

**Session 2**  
**Education and Teaching**  
**– Basis for Industry and**  
**Research**

**Educational Systems need the Reform: Early  
Education in a Technological and  
Increasingly Globalized World**

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# Perspectives for Reform

01.

A new legitimisation of the educational system:  
strengthening development and competencies  
und preparing the child for the challenges of  
the 21th century

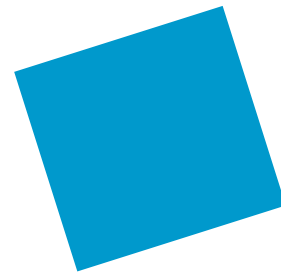


## 02. A Down-Top-Reform

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# New findings in the developmental psychology

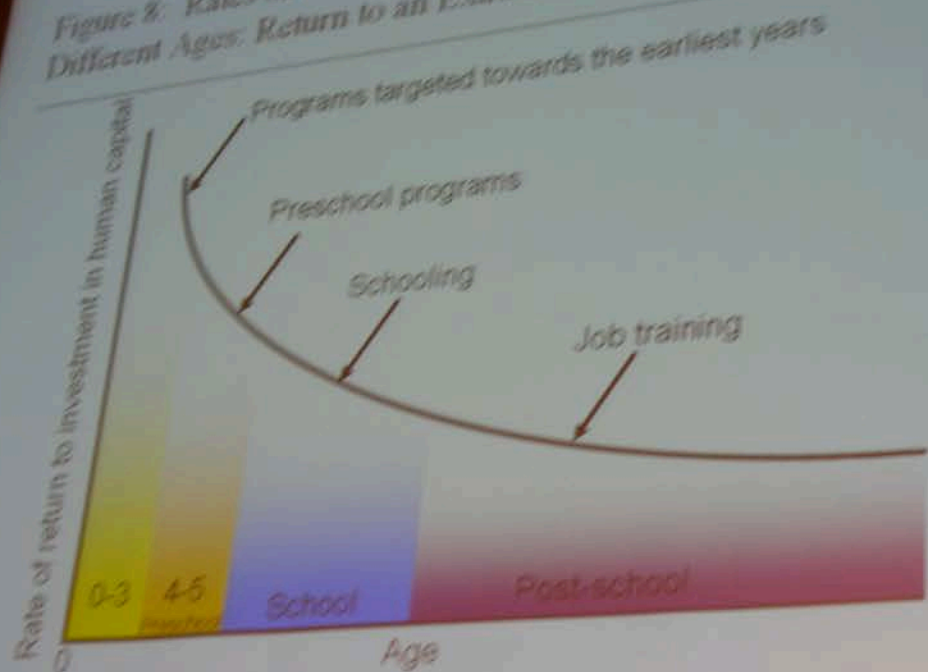




Investment in educational systems:  
with high Profit?



Figure 2: Rates of Return to Human Capital Investment at Different Ages: Return to an Extra Dollar at Various Ages



