

Sources of Motivation of High School Students for Participation in Physics Competitions

There are many competitions in Physics for high school students. Usually one of the most important objectives of these competitions is to develop interest in physics. But there is a problem - how to convince gifted students to participate? What are the actual sources of motivation of participants of competitions? Answers to this question are helpful not only for organizers of these competitions. Likewise, the answers broaden our understanding of motivation in this field where it has not been widely studied.

This contribution shows different motivation factors of participants – why they chose to compete in physics, why they chose that competition and why they continued or stopped in participation. It is interesting that these factors change over time.

This study is based on former diploma thesis of the author (semi-structured interviews with participants and organizers of Czech Physics Correspondence Competition and questionnaires) and it is extended by further interviews with participants, organizers and colleagues and their experiences, also with some other competitions. This study cannot be deemed as exhausting but it is a collection of dozens of mini-case studies.

A literature search on Web of Science in topics “Motivation”, “Physics” and “Competition” shows only 16 results. Most of the results are not at all connected with this topic and the rest is not focused on motivation itself but describes some projects. This shows very low international level of knowledge in this particular field, which is quite interesting.

Keywords

physics competitions, motivation, informal education, physics education

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