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## Evaluation of an Activity Connecting Art and Quantum Concepts for Primary Education

*Tuesday 1 July 2025 09:40 (20 minutes)*

**Abstract.** The field of quantum technology is rapidly advancing and therefore the public should have a basic grasp of quantum concepts. To this end, we designed an activity around an optical illusion known as Pepper's Ghost to introduce the concept of superposition to primary school students and their teachers.

**Research question:** What opportunities and difficulties do pre-service primary education teachers see to apply the Pepper's Ghost assignment in their own classroom? What are the perceived learning experiences and outcomes of the pre-service primary education teachers regarding the Pepper's Ghost assignment?

**Method:** Evaluation research, making use of interviews and learner reports.

### Education level

Pre-service and in-service teacher education

### Physics topic

Quantum mechanics

### Research focus

Active learning

### Research method

Educational design research (Qualitative research)

### Organizing preference criteria

Physics topic

**Authors:** SONNEVELD, Leonie; OCKHORST, Rutger

**Co-author:** Dr HOTZE, Anna

**Presenters:** SONNEVELD, Leonie; OCKHORST, Rutger

**Session Classification:** Parallel oral presentations

**Track Classification:** Quantum education (QUANT)