21

Bertelsmann-Stiftung

Für die Bildung

www.bertelsmann-stiftung.de

Kinder früher fördern

Wirksamere Bildungsinvestitionen

Kongress 11. März 2008,  
Leipziger Buchmesse, CCL

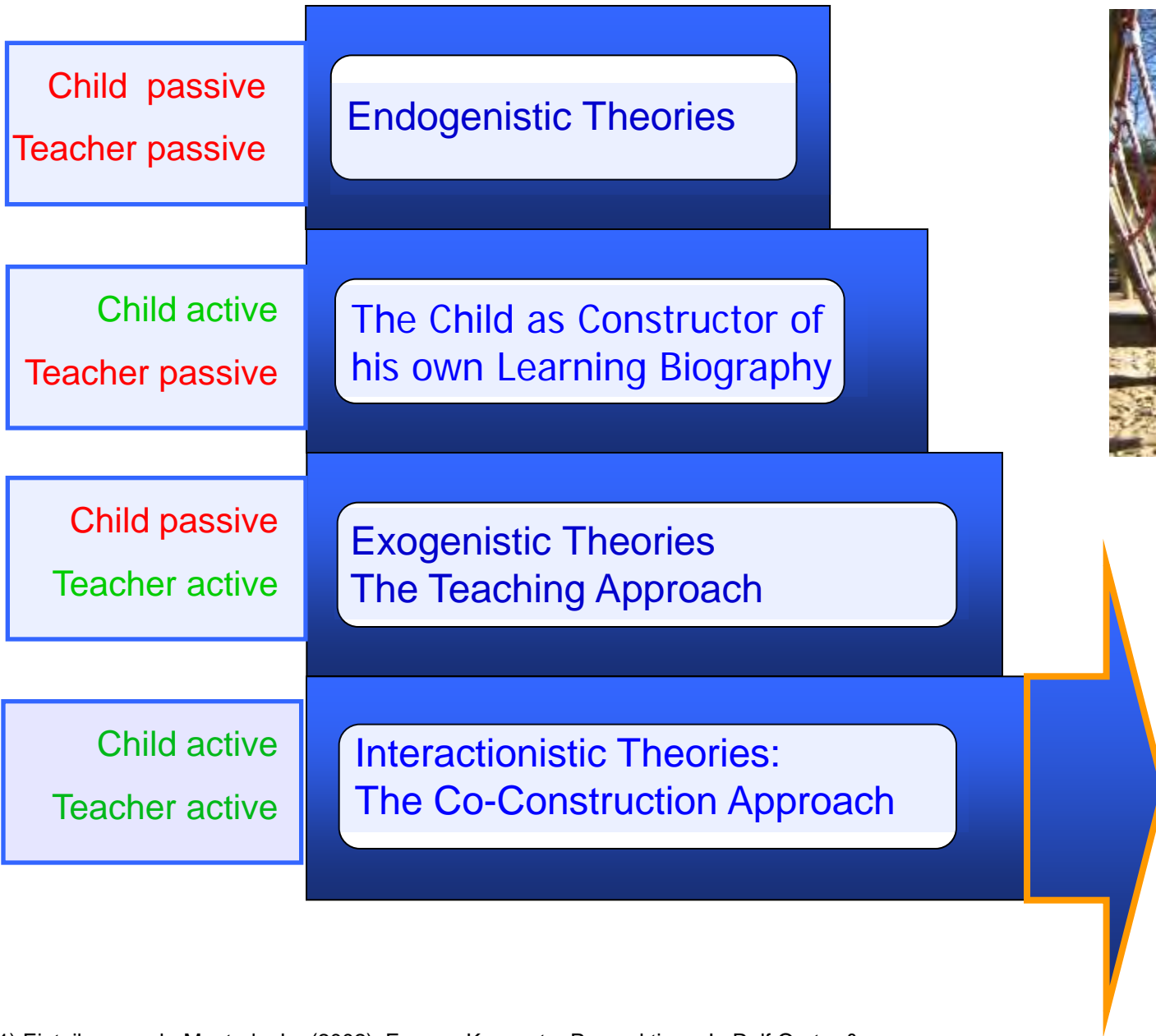
03.

Changing the theoretical position  
- redefining learning processes -





# Theoretical Positions



# 4. Re-Conceptualisation of Learning and a new Didactic Approach: Co-Construction





The child as co-constructor of its own  
learning biography.

Learning as dialogic approach and in  
cooperation with parents, teachers and other  
children.



A new conceptualisation of learning using an interactional approach: the generation of knowledge and the construction of meaning as the result of interactions and discourses.



All co-constructors of child's development  
organise the learning processes  
implementing the same pedagogical  
principals.

05.

