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# Advanced physics courses for teachers -Physicists' perceptions

Monday 30 June 2025 14:30 (20 minutes)

The Rothschild-Weizmann program for excellence in science teaching grants teachers an MSc degree and involves advanced physics courses, going far beyond knowledge taught at Israeli schools. Clearly, such courses deepen content knowledge. However, it is unclear how they change graduates'teaching. We used semi-structured interviews to study how the instructors of the physics courses view their influence on teaching. So far, we have found that they wish to promote a deeper understanding of physics, but also other goals which are less explicit in their courses'syllabi: programming skills, relating physics to "real life", and academic writing. Interestingly, the physicists'adherence to academic freedom hinders their cooperation with their fellow instructors.

#### **Education level**

Pre-service and in-service teacher education

### Physics topic

Other

#### Research focus

Other

#### Research method

Educational design research (Qualitative research)

## Organizing preference criteria

Track

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