The best lighting conditions for hearing-impaired pupils

Good lighting conditions in the classroom are especially important for hearing-impaired pupils.

Hearing-impaired pupils need good light to be able to see the speaker's mouth image, the blackboard and other illustrations well. Vision provides additional information. In poor light, the eyes tire quickly and concentration wanes. Artificial lighting creates uniformly good visual conditions.

1. Good light:

- Increases stamina and concentration
- Improves visual acuity and detail recognition
- Increases reading speed
- Increases contrast perception
- Improves communication

2. Good room lighting means:

- The lighting in the room is uniform.
- The light intensity can be regulated.
- The light does not dazzle.
- The windows have light protection (curtains and blinds).
- The workplaces are bright.
- The lamps do not produce shadows.
- The lighting does not flicker.
- The lighting is dimmable.

2.1 Illuminance and luminance distribution

(Illuminance and luminance distribution refers to the number and arrangement of lamps in a room).

Illuminance is measured in lux. In the classroom, the illuminance should be at least 500 lux everywhere.

It is possible to check this with a mobile phone app.

The lighting in the room must be evenly distributed.

2.2 Glare limitation and lighting direction

Pupils must not be dazzled. Light must not reflect, reflect or produce shadows. We need:

- matt surfaces
- Internal or external blinds
- An arrangement of lamps parallel to the window
- Lamps that do not produce shadows
- Lamps with indirect light
- The windows have light protection (curtains and blinds)
- The workplaces are bright.
- The lamps do not produce shadows.
- The lighting does not flicker.
- The lighting is dimmable.

2.3 Light colour

The light colour must be the same throughout the room. It is perceived differently by everyone. There is no regulation.

Checklist:

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Is the light on?

Is the classroom evenly illuminated?

Is the classroom bright enough?

Is there an additional blackboard light that can be switched on?

The pupil sits in such a way that he is not dazzled.

Are the lamps evenly distributed on the ceiling?

Do the lamps give light without creating a shadow?

Is there a light protection on the windows (curtains or blinds)?

Are the workplaces bright?

Does the lighting work properly?

Can the dimming of the lighting be actively influenced?

Apps:

Lichtmesser LM-3000 Lux Meter for professional

References:

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