

Apprenticeship in Finland Technology Industry



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The Technology Industry in Finland

About 280 000 employees, 50 % of total Finnish exports, 75 % of private sector R&D

Electronics and Electrotechnical Industry

- Data communications equipment, electrical machinery, medical technology products
- Turnover (2014): 15.1 billion euros
- Personnel (2014): 42 300

Mechanical Engineering

- Machinery, metal products, vehicles
- Turnover (2014): 27.2 billion euros
- Personnel (2014): 118 900

Consulting Engineering

- Expertise for construction industry and infrastructure
- Turnover (2014): 5.0 billion euros
- Personnel (2014): 46 300

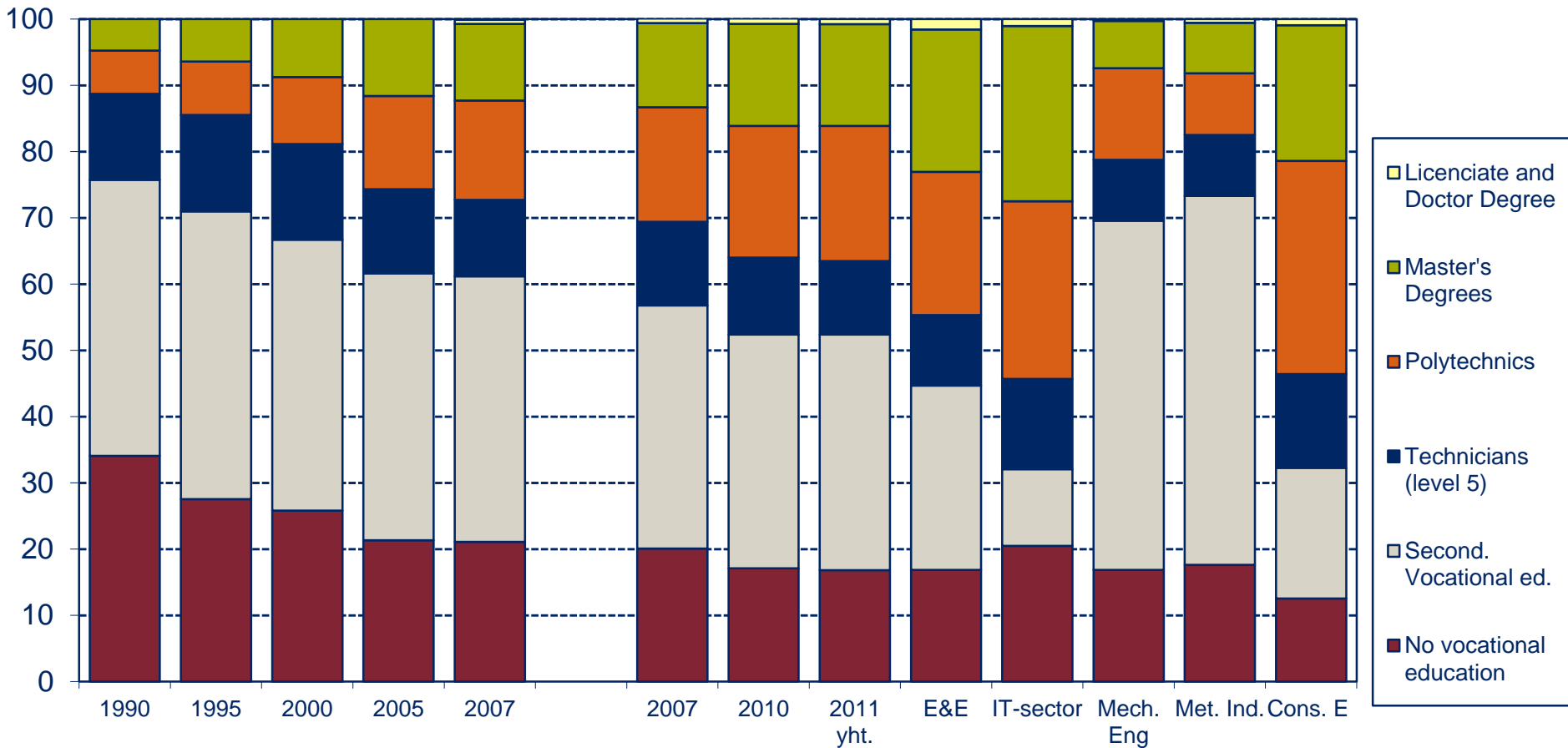
Metals Industry

- Steel products, non-ferrous metals, castings
- Turnover (2014): 9.2 billion euros
- Personnel (2014): 15 300

