



The end of the 1990's brought significant questions to the fields of lighting and light's effects on productivity. The most pronounced questions from the perspective of the Pacific Northwest concerned the relationship between the daylighting of spaces and the productivity of people working in those spaces. Rumors of productivity increases related to the use of daylight have slowly percolated through the business

community for the last decade. Reports of increases in productivity as measured by such secondary indicators as worker turnover, and health via sick leave at extensively daylighted buildings such as the Lockheed Headquarters building in Menlo Park, California have worked their way into the public's attention. The Wall Street Journal's report of November, 1995 documented that the Walmart store in Lawrence, Kansas had a marked increase of sales in the skylighted portions of the store. What sort of truth did these apparently anecdotal observations carry? They seemed to be contradicting more than 50 years of light and productivity research that recommended a lighting design practice most easily characterized by uniformity and control through the dominant use of electric light.

The variability of daylight is a visual amenity as long as there is the ability to directly provide the needed light for individual activities at the appropriate illumination levels. In the Pacific Northwest and Western Canada, an awareness of the effects of daylighting on healthfulness, comfort, productivity and energy efficiency and the use of daylight in architectural design is becoming as commonplace as concerns for adequate ventilation and fresh air.

What is evolving at the beginning of the 21st Century is a new kind of process in the setting of lighting standards and the structuring of productivity research. The laboratory process of standard setting for visual acuity is being combined with field observations of case studies of the work and learning place. A more complex and highly refined relationship between the use of daylight with electric light for ambient and critical task illumination is being examined. The US Green Buildings Council's, 2nd edition of the *Leadership in Energy and Environmental Design Standard*, is being used to advocate for more productive and energy efficient means of lighting with daylight and electric light. Watch the Lighting Design Lab, Daylighting web site in 2001 for more than fifty current projects in the Pacific Northwest that integrate daylight with electric light.

Light, Daylight & Productivity

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above: a day-lighting model of a youth center in Camas, WA. BOORA Architects performed model studies at the LDL.