PÄDAGOGISCHE HOCHSCHULE ZÜRICH

# Expanding competency-based curricula to embrace diversity

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Prof. Dr. Judith Hollenweger Haskell

#### Overview

- 1. Addressing «Diversity» in the context of the curriculum
- 2. What is «Capability»?
- 3. Supporting implementation

# Addressing «diversity» in the context of the curriculum

### What is «normal»?

Normality = Average

It is «normal» to have an IQ of 100.

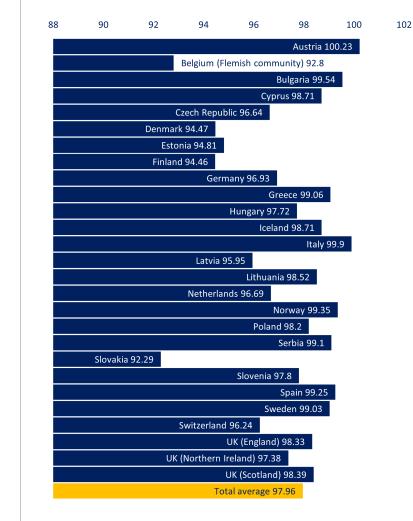
#### **Normality = Frequency**

It is «normal» that more boys die of injury deaths than girls. https://www.aihw.gov.au/reports/children-youth/australias-children/contents/health/injuries

#### **Normality = Standard**

It is «normal» that all children achieve the same competency standards.

→ Schools are focussed on «normality» and at the same time need to respond to «diversity»



Enrolment rate in inclusive education, EASNIE 2022



### Diversity with focus on characteristics of the person



The elephant as a source of information for describing the current situation

The aim is to understand the (relatively) stable characteristics that can be associated with the person.

Diversity: differences in age, gender, ethnicity/nationality, sexual orientation, IQ, health status (ICD), functioning (ICF) ...

The Blind Men and the Elephant https://de.wikipedia.org/wiki/Die\_blinden\_M%C3%A4nner\_ und\_der\_Elefant



### Diversity with a focus on relationships and interactions



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The elephant as an interaction partner involved in a particular situation

The aim is to understand and improve current participation in different life situations

Diversity in terms of «goodness-of-fit» between interaction partners in specific situations

#### Working elephant in Sri Lanka

https://thewanderlustgene.wordpress.com/2012/04/20/elephants-ofcourse-a-working-elephant-to-be-precise/



### Diversity with a focus on life goals



The elephant as a being in need of care and education

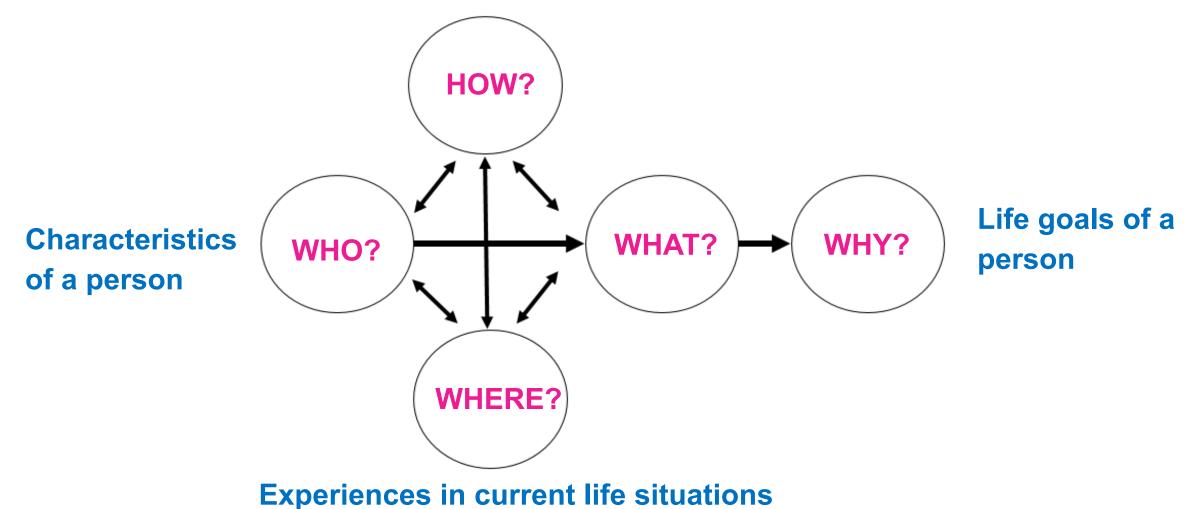
The aim is to secure a «good life» in the future and to identify the next steps towards this goal.

