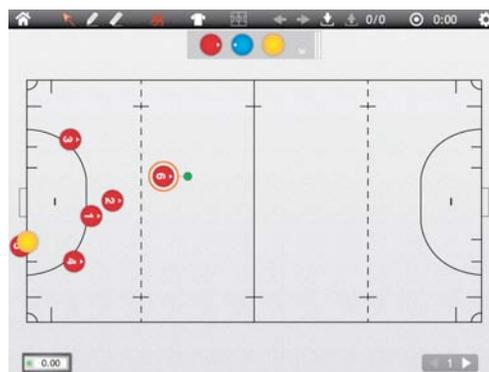
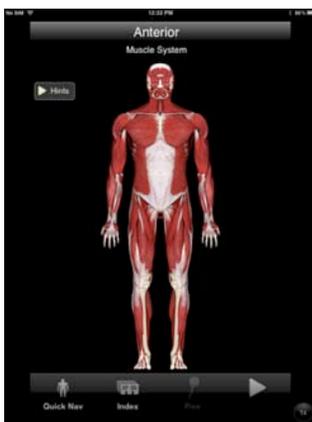
This option requires you to download the Reflection 'app' onto your Mac™.

Once you open the 'app' on your Mac™ you double click the home button on your iPad™ or iPhone™ and swipe to the right so that you can see the AirPlay™ option (as on page 3) and select Mac™ and turn mirroring on and you are ready to see your iPad™ or iPhone™ on your Mac™ screen.

If you then want to display this onto a larger screen just plug your Mac™ into a projector in the same way you would if you were going to display a PowerPoint™ presentation to your class.

You can move around the room with your iPad™ or iPhone™ as it is connected wirelessly through the wifi network to your Mac™.

One of these options should enable you to share your 'apps' with your class. Examples below are iMuscle™ and CoachNote™ and on page 1 SuperBodies™.



1

When using an Apple TV™ :

- Sometimes you don't have wifi internet connections available. If you are not connected to wifi you may find your Apple TV™ will not connect with your iPad™.
- If this happens you can use a router and this will overcome the problem. If you have access to wifi at school then this shouldn't be necessary.
- Many of you are likely to have wifi connections at home that use a modem router (Its usually written on the modem). The modem you use may be a modem only in which case is not helpful for this problem.
- This means that if you don't have wifi available in the gym for example you just plug the router into the power (no need for wifi cables to be connected as well, just the router power cable) and it should enable the Apple TV™ to link to your iPad™.
- The Apple TV™ does have to be linked with the modem /router you are using (in the settings menu of the Apple TV™).



4