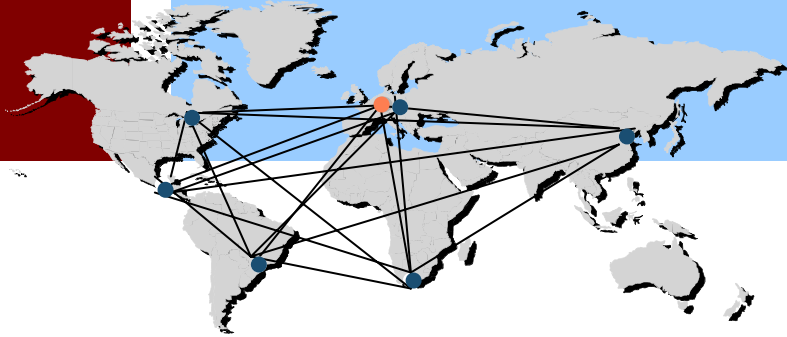




Walther Ch. Zimmerli

New economy of skills or economy of new skills?



New economy of skills or economy of new skills?

STRUCTURE

- 0 **Introductory remarks**
- 1 **The framework: globalization, technologization, and knowledge**
- 2 **The problem: knowledge and skills**
- 3 **The challenge: education, qualification, and training**
- 4 **The goal: a sustainable technology society**
- 5 **The roadmap: society, institutions and individuals**

New economy of skills or economy of new skills?

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0 Introductory remarks

1 The framework: globalization, technologization, and knowledge

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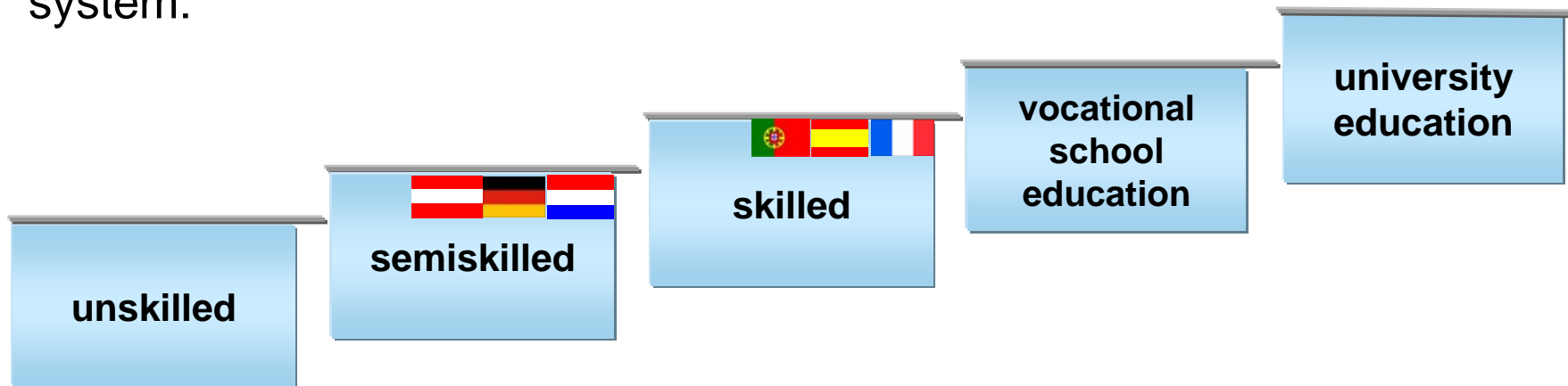
4 The goal: a sustainable technology society

5 The roadmap: society, institutions and individuals

European frame of reference

accreditation of vocational qualification in Europe (1985)

all vocational or academic qualifications can be connected in a five step system:



The German system of dual vocational training has been located in the first two steps.

The problem therefore is to integrate the German into the European system.

