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Standing Up for Ergonomics

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Abstract

After long hours in the computer lab, students from the manufacturing engineering program began studying the ergonomic conditions of the high traffic computer labs. Researchers set out to determine how much time students were using the workstations provided and the impacts on students from using the workstations.

Methodology

The research conducted included RULA (rapid upper limb assessment) and ROSA (rapid office strain assessment) analyses of the current sitting desk design compared to analyses of the proposed sit-stand design. Students who regularly use the workstations were surveyed to gather information about the student’s major, their year of study, and how much time they spend at the desks. The students were also asked to provide feedback on how to improve the workstations.

Findings

Results of the RULA and ROSA analysis indicate that the current design is high risk, and further investigation and change may be needed. 94% of the students who responded to the survey agreed or strongly agreed that the ergonomics of the desks in the computer lab could be improved. 73% also agreed or strongly agreed that their physical health would improve with better ergonomics in the computer labs. Many of the suggestions from the students included better chairs and adjustability for the range of students who use the workstations.

Looking Ahead

Researchers applied for a grant through the Sustainable Action Fund at Western Washington University, but were denied due to an existing request for updated workstations in a minor capital budget proposal submitted annually by the engineering department for the last 4 years. The workstation analyses and survey results point to students needing and wanting updated workstations. The SAF believes that workstations should be state-funded, but with no indication that funding will be granted, many students are stuck using ergonomically unsuitable desks over 20 hours per week.