2015

# Display Screen Equipment Policy

FUTURES
Community College

**Review Framework**

The policy should be reviewed annually in conjunction with the Health and Safety Policy

|  | **Date** |
|---|---|
| This policy was created by Southend Borough Council in: | March 2014 |
| It was agreed by the Governing Body on: | 15 September 2014 |
| This issue was revised and released on: | 17 September 2015 |
| It will be reviewed in: | September 2016 |

Local Authority schools management can adopt this policy, by tailoring this document to be LA school specific/site-specific.

## Contents

### Appendices

## 1. Introduction

*The school recognises the legal obligations in the Health and Safety (Display Screen Equipment) Regulations 1992 as amended 2002 and by means of this policy and arrangements aims to ensure the health and safety of all staff who work with computers and other display screen equipment (DSE).*

The use of DSE is not generally a high risk activity, but failure to meet minimum requirements set out in the regulations can lead to muscular skeletal problems, eye strain, fatigue or mental stress.

## 2. Scope

This policy is applicable to all staff who use DSE at work.

## 3. Definitions

- **Display Screen Equipment**

Any alphanumeric and graphics display screen equipment, including visual display units (VDUs), microfiche readers and laptops. Laptops are unsuitable for regular prolonged use due to poor posture which often cannot be avoided and the smaller screen, which can increase eye strain.

The Regulations **do not apply** to display screens used mainly by students or by the public (e.g. in libraries). It is nevertheless good practice for students to be aware of how to correctly set up workstations in a way to minimise risks. Mobile devices designed for occasional and infrequent use are not covered by this policy.

- **A Workstation**

The 'workstation' includes the display screen equipment and all peripheral items to it (e.g. docking station, printers, external drives, mouse, document holder, telephone/fax, etc.), the work chair, desk and the immediate environment.

- **Information and Training**

Those designated as users need to be properly inducted, trained and informed for the tasks they are required to undertake.

- **Workstation Assessment**

A competent person must undertake an assessment of each user's workstation in conjunction with the member of staff. If work stations are relocated or reorganised, it will be necessary to review the assessment or undertake a new assessment.

The objective is to reduce risks to the lowest level which is reasonably practicable. Those questions answered 'No' on the assessment shall be considered in consultation with the user and line manager.

## 4. Legislative requirements

The Health and Safety (Display Screen Equipment) Regulations 1992 as amended 2002, impose the following key duties on employers to:

- carry out risk assessments of DSE workstations
- incorporate work breaks / activity changes
- provide a free eye test and glasses (where specifically required for working with DSE)
- provide training and information relevant to the tasks being undertaken

## 5. Line Managers'/Headteachers responsibilities

It is the responsibility of line managers/ Headteachers to ensure that risk assessments of DSE workstations are conducted. However, they may delegate the task of actually carrying out the assessments.

To assist Line Managers/Headteachers to meet the requirements of the regulations a comprehensive guide is provided and attached as **Appendix B** to this procedure.

The line manager/Headteacher must ensure a DSE assessment is completed before the employee starts work with the Display Screen Equipment. The line manager's/Headteacher's role is to assess and eliminate or reduce any risk to employees. This is easily achieved through working through the DSE Assessment with the employee.

Line managers must ensure that the work activities of users are planned to allow for periodic breaks or changes in activity.  If possible the work should be designed to include both display screen and non-display screen work. In reality this is almost always achieved through routine breaks to make a drink or visit the printer/photocopier.

Line managers are required to ensure that identified users (as defined in the Display Screen Equipment Regulations 1992) receive appropriate health and safety guidance, instruction and training before they become users and after, should their work or workstation change. In practice this means managers must ensure all of their team have completed the e-learning DSE module on SPARK.

## 6. General

All employees' regular workstations where a DSE is used - regardless of the length and frequency of use of the DSE - should be assessed to ensure that they meet the minimum standards required by the DSE regulations 1992.  An assessment should be undertaken by the employee using the standard workstation assessment form, attached as **Appendix A** to this procedure.

The school will endeavour to identify all those employees who meet the criteria as "users" as set out in the Health and Safety (Display Screen Equipment) Regulations 1992 via these assessments.

Line managers will complete the assessment of the workstations taking into account the information given by the employee on the assessment form.  The assessment will ensure that all workstations comply with the minimum safety requirements for work with display screen equipment.  Those identified as users will be informed of their entitlement to a free eyesight test and financial assistance with the cost of corrective spectacles prescribed solely for use with DSE. Employees identified as users must also receive guidance on the correct and safe use of the DSE.  It is the line manager's responsibility to ensure that such guidance and information is provided.

SBC has a corporate contract with Specsavers opticians, (for SBC staff), in the form of eye care vouchers.

