







To do justice to the heterogeneity of a class through structuring learning



# Pilot Project for joint instruction in Thuringia:

Teaching of pupils with Additional Learning Needs according to the teaching plans for primary and secondary schools. (26 schools are involved)

wicklung und Medien



77 illm

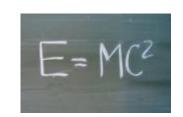


learning processes can be prepared for learners with different starting positions in one class











# a greater heterogeneity



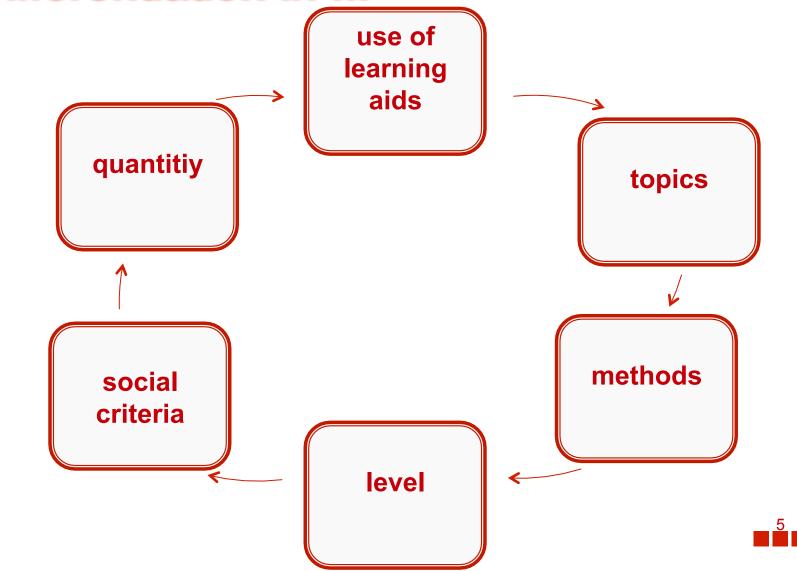




diversity: biography, type of learner, pridisposition, ability, creativity, level of development, pace of learning, ...



### Differentiation in ...





Based on the cognitive development stages of Jean Piaget and the orientation towards the structure and level of learning of Prof. Reinhardt Kutzer

## MULTIDIMENSIONALITY **OF LEARNING**







#### stages of internalisation

	Piaget	Kutzer		
(D)	abstract level	3. generali- sation	ability for abstract use of the findings gained from the particular learning material	
nitive	symbolic level	2. generali-	letters or words, numbers	
og		sation	Illustrations	
le c	visualising the learning matter	1.	complete visualisation	
ls of the cogr development		generali- sation	partial visualisation	
levels of the cognitive development	practical handling of the learning matter		descriptive, practical	



### Multidimensionality of learning by Kutzer

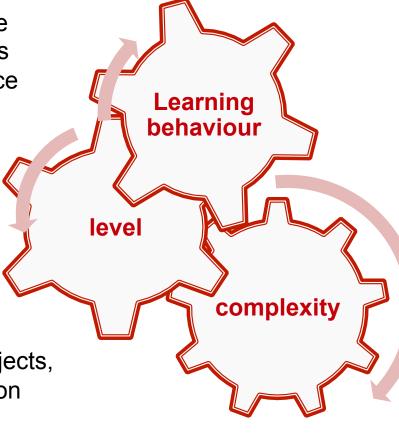
Dimension **complexity**: is derived from the different scientific components of a topic as well as the existing knowledge + experience of the pupils

Dimension **level**: starting point is current developmental status for the pupil, their abilities to abstract and generalise

#### Dimension learning behaviour:

•learning through free association with objects, trial and error, demonstration and imitation

- independent and self-determination
- varies at the different stages of the learning process



