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Learning Tasks in Practice – How to Make Use of COMET Learning Tasks in Vocational Schools

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COMET Tasks: Holistic Problem Solving and Work Process Knowledge
Modular Training

Level of competence

M₁ M₂ M₃ M₄ M₅ M₆ ... Mₙ

Time of training

i:BB

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The Situation

Four years ago, the Parker family (parents, grandparents, one child) built a new home. The southern front – made of glass – has manually controlled sunblinds out of adjustable aluminium slats (see photo).

Because of a fire in the room, caused by an electric iron that was not switched off, the Parker family has to totally renovate their living room. Within this renovation, control of the sun shading equipment shall be automatised.

During a customer dialogue and an inspection of the room, the Parkers expressed the following wishes:

- „I want to control the sunblinds centrally from one place in the living room.“
- „On strong sunshine as well as in the evening on a given hour, the blinds should move down automatically.“
- „In the morning, we like to begin our day seeing the rising sun – then the blinds automatically should move upwards.“
- „As I am used to, I want to be able to iron in the living room. Is there a technical possibility that the iron automatically goes off after half an hour?“
Solution Space

Control Circuit Contactor Control

P1: time switch
S5: brightness sensor
S9: wind sensor
4. Efficiency/Effectivity

Have costs and labour input of different solutions been considered?

Is the control economically efficient?

Have reasons been given why exactly this control was selected?

Have possibilities of saving energy in summer/winter been mentioned (e.g. if all the time the blinds go down on a given hour or an air conditioning is confronted with less warmth from a certain level of brightness on)?
Thank You

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