Supporting development – strengthening  
competencies

The need of a taxonomy and a new  
understanding of competencies for the 21th  
Century



The Concept is focusing on child's development und learning, its structure implicates three different levels:

» **The visions**

» **The competencies**

» **The learning areas**



# EDUCATIONAL VISIONS

**Responsibly and  
value-oriented  
acting children**

**Children as creative and  
imaginative artists**



**Strong children**

**Children as active  
learners, researchers  
and explorers**

**Communicative children**



# Competencies

**Individual-related  
competencies**

**Competencies to act  
in the social context**



**Competencies in dealing  
with change**

**Metacognitive  
competencies**

# » INDIVIDUAL RELATED COMPETENCIES

## Emotional competencies

for example:

- » to talk about emotions
- » to identify emotions

## Personal competencies

for example:

- » self-esteem
- » positive self-concept

## Individual-related competencies

## Motivational competencies

for example:

- » self-efficacy
- » self-regulation
- » curiosity

## Cognitive competencies

for example:

- » problem-solving skills
- » creativity
- » memory function

## Competencies in relation to one's own body

for example:

- » to take responsibility for the own health

# » **COMPETENCIES TO ACT IN THE SOCIAL CONTEXT**

## **Ability to democratic participation**

for example:

- » to keep to rules in discussions
- » to contribute the one's position in a discussion
- » to reconsider one's own position

## **Social competencies**

for example:

- » empathy
- » ability to work in a team
- » ability to communicate

## **Competencies to act in the social context**

## **Ability to take responsibility for something**

for example:

- » for one's own actions
- » for other people
- » for the environment

## **Development of values**

for example:

- » appreciation of diversity
- » solidarity



# How Children Learn to Learn



# Children's concepts of learning

Ingrid Pramling Samuelsson

Learning as doing

???

Learning as knowing



# Children's concepts of learning

Ingrid Pramling Samuelsson

Learning as knowing

???

Learning as  
understanding



# Strengthening Resilience



## Problem-solving abilities

**Belief of self-efficacy**

**Positive self-image**



**High social competencies**

**Ability for self-regulation**

**Internal belief in controlling**

**Active/ flexible coping-behavior**



**Stable, emotional relationship  
to a person**

**Positive  
experiences in  
educational  
institutions**



**Open, supportive  
climate of education  
(authoritative  
style of child-  
rearing)**

**Positive  
peer-relationships**

**Positive  
role models**



06.

Focussing on STRENGTHS,  
not on WEAKNESSES

Individualisation and differentiation  
of learning processes



# Educational visions

**emotionality  
and social  
relations**

**to conduct  
everyday life**



**Strong children**



**health**

**sports and  
exercise**

# Educational visions

language and  
literacy



Communicative children



media

# Educational visions

**fine arts and  
performing arts**



**Children as creative and  
imaginative artists**



**music and  
dance**

# Educational visions

**mathematics**



**technology**



**Children as active  
learners, researchers and  
explorers**

**natural  
sciences**

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# How to implement Curricula !