Schemes such as this allow schools to easily budget for eyesight tests without any additional costs if glasses are required. Schools wishing to make use of the scheme should set up an individual account with Specsavers. For more information visit www.specsavers.co.uk/corporate.

## 7. Definition of User

The regulations define a user as an employee who habitually uses a visual display unit (VDU) as a significant part of their normal work time and they also provide the following criteria that can be used to determine whether an employee should be classified as a user.

a) Depends on the use of the Visual Display Unit, (VDU) to do the job as alternatives are not readily available.
b) Has no discretion as to the use or non-use of the VDU.
c) Needs *significant skills and training* in the use of the VDU to do the job.
d) Normally uses the VDU for prolonged spells of an hour or more
e) Uses the VDU more or less daily
f) Fast transfer of information between the user and the screen is an important requirement of the job
g) The performance requirements of the system demand high levels of attention and concentration by the user.

To ensure consistency of application of the regulations the following criteria should be used to determine whether an employee is to be classed as a user.

**Where an employee:**
Uses DSE for prolonged spells of one hour or more continuously and at least for three hours each day they will be classed as a user unless it can be clearly demonstrated that the majority of the remaining criteria provided above does not apply. If there is any doubt regarding an employee's status assistance should be sought either from their line manager or the appropriate competent person

## 8. Non-employees using the school's workstations

The regulations define an 'operator' as a person who uses an employer's DSE but is not directly in their employment. This would apply to temporary or agency staff. For the purpose of these guidelines an operator's workstation should be assessed using the same standards as for users above. Non-Employees do not qualify for a free eye examination. This would be for their employer to provide.

## 9. Health risks

The regulations recognise and acknowledge the following three principal risks that may affect employees who use DSE:-

♦ Musculoskeletal disorders arising from bad posture and causing upper limb disorders, neck and back pain.
♦ Eyestrain as a result of a combination of screen technology and the effects of lighting. It should be noted that there is no evidence for assuming that working with DSE's can cause permanent eye damage.
♦ Fatigue and stress brought on about by the combination of the above and also by environmental factors such as noise, office conditions and poor job design.

Line Managers are reminded that a separate and specific risk assessment must be undertaken of an employee's duties and working conditions when they are pregnant and when they are nursing mothers.

## *Appendix A*

### *Display Screen Equipment*
### *Workstation Assessment*

This form is to be used for all DSE workstations. Column A should be completed by employees. Line Manager/Competent Person to enter details of any action, taken or proposed, in Column B.

**Name**_____**PC asset No**. _____

**Department & Team**_____

**Line Manager** _____

| Column A | Column B |
|---|---|
| 1 **Duration and Frequency of DSE work**<br>   a) On average, how many hours a day do you spend working with a display screen? _____Hrs/Day<br><br>   b) How often do you use the VDU?<br><br>Every day ☐<br>2-3 days a week ☐<br>Infrequently ☐ | **High user**      **Medium user**<br><br>**Low user**       **Non-user** |
| 2 **Training and competence**<br>a) Have you been sufficiently trained/informed in all of the following?<br>Correct posture and the principles of ergonomics? ☐<br>Furniture and equipment adjustments? ☐<br>The need to take regular breaks from DSE work? ☐<br>Use of the software package(s)? ☐ | If more information/training is needed please provide. Record any action taken. |
| 3 **Health**<br>   a) Do you suffer from any physical or visual discomfort whilst working at your workstation and/or with the display screen?<br><br>If yes please give brief details below   ☐ Yes ☐ No | If uncertainty exists with any symptoms please discuss with your line manager |
| 4 **Eyesight Test (DSE users only)**<br>Have you had your eyes tested in the last two years? ☐ Yes ☐ No | If no, ensure that the employee is aware of the eyesight test procedures if the criteria of user is met |
| 5 **Furniture**<br>   a) Is the layout/design of your workstation such that you are unable to achieve a comfortable position? ☐ Yes ☐ No<br><br>   b) Are you able to adjust the following to suit your personla needs:<br>• Chair? ☐ Yes ☐ No<br>• Angle of display screen? ☐ Yes ☐ No<br>• Keyboard? ☐ Yes ☐ No<br><br>   c) When the chair is adjusted to the correct hieght can you rest your feet on the floor or footrest? ☐ Yes ☐ No<br><br>   d) Do you think the provision of any of the following items would improve your comfort? | |

