

# Working safely with Video Display Terminals (VDT)



How to use your computer without  
hurting yourself



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# Foreword:

The computer is a useful tool.  
Like every technology it can harm you, if you don't use it properly.  
An incorrect use can cause physical and mental troubles.  
The following notes talk about this troubles and give some advice to reduce them to the minimum

# Note for the teacher:

The following notes, available at [www.v-learning.it/marzotto/mod/resource/view.php?id=6910](http://www.v-learning.it/marzotto/mod/resource/view.php?id=6910) are part of a CLIL lecture of about 3 hours.

The lecture includes an online test: <http://www.v-learning.it/marzotto/mod/quiz/view.php?id=7260>

and an activity of self observation: [www.v-learning.it/marzotto/mod/resource/view.php?id=6911](http://www.v-learning.it/marzotto/mod/resource/view.php?id=6911)

# Troubles of a VDT worker

**1. Eye problems**

**2. Muscle skeletal disorders;**

**3. Mental stress.**

# Other problems connected with the use of ICT technologies

**3. Addiction** (gambling, gaming, Online compulsions)

**4. Electromagnetic radiation**

**5. Cyber bullism and cyber crime**

Those aspects will be treated in the next presentation. By now, here are some interesting links:

<http://www.helpguide.org/articles/addiction/smartphone-and-internet-addiction.htm>

[http://www.dipartimentodipendenzeverona.it/dip\\_digitale.html](http://www.dipartimentodipendenzeverona.it/dip_digitale.html)

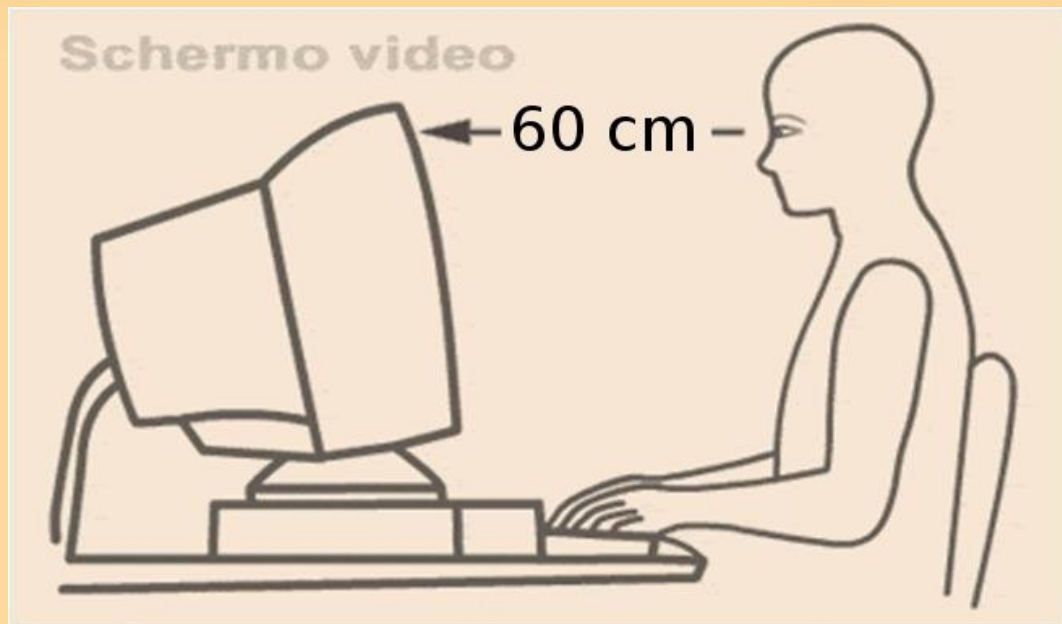
<http://www.applelettrosmog.it/public/index.php>

# What causes eye problems ?

1. Wrong position and orientation of the Terminal Display
2. Fixity of the sight
3. Wrong lighting and monitor brightness
4. Blue Light: Bad for Your Eyes? (do your own research)

# Visual Problems remedies

- Lateral lighting, soft contrast, pastel colours.
- Check the distance... 60 cm
- Focus on distant objects; close your eyes from time to time; sometimes, keep your eyes close and let them rest.



