



# Puget Sound Human Factors & Ergonomics Society

## Technically Cool Computing

### An outreach project of Puget Sound Human Factors and Ergonomics Society

*Technically Cool Computing* (TCC) is a community outreach project developed by the Puget Sound Human Factors and Ergonomics Society (PSHFES) to develop a computer ergonomics learning activity module for students. The module teaches students how to evaluate their computer workstations and work habits in order to reduce their risk for musculoskeletal injuries.

The use of computers has increased significantly over the last twenty years, and so has the rate of related musculoskeletal injuries. Today's children are the first generation to be exposed to the use of computers, cell phones and other similar technology early on, and in most aspects of their life. Providing education for students to achieve comfort, efficiency and safety in their computer habits early on, will assure a healthy workforce for the future.

There is good news! Many studies have shown interventions, such as posture education and furniture that fits kids' smaller bodies help reduce discomfort, much the same as in adults. PSHFES piloted this project with 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> grade classes with great success, and is now offering the curriculum to educators to help children develop healthy computing habits.

*Technically Cool Computing* provides kids with suggestions to minimize or eliminate problems identified, along with simple techniques that can be applied to their desktop computer. Students work in small groups to assess their posture, and then use a "problem-solving" checklist to make simple changes to their workstation such as adding a book to raise the monitor height or scooting their chair closer to the desk to reduce how far they need to reach to the keyboard.

In the first pilot of the Technically Cool Computing (TCC) project in 2009, 72% of students were able to recognize risk-producing postures and 61% of students were successful in correcting postures at their computer workstations. In addition, 89% of students felt they could repeat the exercise at home on their own computers. The most recent pilots, using a newly revised curriculum, resulted in 100% of students able to recognize risk-producing postures and also successful in correcting awkward postures at their classroom computer workstations.

Puget Sound Human Factors and Ergonomics Society is a non-profit organization that seeks to provide ergonomic resources to local communities. PSHFES member volunteers developed the TCC teaching module for 4<sup>th</sup> through 8<sup>th</sup> grade students, however, it could be used for older students as well. For additional information on the project, visit [www.pshfes.org](http://www.pshfes.org)

If you have any questions or know of schools that may be interested in this project, please feel free to contact PSHFES at the e-mail address below.

Sincerely,

Susan L. Murphey BS, CECD  
Community Projects Chair  
Puget Sound Human Factors and Ergonomics Society  
[communityprojects@pshfes.org](mailto:communityprojects@pshfes.org)