| | |
|---|---|
| • Foot rest? <br> • Wrist rest? <br> • Anti-glare screen? <br> • Document holder? | |
| **6 Visual Display Screen** <br><br> a) Can you adjust the contrast and screen brightness of the VDU to suit your needs? <br><br> b) Is the information presented to you on the VDU clear and easy to read? <br><br> If no, please provide brief details | |
| **7 Environment** <br> a) Is your vision disturbed by other areas within your sight which are: <br><br> Too bright? <br><br> Too dark? <br><br> b) Do you generally find the folowing conditions satisfactory: <br><br> Temperature? <br> Humidity? <br> Air movement? <br> Noise? <br><br> c) Does static electricity cause any discomfort? <br><br> d) Do you consider there to be any of the following hazards in your immediate work area: <br><br> Electrical hazards? <br> Tripping hazards? <br><br> Equipment positioned so as to impede escape in the event of a fire? | |
| **8 Additional comments of employee** | **Comments and details of any action by Line Manager** <br><br><br><br><br><br><br><br> **Signed [Line Manager]** <br><br><br> **Date:** |

## Appendix B
## Is 'IT' safe?

**Remember:**

### 1.    Are you sitting comfortably?

➢ The lower arms and wrists should be horizontal when typing
➢ **Don't** bend the hands at the wrist whilst keying in
➢ Feet either on the floor or a footrest
➢ The equipment should be arranged to avoid unnatural positions and excessive stretching
➢ Don't twist, stretch, hunch or stoop whilst using the keyboard
➢ Adjust your chair to suit your needs and comfort
➢ Create sufficient space in which to work and find a comfortable position
➢ Swivel and tilt the screen for comfort and to avoid glare
➢ Change your position as often as practicable

### 2.    Improve your image!

➢ Adjust the brightness and contrast of the screen to suit lighting conditions
➢ Keep the screen clean with screen cleaners
➢ Reduce glare by adjusting screen or by using anti-glare devices, blinds or curtains

### 3.    Take a break [from DSE work]

➢ If possible plan your work routine so that DSE work is mixed with non DSE work
➢ Remember that short, frequent breaks are preferable
➢ Take a break before you start to feel the symptoms of fatigue
➢ Avoid similar activities during your break
➢ **Don't** forget to take your breaks

### 4.    Speak up!

**Speak to your Supervisor:**

➢ If you are concerned that any aspects of your workstation and immediate environment may be affecting your health and safety
➢ If you are having difficulties with the software
➢ If your workload is leading to you spending long periods of the DSE without sufficient breaks

**Use this page as an aide memoire to ensure your health, safety and comfort whilst using the DSE.**

## *Appendix C*

### Display Screen Equipment (DSE)

### Guidance Notes for Line Managers/Headteachers

#### 1.     Lighting

Lighting should be appropriate for all the tasks performed at the workstation, e.g. reading from the screen, keyboard work, reading printed text, writing on paper etc.  General lighting - by artificial or natural light, or a combination - should illuminate the *entire room to an adequate standard.  Any supplementary individual lighting provided* to cater for personal needs or a particular task should not adversely affect visual conditions at nearby workstations.

Problems which can lead to visual fatigue and stress can arise for example from unshielded bright lights or bright areas in the worker's field of view; from an imbalance between brightly and dimly lit parts of the environment; and from reflections on the screen or other parts of the workstation.

Measures to minimise these problems include: shielding, replacing or repositioning sources of light; rearranging or moving work surfaces, documents or all or parts of workstations; modifying the colour or reflectance of walls, ceilings, furnishings etc. near the workstation; the provision of anti-glare screen filters, document holders or a combination of these.

#### 2.     Noise

Noise from equipment such as printers at display screen workstations should be kept to levels which do not impair concentration or prevent normal conversation; unless the noise is designed to attract attention, e.g. to warn of a malfunction.  Noise can be reduced by replacement, sound-proofing or repositioning of the equipment; sound insulating partitions between noisy equipment and the rest of the workstation are an alternative.

#### 3.     Heat and Humidity

Electronic equipment can be a source of dry heat which can modify the thermal environment at the workstation.  Ventilation and humidity should be maintained at levels which prevent discomfort and sore eyes.

The humidity within an office can be improved by the use of plants, shallow dishes of water placed near dry heat sources, humidifiers and de-humidifiers, and by improving natural ventilation.

#### 4.     Space Requirements

Prolonged sitting in a static position can be harmful.  It is most important that support surfaces for display screen and other equipment and materials used at the workstation should allow adequate clearance for postural changes.  This means adequate clearances for thighs, knees, lower legs and feet under the work surface and between furniture components.  The height of the work surface should, if a keyboard is used, allow a comfortable position for the arms and wrists.

## 5.     Footrests

Footrests may be necessary where individual workers are unable to rest their feet flat on the floor e.g. where work surfaces cannot be adjusted to the right height in relation to other components of the workstation.  Footrests should not be used when they are not necessary as this can result in poor posture.

