DSE ASSESSMENT GUIDANCE

This Guidance sheet is aimed at Display Screen Equipment (DSE) users and Local Workstation Assessors (LWA) and gives brief details of the ‘minimum workstation requirements’, simple tips for safe use of DSE, common problems seen with workstations, and possible solutions that could be tried to make improvements. The advice is in line with accepted good practice and the University’s BeOnline workstation assessment system.

DSE users are required to carry out online training and then a self-assessment of their DSE workstation(s). The DSE training and self-assessment are available online via the Awaken Portal, which can be accessed from the University StaffNet pages under the link ‘BeOnline Health and Safety Training’. New staff will be invited to undertake the training and assessment upon starting at the University.

The DSE Workstation Assessment Procedure, (HS-GN-009) shows the processes to be followed. Where the online self-assessment identifies issues in the DSE workstation, a referral will be generated. An in-person (where possible) follow up assessment will be conducted by the LWA to try and resolve any issues. If the issues continue, the HSW Team can carry out further assessments. For more complicated cases or cases that have arisen due to a medical condition, a referral either to Occupational Health via HR or to Posturite will be made.

After assessment by Posturite a report will be provided including recommendations and costs of the equipment recommended. It is worth noting that Occupational Health, LWAs, HSW team and Posturite can all provide recommendations. It is then the responsibility of the School / Directorate to implement any recommendations. Further advice on the recommendations can be sought from the HSW Team where required.

There are a number of online DSE training and assessment packages available:

1. BeOnline DSE Workstation Training and Self-Assessment – Flexi. This is the default training & assessment package and allows staff to assess multiple different workstations
2. BeOnline DSE Workstation Re-Assessment (Mover). This can be assigned to staff who have moved location
3. BeOnline DSE New and Expectant Mothers. This is for those members of staff who have informed the University that they are expecting a child or have recently returned from maternity leave

In addition, all staff who have completed a DSE workstation training and assessment will be required to undertake refresher training and assessment every 3 years.

For members of staff working from home, the DSE Homeworking Checklist (HS-SF-011) and the DSE Home Working Guidance (HS-GN-038), will be useful for staff to maintain an adequate workstation setup.

The BeOnline Workstation Re-Assessment (Mover) will be assigned to any staff member requiring it, but the HSW team should be made aware of through the individual’s Line Manager. The onus will be on the staff member’s Line Managers to inform the HSW team.

Any other reason/change in circumstance for example, Pregnancy, accident or ill health, leading to a requirement for a DSE Assessment, the staff member’s Line Manager must inform the HSW team as soon as possible to ensure this is captured and assessed.
LWAs will receive external training, which may be supplemented with additional training, guidance, advice where required. They will be expected to sign the Local Workstation Assessor Agreement (HS-GN-008)

LWAs can carry out DSE Assessments for members of staff and PGR students. Their recommendations may include replacement or ergonomic keyboards and mice, additional lumbar support, wrist support and footrests. LWAs should escalate cases to the HSW Team if they do not feel competent to advise on complex cases.

A standard Workstation checklist has been developed to promote consistency of assessment. This checklist meets the requirement to record assessments. LWAs are required to use the form to record findings from in-person assessments. Each School/Directorate should maintain records of who their users are, the workstation assessments and any relevant documentation relating to actions that have been taken and training/information that has been provided.

If there are significant changes to a workstation, it must be re-assessed, and actions implemented where required, to meet the requirements of the Regulations.

Some examples of significant changes are:
- Relocation of workstation
- A major change in workstation furniture
- A substantial increase in the amount of time required to be spent using display screen equipment
- A substantial change in other task requirements (e.g., more speed or accuracy)
- A major change to software used
- A major change to the hardware (screen, keyboard, input devices etc); including replacement of an unrepairable item with a new one, even if the replacement is the same model
- Significant modification of environmental conditions such as the lighting

Some Common DSE Problems And Their Solutions
Health – General Body
Aches, pains and any discomfort experienced at the workstation can occur due to different reasons such as medical conditions, sports, hobbies and also using a computer at home. Where possible, the initial workstation assessment should identify if any problems appear to be related to work and any other contributory factors. Sports and hobbies can place additional strain and prevent the body from getting adequate rest required, thereby contributing to any discomfort that felt at work.