Information Technology

- IT services, applications and programming
- Turnover (2014): 10.0 billion euros
- Personnel (2014): 53 000

Qualifications of Personnel in Technology Industry 1990-2011



Technology industry 990-2007
Excl. Consulting Engineering.

Technology Industry, all sectors 2007-

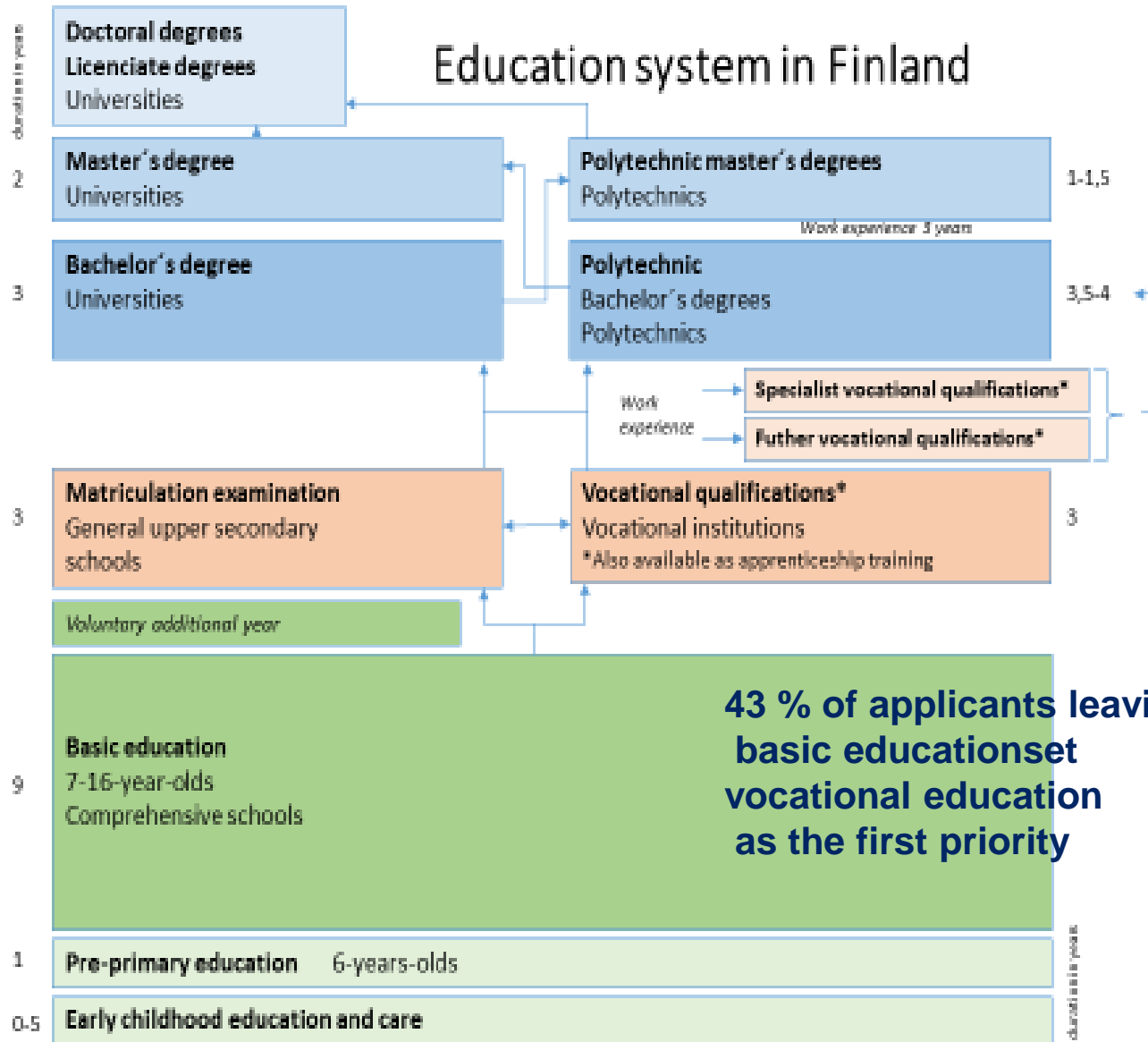
Technology Industries: Most important Secondary Level VET qualifications in 2011