## 6.     Work Chair

The primary requirement here is that the work chair should allow the user to achieve a comfortable position.  Seat height adjustments should accommodate the needs of users for the tasks performed. The Schedule requires both the seat and the seat back to be adjustable in height relative to the ground, the seat back should also tilt.  Provided the chair design meets these requirements and allows the user to achieve a comfortable posture it is not necessary for the height or tilt to be adjustable independently of the seat.  Automatic backrest adjustments are acceptable if they provide adequate back support.

The DSE e-learning module on SPARK gives full instruction on how the standard work chairs used at the Civic Centre can be adjusted.

## 7.     Work Desk or Work Surface

Work surface dimensions may need to be larger than for conventional non-screen office work, to take adequate account of the range of equipment used in addition to non DSE workstations

Work surfaces should also be non-reflective and allow room to move equipment to permit the user some variation in layout.

## 8.     Document Holders

Document holders are useful for work with hard copy, particularly for workers who have difficulty in refocusing.  They should position working documents at a height, visual place and, where appropriate, viewing distance similar to those of the screen; be of low reflectance; be stable; and not reduce the readability of source documents.

## 9.     Display Screen

A change to a different display can resolve individual problems with flicker.  Persistent display instabilities - flicker, jump, jitter or swim - may indicate basic design problems and assistance should be sought from suppliers and/or the ICT section.

Negative or positive image polarity (light characters on a dark background, dark characters on a light background respectively) are acceptable, and each has different advantages.  With negative polarity flicker is less perceptible, legibility is better for those with low acuity vision, and characters may be perceived as larger than they are; with positive polarity, reflections are less perceptible, edges appear sharper and luminance balance is easier to achieve.

It is important for the brightness and contrast of the display to be appropriate for ambient lighting conditions; trade-offs between character brightness and sharpness may be needed to achieve an acceptable balance.  In many kinds of equipment this is achieved by providing a control or controls which allow the user to make adjustments.

All DSE equipment must have mechanisms to allow the screen to be tilted or swivelled to avoid glare and reflections and enable the worker to maintain a natural and relaxed posture.  Screen height adjustment devices, although not essential, may be a useful means of adjusting the screen to the correct height for the worker.

## 10.    Keyboard

Keyboard design should allow workers to locate and activate keys quickly, accurately and without discomfort.  The choice of keyboard will be dictated by the nature of the task and determined in relation to other elements of the work system.  Hand support may be incorporated into the keyboard for support while keying in or at rest depending on what the worker finds comfortable, or may be provided in the form of a space between the keyboard and front edge of the desk, or may be given by a separate hand/wrist support attached to the work surface.

## 11.    Principles of Software Ergonomics

In most display screen work the software controls both the presentation of information on the screen and the ways in which the worker can manipulate the information.  Thus software design can be an important element of task design.  Software that is badly designed or inappropriate for the task will impede the efficient completion of the work and in some cases may cause sufficient stress to affect the health of a user.

Requirements of the Authority and of display screen workers should be established as the basis for designing, selecting, and modifying software.  In many (though not all) applications the main points are:

### Suitability for the task

Software should enable workers to complete the task efficiently, without presenting unnecessary problems or obstacles.

### Ease of use and adaptability

Workers should be able to feel that they can master the system and use it effectively following appropriate training.

The dialogue between the system and the worker should be appropriate for the worker's ability;

a) Where appropriate, software should enable workers to adapt the user interface to suit their ability level and preferences
b) The software should protect workers from the consequences of errors, for example by providing appropriate warnings and information and by enabling "lost" data to be recovered wherever practicable.

### Feedback on system performance

(a) The system should provide appropriate feedback, which may include error messages; suitable assistance ("help") to workers on request; and messages about changes in the system such as malfunctions or overloading

(b) Feedback messages should be presented at the right time and in an appropriate style and format. They should not contain unnecessary information.

**Format and pace**

(a) Speed of response to commands and instructions should be appropriate to the task and to workers' abilities

(b) Characters, cursor movements and positions change should where possible be shown on the screen as soon as they are input.

**Performance monitoring facilities**

(a)     Quantitative or qualitative checking facilities built into the software can lead to stress if they have adverse results as an over-emphasis on output speed

(b)     It is possible to design monitoring systems that avoid these drawbacks and provide information that is helpful to workers as well as managers. However, in all cases workers should be kept informed about the introduction and operation of such systems.

