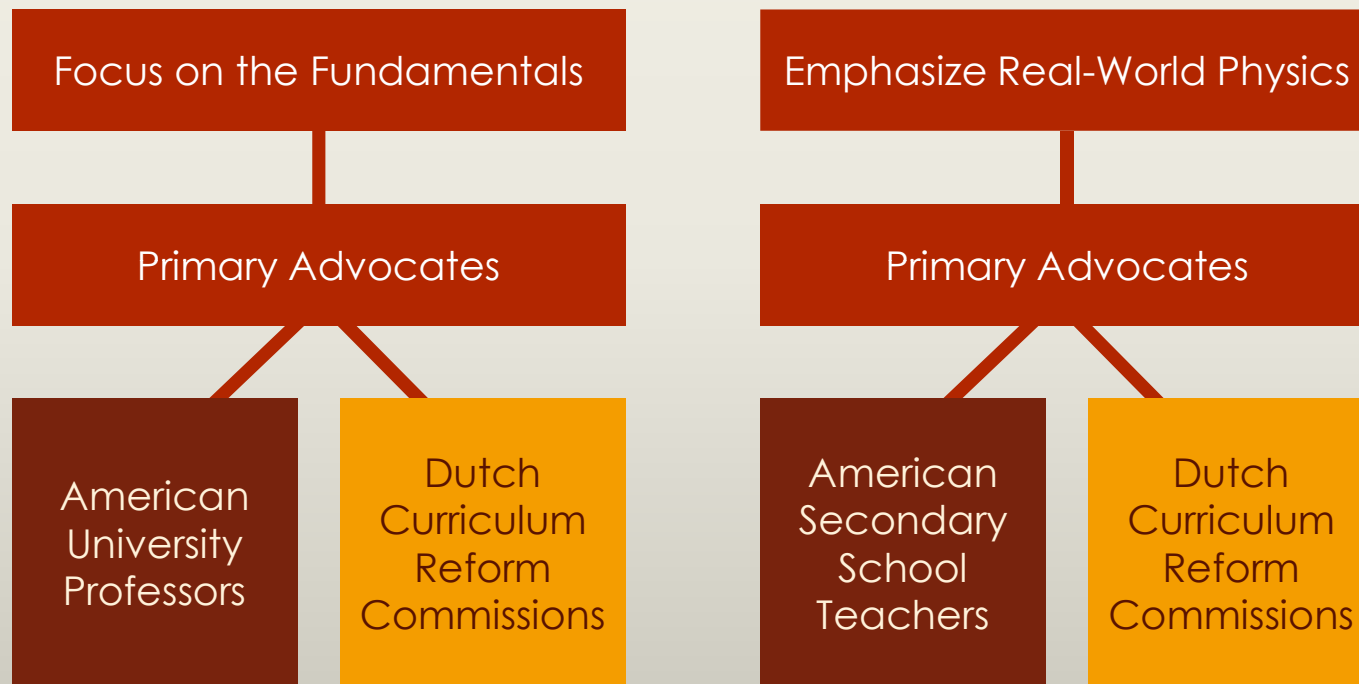


Physics Educator Certification in the United States and the Netherlands

Erin Fosnocht

Rendering the Problem: Methods of Physics Education

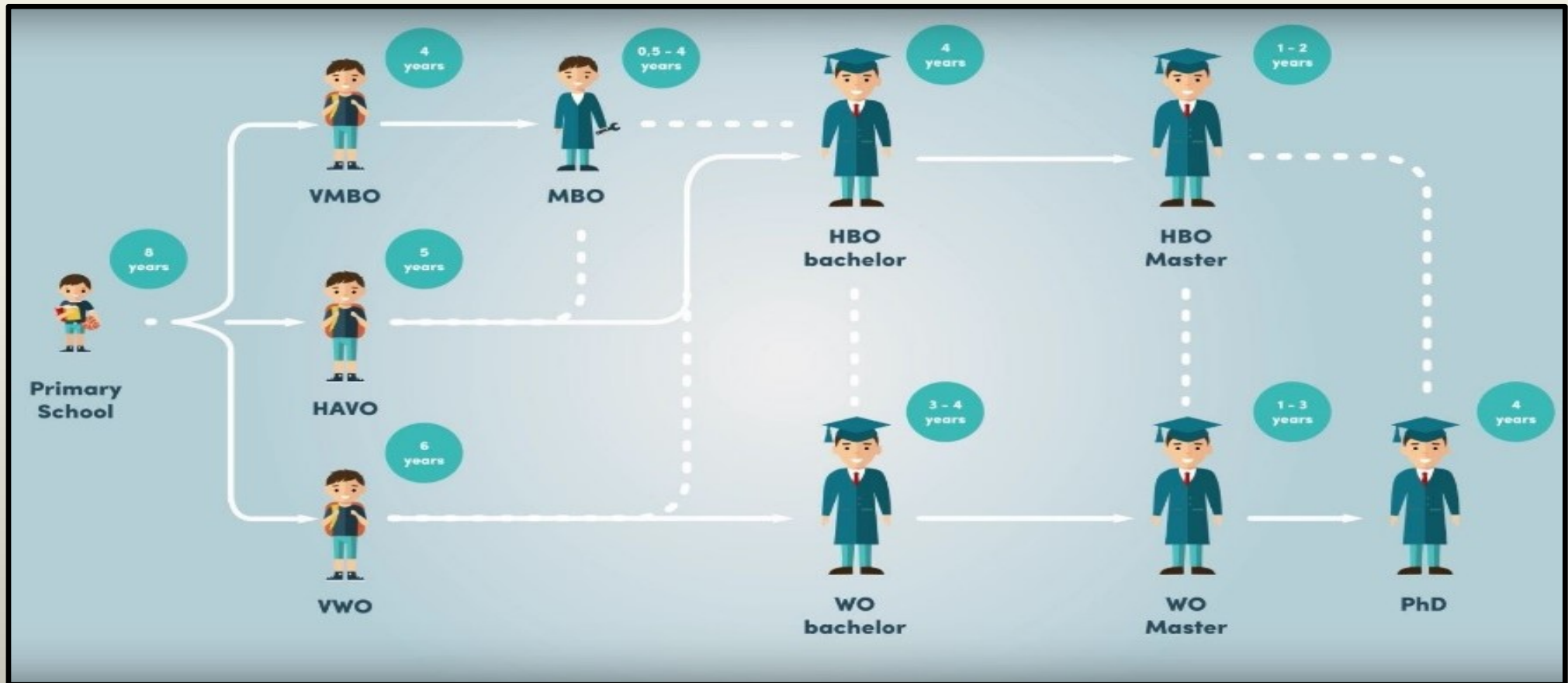
Conflicting Educational Methods



Physics Education in the United States

- Mandatory General Science Course
 - Ages 14-15
 - cursory survey of physics, chemistry, and related topics
- High School Physics in Virginia
 - Not mandatory or encouraged