# Project „Natur-Wissen schaffen“

- Implementation of Curricula

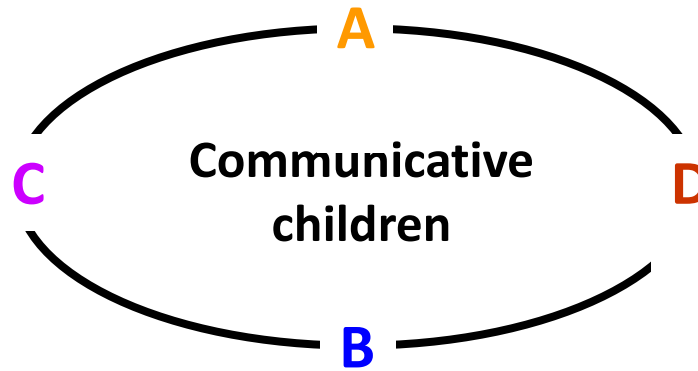




# Educational goals: media

Experiences and practical knowledge in dealing with media

Processing and reflexion of own contact and own experiences with media



Knowledge and reflexion of the making and function of media

Use of media for own concerns, questions and for social exchange

# Educational visions

**Religiousness and value-based concept**

**Democracy and politic**



**Responsibly and value-oriented acting children**



**Society, economy and culture**

**Environment**



# 7. How to cope with Diversity



ild

th feelings  
nt thing,



ATIONAL AND CHILD HEALTH  
COUNCIL HEALTH  
MIDDLEMORE HOSPITAL SO

tag, wie geht's?  
German

γεια σου  
Greek

ia orana  
Tahitian

喂  
Chinese

ciao  
Italian

