Display Screen Equipment (DSE) Workstation Assessment Guidance

What are the arrangements for DSE assessment in the University?

The Health & Safety (Display Screen Equipment (DSE)) Regulations (1992) require all employers, such as the University, to arrange for assessments to be made of DSE workstations used by their staff. The arrangements in the University are for staff to assess their own workstations using an assessment form with assistance and training if necessary (see HELP Section at the end of this guidance).

1 The term “DSE workstation” defines the immediate working environment and includes your desk, chair, display screen, computer processor, keyboard, mouse and other desk-based equipment such as telephone and copy holder.

2 A “DSE User” is a member of staff who uses DSE as an integral and essential part of their work and uses it regularly (e.g. at least for an hour a day, every day). They may have their own DSE workstation or share a multiple use one. Before using a multiple use one it is very important to readjust the workstation to suit their individual needs.

What can I do to help myself?

It is worth setting up your workstation properly both so you can be as comfortable as possible and to help you avoid any potential health problems. You should make full use of all the adjustment facilities within your workstation to ensure that it is best suited to you as an individual. The following guidance aims to provide helpful information about each section of the University DSE assessment form:

http://offices.exeter.ac.uk/safety/docs/dse/DSEAssessmentForm.pdf

1. HISTORY

Posture
- When working in a fixed position at a DSE workstation for extended periods of time your body is not in a natural posture. DSE work involves small but very repetitive movements of the hands and wrists. The rest of the body remains fairly static and requires good support, particularly lumbar support. In a poorly set up workstation this support is absent and, over a extended period of time, chronic health conditions called musculo-skeletal disorders can occur.
- Musculo-skeletal disorders are the most common occupational illness in Great Britain. They include problems such as low back pain, neck and shoulder pain, joint injuries and repetitive strain injuries of various sorts (particularly of the wrists and fingers).

Eyesight
- In addition to small repetitive movements of your hands and wrists, your eyes are working hard, moving and re-focusing on the screen, keyboard and written work. Over an extended period of time, they become tired and possibly strained and sore.
These symptoms are unpleasant but there is no medical evidence to suggest that computer use causes damage to your eyesight.

- If you have set up your display screen correctly (see 3 below) but you still cannot read the screen characters clearly you may have an existing problem with your eyesight.
- Under the Regulations the University must provide you with free sight test and eye examination by an optician. If, as a result, glasses for DSE work are considered necessary, the University will fund the purchase of a basic DSE glasses. Please see the section on Display Screen Eye Tests on the Occupational Health Service website for further information.
  [http://admin.exeter.ac.uk/personnel/occ_health/dse.shtml](http://admin.exeter.ac.uk/personnel/occ_health/dse.shtml)

2. USAGE

- If you are sitting for long periods in front of the screen, make sure you change your posture as often as practicable. Some movement is desirable, but avoid repeated stretching or twisting to reach things you need (if this happens a lot, rearrange your workstation).
- Most jobs provide opportunities to take a break from the screen, e.g. to do filing or photocopying. Make use of them. If there are no such natural breaks in your job, your employer should plan for you to have rest breaks. Work breaks should:-
  - be taken before the onset of fatigue;
  - be included in working time, reducing the workload and not leading to an increased compensatory pace of work;
  - be short and frequent rather than longer and occasional, for example a 5-10 minute break after 1 hour of continuous screen and/or keyboard work is likely to be better than a 15-20 minute break after 2 hours;
  - be away from the screen, if possible;
  - be informal rather than formal; and
  - allow the user some control of the pace of work.

