

DAYLIGHTING IN THE CLASSROOM



Research consistently shows that students attending schools providing natural daylight outperform those attending non-daylit schools. Well designed daylit schools can improve students' academic achievement, productivity, and attendance, as well as lower energy consumption.

A study by the Heschong Mahone Group shows:

Students with the most daylighting in their classrooms progress 20% faster on math tests and 26% on reading tests in one year's time than those with the least.

Students in classrooms with the largest window areas progress 15% faster in math and 23% faster in reading than those with the least.

Students with a well-designed skylight in their room – one that diffuses daylight throughout the room and allows teachers to control the amount of daylight entering the room – also improved 19 to 20% faster than those students without a skylight.

Students in classrooms with operable windows progress 7 to 8% faster than those with fixed windows, regardless of whether the classroom also has air conditioning.

These effects were all observed with 99% statistical certainty.

Another study by the Policy and Planning Branch of Alberta (Canada) Education shows:

Students in full-spectrum light are healthier and attend school 3.2 to 3.8 days more per year.

Libraries with superior light result in significantly lower noise levels.

Full-spectrum lighting induces more positive moods in students.

The additional vitamin D received by students in full-spectrum light, contributes to 9 times less dental decay and growth in height averaging 2.1 cm more (over the

two year study period) than students attending schools with average light.

Street Dixon Rick works diligently to provide daylight, views, and natural ventilation to every occupant in the buildings we design. These features contribute to energy efficiency, which is an important aspect of every building we design. However, providing healthy, inspiring environments in which our clients learn, work, and play, is our end goal.

-Chip Jones, ALA, LEED-AP