



eco'tude

changing your schools ecological attitude

Illumination Audit

What you are auditing?

You will be measuring the amount of light in various areas around the school.

Why are you auditing it?

In many Australian schools, lights are left on even though they may have an excellent supply of natural lighting. Even if natural lighting is lacking the amount of light produced by classroom lights might exceed the suggested light levels according to Australian Standard AS 1680 as shown in the table below. If a reading is 50 Lux above standard the room can be considered over illuminated and wasting energy. However it is recommended that rooms are not more than 50 Lux below standard as even though this may save energy other sustainability issue come into play such as health and safety. With a combination of natural and generated light the levels in an area should be within 20 Lux of the standard.

How do you do it?

1. To conduct this audit you will need access to a light meter.
2. In your Eco'tude journal draw a table similar to the one below.
3. Decide which classroom you wish to test.
4. You may wish to measure the light level in the rooms under different conditions which may include:
 - Different times of the day (eg morning versus afternoon)
 - Lights on versus lights off (to determine the amount of natural light)
 - Curtains open or closed

Add an extra column to the table where necessary

5. Note in your journal the weather conditions outside as a cloudy winters day produces much less natural light than a sunny clear summers day
6. For each area make comments about the condition of the room and its current use of lighting (perhaps a particular class has only half the lights on during sunny afternoons)
7. After completing the audit you can recommend to increase or decrease the light levels.
8. Note your thoughts in your Eco'tude journal on how the illumination at your school should be improved. Will you make any recommendations to the school?

Area	Light Level (LUX)	Suggested Light Level (LUX)	Increase or decrease	Comments
Entrance Areas, Waiting Rooms		160		
Classrooms		240		
Specialist Classrooms, eg TAS, computer rooms		400		
Hall, Gyms – general use		80		
Hall, gyms – exam use		400		
Corridors		80		
Offices		400		
Storerooms		80-160		
Toilets		80		
Library		240-400		
Canteen		400		