Diversity in terms of the capability of persons to achieve a life they value

Photo series by Ko Myo http://komyophoto.com/stories/beautiful-girl/



Bringing the three views together





### Educational goals of the Curriculum 21 (Lehrplan 21)

Education is an open, lifelong and actively shaped process of human development.

Education enables individuals to explore and develop their **potential** in intellectual, cultural and practical aspects of life, and to develop their **own identity** by engaging with self and the environment.

Education enables people to lead an independent and self-responsible life, which leads to responsible and independent participation and involvement in social life, in social, cultural, professional and political terms.

All subject domains (e.g. mathematics, music) elaborate their contribution «Enablement» or «Capability» (German: Befähigung) is the ultimate educational goal for all students

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# Relationships between competences and educational objectives

Definition of "competence": The cognitive abilities and skills available to or learnable by individuals to solve specific problems, as well as the associated motivational, volitional and social readiness and skills to use the problem solutions successfully and responsibly in variable situations.

- When working on the competences, the pupil acquires key skills and abilities  $\rightarrow$  «Potential»
- While working on the competences, the pupil makes important experiences and acquires (subject) knowledge in order to be able to participate in life situations → «Participation»
- When working on the competences, the pupil develops important motivational, volitional and social readiness skills → «Identity»

#### How can all aspects be taken into account in «building competencies»?

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#### Each subject domains defines...

#### Competences and competence levels $\rightarrow$ Skills and abilities

Education involves the acquisition of skills and abilities that prepare for lifelong learning and for a "competent way of life": «Ability»

#### Subject content and topics $\rightarrow$ General knowledge and experience

Education also includes experiences and experiential knowledge of content/topics that prepare for life-wide learning and future lifeworlds: «Knowledge».

#### Shared values and culture $\rightarrow$ Personal development

Education also includes the development of readiness and attitudes towards oneself, other people, the environment and society: «Motivation».



### Addressing diversity – Swiss approach

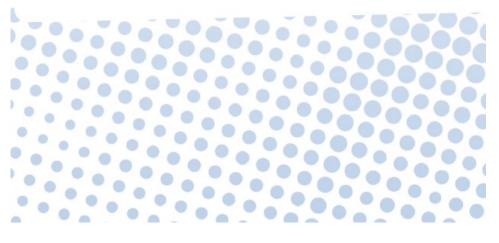
Application of Curriculum 21 in situations of complex disabilities helps to bring together diagnostic information with the framework curriculum of the German-speaking cantons of Switzerland

Guidance on expanding the curriculum so that it can be applied to all pupils, considering:

Disability situation Participation situation Learning situation

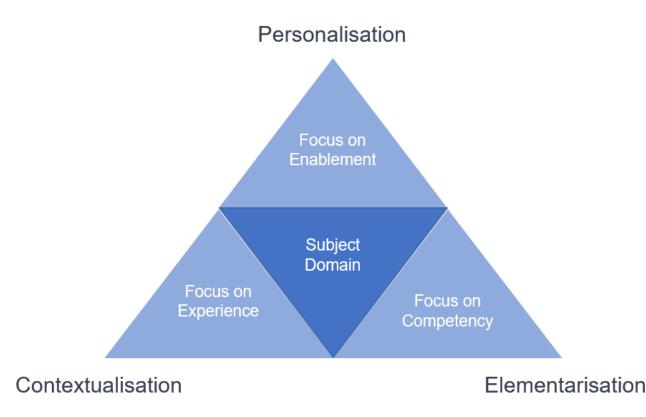
#### Anwendung des Lehrplans 21 für Schülerinnen und Schüler mit komplexen Behinderungen in Sonder- und Regelschulen

Verabschiedet von der Plenarversammlung der Deutschschweizer Volksschulämterkonferenz am 14. Mai 2019





### Three references for the expansion of Curriculum 21



#### **Elementarisation:**

Education must build on existing abilities and skills and develop them further: «Ability»

#### **Contextualisation:**

Education must relate to and expand (experiential) knowledge of living and learning environments: «Knowledge»

#### **Personalisation:**

Education must enable engagement with current attitudes, values, readiness and further develop these: «Motivation»



### «Am I complying with the educational mandate?»

#### **Empowering - meaningfully personalised?**

Does the pupil expand his or her possibilities of action and experience in the long term if this task can be solved? To which areas of capability are these expanded possibilities of action and experience related ?

