



De-Lamping

A **brighter** way to use light

A Presentation by

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How are our classrooms lit?

30 foot-candles
is the standard
light intensity for
classrooms!



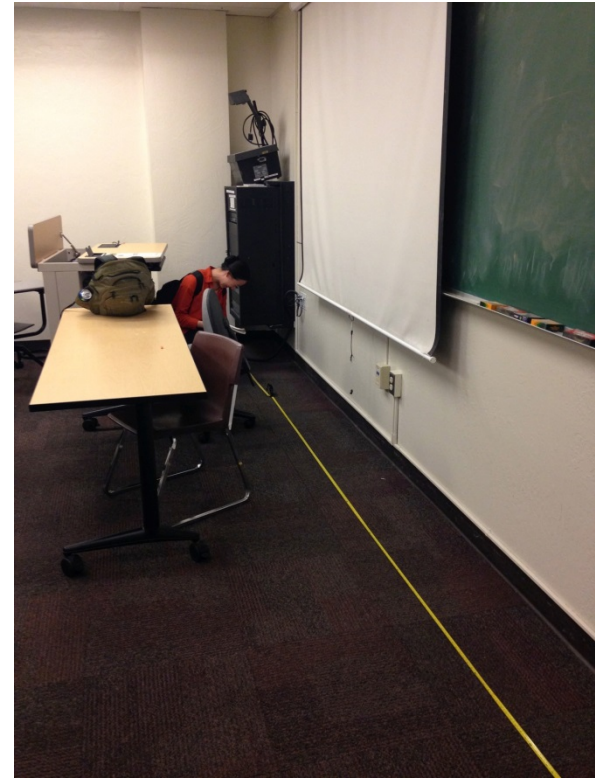
The Measurement Process

Daytime	Nighttime
Measured 6 locations per room	Measured 6 locations per room
Measured room 3 times with blinds open, closed, & half open	Measured room once all lights on

Buildings measured: Arts & Sciences, Lucas, O' Connor, & Kenna

More Measuring...

We measured the rooms for the area so we could predict how much wattage was being produced to light the room!