European frame of reference

Bologna declaration (1999), Lisbon Agenda (2000), The Bruges initiative (2001), The Copenhagen declaration (2002)

The five important fields of activity:

1. Creation of a unified European university system until 2010
2. Emphasis on the European dimension of vocational training
3. Improvement of the transparency of qualification and degrees
4. Mutual recognition of competencies and qualifications
5. Qualification assurance of vocational training

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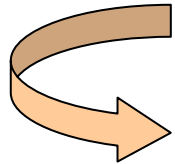
1 The framework: globalization, technologization, and knowledge

a) 4 aspects of globalization

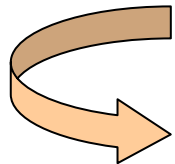
- economical globalization
- technological globalization
- ecological globalization
- political globalization

1 The framework: globalization, technologization, and knowledge

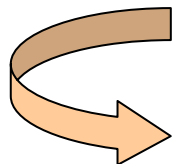
b) the coming of the technology society



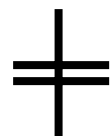
an increasing number of economic elements which used to be assigned to the primary and secondary sector (extraction/processing of raw materials) are shifted towards the tertiary sector (services)



hybridization: to know is to make



„knowledge society“



people know more




the ratio of electronically communicated and knowledge-based services is increasing

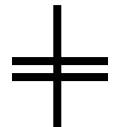
1 The framework: globalization, technologization, and knowledge

c) „the West“ – knowledge economy in both hemispheres

„the West“ = the Northern hemisphere in the eye of the Southern hemisphere

- even in the Northern hemisphere concepts like „knowledge economy“ or „knowledge society“ are misleading

knowledge society  knowledge technology society

information  knowledge

- to have access to a big storage of information (e.g. the internet) does not necessarily imply knowing it
- the quicker the potentially accessible knowledge grows, the less we know

the South: a co-existence of elements of pre-industrial, industrial and post-industrial societies

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2 The problem: knowledge and skills

a) transformation of knowledge into innovation

innovation = «commercialization of invention»

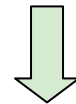
Joseph A. Schumpeter

- the distinction between knowledge and skills becomes blurred
- the application of knowledge feeds back into the generation of new knowledge (pramatico-genetic knowledge)
- success in the market becomes itself an element of pramatico-genetic knowledge

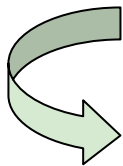
2 The problem: knowledge and skills

b) skills as cultural technologies

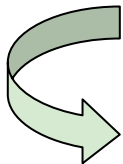
further development of the three
traditional cultural techniques
(to speak/hear, to calculate, to write/read) by



the use of (linked) computers (AI, DAI)



key qualification of the future:
to be able to use the modern technologies



knowledge is no longer the individual, mental way of thinking;
today it is rather more the globally distributed information that we
are able to access at any time

2 The problem: knowledge and skills

c) ignorance, knowledge management, and innovation

- ignorance is the driving force of knowledge
- the skills required consist in managing ignorance (e.g. search engines etc.)
- the skills required include intellectual property management (IPM) and innovation management (IM)

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3 The challenge: education, qualification and training

a) educational system and tertiary education

- medieval university:
training center of church elites
↳ theologico-philosophical knowledge
- modern university:
training center of state elites
↳ empirico-theoretical knowledge
- university of the future:
training center of economic elites
↳ pragmatico-genetic knowledge

3 The challenge: education, qualification and training

b) the dysfunctional university

up to now the universities are restricted to:

- the age group of 18 to 30,
- disciplinary qualification,
- empirico-theoretical knowledge.

3 The challenge: education, qualification and training

c) lifelong and blended learning

in a knowledge society training institutions have to concentrate on:

- the age group of 18 to 80,
- transdisciplinary competencies,
- pragmatico-genetic knowledge.
- globalized institutions need blended learning, i.e. the intelligent combination of distance and face-to-face education

