

Do we need more physics
teachers?

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Are we in need of more physics teachers?

- Distribution of physics teachers is uneven
- Turnover rate for physics teachers
 - Need to replace those who left
- To improve the teacher-student ratio

Do we need more “physics” physics teachers?

- Proportion of “physics” physics teachers in a number of schools is rather low.
- Non-physics trained teachers (the engineers) are not able to appreciate some of the physics concepts at a more subtle level. (E.g. Newton’s 1st Law)
- However, these non-physics trained teachers bring in alternative experience (e.g. industry experience)

Do we need more “physics” physics teachers?

- Engineer compartmentalize the learning outcomes; they are also very systematic
- Physics-trained teachers like to link concepts together, to see the relationship between topics.
- There are merits and demerits to both approaches.
- IBL is bedrock of physics curriculum
 - Since physicists like to ask “why”, do we need more physics teachers?

How to attract more physics graduates into teaching?

- Vicious cycle
 - Not enough physics graduates to begin with...
 - Not enough physics graduates to inspire students...