

Modern

LIGHTING:

beyond energy efficiency

Impacting biological
processes and behavioral
outcomes of school
children and teachers

copyright 2013 BENAY BURNETT Consultancy

HUMANIZING LIGHT

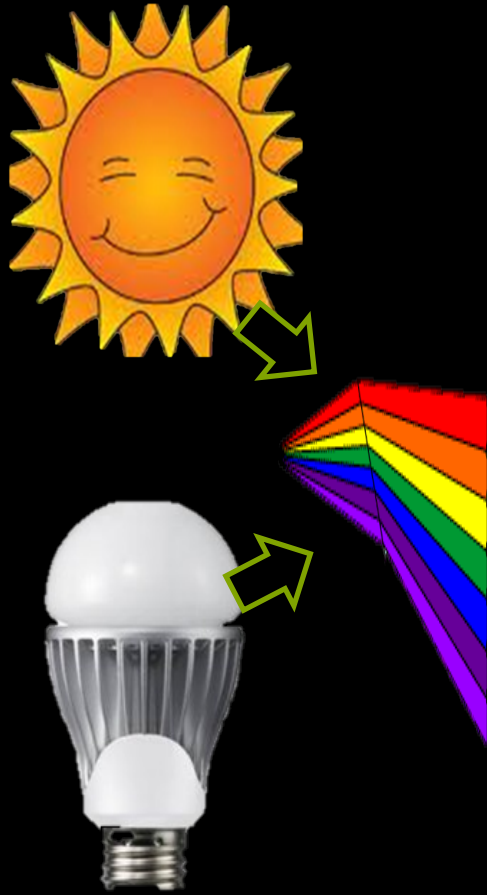
<http://www.BenyaBurnett.com>

CIRCADIAN SYSTEM: Functions

- Heart Beat, Blood Pressure
- Core Body Temperature
- Sleep/Wake Cycle
- Immune Response
- Hunger/Thirst
- Muscle Coordination
- Hormonal Regulation
- Metabolic Functioning

SLEEP





Wavelength
of light
energy
entering the
eye



Light: dosing
protocol

- Spectral Distribution
- Timing
- Intensity
- Duration
- Location



Attention
Productivity
Performance
Cognition



SLEEP

Cognition

- Comprehension
- Understanding
- Reasoning
- Communicating
- Planning
- Decision making
- Learning

**The process of sleep
starts in the day so you
can sleep at night.....**



HOME SWEET HOME

copyright 2013 BENAY BURNETT Consultancy
HUMANIZING LIGHT
<http://www.BenyaBurnett.com>

Receiving ample amount of
high daytime light levels and
adequate
darkness at night
are the two major environmental
factors influencing circadian
efficacy and the promotion of sleep
and reduction in the formation of
disease including cancer, obesity
and diabetes

To sleep at night kids daytime lighting needs are based on age:

- Daycare & pre-school
- Primary grades
- Middle school adolescents
- High school students

The right light

delivered from the right location at the right time of day for the specific age group can result in:

- Higher standardized test scores
- Enhanced attention span
- Improved social skills
- Accelerated memory recall
- Reduced traffic accidents

The **BENYA -BURNETT** CONSULTANCY

Deborah Burnett ASID, CMG, AASM
James R Benya, FIALD, PE, FIES
Mark Bauserman

+1 615 -351 8337

Deborah@deborahburnett.com

[http :// www. Benyaburnett.com](http://www.Benyaburnett.com)