## 12.    Training

Training should cover the health and safety aspects of using the workstation, as well as the mechanics of the job. Subjects covered should include:

(a)     adjustment of furniture and equipment as well as how and why they should be used
(b)     achieving optimum workstation layout
(c)     inspection and maintenance procedures including cleaning
(d)     arrangements for and importance of taking breaks
(e)     eye and eyesight testing entitlement and arrangements
(f)     the Display Screen Regulations and the user's role in meeting them

Training should enable users to recognise and understand any risks that may be present at the workstation, including the recognition of symptoms relating to adverse health conditions. It should encompass the procedures that should be followed for reporting problems to management.

## 13.    Job Design

There are two basic areas where job design can have an impact upon the health of the operator.

(a) A boring or repetitive task has an influence upon job satisfaction and can cause mental stress. This may lead to health problems including absence and will inevitably cause inefficiency and a higher rate of error.

(b) Intensive work at a display screen can cause visual discomfort which may, in turn, lead to problems such as headaches and even mental stress. Intensive keyboard use and static posture are contributory factors in most incidences of work related upper limb disorders.

It is incumbent upon the employer to design jobs in a manner which ensures these intensive periods of on-screen activity are avoided. This is best achieved by varying tasks within the working day.

## 14. Rest Breaks

The purpose of a rest break is to prevent the onset of fatigue. Unless there is a disciplined approach, it is common for breaks to be taken after the onset of fatigue. Proper job design should aim for prevention rather than cure.

Where rest breaks are built into the working day, it is better to allow a larger number of short breaks rather than longer but fewer breaks. Avoid the creation of regimented routines that require the operator to cease work at set intervals as these are often counter-productive. For example, where an operator is instructed to halt work for the last 10 minutes of every hour, the following situation could arise.

Ten minutes prior to the allotted break, an operator finds that the next task would normally take 15 minutes. The operator may:

(a)     work intensively, and faster than normal, in order to complete the task before breaking.

(b)     decide that as the task cannot be completed before the break, it is not worth starting.

Neither outcome is satisfactory. In (a) the operator is increasing mental stress, error potential and muscular fatigue. In (b) the operator is working inefficiently.

The solution is to allow operators the discretion and flexibility to decide when to take breaks from on-screen activities, and to ensure that they do not wait until fatigued. In general terms it is more beneficial to the body for the operator to take a 30 second break every five minutes, rather than to take an equivalent period of time off in one break per hour.

## 15. Operator Posture

There have been a number of attempts to define "correct" posture for working with a display screen. Some suggest that the achievement of an upright seated stance is best. It is, however, a misconception to believe that any single seated position can, or should be maintained throughout the working day. Postural fatigue cannot be eliminated by adopting one "perfect posture", but may instead be reduced by regular changes of position and active muscular work which assists the blood circulation. Employees should be actively encouraged to contribute to their own comfort by these frequent postural variations.

Workstation equipment should be correctly placed and adjusted to allow easy freedom of movement within a range of comfortable positions. Workers should in no circumstances be forced to adopt constrained postures or exert effort at the extremes of reach in order to overcome shortfalls in the design or capability of the workstations.

*Appendix D*
## Display Screen Equipment (DSE)

*Guidance Notes for Users*

## 1.   Introduction

Display Screen Equipment (DSE) is now common throughout the workplace. Its introduction has led to many benefits, making tasks quicker and easier to perform.  However, its use can lead to DSE operators spending long periods sitting looking at a screen and using a keyboard.  If care isn't taken with the design of the workstation and DSE tasks, some DSE users can experience problems such as headaches, "eye strain" and muscle pain.  It is also important that you know how to adjust your workstation for your comfort.

**These notes will tell you:-**

* What the risks are from using the DSE
* What the Council's duties are;
* What you should do to ensure your health and safety when using the DSE.

## 2.   What are the risks?

The risks from DSE work are actually quite small and are easily avoidable provided your workstation is set up correctly and you know what to do to reduce risks to yourself.

Poor work design and a lack of awareness in the correct way of setting up a workstation can result in discomfort, and/or cause or aggravate conditions such as:

* Upper Limb Disorders (ULD) (e.g. upper limb aches and pains caused by poor posture);
* Back ache;
* Fatigue and stress;
* Temporary eye strain.

There are other minor or perceived risks, these will also be discussed.

### Upper Limb Disorders

This term covers a variety of conditions ranging from simple aches and pains in the back or neck to conditions such as repetitive strain injury (also known as RSI or tenosynovitis).  Upper limb disorders can be caused by long periods of rapid, repetitive actions; prolonged static positions, particularly in uncomfortable or unnatural positions (i.e. positions which twist or stretch muscles).  Usually aches and pains do not last, but in a few cases they may become persistent or even disabling.  Following the advice in these notes will help prevent upper limb disorders.

It is important that you report any regular discomfort in your hands, wrists, neck or shoulders to your Supervisor so that he or she can take appropriate action.  Symptoms could include aches, pains or sensory loss ("tingling" or "pins and needles").