apa kabar?  
Indonesian

Здравствуй  
Russian

WE ALL SMILE IN THE SAME LANGUAGE



kia ora  
Māori

नमस्ते  
Hindi

witam  
Polish

こんにちは  
Japanese

bula  
Fijian

salut  
French

mālō nī  
Tongan

chào  
Vietnamese

kia orana  
Cook Islands

tālofa  
Samoan



Meredith



Finn D



Connor



Gene



Se



Wesley



Kasper



Wendy



Claudia



Paul



Estelle



Paul



Angus



Paul

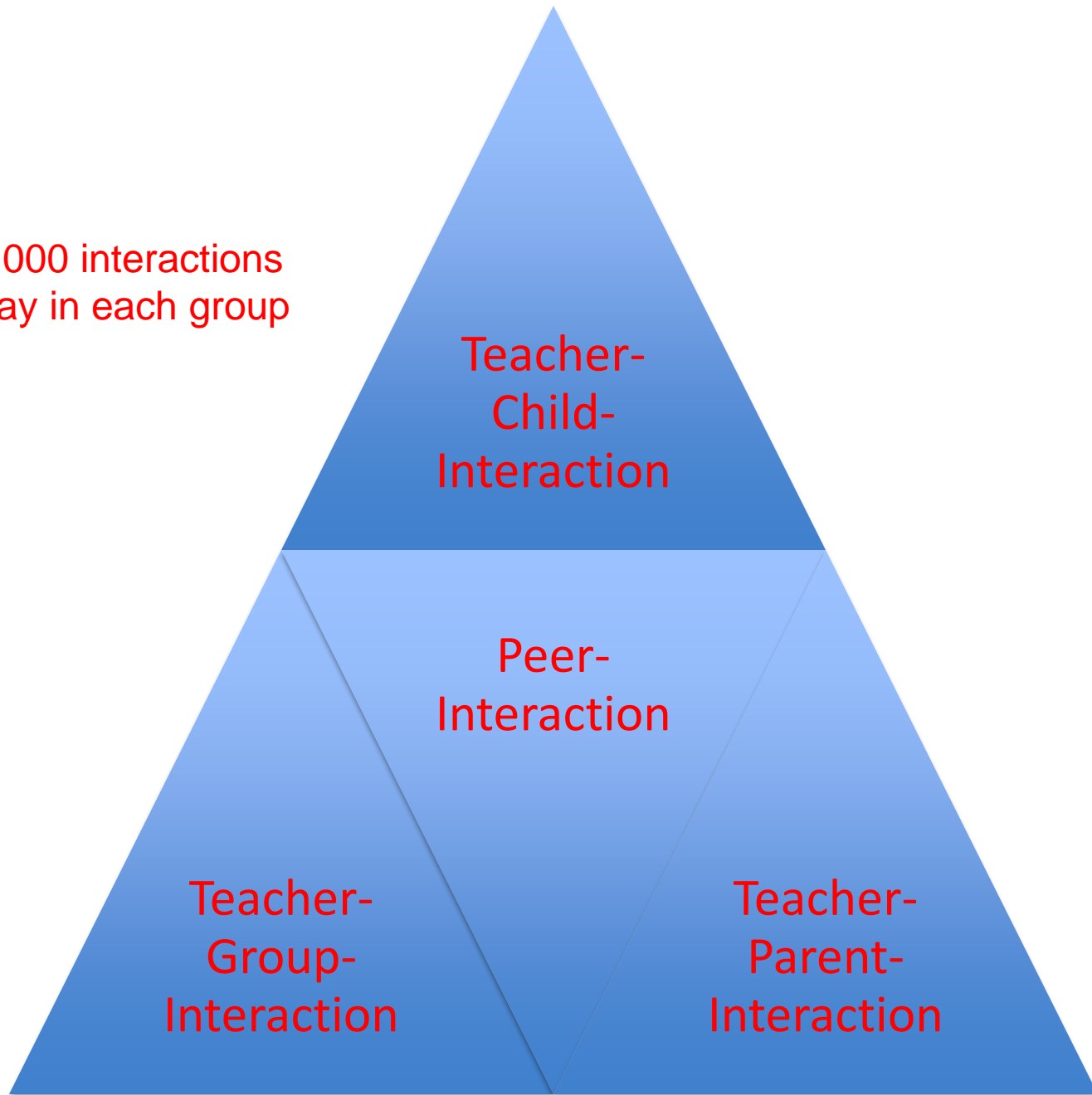


08.

High quality of interaction: the key for high educational quality and for high efficacy of the educational system



About 1000 interactions  
every day in each group



# How to optimize the interaction between teacher and child

## How to organize learning processes



**Specific educational  
methods**

**General educational  
methods**





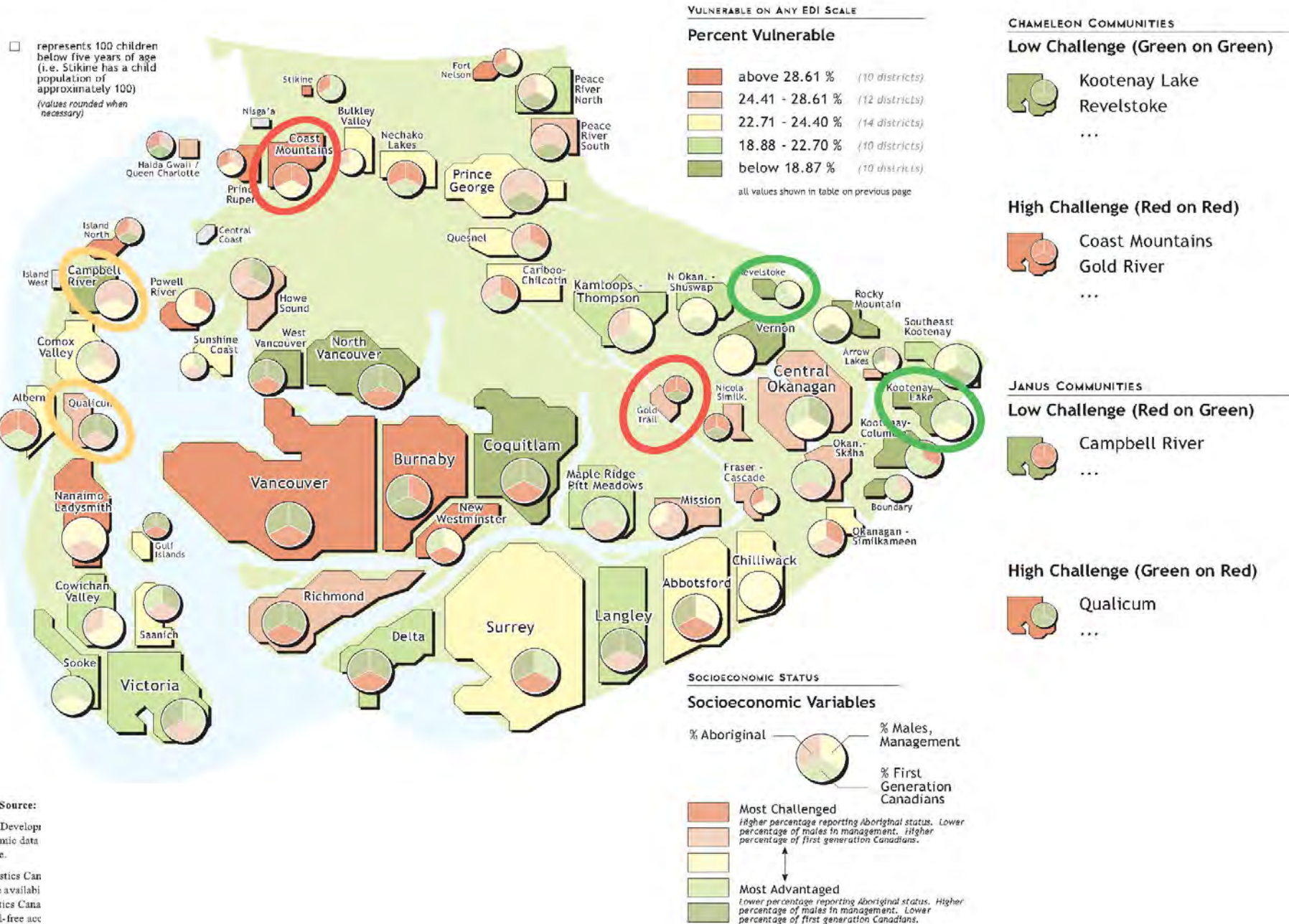
09.