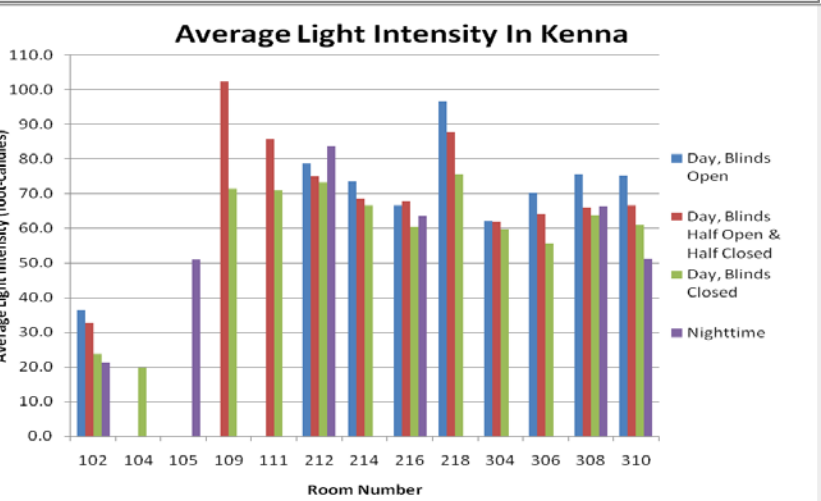
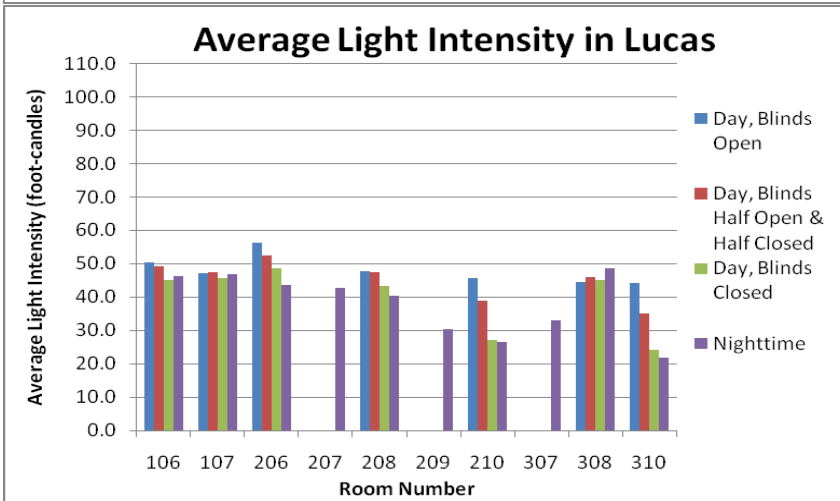
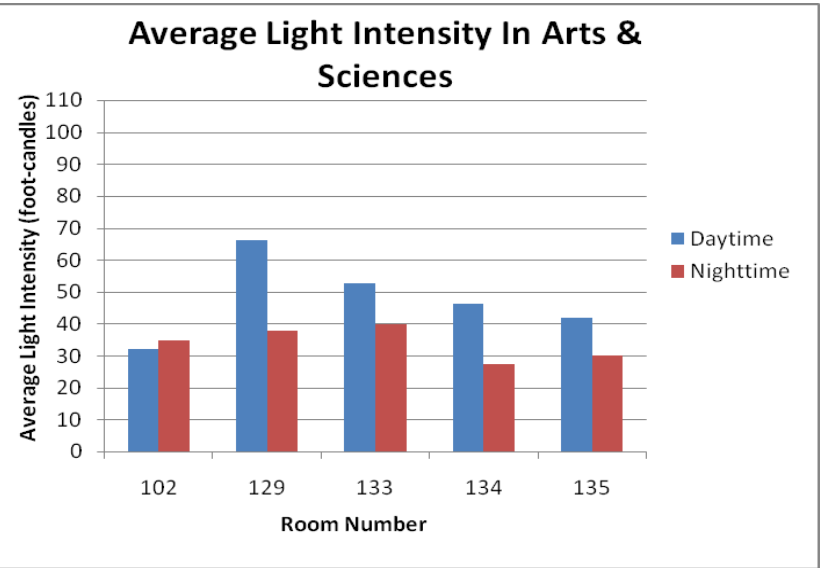
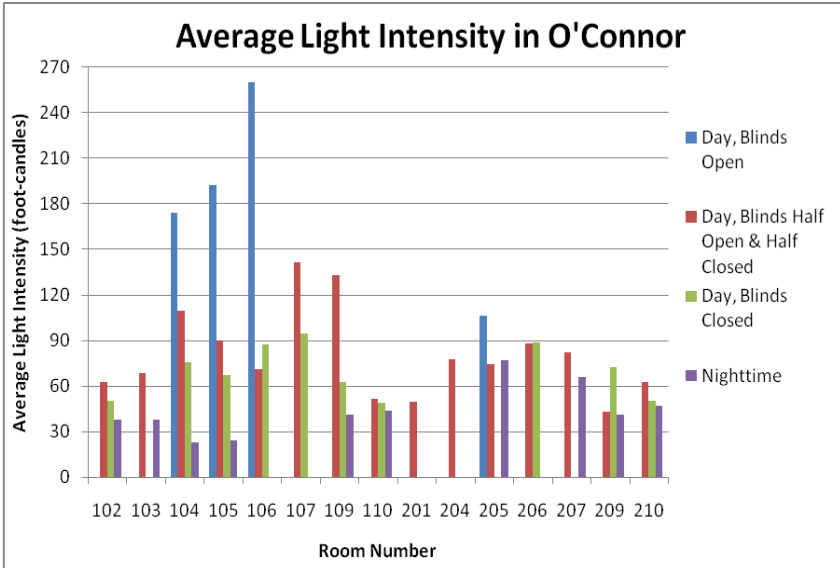
From Wattage to Kilowatt-Hours

Foot-candles \longrightarrow lux \longrightarrow watts \longrightarrow kWh

Assumptions

- lighting efficacy of 60 lumens/ W
- Some rooms of the same building have the same area
- Lights on for an average of 12 hrs/ day, 7 days/ week

How Each Classroom Measured Up



Financial Savings & GHG Reductions

.11¢ per kWh of **electricity**



.54 lbs of CO₂ per kWh of **electricity**

Results

Building	Financial Savings/Month	CO2 Emission Avoided/Month (lbs)
Arts & Sciences	\$34.00	170
Kenna	\$320.00	1600
Lucas	\$180.00	910
O'Connor	\$320.00	1600
Total	\$850.00	4200