

Labour Market Oriented Curricula – Putting in the Practice

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Higher Education and Market Competencies

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Originally, universities were **teaching** institutions, but still with an early dichotomy between "skills or intellect", i.e., between medicine/law, and "knowledge for the sake of knowledge"

Research entered universities only in the 19th century, especially by the introduction of the *Humboldt* concept, also copied by American universities

Now universities are given **the third task**, or 'service to the society', or, 'regional engagement'

The **demands** of the labour market for the **contents** of higher education heavily increasing. Individual needs!

The '**old**' target in HE: the degree or a diploma!

The '**new**' target: relevant competencies and skills, by learning! - The future is here, now!

In education, and in Higher Education (HE) in particular, the **outcomes** matter! The outcomes are not only assessed by the HEI itself, but also by the labour market! A strong need for open and fully transparent system

Skills are the property of an **individual**, not of a group! But capacity for **group work** is also gaining in importance

The relationship between education and labour market is a **two-way-street**

Labour market determines the needs of skills, but education can also create new skills and avenues that in turn change the labour market!

In many cases the **mismatch** between the two can be disturbingly strong

It is a serious challenge for HEIs and their future missions and strategies; the HEIs cannot be just passive onlookers!

Response to this situation is not only a matter of the **curricular structure**, but also a matter of **teaching/learning methods** and modes used!

- Still the basic facts and **core substance** must be right and sufficient
- But what is 'core'? Overload? Flexibility?
- The new **Bologna** degree structure aims at producing individual flexibility in the study path
- Sheer rote learning does not support creativity and **innovativeness**; learn by probing; the new labour market does **not** need but obedient workers
- Teachers losing their old **monopoly**; learning will be an **interactive** process; away from 'chalk & talk'!



Curricular structure:

- Not a steady state but a **dynamic** one; curricular renewal up-to-date at intervals
- **Input** from various sources, also from the industry that would benefit from skilled labour (Nokia as an example in Finland)
- **Feedback** from alumni
- **Feedback** from industry in the form of temporary lecturers, also as tutors, thesis advisors, etc. brain storming, (*Learning by Developing*), etc. (cf. www.laurea.fi)
- National labour market structure?
- **What might be your own indicators of success?**



But **outside** the traditional curriculum:

- Addressing/studying problems common for the industry, public sector, etc. through student group work, also e.g. *Learning by Developing* (LbD); or through **contracts** with industry, public institutions, etc., by a truly **interdisciplinary** approach
- By developing truly **professional** degrees (vs. the academic degrees); e.g. joint thesis work with companies, practical applications
- **Practical training** periods, e.g. during summer recession
- Special **service functions** for employment
- But be innovative for your own solutions...!
- (Innovations can be both **social** and **technical**)



In Finland, a **dual** HE system prevails, with
The Polytechnics and the Universities co-existing,
and in cooperative relations; in the Helsinki region:
HERA = Helsinki Education and Research Area

In polytechnics, e.g., the **advanced degrees** made
directly with/in companies, public institutions, etc.,
but only after a 3-year employment period



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But the labour market may also need a heavier input in the form of **new entrepreneurship**:

In the early phase, the university can develop special **innovation services** to help:

- In systematic **recognition** of new innovations;
- In **evaluation** and **development** of innovations;
- In **commercialization**;
- **Business incubators** offer services to **support** start-up companies and initial operations; they may also help companies to **network** with other operators in the field

But there are also several international **cooperative ventures** in this very field:

E.g., **Global Venture Lab** initiative, with several countries and universities participating, can give guidance to engineering, IT and natural sciences students towards entrepreneurial skills, business competencies and commercialization;

Developing entrepreneurship is and should be a cooperative action also between HEIs and governmental organisations, etc. Often, a (public) **buffer organisation** is also helpful! (Cf. a seminar on this very topic in Novi Sad in Oct. 2005.)



But besides professional skills, certain **generic skills** are also needed, also for individual success in the labour market (partly, after Yopp 2009):

1. Knowledge of human cultures and the physical and natural world (usually the sphere of the school)

1. Focus by engagement with **big questions** including

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving



3. Practiced across the curriculum in the context of progressively **more challenging problems**, projects and standards for personal and social **responsibility**, including:

- Civic knowledge and engagement – local and global
- Intercultural knowledge and competence
- Ethical reasoning and action

4. **Integrative learning**, incl. synthesis and advanced accomplishment across general and specialized studies



5. Demonstrated through application of knowledge, skills, and responsibilities to new settings and complex problems

The real role of Higher Education is not to produce solely useful knowledge, but also plenty of 'useless' knowledge, for the sake of building human capacity and character, for the growth and development of an individual and a citizen!



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*The world's most compelling ideology is
neither democracy nor capitalism nor...
...but success.*

(Parag Khanna, 2008)



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Some links to the Finnish HE, Innovation, and QA Policies:

www.research.fi

www.finheec.fi

The following **aerial view** is from the University of Kuopio (Finland) campus, showing a concentration of

- the University (ca. 6000 students)
- the Savonia Polytechnic (ca. 5000 students)
- the Science Park (over 230 companies)
- several National Research Institutes;

...all in close physical proximity, promoting inter-agency and interdisciplinary collaboration...



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Thank you, kiitos!



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