- Secondary level vocational qualifications app. 96000 / 35 % of personnel
- Vocational Qualification in Metalwork and Machinery 33500 / 12 %
- VQ Electrical Engineering and Automation Technology 13600 / 5%
- VQ Vehicle Technology 7900 / 2,9 %

- Further Qualification in Metalwork and machinery 2.622 / 1 %
- FQ Electrical Engineering and Automation Technology 571 / 0,2 %
- FQ in Information and Communication technology 452 / 0,2 %

- Specialist Vocational Qualification in Metalwork and Machinery 194/0.1 %

Education system in Finland



Equal opportunities

Public Funding - Free of charge

No dead ends

Upper Secondary Level VET

- VET provision government regulated
- Funding from the states and local authorities
- Qualification requirements decided on national level by FNBE in cooperation with employers, employees and educational institutions
- Compulsory and optional modules, skills demonstrations/competence tests, on-the job learning, individualisation, tailoring

- Vocational upper secondary qualification (initial vocational education, IVET)
- Further vocational qualifications (work experience expected)
- Specialist vocational qualifications (work experience expected)
- Forms to achieve :
 - Curriculum based programs (initial vocational education, IVET)
 - Competence based programs (all exams – on-the-job-training)
- Apprenticeship one form of to complete (usually) competence based program

Initial Vocational Education 2013

	Total	Curricula-based	Share, %	Competence based		
					Apprent. share, %	
New students						
ICT	1810	1456	80.4	409	60	14.7
metalwork & mach.	4027	2624	65.2	1507	111	7.4
El.eng. and autom. tech.	3676	2706	73.6	1152	189	16.4
Inf &telecomm. Tech.	1465	1353	92.4	122	11	9.0
Students						
ICT	6192	5206	84.1	1171	193	16.5
metalwork & mach.	12704	10128	79.7	2973	414	13.9
El.eng. and autom. tech.	12208	10013	82.0	2710	530	19.6
Inf &telecomm. Tech.	4874	4621	94.8	296	45	15.2
Qualifications						
ICT	1097	967	88.1	180	51	28.3
metalwork & mach.	2640	2165	82.0	596	127	21.3
El.eng. and autom. tech.	2821	2193	77.7	725	103	14.2
Inf &telecomm. Tech.	969	904	93.3	71	6	8.5

