

**“The main thing is practical work” – Teachers’ beliefs supporting the intellectual development in technology education**

- Relevance of the topic
- Theoretical standpoint
- Methodology
- Results

## Relevance of the topic



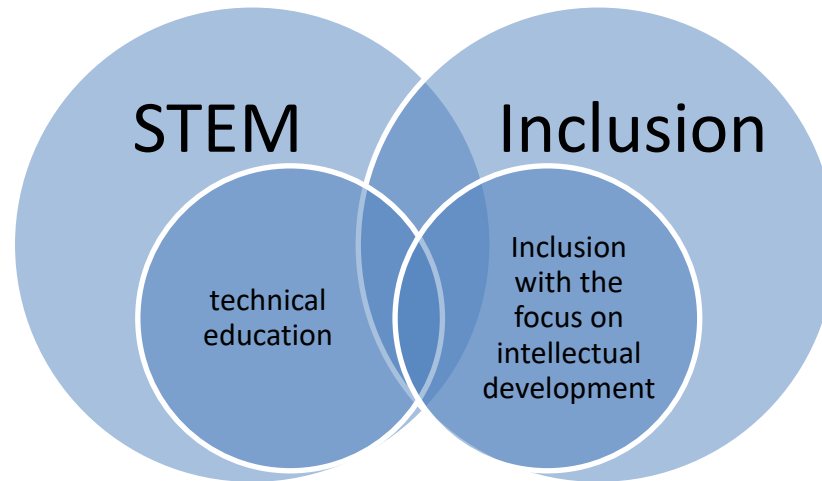
# Technical education for people with mental disabilities in Germany

grade	age	anchoring of technical education
12 <sup>2</sup>	17	Final level / two-year prevocational training course „Berufsqualifizierender Lehrgang (BQL)“
11	16	
10 <sup>1</sup>	15	subject economics-work-technology studies „Wirtschaft – Arbeit – Technik (WAT)“
9	14	
8	13	
7	12	
6	11	
5	10	
4	9	technology-based content included in the general subject lessons
3	8	
2	7	
1	6	

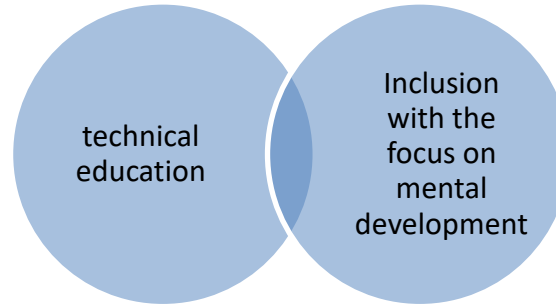
Focus of this study:  
 determine teacher beliefs of compulsory technical education

<sup>1</sup> end of compulsory education

<sup>2</sup> end of compulsory vocational education



- few publication with regard to STEM and Inclusion
- Publication on inclusive technical education are often of an older vintage



- lessons should be differentiated in terms of methodological choices, use of devices and adoptions, and personal support (Fischer & Pfriem 2011, p. 349)
  - classes in workshops are challenging for teachers and must be tailored to the individual needs of each pupil (Schaubrenner 2021, 2018a, 2018b)
- ➔ What beliefs do teachers at schools for mentally disabled children have about technical education?

## What beliefs do teachers at schools for mentally disabled children have about technical education?

Research approach	qualitative
Data collection	semi-structured interview according to Witzel & Reiter (2022)
Sample	teachers practicing in German special education schools in the federal states of Berlin and Brandenburg (N:9)
Data analysis	qualitative content analysis following Mayring (2022) using the Atlas.ti software



## objectives

material and tool  
knowledge

specific production  
techniques

safety aspects

independent planning of  
the work

## The manufacturing task



## settings

dividing pupils into very  
small learning groups

restricting access to  
machines





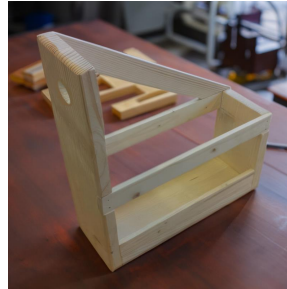
## technology

consciously selecting the tools and materials

production steps are tested or even done by teachers

dealing with problems spontaneously

## The manufacturing task



## didactic

providing personal assistance

pupils' individual interests are taken into account in the selection and design of the products

repetition, demonstration and ritualized procedures are used



**self effective**

“But basically I find workshop work, especially at our type of school, very important because practical action, that's what it's mainly about”



**positive feedback**



**better learning**



**orientation towards the future**



- Is this strong orientation on craftsmanship enough for a modern technical education?
- Do the students with intellectual disabilities get their right to an equal technical education?

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