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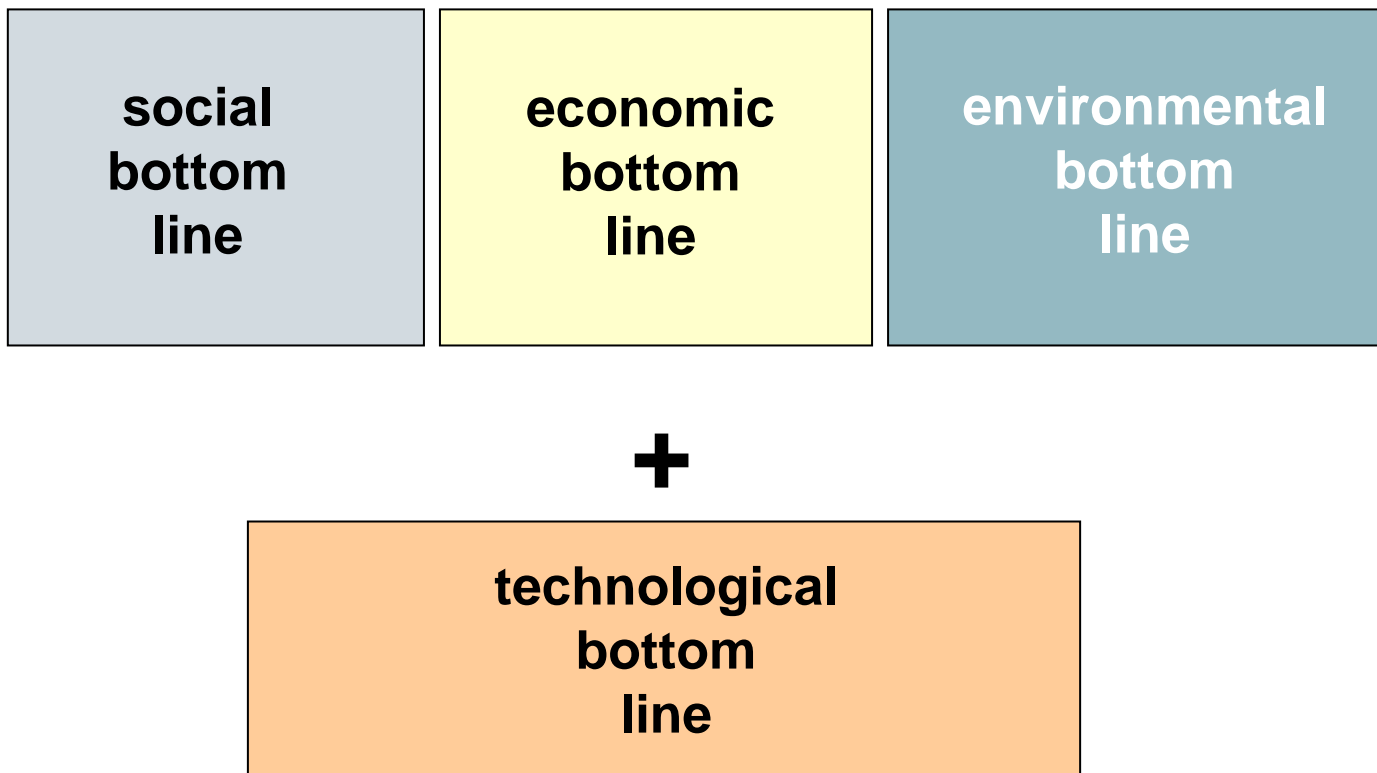
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4 The goal: A sustainable technology society

a) from triple to quadruple bottom line

„triple bottom line“ (John Elkington)



4 The goal: A sustainable technology society

b) agents of sustainability

- institutions like NGOs, World Ethics Council, Global Compact
- tertiary education institutions

4 The goal: A sustainable technology society

c) beyond Bell and Snow

Bell	\neq	postindustrial
	$=$	technologically sustainable
Snow	\neq	2 cultures
	$=$	4 (engineering sciences, sciences, social sciences, humanities) or 1 (transdisciplinarity)

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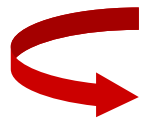
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5 The roadmap: Society, institutions and individuals

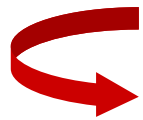
a) education in a pluralist society: division of labour



the technology society will be a pluralist society, both from a professional and a value systems' point of view



the educational system will therefore in a first step develop according to the existing institutions (private or public) and societal groups



in a second step new institutions, mainly company driven will come into being

5 The roadmap: Society, institutions and individuals

b) education in public private partnership (PPP)



in most modern societies education is either exclusively or predominantly organised by public authorities



as in a technology society knowledge and skills coincide (innovation) private-public partnerships will emerge



educational institutions will thus contribute to both, innovations and the development of pragmatico-genetic knowledge

c) education by church, state and economy



the development of the technology society will not completely dismantle the previous main agents of education:

- the churches and their educational institutions will still take care of the church elite
- the state and its educational institutions will still take care of the state elite
- being innovation oriented the educational institutions of economy will have to be preeminently agents of innovation (Volkswagen AutoUni)

**„There is only one thing in the long run more
expensive than education:**

no education.“

(John F. Kennedy)



VOLKSWAGEN AutoUni 

Thank you for your attention!