

An Anthropometric and Postural Risk Assessment of Students in Computer Laboratories of a State University

Authors : Sarah Louise Cruz, Jemille Venturina

Abstract : Ergonomics considers the capabilities and limitations of a person as they interact with tools, equipment, facilities and tasks in their work environment. Workplace is one example of physical work environment, be it a workbench or a desk. In school laboratories, sitting is the most common working posture of the students. Students maintain static sitting posture as they perform different computer-aided activities. The College of Engineering and College of Information and Communication Technology of a State University consist of twenty-two computer laboratories. Normally, students aren't usually aware of the importance of sustaining proper sitting posture while doing their long hour computer laboratory activities. The study evaluates the perceived discomfort and working postures of students as they are exposed on current workplace design of computer laboratories. The current study utilizes Rapid Upper Limb Assessment (RULA), Body Discomfort Chart using Borg's CR-10 Scale Rating and Quick Exposure Checklist in order to assess the posture and the current working condition. The result of the study may possibly minimize the body discomfort experienced by the students. The researchers redesign the individual workstations which includes working desk, sitting stool and other workplace design components. Also, the economic variability of each alternative was considered given that the study focused on improvement of facilities of a state university.

Keywords : computer workstation, ergonomics, posture, students, workplace

Conference Title : ICAEIM 2018 : International Conference on Automotive Engineering and Intelligent Manufacturing

Conference Location : Sydney, Australia

Conference Dates : January 29-30, 2018