3. DISPLAY SCREEN

- As a general guide, the screen should be positioned about 35cm - 60cm away from you or about an arm’s length.
- By sitting “face-on” to the computer screen, you will avoid having to twist the body placing unnecessary strain on muscles and tendons.
- To help prevent the neck muscles from becoming fatigued, a comfortable viewing angle should be achieved by adjusting the screen’s swivel and tilt mechanism.
- ‘Touch typists’ (who rarely need to look at the keyboard) usually prefer an elevated screen position, with their eyes level with the top of the screen (which is tilted up slightly). Non-touch typists (the majority of us!) prefer a lower position since our eyes need to glance from the screen to the keyboard and back again. A lower position minimises head movements. Flat screen display screens are usually easily height adjustable. You may need to use a screen stand or adjustable swing arm.
• The screen should be free from dirt or grime, including finger marks. Make sure you regularly clean your screen’s surface using a proprietary screen cleaner / wipes.
• The desk and screen should be arranged so that bright lights are not reflected in the screen. For example you should not be directly facing windows or bright lights. Ideally your screen should be situated at a 90-degree angle to the source of reflection/glare.
• To prevent unwanted light, adjust blinds or curtains.

![Diagram showing screen arrangement](image)

• By setting the screen to display dark characters on a light background, the screen will be less prone to glare and reflection. This is usually set as standard in the computer’s software.
• If working with colours select those that are easy on the eye (avoid red text on a blue background, or vice-versa).
• The characters on the display screen should be stable and sharply focussed and free from flicker or movement. They should be of an adequate size for legibility.
• You should be able to adjust the brightness and contrast of the screen to suit the lighting conditions in the room. These controls are usually found on the lower, front side of the monitor.
• It is important to also keep glasses clean (if worn) as this may affect your view of the screen.
• A document holder is not an absolute requirement however, if the user has to significantly work from copy, one should be provided to help avoid awkward neck movements. Where a document holder is used, it should be adjustable and stable. The document you are working from should be set at a similar height, viewing distance and angle as that of the display screen.

4. KEYBOARD

• Your keyboard should have adjustable rear supports underneath in order to raise the keyboard at a slight angle, to get a comfortable keying position.
• The characters on the keys should be clearly marked to make for easy typing. If not a new keyboard may be required.
• You should leave space in front of your keyboard to rest/support their hands when not keying. A wrist rest provides gentle support and helps you keep your hands in line with your forearms.
• Good keyboard technique is important: -
  o Don’t bend the hands at the wrist when keying
  o Don’t overstretch your fingers when typing and try to keep a soft touch on the keys.
o Don’t rest your forearms or wrists on the edge of the desk as this can lead to health problems developing in the forearms and impede free movement in your hands.

5. MOUSE (or TRACKBALL) & MAT

- Position the mouse within easy reach, so it can be used with the wrist straight, not bent upwards.
- There should be sufficient space to use your mouse. A lot less strain is placed on the arm and shoulder by placing the mouse close to your body (not under or on piles of paperwork!).
- Sit upright and close to the desk, so you don’t have to work with your mouse arm stretched.
- Support your forearm on the desk, and don’t grip the mouse too tightly.
- Rest your fingers lightly on the buttons and do not press them hard.
- A suitable mouse mat will have a surface that allows free and easy movement.
- Some mouse mats have a built in wrist rest. If you have this type of rest you should not be tempted to lean too heavily on the rest and pivot the hand from the wrist. The rest should simply support the wrist so that you use the whole arm to guide the mouse.
- Change the mouse between hands from time to time. Changing from right-handed use to left (and vice-versa) spreads the load and gives each hand a break, particularly if you are an intensive user of the mouse. If you do change the hand you use your mouse with, it is important you also change the mouse button settings otherwise it will not function properly.
6. WORK CHAIR

- The chair should be stable and allow the user easy movement. Ideally the chair will have a five-footed base with castors and a swivel seat for comfort.
- The seat height should be adjustable as well as the seat back and tilt. As a general guide, once you have found a comfortable position, your eyes should be level with the top of the screen and your arms should be approximately horizontal.
- Adjust the chair height to ensure hands are horizontal to the keyboard.
- Once the chair has been set to the correct height, if your feet cannot be placed flat on the floor then a footrest is required. The footrest needs to be adjustable in height and large enough to vary the position of the feet.
- The chair’s back rest should be adjusted in height and tilt so you can get good lumbar support to the lower part of the back. Try not to slouch!
- Adjust your chair height by using the levers to find the most comfortable position for your work. As a broad guide, your forearms should be approximately horizontal and your eyes the same height as the top of the display screen or slightly above it.