If symptoms continue after you have finished DSE work you should seek medical advice promptly.  It should be borne in mind that upper limb disorders may not be caused by DSE work, although such work may exacerbate the condition.  For instance Carpel Tunnel Syndrome is a wrist condition which can occur naturally in middle aged women.  Other conditions such as tennis elbow may be associated with hobbies.

### Visual Problems

Working with DSE cannot damage eyesight. It can however highlight an existing problem and prolonged periods of working with DSE can lead to symptoms of visual fatigue. Problems can include eye discomfort such as dry, itchy, aching or tired eyes; or difficulties with focusing or perception of the image. Postural problems may also result from visual difficulties if the user adopts an unnatural position in order to see the screen more easily.

Visual problems can occur if you stay in the same position and concentrate for a long time; if your workstation is badly positioned; if lighting conditions are poor; or if the image quality is unsatisfactory. Following the advice in these notes will help to minimise such effects.

Visual problems could also be due to a defect with your vision. Some people have difficulty focusing at the visual distance of the screen and there are also come rare eye conditions which may only become apparent when doing DSE work which tends to be visually demanding.

### Fatigue and Stress

Working with DSE can sometimes be stressful. For instance pressure to meet deadlines or an increased pace of work can lead to fatigue or the feeling of being "snowed under"; poor job design can lead to boredom or a feeling of isolation; or lack of familiarity with the software can result in frustration when things go wrong. Many problems can be overcome by better work planning and organisation. Training in the use of the software package is important as is the choice of a software package which is appropriate both to the task and the hardware.

### Photosensitivity Epilepsy

This is a relatively rare condition where the sufferer reacts adversely to flickering lights and patterns. The majority of those who suffer an attack will have done so before the age of 20. Only a small proportion of those who suffer from photosensitive epilepsy are likely to be affected by working with DSE, so if you do you should still be able to work successfully with DSE.

## 3. Completing a DSE User Assessment Form

All employees who are required to use DSE as part of their regular duties should complete column 'A' of a Workstation Assessment Form. Column 'B' should be completed by a the Line Manager or another Competent Person, if available, who should also refer to the separate guidance, entitled Display Screen Equipment – Guidance Notes for Competent Persons.

## 4. Health and Safety Training and information

Your Line Manager/Supervisor will provide details of local arrangements for:
- carrying out DSE user assessments
- arranging breaks from DSE work
- reporting symptoms of ill health which may be associated with DSE work
- eye and eye sight tests
- User training, including an e-learning module available on the Intranet

## 5. Planning Work Activities

Breaks away from the DSE are important to prevent fatigue and the development of postural and visual problems.  The Regulations do not specify a minimum frequency of breaks as this would depend on the intensity and length of use of the DSE.

However short, frequent breaks are preferable to longer, less frequent breaks.  Where possible you should plan your work so that DSE work is mixed with periods of non DSE work.  Where this is not possible deliberate breaks may need to be introduced.  Breaks should be taken before you begin to experience symptoms of fatigue and should not be spent doing similar work.  For instance, if your DSE work involves continual use of the keyboard you should not type or knit during any break.

## 6.     Setting up your workstation

This section gives general guidance on how you should set up your workstation.  The design of your workstation should allow you flexibility to arrange the equipment to suit your needs and comfort.  It is important that you take account of the guidelines to minimise the risk of health problems.

### The Ideal Seating Position

It is recommended that you sit with a straight back and at a height which allows your lower arms to be horizontal when typing, with an approximate 90 degree angle at the elbow.  Your eyes should be at roughly the same height as the top of the DSE casing and your feet should be flat on the ground.  If your feet do not touch the ground a footrest will be necessary.  If you sit too high or too low you will be forced to type with bent wrists or in a hunched or stooped position, which can cause discomfort in your wrists, arms, shoulders, neck or back.  The recommended seating position is illustrated in the diagram below.
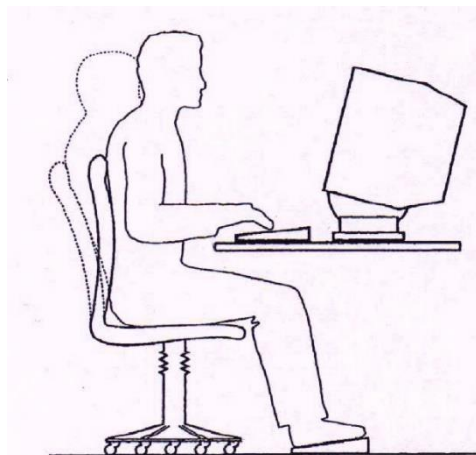


