

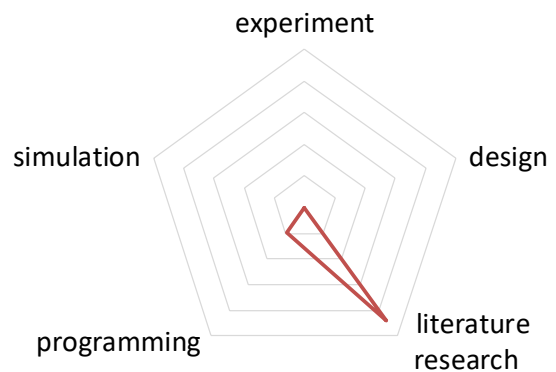
Project/Bachelor Thesis:

Literature research on comfort relevant measurements in differently ventilated classrooms

Good indoor air quality, well-suited room acoustics and sufficient illumination are key prerequisites for successful learning and teaching in classrooms. Although in the course of mostly energetically motivated refurbishments some schools have already been equipped with mechanical ventilation devices, the majority of schools in Germany continue to rely on manual window ventilation. Thus, indoor CO₂ concentrations, a commonly used indicator of indoor air quality, regularly exceed respective limit values due to insufficient occupational ventilation behavior. Shortcomings in room acoustics are usually due to inadequate reverberation times, an important criterion in the context of speech intelligibility. Insufficient illumination makes the reception of information more difficult.

Scope of Work:

You systematically search for field and intervention studies regarding comfort relevant measurements in classrooms and incorporate relevant publications into a literature database. After dividing the studies into subgroups according to the respective applied measurement and evaluation methods, you visualize all collected information. In a meta-analysis, you finally evaluate and process the data statistically. By arrangement, this thesis can preferably be written in the form of a review paper.



Our Profile:

E.ON Energy Research Center at Aachen University is concerned with concepts of sustainable energy supply that account for technical feasibility as well as social and economic aspects. Reduction of primary energy consumption in conjunction with increased indoor air quality is a major focus of research.

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