## An Ecological Approach in the Educational System: Building new partnerships



Map 4.7.2: Vulnerability on Any Scale and Socioeconomic Status

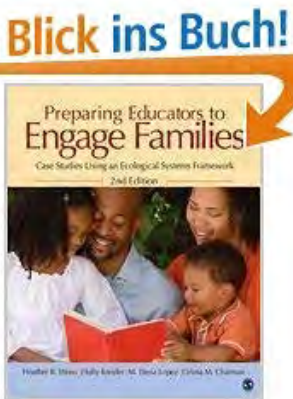
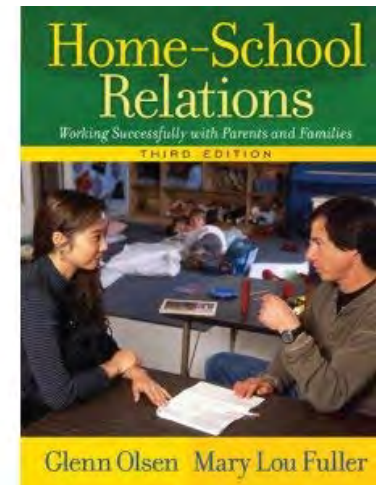
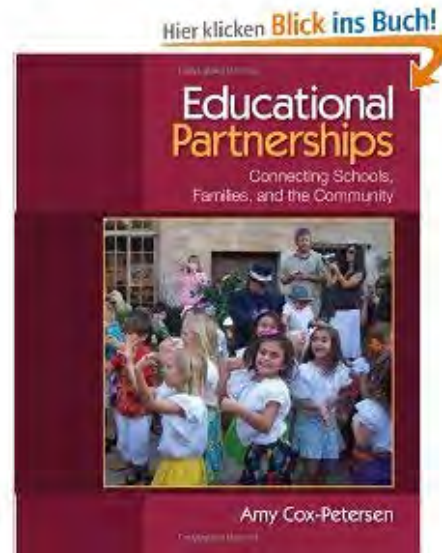
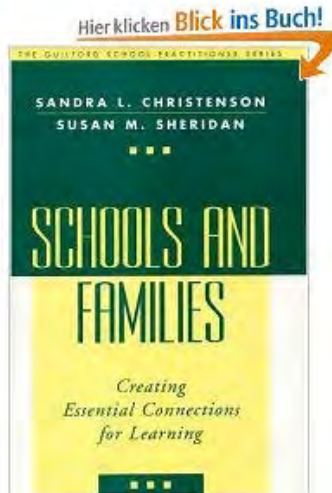
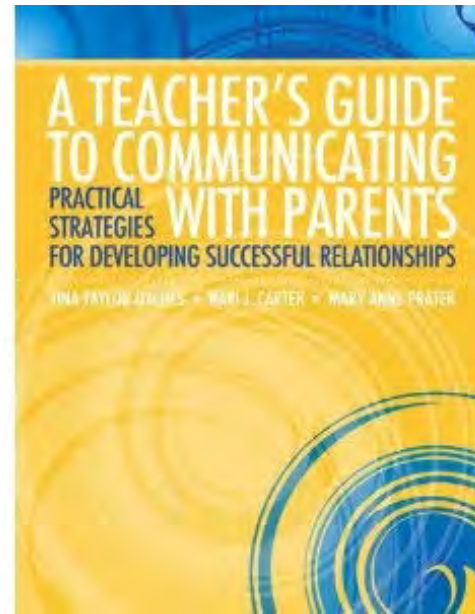
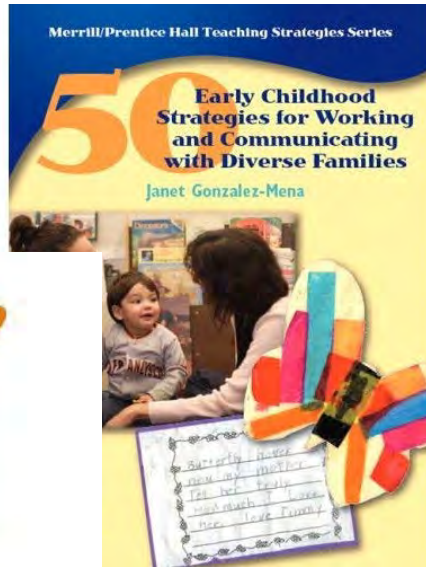
(59 School districts)