# Eyes Problems

Check your understanding with the first three questions of the quiz on VdT health and safety:

<http://www.v-learning.it/marzotto/mod/quiz/view.php?id=7260>



# What causes muscle skeletal troubles?

- Wrong posture

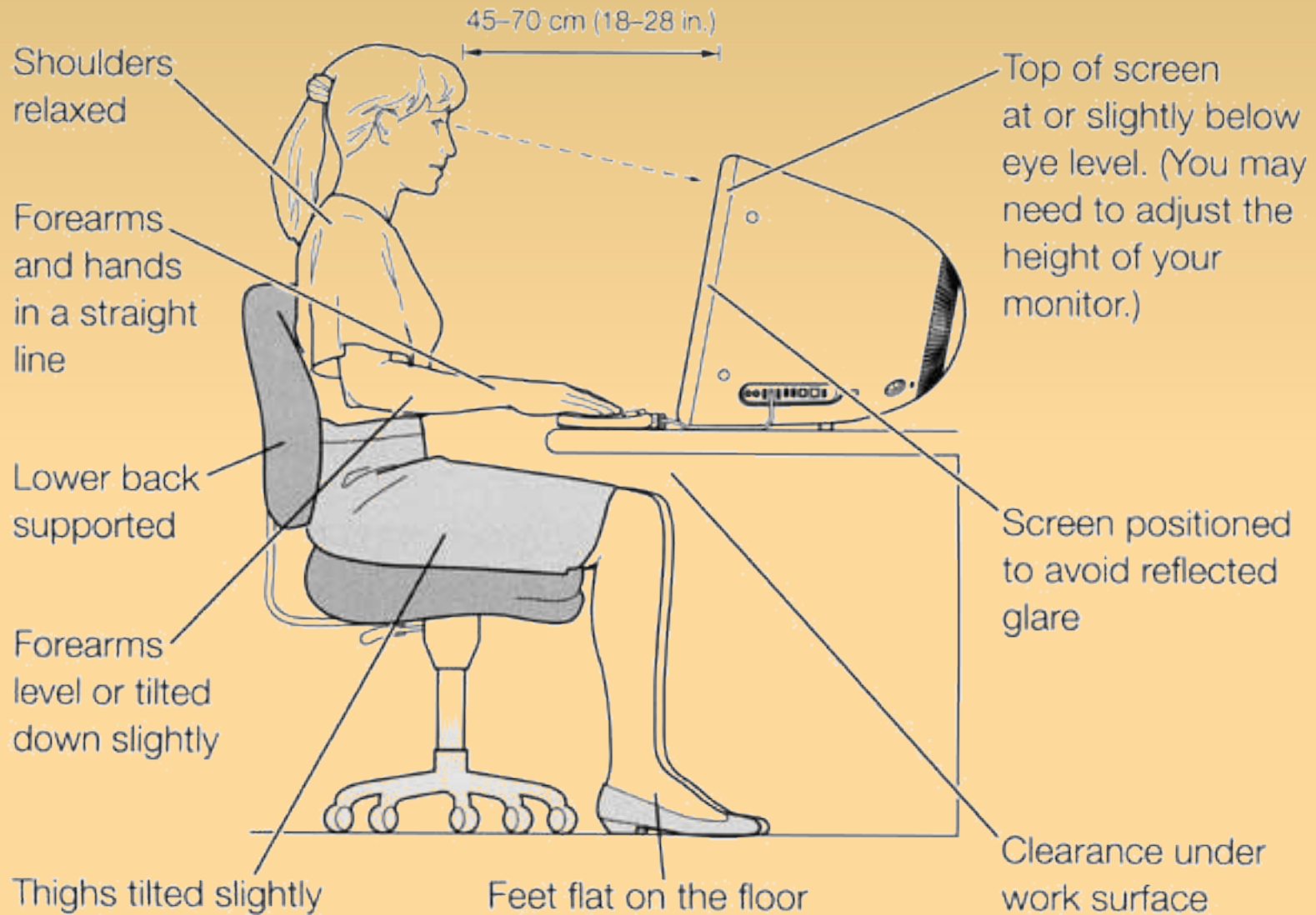


- Repeated micro movements (e.g. when you use the mouse) .