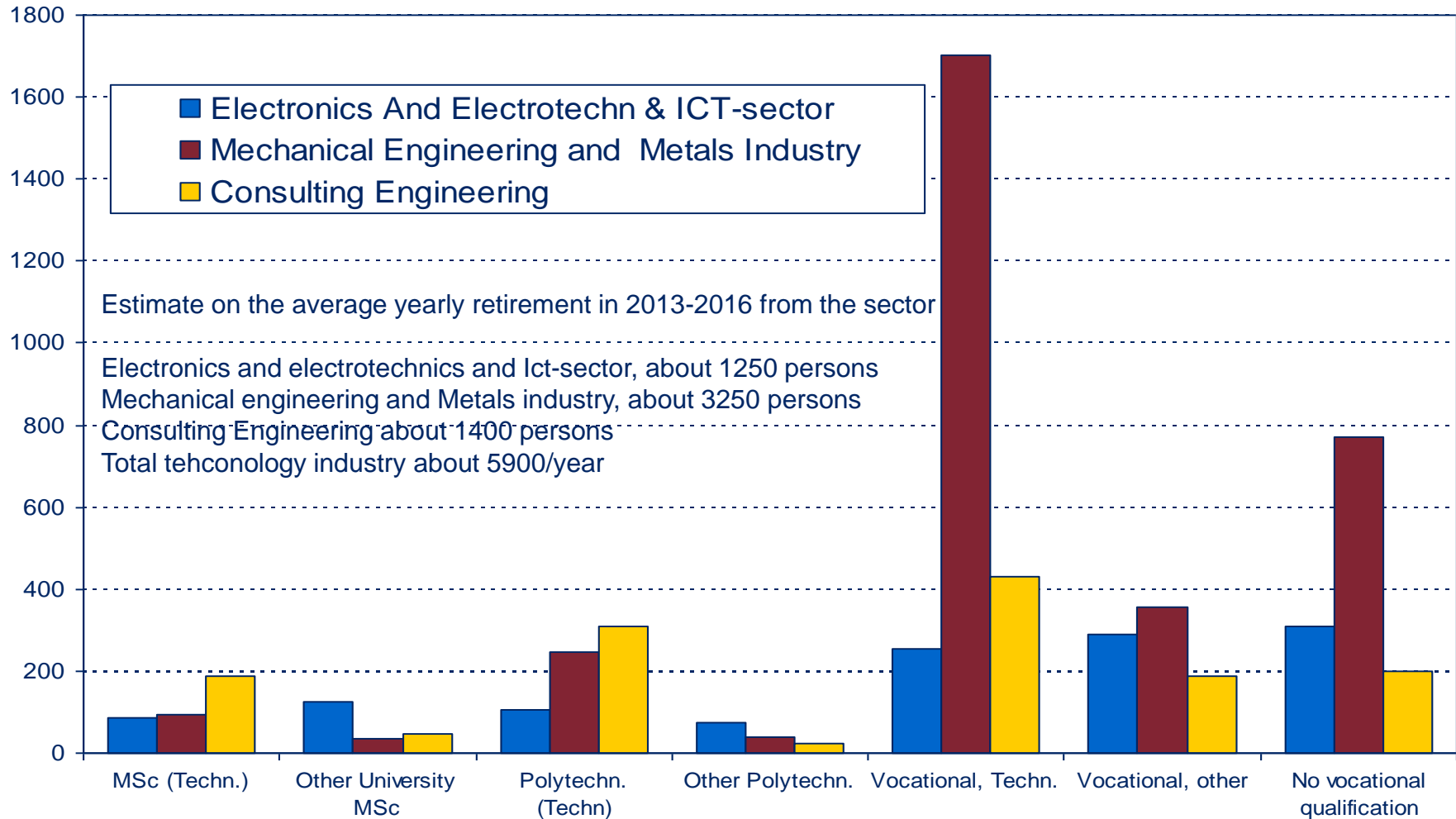
Apprenticeship programs – general features

- Mainly used by adults
- Agreement between employer / employers, student and Apprenticeship Office
- Apprenticeship is contract of employment with the terms of collective agreement of the sector incl. salary, trial period, holidays etc.
- Employer offers duties at least 25 hours/week
- On-the –job training + theory in educational institutions
- Workplace instructor: Trainer, supporter and assessor of learning