Whilst this position is recommended to reduce the possibility of muscle tiredness, staying in any position for a long time will lead to discomfort.  You should therefore choose a position which you find comfortable, but change your position as often as is practicable to avoid discomfort.  You should avoid positions which result in unnatural twisting or bending as this could lead to muscle pain, particularly if maintained for a long time.  Also, whilst some movement is desirable, repeated stretching should be avoided.  The following are examples of positions which should be avoided:

* display screen placed on a desk to the immediate left or right of the user rather than on the same desk as the keyboard.  This position results in unnatural stretching of the neck muscles, which can lead to neck and back ache.  Whilst the screen does not have to be placed immediately in front of

the user, it should be placed in a position which allows only slight movement of the head to see the screen.

* The printer is placed under the desk.  This results in the user having to constantly bend and stretch to reach the printer and restricts leg room, leading to discomfort and possible back ache.  If the printer is placed on an adjacent desk the user can swivel the chair to reach it without stretching.

### Your Chair
Your chair should be comfortable and of a swivel type to minimise unnecessary twisting.  It should be adjustable in height, and the chair back adjustable in tilt, though not necessarily independently of the seat.  If possible you should adjust the chair so the back-rest supports your lower back where it naturally curves inwards.  The chair height should be adjustable so that your lower arm is horizontal from the backrest.  If other people use your workstation, remember to check that the chair is adjustable to suit your needs before beginning work.

### Your Desk
Your desk height should allow you to attain the recommended seating position with your legs fitting comfortably under the desk.  You should have enough desk space for the display screen, keyboard, document holder and any other items you may need and you should have room to move equipment to find the most comfortable arrangement for you.

Arrange your equipment so that the most frequently used items are within easy reach to minimise stretching.  You may need to experiment with different layouts to find the best for you.  If necessary change the layout throughout the day.

You should also have sufficient space in the general environment around your desk to move and vary your position.  There should be enough space under your desk to allow you unobstructed leg room.  Avoid storing equipment and items under the desk which may restrict your leg room and lead to unnecessary stretching.

### Your DSE Screen
Your display screen should be supported at a height which avoids the undue raising and lowering of your eyes.  If the viewing angle is wrong you may suffer from neck and shoulder pains.

Swivel or tilt your screen to find the most comfortable position and to minimise reflection from windows and light fittings.  If necessary alter the screen position throughout the day.

You may find a document holder useful, particularly if you need to copy from documents of have difficulty in refocusing.  If you have a document holder you should adjust it so that it is at the same height and plane as the DSE screen.  Place it at a distance where you can read it easily without leaning forward.  If you spend most of your time looking at the source document you may prefer to put the document holder directly in front of you and the screen to one side.

### The Screen Image
The screen image should be stable with no flickering and the characters well defined and easy to read.  If you think that the image quality is poor tell your Supervisor who may need to seek professional advice.

Adjust the brightness and contrast controls to suit your needs and the lighting conditions in the room.  On some computers it is possible to alter the colour of the characters.  Experiment with the colour combinations to find the one which you find most pleasing to the eye.  Certain colour combinations,

particularly light characters on a dark background, reduce the perception of flicker; whilst dark characters on a light background reduce the effects of glare.

Use proprietary screen cleaner to remove dirt and grime from the screen and filter regularly. (N.B: Some mesh screen filters require special screen cleaners - if in doubt ask your Supervisor). If you use a screen filter remember to clean the screen behind it as well.

### Your Keyboard
Adjust the position and angle of the keyboard to find a comfortable position.

Leave a space in front of the keyboard to support your hands and arms when you are not typing. You should not support your wrist on the edge of the keyboard or desk, or bend your hands up at the wrist whilst typing. This is because your hands will then bend backwards in an unnatural position, which can result in discomfort and may lead to permanent injury. You may find a palm rest to support your hands and forearms useful, particularly if the keyboard is high. If used whilst keying in it should support your hands in a horizontal position.

Whilst typing try to keep a soft touch on the keyboard and do not overstretch your fingers.

### Light
Light levels should be sufficient to enable you to read the source document easily, without affecting the visibility of the display screen. There are recommended light levels.

### Glare
Glare is caused by bright areas, such as windows, light or reflections off shiny surfaces, which can cause discomfort either directly or by reflecting off the screen. If you find glare from the screen or other sources disturbing discuss this with your Supervisor. There are several things that you can do to minimise glare:

♦ Adjust the position and angle of your screen
♦ If possible place the screen between and parallel to rows of light fittings. Avoid positions with windows immediately behind or in front of the screen.
♦ If the light fittings are directing light downwards try positioning the screen in a vertical plane.
♦ Adjust the brightness and contrast to suit your needs. You can also experiment with different colour combinations to find the one you prefer. Remember dark characters on a light background reduces glare from the screen.
♦ If curtains or blinds have been provided to reduce the effects of sunlight use them
♦ Display screens can be protected with anti-glare shields, meshes (filters), sprays etc. If provided use them.