A poorly designed home workstation or continuous/extended use of a laptop may be contributing to a particular problem. Although improvements can be made to the work arrangements and office workstation to resolve or minimise problems and prevent any contribution they may be making to discomfort, DSE users may need to make changes at home too to feel the full benefit. Refer to the DSE Working from home guidance and Checklist. However, if the home workstation is more comfortable than the workstation in the office, it will be helpful to identify the differences as these may indicate possible solutions at work. Line managers need to be aware of specific health and medical problems that may be adversely affected by the workstation or work and arrange a referral to Occupational Health via HR.
Chair and Desk
The chair must be stable and allow freedom of movement (normally five-point base and castors) and a comfortable working position. It must have adjustable seat height and adjustable back height and angle. Rigid, faulty or poorly adjusted chairs can lead to sitting too high or too low, in awkward positions, or with poor back support. This can cause aches and pains in the legs, back, shoulders and neck. Chairs should be adjusted to suit, and adjustments known and working properly, with broken chairs replaced.

The desk must be large enough to allow flexible arrangement of equipment and documents and for them to be reached and seen easily. Account needs to be taken of requirements for both DSE and other work. The surface must not be shiny enough to give distracting reflections from lights and windows. There should be enough space underneath for the legs and to allow changes of position for different tasks. It should always be possible to sit directly in front of the work in hand. Frequent reaching and twisting or leaning or turning slightly to one side when sitting can all cause extra muscle tension in the back, shoulders and neck and lead to aches, pains, and headaches. A proper posture should be maintained while sitting at the workstation and the right chair should be used to provide adequate support.

Items around the desk should be positioned to give enough room to write or use the space in front and keep things like the mouse, keyboard, and phone, within reach. Other adjustments may then be needed to the screen height or angle. Raise your chair so that your lower arm is level with the desk, the forearms should rest on the desk, offloading the shoulder and neck muscles. If you can’t rest your feet comfortably on the floor you need a footrest.

Space Around The Desk
There must be adequate space at, under and around the workstation for DSE and other work and to change position from time to time. Too little or awkward space can lead to bumps and bruises when moving past furniture, falls over trailing leads and clutter, or aches and pains from working in uncomfortable positions. Equipment and furniture can be moved slightly to make a bit more space or give easier access. Trailing leads and infrequently used items should be kept somewhere else or removed.

Footrest
Once the seat height is correctly adjusted the thighs should be properly supported by the seat pad and the feet should be either flat on the floor or on a suitable footrest. If the seat is too high the edge of the seat can put pressure on the backs of the legs and knees; or the feet may be placed on the castors and give an awkward sitting position and additional strain and aching in the lower back. Do not use a footrest when it is not needed as the thighs will not be fully supported by the seat pad and extra pressure is placed on the buttocks and base of the spine.

Display Screen
The height and angle of the display screen must allow a comfortable head position. The screen may be on the desk or raised but must be adjustable and free from glare and reflections from lights and windows. It must have a clear stable image that does not flicker, and also have adjustable brightness and contrast controls. Poor quality characters and images, or glare and reflections can lead to
difficulties reading the screen and may cause tired eyes and headaches, or back and neck pain from awkward postures. Screen height depends on the need to look at the keyboard when typing and the kind of work being done. The ideal relaxed position for the neck and eyes is looking down slightly. Touch typists may be comfortable looking down just a little with the screen on top of the base unit or a raised stand, with the top of the screen no higher than eye level. It is generally recommended that the screen is about arm’s length away, but it may be helpful to move it a little nearer or further away for some work or if the eyes are tired. For wearers of bifocal or varifocal glasses the screen height and distance will also be determined by the need to look through the appropriate part of the lens. The screen brightness and contrast settings may require be adjusted to suit the change in lighting levels change.