![Hands are horizontal to the keyboard](image)

![Feet should be flat on the floor. In this instance, a footrest is required](image)

- The space underneath the desk should be free of any unnecessary obstacles such as boxes or stored equipment, etc allowing you to move your legs freely.
- Pressure should not be created underneath your thighs as a result of the chair being set too high or alternatively no thigh support as a result of the chair being set too low. As a rough guide, your knees should be at right angles.
7. DESK

- Arrange your work surface so that you have enough space in which to write either to the left or right of the keyboard.
- Use a document holder positioned next to and level with the screen to help you avoid awkward neck and eye movements and have more desk space.
- Avoid any glare or reflection on your desk by controlling daylight using blinds or curtains. Overhead lights should not be too bright.
- The desk surface should be non-reflective.
- Make sure there is space under your desk to move your legs freely. Move any obstacles such as boxes or equipment.
- A desk may need to be replaced or raised if you are above average in height. Some desks are designed to be adjustable.

8. ENVIRONMENT

Space
- The workstation should be set-up to allow the user space to sit down, get up and move from side to side without difficulty as well as allowing for changes in posture whilst working.
- Prolonged sitting in a static position can be harmful. You should change your posture as often as practicable.

Lighting
- Ceiling lights should not be too bright causing eye fatigue and reflection on the screen and desk. Nor should they be too dim causing eye strain.
- If the lighting in the office is insufficient for the tasks you are performing, a desk lamp may be required.
Temperature, Humidity and Ventilation

- As a general rule, office environments should be no lower than 16 degrees (after completing the first hour of work) although individuals have different tolerances.
- The humidity of the office should be maintained at a comfortable level to the user(s). Excessive humidity can be unpleasant just as extremely dry air can cause eye discomfort to DSE users.
- A build up of static electricity is more prone in areas of low humidity. One or two potted houseplants may help control low humidity as well as making the environment seem more pleasant.
- When a new office area is being set up or additional computers are being introduced into an existing work area, the heat output from computers should be taken into account.
- Working in hot, stuffy rooms makes you feel tired and lethargic and dries your eyes.
- Make full use of openable windows or portable fans to improve ventilation.

Noise

- Background noise (particularly in open plan/shared offices) can be distracting to DSE users resulting in errors being made or reduced efficiency.
- The noise level at the workstation should not be sufficiently high to prevent you from being able to concentrate and carry out your work. For example, you should be able to carry out a work-related conversation or hold a telephone conversation without being significantly affected by background noise.
- Noisy office equipment such as printers or photocopiers may need to be relocated away from the office occupants or separated by screens to limit noise. The purchase of well-designed printers, etc can usually overcome these problems at source.

HELP

What should I do if I have any health problems?

- If you think you have health problems connected with your work, talk to your supervisor, manager or safety representative first, who should then report this to the Occupational Health Service.

What should I do if I have any problems completing the DSE assessment form?

- If you have any problems completing the assessment form contact the Health & Safety Office.

Is there any Health & Safety training in DSE assessment?

- Yes, the Health & Safety Office provides a course entitled ‘Office Safety & Computer Workstations’. The course is bookable via the University’s Staff Learning & Development website (http://services.exeter.ac.uk/learninganddevelopment).

CONTACT DETAILS

Occupational Health Service
http://admin.exeter.ac.uk/personnel/occ_health/contacts.shtml

Health and Safety Office (Aurelia Trolley, A.C.Trolley@exeter.ac.uk)
http://offices.exeter.ac.uk/safety/about.html

USEFUL REFERENCES
http://www.hse.gov.uk/msd/dse/guidance.htm