The Dutch Education System



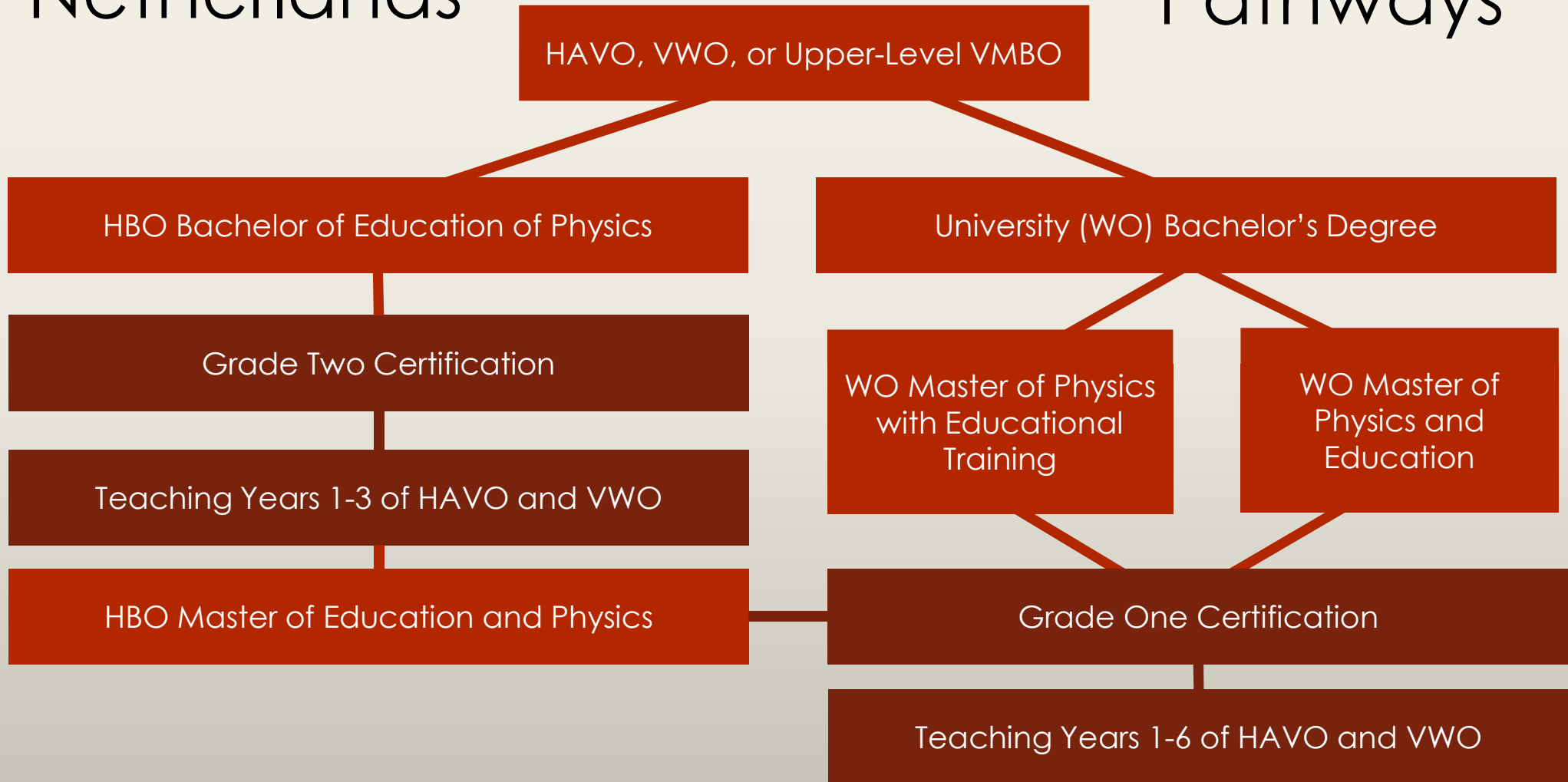
Physics Education in the Netherlands

- Mandatory for all HAVO and VWO Students
 - Ages 13-15
 - Includes theories, formulas, units, and laboratory activities
- VWO Science Track
 - 3 more years of physics
 - Includes Quantum Mechanics, Relativity, and Particle Physics
- Final Examinations
 - Mandatory for all students
 - Focus on either formula-based or practical physics

