



Health & Safety Guidance Interactive Whiteboards & Projectors in Classrooms

The majority of primary school and many secondary school classrooms in Bracknell Forest now have a fixed interactive whiteboard (IWB) and ceiling mounted projector and there are important health and safety issues that must be considered.

All staff using the equipment should be made aware of the following guidance and training in the use of this equipment should include all health and safety issues. Risk assessment should inform good practice within every school.

Projector Settings

- Precautions should be taken to avoid discomfort and possible damage to the eye, both of the teachers using the board on a regular basis and any pupils who come up to the board to interact during the lesson. Ceiling mounted projectors are considered to be a good solution as they reduce the possibility of projector beam dazzle. This enables whiteboard users to look at the class without directly looking at the projector beam. Schools should consider short-throw projectors for any new installations as they dramatically reduce glare and shadowing.
- When using a data projector it is important to ensure that all staff and pupils are aware of the potential danger of staring directly into the projector's beam. Users should be encouraged to keep their back to the beam when standing directly between it and the board. They should stand to one side of the board while facing out towards the class. Pupils should always be supervised whilst the projector is operating and be made aware that they should not look into the beam.
- All the projectors, where possible, should be set to the lower power setting to reduce glare and preserve bulb life.
- In a bright room, rather than increasing the brightness of the projector, blinds should be used. Using a more powerful projector could lead to discomfort and possible damage to the eye.
- It is very important to follow the manufacturer's instructions. Warning notices should be displayed prominently by the equipment and pupils and teachers should be discouraged from staring at the beam.
- If any additional mobile boards and projectors are used in school then it is important to ensure that the unit is anchored firmly when in use, and that trailing power cables are covered and secured.
- The projectors should have been professionally fitted and adjusted, so that the 'keystone correction' provides a correct 'rectangular' image onto the screen.

Projector Maintenance

- The projector should be put into 'standby' mode or switched off whenever it is not being used for any period. This not only eliminates glare but extends the life of the bulb. Bulb life is counted in number of hours of use, therefore leaving it switched on unnecessarily is not cost effective.
- Projector filters must be cleaned (usually monthly) according to manufacturers' recommendations, otherwise any warranty is invalidated. A suitable person in your school should be identified and made responsible for carrying out this routine maintenance task. The person should have the necessary skills and training to be able to work at height in order to remove the projector from its' housing, clean the filter and securely replace it.

Interactive Whiteboards

- The age and height of the children who will use the room should determine the height at which a board is mounted. Consideration should also be given to the fact that a classroom will be used by different teachers who may be of significantly different heights. You cannot accommodate the needs of all potential users with a fixed height board. However, there are now some integrated, height-adjustable IWBs, with short throw projectors, that are well worth considering for new installations. When installation costs are taken into consideration, these prices for these integrated solutions can be competitive.
- Teachers in Nursery, Foundation Stage or KS1 settings can avoid back strain by sitting when using their board, a wheeled chair is useful for this.
- The IWB should be installed in an area with adequate access at either side of the board (approximately 600mm each side) with no fixtures and fittings below or around the board that can restrict access, form a trip hazard or directly cause injury to a user. For the same reasons, general clutter should not be allowed to build up around the board.

Glare from IWBs can be further reduced by:

- Using lower power settings on projectors.
- Changing the default background colour on all electronic resources when possible, to either a dark or pale colour. Dark backgrounds and light colour pens are very effective in bright sunny conditions.

Other Considerations

Schools should ensure that there are adequate power sockets for IWB, laptop or computer, any sound equipment/projector and any other equipment to be used. Trailing cables can cause a very significant trip hazard, with the potential to cause injury or aggravate existing injuries/medical problems.

References:

http://schools.becta.org.uk/index.php?section=lv&catcode=ss_lv_saf_hs_03&rid=12898 modified 18 June 2007

For further advice on the use of projectors and interactive whiteboards in the classroom please contact the LA ICT team.