#### **Applicable - meaningfully contextualised?**

Can the pupil apply this «problem solution» in other relevant situations as well? In which areas of life does the acquisition of new skills and abilities expand the possibilities for action and/or experience?

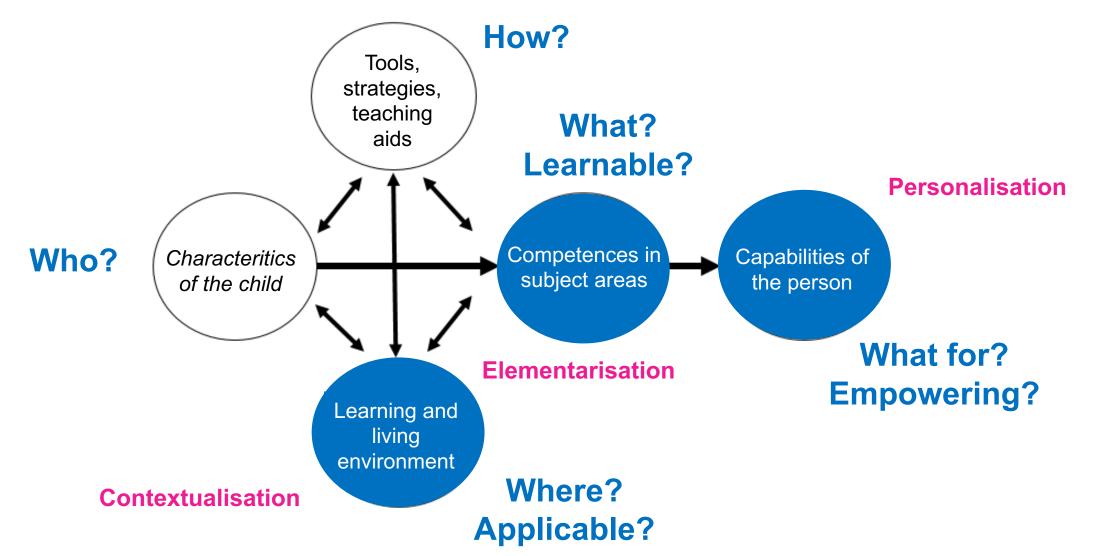
#### Learnable - meaningfully elementarised?

Can the planned activity be located in the zone of next development? Do the skills and abilities to be learned contribute to competence building in the long term? Which competences are involved?



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### Situation model as a tool for expanding the curriculum





## What is «Capability»?

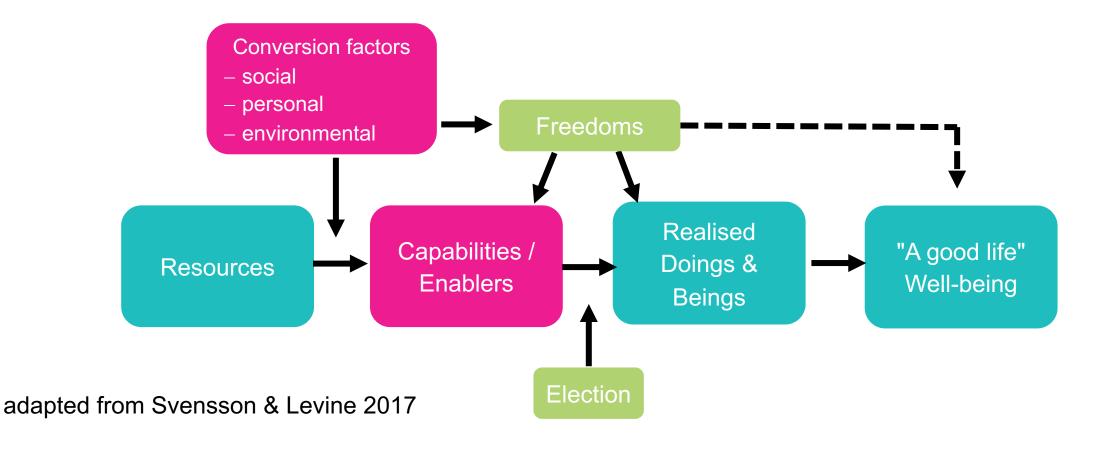
### The Capability Approach (Sen & Nussbaum)

Empowerment approach: Normative approach to understanding differences between people in terms of realisation of actions (doings) and states (beings).