Keyboard, Mouse or Tracker Device
The keyboard should be separate from the screen, be adjustable and have clearly legible characters. There must be enough space between the keyboard and the edge of the desk to allow the hands to be supported when not typing. Typing or gripping the mouse too tightly and using the mouse with the arms reaching forward or out to the side places additional strain on the neck and shoulders and can cause discomfort. Forearms should be approximately horizontal, and wrists relaxed but straight. Typing or using the mouse with the wrists bent up, down or flexed to one side can constrict the nerves and blood flow in the joints and may cause discomfort. Resting the hand or wrists on the desk when typing can bend the wrists up, put extra pressure on the contact points and cause discomfort. The mouse should be close to the keyboard to avoid the arm reaching forward or being held out to the side. If the mouse is being used exclusively, it can be moved in front of the body and the keyboard moved to one side. An upright mouse may be preferred. Mouse mats provide cushioning for the heel of the hand but need to be large enough for the task, smooth and free from sharp or damaged edges. Left-handed users may prefer to reverse the operation of the mouse buttons and may need to have a mouse shaped for left-handed use.

Document Holder
A document holder helps to keep papers or documents in a comfortable position for easy reading and annotating when working on the screen. A holder can be useful for people who have to look repeatedly from the screen to a document and back again, and for anyone who finds difficulty refocusing. The document holder must be stable and positioned to minimise head and eye movements. A poorly positioned document holder or leaning to look at papers on the desk can give awkward back and neck postures or difficulties focusing. Back and neck pain, tired eyes and headaches could result. Upright document holders should be placed next to the screen and at a similar height, angle and distance. Touch typists may only need to look at the screen occasionally and could have the document holder directly in front of them and the screen slightly to one side when copy typing.

Eyes and Eyesight
There has been no evidence found linking DSE work to any permanent eye damage, but it may aggravate pre-existing vision defects and make the users more aware of them. DSE work does not itself cause the eye problem; the problem would have been there already but not causing any noticeable difficulty. Uncorrected vision defects and/or poor working conditions may give some users temporary visual fatigue, blurred vision or headaches and can make DSE work more tiring or
stressful than it should be. Glare on the screen, bright areas (e.g., windows) in the field of view or a dirty or unclear screen can also lead to eye strain. So, take regular breaks, use blinds to shield windows and keep your screen clean. Avoid poor character definition on your screen. Change your default font size and/or colour. Try the palest green or blue as a background colour. Under the Regulations, all staff are entitled to a vision test and where required, provision of a basic pair of glasses. This is only where glasses for the distance the screen is viewed at. If an ordinary prescription is suitable, then the University is not required to pay for glasses. The University makes a contribution for a basic pair of glasses and further details can be found in the Expenses Policy.

Factors such as inadequate lighting, a poorly adjusted screen or badly positioned documents can make it uncomfortable for the user. Eyesight commonly deteriorates with age and many people start to wear spectacles for reading and other close work. Users with bifocal and varifocal glasses need to look through the appropriate part of the lens and therefore can find themselves adopting an awkward posture or making repeated adjustments to their head/neck position. Particular attention should be paid to the distance and position of the screen, papers and other items to prevent discomfort.

Rest and Work Breaks
The breaks referred to here, are anything that gives a change from screen, keyboard and mouse work. They include other work such as phone calls, filing or going to meetings and are not only coffee and lunch breaks. The frequency and length of the breaks will depend on the work being done and ideally it should be possible to choose when to take them. Short frequent breaks, for example five minutes after 50-60 minutes continuous screen work, are better than longer breaks at less frequent intervals. Breaks are also more helpful if taken before tiredness and discomfort are felt. Tired eyes, stiffness, poor concentration and mistakes can all result from inadequate breaks from the screen. Most people have a usual mix of tasks providing natural breaks away from the screen, often far more than is assumed. If a mixture of tasks isn’t available, the Line manager should be consulted on possibilities for revised working and the introduction of breaks.

It should be noted that drafting documents or amendments on paper helps minimise the time spent working on screen. Breaking off and doing something else is also better than staring at the screen waiting for inspiration. It’s natural to save intensive work for quiet times when there will be few interruptions and quite easy to forget to take breaks if colleagues are not around and the phones are quiet. Fatigue and discomfort often lead to mistakes and don’t save time in the long run. Concentrating on the screen can reduce the blink rate leading to dry eyes. This can be a particular problem for contact lenses. ‘Mini-breaks’ of a few seconds from time to time can really help, e.g. the 20-20-20 guide (every 20 minutes take a 20 second break and focus your eyes on something at least 20 feet away (6m)), looking away from the screen or out of the window, taking the hands away from the keyboard and mouse, giving the fingers and hands a massage and shake, letting the arms hang down by the sides of the body, or standing up and stretching.

