

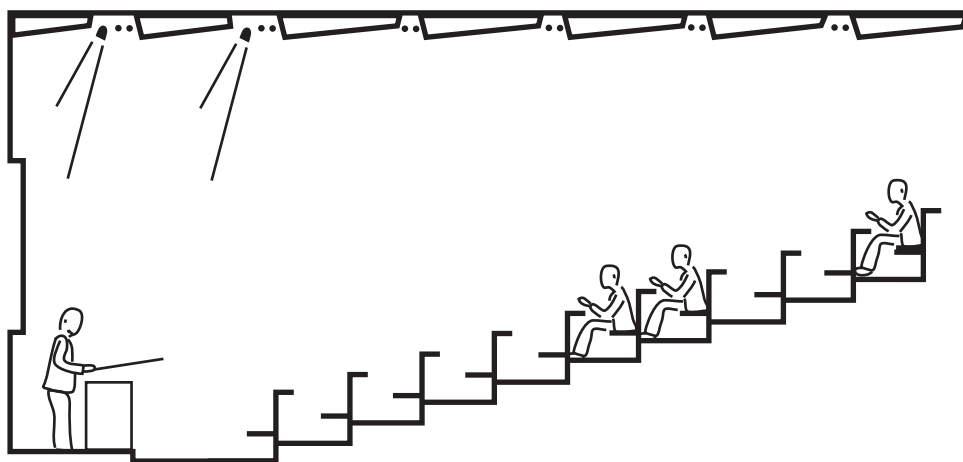
11.2.2 Daylight or electric light

Most school premises make extensive use of daylight yet electric lighting is always installed for use after dark and to supplement daylight in some parts of the space. Daylight should be used whenever it is available provided it is available without causing visual or thermal discomfort. This means that care has to be taken to control the admission of sunlight (see Chapter 7). Also, if electric lighting is used during daytime, it should be fitted with a control system that will minimise its use of energy.

11.2.3 Common lines of sight

Formal teaching spaces have common lines of sight. For example, the lines of sight in a lecture hall are commonly from the seating towards the lecturer's podium, demonstration bench and projection screen, and from the lecturer towards the seating area. These common lines of sight allow the lighting designer to pick the location and shielding of luminaires and windows so as to eliminate glare (Figure 11.2).

Figure 11.2 Common lines of sight in formal teaching spaces



11.2.4 Flat or raked floor

Small rooms in educational premises almost invariably have a flat floor but large lecture halls often have a raked floor. The problem these pose is that the effective height of the room decreases from the front to back of the lecture hall and this will influence the spacing of the luminaires if a constant illuminance is to be provided.

11.2.5 Presence of visual aids

Today, the 'chalk and talk' approach to instruction is often supplemented by visual aids using television and computer screens or projected images. Uncontrolled lighting, both daylight and electric light, can make it difficult to see these aids. The presence of such aids makes it necessary to be able to dim the lighting of the classroom and to control the admission of daylight, particularly where daylight falls directly on the screen (see Section 11.3.3).

11.2.6 Surface finishes

While strongly coloured surfaces can be stimulating, their use in classrooms should be limited to small areas (LRC, 1998). The majority of classroom surfaces should be finished in low chroma, high reflectance materials. This will increase the amount of inter-reflected light which, in turn, will distribute daylight more evenly across the room, and reduce the strength of any shadows and veiling reflections.