Central concepts of the empowerment approach:

- Resources (commodities): Resources available to an individual (e.g. social capital, money, infrastructure, talents and skills).
- Functionings: Functionings as actions and states («beings» and «doings»)
- Capabilities: The possibilities and freedoms a person has with a view to a good life: options or life chances; combinations of functionings feasible for a person to achieve
- Conversion: Implementation of resources to shape one's own life (is influenced by external and internal «constraints»)
- Agency/choice: Choice turns the «space of possibilities» into a «bundle of capabilities» (realised doings and beings)

Graphic representation of the empowerment approach (Amartya Sen and Martha Nussbaum)





### Examples related to «riding a bicycle»

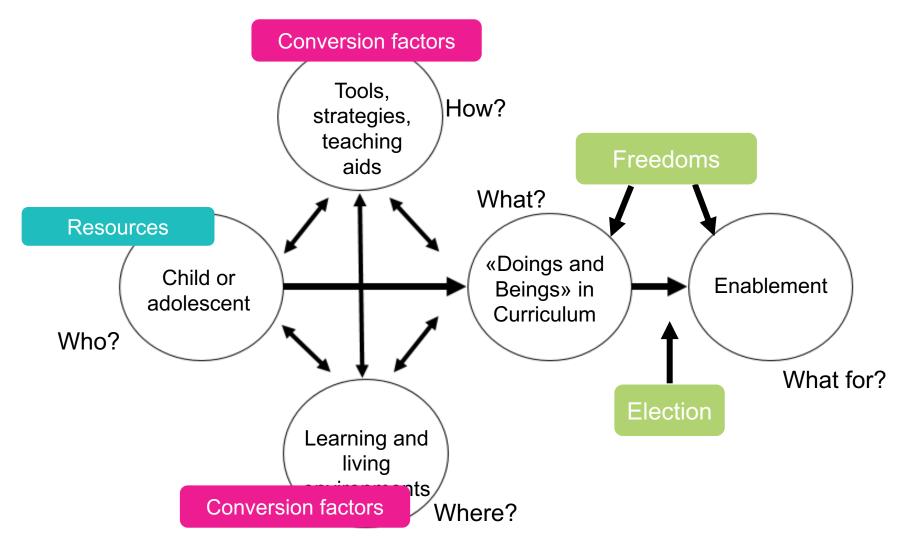
Personal resources may be reduced due to a functional limitation: a limitation of muscle functions prevents the use of a bicycle for mobility.

Conversion of resources into desired «doings» and «beings» (participation) may be impaired by functional limitation: Pronounced cognitive problems can reduce the usefulness of a bicycle for mobility.

Conversion of resources into «doings» and «beings» can be improved by optimising conversion factors (environmental factors): Electric bike compensates for limited muscle functions.

Freedom and choice is the result of the interaction between person-related factors, bodily functions, activities, participation and environmental factors in achieving one's own goals: Participating in the Paralympics with a handbike.

### Translated into situational activity model



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### Capability approach in the educational context

Educational mandate of Curriculum 21 as a normative framework

- Empowering pupils to live a «good life»
- Acquisition of competences («functionings»)
- «School as a living and learning space»: the intrinsic, positional and instrumental value of education must be taken into account
- Teaching values (e.g. education for sustainable development)

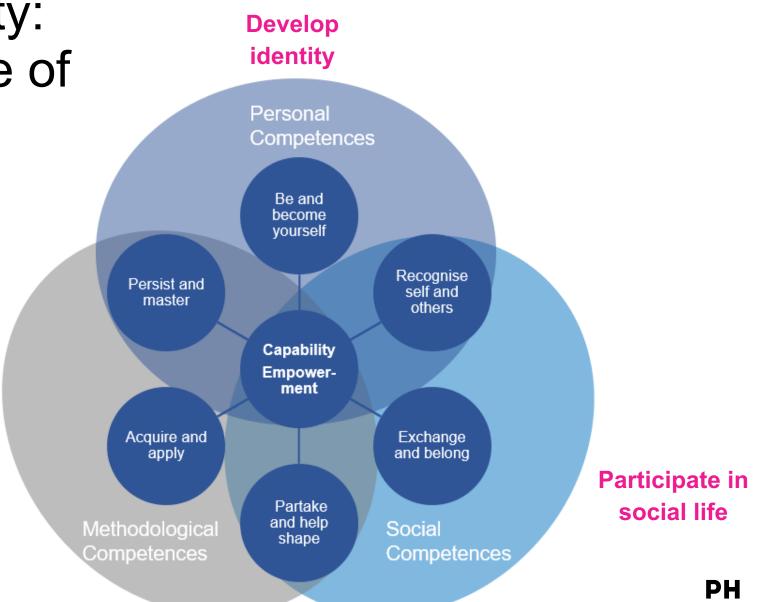
Application of the capability approach in education:

- Provides a normative framework for conceptualising and assessing a good life in a particular context (Walker & Unterhalter 2007).
- Education is the building of «resources» and the expansion of «capabilities»
- «Functionings» in children are possibly more central than «capabilities» because «freedom» and «choice» are (justifiably) restricted (Saito 2003)
- Life Span Approach justifies use of the capability approach with children
- Curriculum conceived as a «list of essential capabilities» (not a fixed set of skills)

### Domains of Capability: Educational mandate of schools

Empowerment as an educational mandate: «Securing participation in the future».

«Learning what is necessary to be able to participate in all areas of life in the future».



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Explore

potential

## Supporting implementation

### Mental map



Situation analysis Sense-making and goal-setting Planning Co-creation and implementation Control and evaluation

Pupil in the centre
Individual support
Class level
School level
Outside world



### Core process

#### Analysis of the school situation

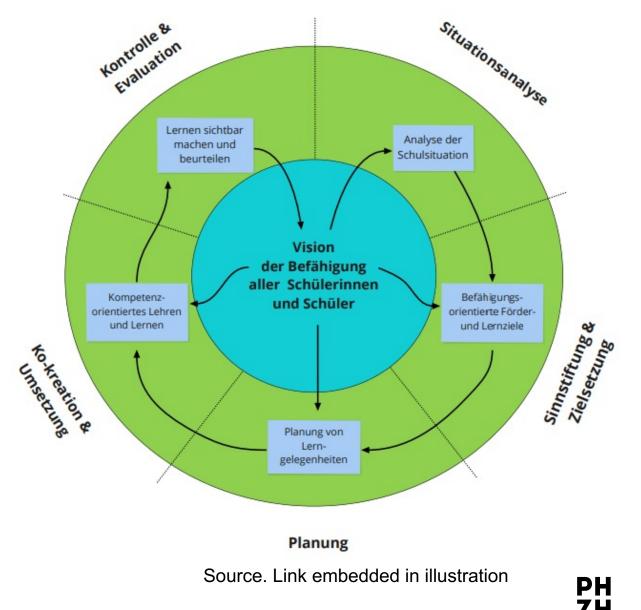
- Disability situation
- Participation situation
- Education situation

#### **Empowerment-oriented support planning**

- Enabling vision
- Competence-oriented promotion and learning goals
- Goals for improving the participation and disability situation

#### **Planning learning opportunities**

Planning school/teaching, socio-educational settings, therapies, living/home



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#### Access



#### **Functional limitations**

Non-changeable features of the child, for example Impairments of bodily functions, health problems and risks

### Minimising impact on participation and education

#### **Participation**



Skills and abilities

Acquired activities and skills, components of competence in Curriculum 21 (e.g., related to basic standards).

#### Achievement



Talents and potentials

Coping styles, learner preferences and interests, identity, values and culture, emergent skills in the zone of next development

### Basis on which participation must be ensured

### Basis for empowerment in the future



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<b>Disability situation</b>	Participation situation	Education situation
Disease, disorder (ICD)		
Body functions (ICF)		
Activities in the context of disability	Activities in the context of the current school situation (in ICF life domains or competency domains)	«Performance»
Participation in the context of disability	Participation in the context of the school situation	Participation in the context of the educational goals in Curriculum 21
Environmental factors related to disability	Environmental factors related to participation in school	Current and future lifeworlds
Personal factors significant for disability	Personal factors are important for learning	Personal factors important for empowerment
Disability-related goals (goals in therapy, rehabilitation)	Classroom-related goals (goals related to educational support areas)	Capability-related goals (goals related to expand capabilities)



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### Structured information from ICF for educational planning

#### **Functional limitations**

- Impairments of bodily functions, health problems and risks (ICF and ICD), e.g. according to SAV, Support Diagnostic Report
- Potential interference with the educational process must be minimised

#### **Skills and abilities**

- Activities in the ICF (cf. SSG and SAV), components of competence in Curriculum 21 (e.g. regarding basic entitlements).
- Looking at what is available ("resource-oriented description")
- Basis on which participation must be ensured

#### **Talents and potentials**

- Coping styles, learners' readiness, preferences and interests, emergent skills in the zone of next development
- Person-related factors in the ICF (SSG 2nd page)
- Basis for "empowerment" in the future