Lighting
Lighting at the workstation must be adequate for DSE and other work. It may be inadequate or uncomfortable because it is too dim or too bright and harsh, patchy, flickering, or produces shadows, glare or reflections, causing difficulty seeing the screen and other work clearly. This may lead to sore eyes or headaches, or aches in the back or neck either from leaning to read or from sitting awkwardly to avoid glare and distracting reflections. Ask Estates and Facilities to replace dull
or flickering lights and clean dirty lights within on-campus offices. Can desks be moved slightly to take advantage of better lit areas of the room? Blinds should be used to control glare and reflections from sunlight or to allow more daylight in.

Temperature and Humidity
Temperature and humidity at the workstation may be uncomfortable because it is too hot, too cold, very dry, stuffy, airless or draughty and can lead to difficulties in concentrating and perhaps more frustration and mistakes. Cold draughty rooms can lead to general tenseness in the body, stiffness and aches and pains. Low humidity could cause problems of sore dry eyes. Check that the radiators are working properly and no draughts from windows and doors. Any faults should be reported to Estates & Facilities. Turn off equipment when not in use.

Noise
Noise levels from equipment, other people and external sources must not distract attention or disturb speech. Too much or distracting noise may lead to frustration and mistakes because it is difficult to concentrate, or conversations cannot be heard clearly. Shared printers or photocopiers can be moved further from people to minimise disturbance. Jobs needing close concentration could be done in quieter parts of the office.

Laptop
Laptop computers are designed for portability but carrying them and their accessories (and your paperwork) can still be a problem. They may also be a target for thieves. Their small size can make it very difficult to adopt comfortable and healthy postures when using portables, so they should not be used for prolonged periods. Back, neck and shoulder pain can easily be the result. Facilities for use as a ‘docking station’ and fitting an external mouse/numeric keypad can help achieve more comfortable postures. Laptop risers, boxes, books, or small lightweight stands can be used to raise the portable’s screen to a more comfortable viewing height. A separate keyboard must then be used as the keys will be at too steep an angle for comfort. Sit directly in front of the portable and sit right back in the chair so that the back rest can support you. Try to position the screen at right angles to windows and as far from them as possible and angle the screen so that it is roughly perpendicular to your line of sight to help avoid reflections/glare. Regularly clean the screen and adjust the screen brightness to ensure maximum legibility.

Software
Software must be appropriate for the task and be easy to use with appropriate training. It should allow adaptations to individual abilities and preferences and give feedback and error messages. Using software that is unsuitable for the work or not fully understood can lead to frustration, mistakes and time wasted on over-long processes or corrections. Formal training courses, software ‘Help’ pages and information on the Internet give good introductions to software but may be of limited help on details.
Pregnancy
If you are pregnant you will need to review your DSE set up. This may mean tilting the set pan forwards slightly to help make room for a growing ‘bump’ and/or adjusting the lumbar support to accommodate any changes in your posture.

Some potential solutions to common DSE problems can be found at the Posturite resource pages here

DSE Equipment and Providers

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<th>Equipment Type</th>
<th>Examples</th>
<th>Providers</th>
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<tr>
<td>Ergonomic equipment</td>
<td>Ergonomic chairs, sit-stand platforms, etc</td>
<td>Posturite (via HS&amp;W or HR). Claremont (via Estate and Facilities)</td>
</tr>
<tr>
<td>General office equipment</td>
<td>Regular office desks and chairs</td>
<td>Claremont (via Estates and Facilities)</td>
</tr>
<tr>
<td>Accessories/additional</td>
<td>Mice, keyboards (including ergonomic), foot stools, laptop risers, headsets, etc</td>
<td>DDIS (ergonomic, via Assistive Technology) Banner (also dependant on school/department)</td>
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