



# TECHNOLOGY EDUCATION

## Making Your Work Environment “YOU”- Friendly

**Ergonomics is the science of adjusting your work environment to fit your body. Below are some tips about how to make your work area “ergonomically correct” so that you are most comfortable and efficient.**

**See the Light:** Use a mix of fluorescent and incandescent light — not too bright, not too dark. Proper lighting will help you reduce glare and bright reflections from your screen, nearby glass or shiny surfaces. Light changes during the day, so you may have to make several adjustments while working.

**Monitor your monitor:** Avoid putting your monitor, keyboard or both off to one side on a desk. If you do more than a few minutes of keyboarding a day, put your keyboard and monitor directly in front of your normal sitting position. The screen should be 18-30 inches from your eyes, or about an arm’s length. The top of the monitor should be at eye level because the eyes are at their most comfortable position straight ahead but slightly downward. This posture also makes it easiest to balance your head above your shoulders with the least muscular effort.

**Catch your mouse:** Using a mouse incorrectly can create repetitive stress injuries. Your mouse should be on the same level as the keyboard so that it does not cause you to twist or reach. A keyboard tray with a mouse shelf extension is an easy, inexpensive solution to this problem.

**Brightness and colors:** To prevent eye strain, black characters against a light gray background are often easiest on the eyes for long periods. Adjust your contrast and brightness to create the brightest screen possible without blurring. Be sure to look away from your screen at least every 30 minutes and focus on something over 20 feet away.

**Wrist rest:** The knuckles, wrist and top of the forearm should form a straight line, but you can’t get into this position with most commercial wrist pads. Try a “floating” wrist position. Frequent rest, away from the keyboard, is a good idea with floating wrists because it stresses shoulder muscle contraction. Use the lightest possible finger pressure during keying.

**Elbow connected to the shoulder bone:** Elbows should form a 90 degree angle while hanging at your sides from the shoulders. Rarely do chairs with armrests allow this position, though, so it is important to keep your shoulders relaxed in a lowered position as you keyboard.

**Have a seat:** Seat height should allow the upper body postures described above. Feet should be flat on the floor. If your feet don’t reach the floor, a foot rest is necessary. Even a phone book can help allow the lower legs to be vertical and thighs horizontal.

**Chair backrest:** Expensive motors and adjustable sections are not necessary if your backrest has firm support for the inward curve of your lower spine (lumbar) and outward curve of your upper spine (thoracic). You decide if you need upper body support to help keep your torso and head vertical. The seat of your chair should be large enough to accommodate frequent changes in position and firm enough to allow your weight to be supported through the buttocks, not the thighs. If others will use your chair, easy height adjustment is a must.

**Take a Break:** You should change your sitting position at least every 15 minutes. Active breaks should be taken at least every 30 minutes especially for those who perform more than 2 or 3 hours of keyboarding a day. Take smaller breaks more often.