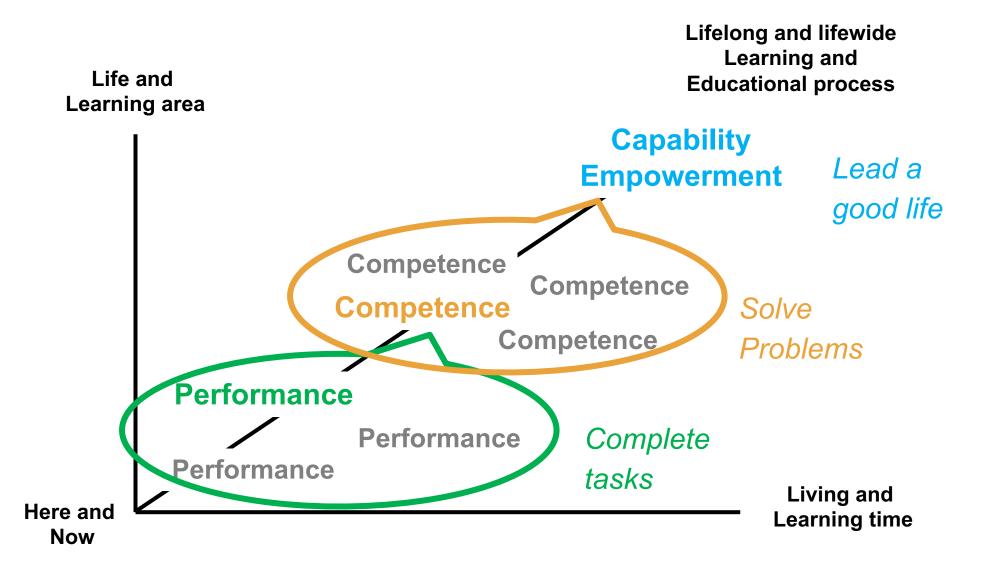
### Linking the ICF to the Curriulum with the help of the ICF life domains

«Securing participation in the present as a basis for learning and competence acquisition».

«Learning what is required to participate in learning and school life in the present time».

	Strength 순	General learning The pupil can listen, watch, observe; focus attention; notice things; find and
	Û	execute solutions; plan; practise
	 Problem	
	☆	Acquiring language and concepts The pupil can repeat phonetically accurate; understand the meaning of words and symbols; combine words into phrases; acquiring a vocabulary appropri-
	 <b>↓</b> Problem	ate of age; modify language according to meaning (first and second lan- guage)
	 Û	Reading and writing The pupil can read; read out loud; understand what he/she reads; write cor- rectly and legibly
	 √ Problem	
	Strength	Mathematics
	 û	The pupil can do mental arithmetic; written arithmetic; understand and solve mathematical theorems; understand and master curriculum content in mathe-
	 Ŷ	matics
	 Problem	
		Handling tasks and demands
	 Û	The pupil can undertake tasks independently or in a group; assume responsi-
	 : <b>П</b>	bility; carry out daily routines; handle happiness and frustration
	 Problem	
	 Strength	Communication
	 Ŷ	The pupil can understand what others say and communicate; express his/ her thoughts in such a way that others understand; explain things to others;
	 仑	converse and discuss
	 Problem	
		Movement and mobility
	 Û	The pupil can plan, coordinate and imitate body movements (e.g. in sport); plan, coordinate and imitate fine hand use (e.g. doing crafts)
	Ŷ	
	 Problem	
		Looking after oneself
	 Û	The pupil can care for his/her personal hygiene, look after his/her health and
	 Ŷ	diet; avoid dangerous situation and harm; avoid harmful substances
	 V Problem	
		Handling relationships
	 상 산	The pupil can relate to people; show and respond to consideration, gratitude
Haskel		and tolerance; regulate social closeness and distance; handle criticism; form
	Ŷ	friendships
	Problem	

### What for? Capability as ultimate purpose of education



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### How do you teach "empowerment"?

It is not about the "what" you teach, but the "how" and the "why".

