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# Universities and vocational high schools

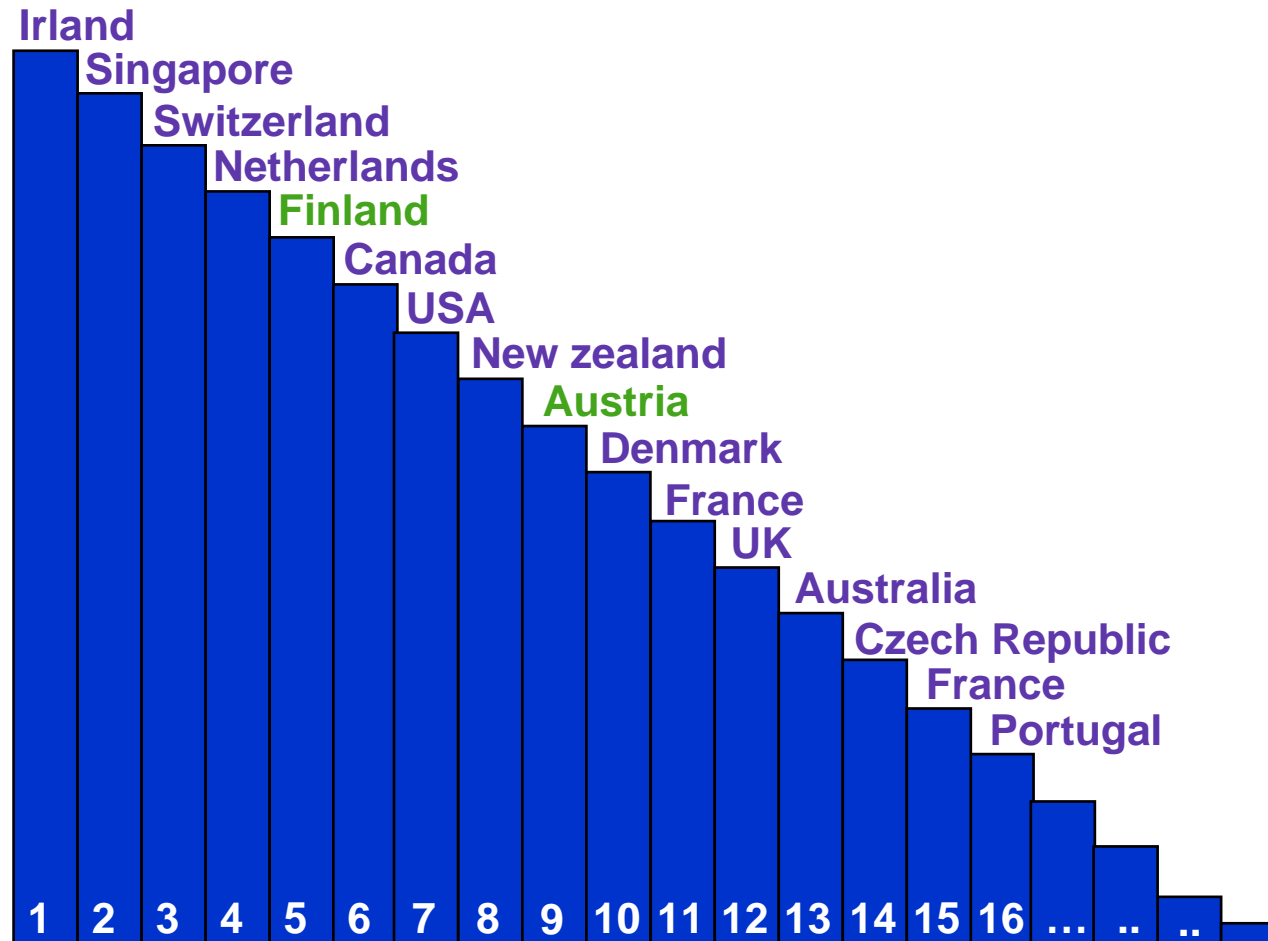
- WORRIES:

- The competitiveness of Finnish universities
- The quality of education
- Internationality of our universities
- Vocational high schools do not give concrete skills
- Need to diminish the number of new students in vocational high school and in universities
- Need to diminish the different study programs

- FACTS:

- Finnish universities are not highly ranked in international comparison
- In technical area the situation is alarming
  - In addition to USA, APAC is also passing Europe
  - finish research institutions publications are referred clearly less than OECD average
- Lack of women in technical training
- Less than 45 % will be graduated in five years in technical areas
- Teacher/student portion very low compared to world best universities
- Competencies that vocational high school gives are not concrete enough
- Vocational high schools is aiming towards university R&D status → they should concentrate to D&R status

# Globalization in year 2003



The index measures the economic integrations, technical connections,  
personal contacts and political co-operation

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Lähde: TEKES

# The effects of globalization

- Corporate sector will be part of global network → same effect need to be seen in education
- Success in global network require focus, critical mass and quality of education

# Needed characters for engineer

- Eagerness to learn, renewal
- Ability to take the opportunity
- Agility
- Cristallize the essencial
- Apply knowledge
- Team work
- Problem solving
- Disipline and timeschedule
- Ability to analytical and conseptual thinking
- Search for information
- Creativeness
- Courage to change things
- Humbelness to knowledge