**Data Source:**  
Early Developmental Economic data Profile.  
<sup>1</sup> Statistics Canada on the availability Statistics Canada its toll-free acc

Equality of Educational Opportunity  
1966

Children and Their Primary Schools,  
1967





**FINE**

**Family Involvement  
Network of Educators  
University of Harvard**



10.  
A new Architecture  
of the Educational System





A Coherent Educational System

1. Consistency in the principles and the educational aims
2. Consistency in coping with transitions
3. Consistency in the educational processes



# *New Places for Learning and the Reform of Professionalisation*

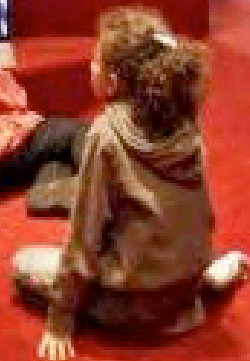
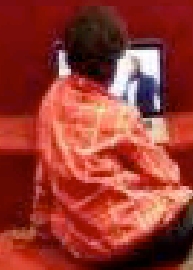
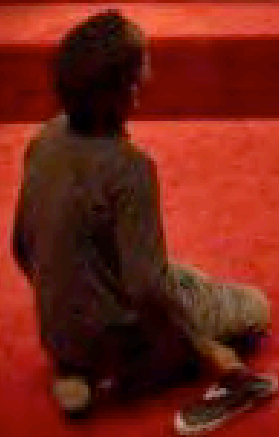


Learning is a treasure  
that will follow its  
owner everywhere.  
Chinese Proverbs



















# Reform of the Professionalisation of Pedagogues

The Competency-Model  
von Fthenakis et al. 2014

My vision:  
Education as part of the responsibility  
of the society at whole !

The political vision ?

# Developing the Country/the City as a great place of lifelong learning, offering a fair chance to every child



Thank  
you

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