### Noise
If you find the noise level in your work area is distracting or makes conversation difficult you should discuss this with your Line Manager.

### Thermal Conditions
A large amount of DSE equipment in one room can make the room feel warm and dry. The presence of static often suggests low humidity. Whilst there are recommended levels for temperature, humidity etc., the decision as to whether conditions are adequate depends very much on personal preferences. Where there are several people in one area with different views it may be necessary to reach a compromise. If a number of people in one area are unhappy with the environmental conditions, discuss this with your Supervisor who may need to seek professional advice.

If the room where you work does appear dry a simple solution can be the addition of houseplants. Watering of such plants helps to increase humidity as well as creating a more pleasant environment.

## Your Software

The software package you use should be suitable for the task and easy to use.  If you feel that the package is unsuitable or that you need further training discuss this with your Supervisor.

You should also know where to get help if you have problems with the computer program.

### Appendix E

### Schools
### Using whole class teaching technologies safely

The use of interactive whiteboards and data projectors in schools is commonplace and of low risk provided basic 'common sense' procedures are followed.

There is also increasing use of ultra-short throw projectors, these enable the projector to be mounted above the display screen and thus remove any risk for a user in directly exposing their eyes to the beam.

Where such devices are not in place it is recommended that schools:

- Make clear to all users that no one should stare directly into the beam of the projector.
- Encourage users to stand to the side of the beam when working with a class.
- Ensure that when entering the beam, users do not look towards the audience for more than a few seconds.
- Encourage users to keep their backs to the projector beam when standing in it.
- Ensure that students are supervised at all times when a projector is being used.
- Position whiteboards at a comfortable height for both staff and students.
- Make sure that all leads are safely located, and that students don't walk around the back of working areas which have cables.

In rare situations where the use of fixed, ceiling-mounted projectors is not possible, it should be ensured that the unit is anchored firmly when in use, and that trailing power cables are covered and secured.

### Use of ICT by students

Whilst the DSE Regulations do not apply to students, the good practice in terms of workstation set up and posture should be adopted where practicable.

General guidance for schools as regards health and safety relating to ICT had previously been produced by BECTA (The British Educational Communications and Technology Agency). BECTA closed in March 2011.

Its website is archived on the National Archives site, and its health and safety pages can be found at http://webarchive.nationalarchives.gov.uk/20110130111510/http://schools.becta.org.uk/index.php?section=lv&catcode=ss_lv_saf_hs_03

### Student safety with ICT

- Ensure there is sufficient working space in front of the keyboard and that students have room to make notes or use textbooks alongside the computer.
- Provide adequate space around workstations for unhindered staff and pupil movement.
- Position the screen to avoid reflections.
- Encourage students to adopt postures which do not impose a strain or require awkward movements.
- If students are going to be seated for extended periods, ensure that good-quality seating is provided which supports the back.

- Chairs which are height adjustable are desirable in order they may safely accommodate the range in size of students.
- Students sit at the recommended height (with the eye level at the top of the screen).
- Screens should be positioned to reduce reflection and glare from lights and windows, using blinds where necessary, and should be adjustable for brightness and contrast as the lighting changes throughout the day. They should also be cleaned regularly.
- Desks must be the appropriate height for the user.
- Ensure the room temperature does not get too warm because computers are kept switched on for prolonged periods.

## Wireless Local Area Networks (WLAN)

Many schools now use wireless technology.  With regard to the potential exposure of staff and students to radio frequency (RF) radiation SBC follows the advice of Public Health England (PHE).

On the basis of current scientific information, exposures from Wi-Fi equipment satisfy international guidelines and are less than those from mobile phones.

PHE continue to state that wireless networks are safe for use in schools as is the case with mobile phones this situation is kept under review so that parents and others can have as much reassurance about their use as possible.

Schools should use an experienced installer who will follow the manufacturer's recommendations for installation and operation.

## Health and Safety Advice

### When using an interactive whiteboard:

❖ **Make sure that students are supervised at all times whilst the projector is in use**

❖ **Do not stare directly into the projector beam at any time**

❖ **Staff should stand to the side of the beam when working with a class and not look towards the beam for more than a few seconds**

❖ **Whilst using the whiteboard, students should stand with their back to the projector beam.**

❖ **Do not cover the projector ventilation slots at any time**

❖ **Do not unplug or switch off the mains supply to the projector whilst the cooling fan is running.**