- Support autonomy and exploration, even when things go wrong
- Develop and support intrinsic motivation
- Create a learning environment that promotes confidence and allows mistakes to be made
- Experimenting with activities in which pupils can exercise their creativity and discover their interests

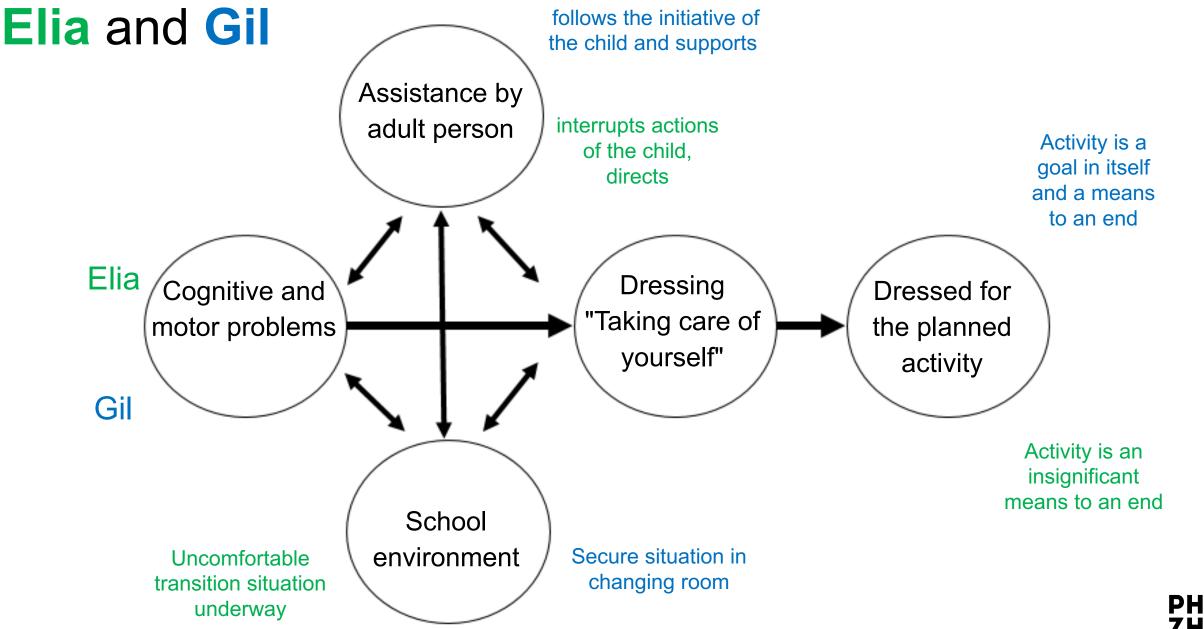


I expect you all to be independent, creative, critical thinkers who will do exactly as I say!

### Empowerment orientation in everyday life







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### **Enablement: Example Tom Sawyer**

Pupils are not always motivated and interested in carrying out the tasks assigned to them.

They may even consider it a punishment.

Tom Sawyer manages to empower himself in a situation that is unpleasant for him.

How can you support your students in this?





#### Empowering Nils – focus on «Perist and master»



#### **Current life and school situation**

5 years old, CH, older sister, lives with family in small town; since one year in basic school of the HPS, on 1 day full day, otherwise half day; well looked after in class.



#### Competence-oriented development goals for Nils

#### **Competences to be promoted in Nils (examples):**

"Pupils can extract important information from non-fiction texts." (D.2.B1)

"Pupils can recognise and explain connections between nutrition and well-being". (NMG 1.3)

"Pupils can analyse simple problems, describe possible solution procedures and implement them in programmes." (MI.2.2)

The extension is always done against the background of the pupil's life situation, taking into account:

- Interests, potentials and readiness;
- Contextual factors such as environment, age, gender, origin;
- existing abilities and skills and existing functional limitations.



### **Enabling Vision Nils**

The pupils can understand, grasp and carry out technical or creative tasks (BG / TTG).

The pupils can perceive the world, act in the world, orientate themselves in the world and open up the world for themselves (NMG). The pupils can recognise challenges in the educational process, name frustrations, include their own resources and develop possible solutions. <u>BO.3.2</u>

The pupils can set priorities, make decisions and at the same time remain open to alternatives. <u>BO.3.1</u>

Persist and Master: Nils is able to recognise challenges, engage with new situations and use his own feelings, experiences and reflections to overcome difficulties. The pupils can analyse simple problems, describe possible solution procedures and implement them. <u>MI.2.2</u>