Physics Educator Certification

Netherlands

Pathways



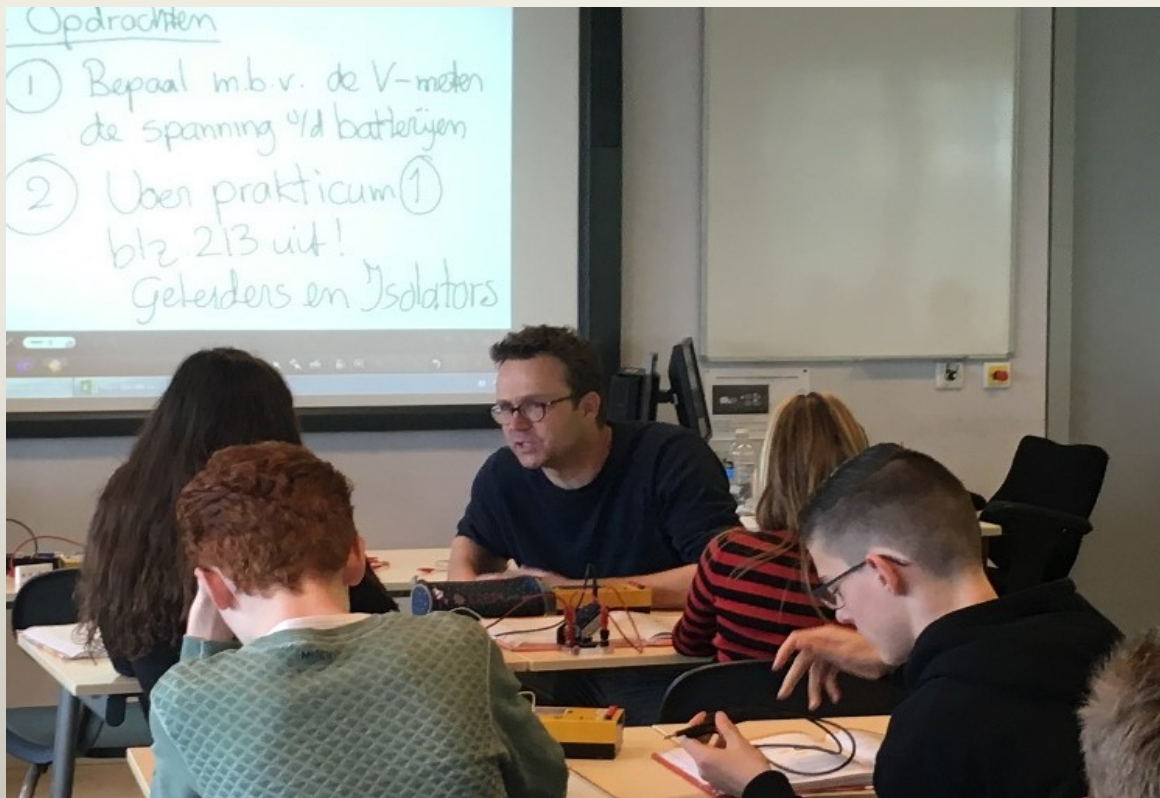
Personal Perspectives: Dutch Physics Teachers

Ben Groenen



Believes that “ideally, [physics should be] linked with other subjects, but in the higher levels, you must focus on the subject on its own”

Joris de Graaf



Tries to strike a balance between doing “cool stuff” in class and demonstrating the rigor of upper-level physics

Conclusions

Questions?