#### stages of the cognitive development

#### differentiation-matrix

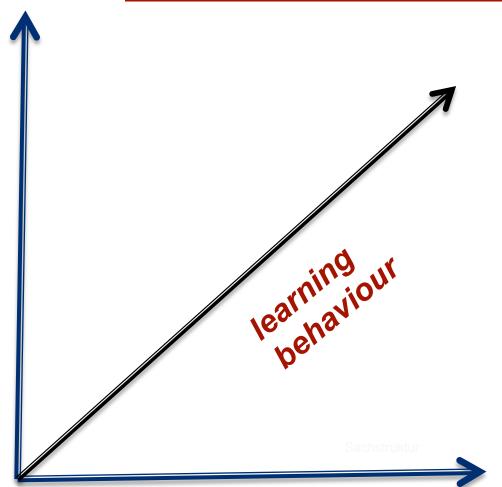
abstract level

symbolic level

complete visualisation of the learning matter

partial visualisation of learning matter

practical handling



Complexity of subject matter



# presentation about abstract presentation which presentation about inventions which presentation about significance of the i., significance of the i.,

understand the

(compare)

preconditions and

beginnings of the

industrialisation

inevitable expansion

(discussion round)

level

promoted or

accompanied the

industrialisation

pinhole camera

new technologies

		Industrialisation	(alscussion rouna)	their effects (discussion)		industrialisation
	symbolic level	assemble picture material in a time-line	illustrate the associations in a flow-chart	documentation of the development of railway traffic until today (power point or posters)	prepare a presentation, sort and label picture material	make up fictitious biographies in texts and pictures (people from different social backgrounds)
	complete visuali- sation	describe inventions and identify their benefits	learn about the causes of the beginning of the industrialization in GB, understand subsequent development (texts, talks)	gather and interpret material about the development of railway traffic as the driving force of the industrialisation	find material about a regional enterprise founded in the 19 <sup>th</sup> century, use the media and archives	derive information from different factual texts, gathering media about people's lifes
l	partial visuali- sation	gather and name pictures of inventions from the 18./19. century	use of the steam engine in the textile industry in GB, comparing pictures	draw in maps: industrial towns, mineral resources, railway tracks	make or draw a model of an industrial site	come up with scenes to playact
	descriptive practical	experiments with steam, light bulbs,	do sewing by hand and by machine	comparing photographs taken	trips into the surrounding area (train	watch original film material (movies)

before and after 1930

Industrialisation in

Germany

industrial revolution

other revolutions and

and compare it to

reflect their own living

comparison with 14-

vear-olds during the

outcome of the

social issues

industrialisation,

and learning

conditions in

development during

the industrialisation.

stations, factory

the region

buildings, companies)

industrialisation in



#### **Teamwork**

Subject matter teacher and special education teacher work together!





### The result:

# Looking at poetry, 9<sup>th</sup>, grammar school, 1 pupil with a need for enhanced focus of mental development



rhyming couplets and their effects

create a poem with the found rhymes

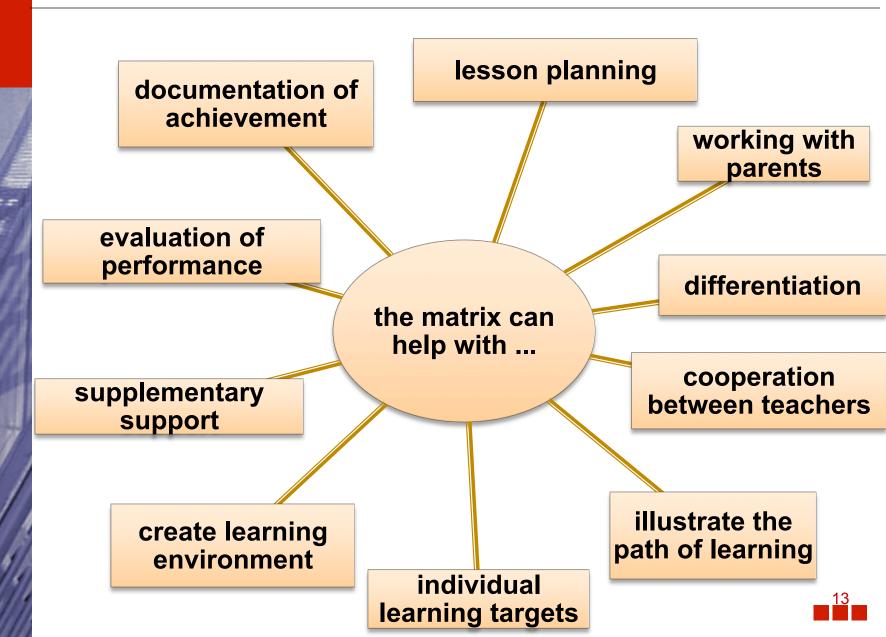
find rhymes

listen to a poem, assigning images and words

sound of words, see, listen, assembling picture material

Emanuel von Bodmann "Der Bodensee"







#### The spirit of learning is the difference! R. Kahl



Thank you for your attention!