# How to reduce muscle skeletal troubles

- Check your posture (see next picture)
- Prefer keyboards rather than mouse.
- Organize your desk
- Practise some exercises (there's an example ahead)

# Check your posture



# Posture

Check your understanding with the questions from 4 to 6 of the

quiz on VdT health and safety:

<http://www.v-learning.it/marzotto/mod/quiz/view.php?id=7260>

# What causes Mental stress

- Scarce knowledge of the tools
- Lack of breaks
- Bad aeration
- Bad attitude



# How to reduce mental stress

- Take your time to learn how the computer works
- Keep it efficient
- Take a 15 mins break every 120

- Plan your work:

Turn on the device when you know what you want to do with it.

Remember :The best ideas come unplugged

- Air the room
- If you have to do something, do it at your best.



# Mental Stress

Check your understanding with the questions from 7 to 9 of the quiz on VdT health and safety:

<http://www.v-learning.it/marzotto/mod/quiz/view.php?id=7260>

# Laws and regulations

In Italy there are some laws which protect the health and safety of the VTD workers (who works at a vdt at least than 20 hours per week)

(Decreto legislativo 9 aprile 2008, n. 81)

TITOLO VII

ATTREZZATURE MUNITE DI VIDEOTERMINALI

Articoli 172 - 179



# Laws and regulations

*If your placement is not comfortable in terms of lighting, airing, ergonomics, seat, etc... You have the right to ask for:*

- ✓ Information and training about safety and health (art 177)
- ✓ Adjustment of your placement in conformity to the requirements (see “allegato XXXIV” art 173)
- ✓ A break of 15 mins every 120 mins (art 175)
- ✓ Appropriate health surveillance (art 176)

# Check List

- ✓ **Lighting**
- ✓ **Airing**
- ✓ **Distance and contrast of the display**
- ✓ **Posture**
- ✓ **More keyboards and less mouse**
- ✓ **15 minutes break every 2 hours**
- ✓ **Stretching & Relaxing exercises**

# Other Advice

- ✓ **Know your tool**
- ✓ **Keep it efficient**
- ✓ **Plan when you are unplugged**
- ✓ **Choose a job that you like (*and do it at your best, anyway*)**

# Other references

*D. Lgs. 81 del 2008 Titolo VII (art.i.172 - 179)*

Libretto dell'INAIL del 2010

US department of Labour:

<https://www.osha.gov/Publications/videoDisplay/videoDisplay.html>

*University of New Mexico: ergonomic guidelines*

<https://srs.unm.edu/ergonomics/ergonomic-guidelines.php>

*Safety Works : Maine Department of Labour*

[http://www.safetyworksmaine.com/training/online\\_classes/vdt/VDT-Main.htm](http://www.safetyworksmaine.com/training/online_classes/vdt/VDT-Main.htm)

# Exercise : posture and relaxation



1. Set your chair straight in front of your desk
2. Breathe deeply twice
3. Feel your feet pressing the ground
4. Balance the weight of your buttocks on the chair
5. Drive your attention to the backbone: straight it respecting its natural curves
6. Place your hands on the desk
7. Relax your shoulder and rotate them three times clockwise, three time anti-clockwise
8. Rotate gently your head
9. Stretch your arms and rotate your hands (like a flamenco dancer)

# Take care of yourself

Working at a VDT (like every other sedentary work), need to be balanced by a proper physical exercise:

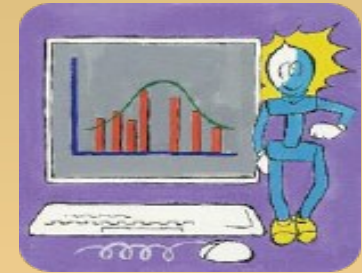
What is your balancing activity?

Jogging, trekking, swimming, climbing, juggling, rowing, cycling, chopping woods, jumping rope...

# Work in pairs

Get the “Workstation checklist” available at  
[www.v-learning.it/marzotto/mod/resource/view.php?id=6911](http://www.v-learning.it/marzotto/mod/resource/view.php?id=6911)

Fill it and discuss with a friend



Thanks for your attention  
And  
Good luck with your work .