- Target is the qualification or part of it
- Personnel training or recruitment

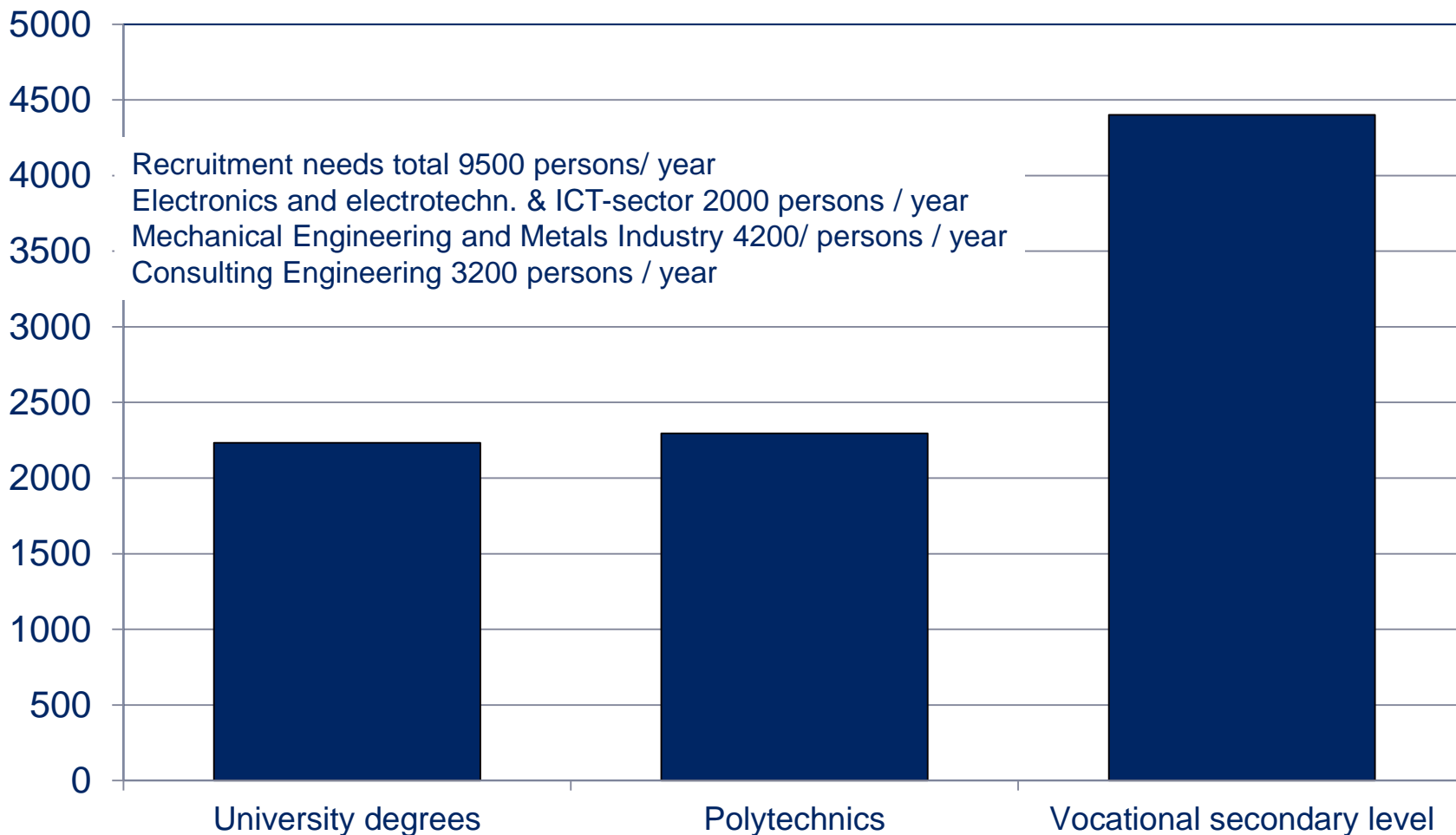
- Theory studies: free of charge for employer and the student
- Training compensation for the employer (1-250/350 e/month)
- Financial support for hiring an unemployed (possibility /discretionary)

Retirement of Technology Industry Personnel by Educational Sector in 2013-2016. Yearly average



*) Vocational education plus technicians. Vocational, further vocational and specialist vocational qualifications

Estimate on the yearly recruitment needs in Finnish Technology Industry 2013-2016



*) Vocational includes initial, further and specialist qualifications

Youth guarantee 2013

- In Finland in Feb 2015: unemployment rate 10,1 %, 15-24 yrs 25,5 %
- an unemployed person under 25 of age or
- a person with a new qualification under 30 years of age
- In three months
- a job, on-the-job-training, study place, workshop etc.

- Education guarantee:
- For every student leaving compulsory education will be guaranteed a study place in secondary level general or vocational training or in apprenticeship training
- In 2013, 9 % of those 9th grade school leavers, accepted to secondary level education, did not take it. Danger - dropping out

Renewal of Apprenticeship and On-the job-learning 2014-2016. New trials

- Minedu:
- Target to increase apprenticeship training for young people and create models that combines the forms of school-based and apprenticeship based education
- Target: persons under 25-years of age without secondary level education

- Initiatives to be supported:
 - A preliminary period for apprenticeship
 - Training on-the-job-trainers
 - Raised financial support to employers
 - Developing supported apprenticeship
 - Contributing on-the-job-learning and flexible ways to combine work and institutional training
 - EK and FFTI active