

ELTE Project Help Sheet 2

supporting the development of technology enhanced teaching and learning in Social Policy and Social Work in higher education

Using a Data Projector with a Laptop

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Introduction

This help sheet provides guidance for using a data projector with a laptop. Most of the steps will also be relevant to operating a data projector with a PC. Differences in individual models and makes of laptops and/or projectors may affect some of the instructions.

Setting-up

1. **Ensure all equipment is switched off.**
2. **Position the data projector** on a flat surface in front of a screen or white wall ensuring the whole audience will be able to view the image. Whiteboards can be used but the reflective surface impacts on the quality of the image.
3. **Connect the data projector to the electricity supply** by plugging the cable (“kettle lead”) into the three pronged socket (see image). Many venues now have covered electricity sockets on the floor. You may need an extension lead to reach a socket and maintain the best position for the projector.



This help sheet is part of a series being produced for social policy and social work higher education teachers and support staff as part of SWAP's E-Supported Learning and Teaching Enhancement Project. The project is running until July 2008.

For more details on the project visit the SWAP website

<http://www.swap.ac.uk>

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4. **Position the laptop** so that you are not obstructing the audience's view of the screen but where you can still access it. There may be a remote control that allows you to stand some distance away.

Teaching tip – If you are presenting in front of an audience try not to look at the projected image too often and thus turning away from the audience – use the laptop for your content view.



5. **Connect the projector with the laptop using the VGA cable.** The connectors at each end of the cable can vary in colour and shape but both ends will look the same with 15 pins in them (see image). Attach one end of the cable to the data projector port labelled 'In' (not 'Out') or similar (usually blue). Attach the other end of the cable to the laptop. Screw in the side screws to secure.

Tip — Before switching the machines on ensure that the cables are positioned to allow as much space on the table or surface as possible and check floor cables for position so that they do not constitute a hazard that people could trip over. Tape is sometimes useful to flatten cables.

6. **Switch on the data projector.** If there is one, take the cap off the front of the lens. Plug the projector in and switch it on ('Power' or 'On' button is usually on top). It can take the projector a couple of minutes to warm up.

Nothing has happened!

- Is the electricity socket switched to 'On'?
- Is the cable fitted securely?
- Have you tried pressing the 'Power' or 'On' button on the projector again?
- Did you remove the lens cap if there is one?

7. **Switch on the laptop.** Don't forget to plug it in and log on if necessary. You should now see the laptop screen view displayed on the big screen.

I cannot see anything on the screen!

- Sometimes the projector does not display immediately. Wait a minute or two.
- Can you see the image on the laptop but not on the big screen or vice versa? See the troubleshooting on the next pages for more help.



Troubleshooting I: If you see one of these three options, follow the steps below; otherwise go to Troubleshooting II on the next page.

1. I can see an image on the **laptop** but not on the big screen.

2. I can see an image on the **big screen** but not on the laptop.

3. I can see **nothing** on either the laptop or the big screen.

Check the data projector settings. Press the button on the projector marked 'Input' or 'Source' and hold it down for a few seconds. A menu should appear on the screen or the current setting may appear in one corner. Find and set the projector input setting to 'ANALOG RGB1' or similar (not video or camera).

Find the Fn key on your keyboard (usually in the bottom left)

Find the appropriate F key on the top row of your keyboard with LRT/CRT on it, or an icon like a screen (usually F5, F7 or F8)

Try out all of them if you are not sure

Press these 2 keys (Fn and F key) at the same time

Release the 2 keys and see what happens

I can **NOT** see the image on the laptop and on the big screen!

Go to option 1, 2 or 3 above and try again. It can take up to 3 attempts!

Still no success? Try the troubleshooting II tips on the back page or seek technical support

SUCCESS!
I **CAN** see the image on the laptop and on the big screen!

Go to step 8

Troubleshooting II

If you can see something on the laptop and on the screen, but they are different images, the laptop may be treating the projector as a second monitor. Go to Start > Control Panel > Display. On the Settings tab ensure the 'Extend my Windows desktop onto this monitor' box (usually at bottom of window) is not selected. If it is selected and greyed out (i.e. you cannot untick it), shut down your laptop, disconnect the projector from the laptop, restart the laptop and change the setting. Then restart your laptop again and repeat from Step 5. If you cannot untick the box or the previous instructions were not successful, seek technical support.

8. **Make any fine adjustments** to improve the quality of the projected image. The image should be centred in the projection area.

Position - underneath the projector there are feet to adjust the height. You may on occasion need to put the projector on top of books etc. but you should ensure the surface is wide and stable enough for the projector to sit securely. Sometimes the position of the projector will not result in a square or rectangular image but instead in a 'keystone' shape. It can be altered by accessing the projector settings via a button on top of the data projector usually labelled 'Menu'. The menu items are then displayed via the projector image. The cursor (arrow) keys on the projector can be used to navigate through the menu and adjust the keystone as required.

Size of image - this can be changed by adjusting the size settings on the projector menu or by physically moving the projector closer or further away from the screen. The closer to the screen the smaller the image.

Focus – this can be adjusted manually by rotating the lens or using the menu.

9. **Using sound** - adjust the sound settings on your laptop by clicking on the appropriate icon on your laptop. Remember if you are in a room with just a laptop and projector and want to use audio in your presentation you will probably need to connect portable speakers to provide suitable sound quality and level.

Teaching Tip—If there are several presentations from different people you are advised to save each to the Desktop for quick and easy transition between them.

10. **Start the programme** you wish to use, such as PowerPoint.
11. When you have finished using the projector, **switch the projector off**. A text request will appear on the screen asking you to press the button again if you want to proceed with switching off. Depending on the make and model you are using there will continue to be a noise from the projector as it cools down, often for several minutes. Only when the cooling process has finished should the projector be switched off at the mains (this helps to extend the life of the projector lamp).
12. When you have finished using the laptop, **switch the laptop off and disconnect all cables**.