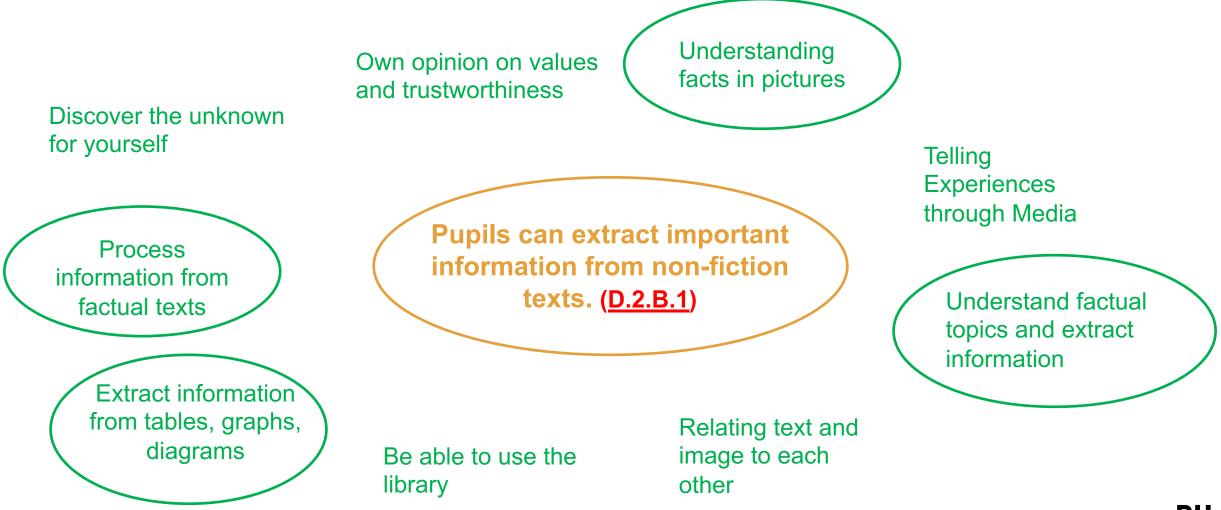
The pupils can test and use the properties and effects of materials and tools BG.2.D.1

Pupils can extract important information from non-fiction texts <u>D.2.B.1.</u>

The pupils can perceive the body, control it specifically and correct themselves in the execution of the movement. <u>BS.3.A.1</u>

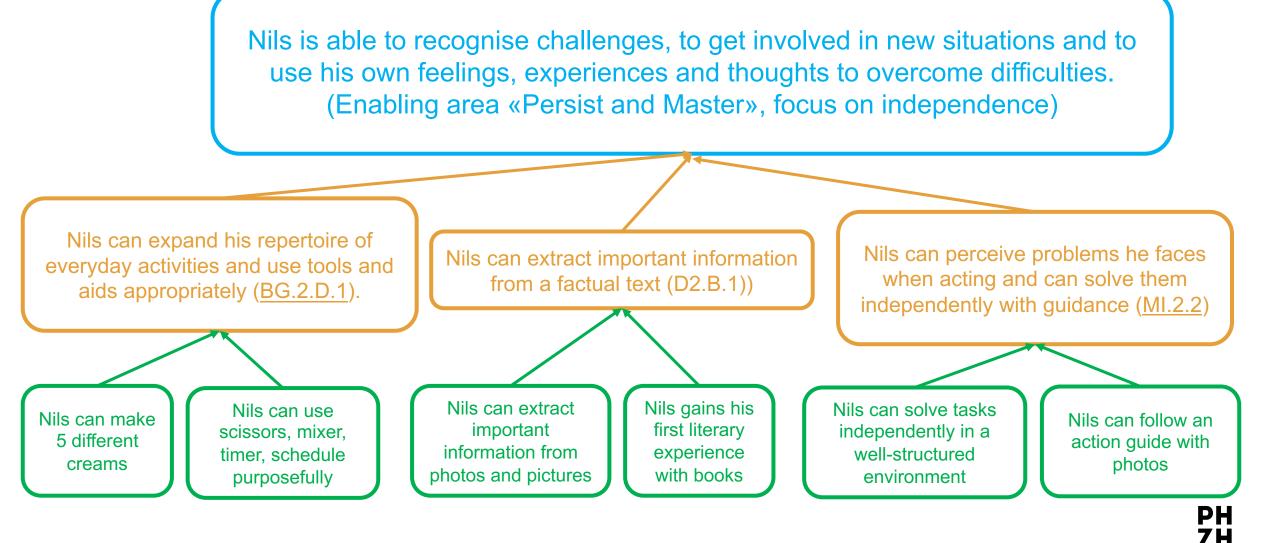


### Mind map with central aspects of a competence





### Empowerment-oriented promotion goals: Example Nils



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#### Video example Nils - implementation in classroom





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# Thank you for your attention.

Questions? Comments?