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# Development of a Learning Arrangement on the Topic of Wind for Primary Education

*Monday 30 June 2025 16:30 (1 hour)*

Understanding weather phenomena, such as wind, is essential for fostering scientific literacy from an early age. As part of the binational project "Understanding Weather", this study focused on designing and evaluating a learning arrangement on wind for primary education (3rd grade) using a design-based research approach. The intervention, implemented in four classes (N=89), led to 50% of students correctly identifying wind direction ($p < .001$). The follow-up survey showed no significant decline over time. Nevertheless, we also found hints for improvement of the learning arrangement and all findings inform the next iteration cycle in the development process.

## Education level

Age under 12 (Primary education or earlier)

## Physics topic

Other

## Research focus

Innovative instructional strategies and pathways

## Research method

Mixed method (qualitative & quantitative)

## Organizing preference criteria

Education level

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