

Barriers on the path to inclusion.
The development of special needs education
in Germany over time. An open textbook

Markus Gebhardt

Professor of special education for learning difficulties including inclusive education. Ludwig-Maximilians-Universität München, Germany

<https://orcid.org/0000-0002-9122-0556>

Jeffrey M. DeVries

Postdoctoral Scholar

University of California, Irvine

<https://orcid.org/0000-0001-8923-6615>

Version 0.1

2025

Veröffentlicht unter der Lizenz:
CC-BY 4.0

Summary

Special education is a school-based construct intended to provide specific help and more resources to individual children. This textbook provides a historical overview of the development of special education in Germany, outlines key concepts and theories that underpin this field of study, and identifies fundamental questions posed by scholars and practitioners alike. The different perspectives on disability and the special educational needs for support are presented and discussed, especially for children with learning difficulties (special needs in the area of learning). This book serves as an introductory work in the field of inclusive education. It serves as the basis and basic knowledge for the teaching profession of special education. This book is a translation of a German open textbook (Gebhardt, 2024) that provides international students with better access to international courses in special education at German universities.

Keywords

Inclusion, Special school, Learning disability, Learning difficulties, Need for support, Special education focus, Learning, Response-to-intervention, Diagnosis of learning progression

Quotation:

Gebhardt, M. & DeVries, Jeffrey M. (2024). *Barriers on the path to inclusion. The development of special needs education in Germany over time. An open textbook* (version 0.1). Ludwig-Maximilians-Universität München.

Inhaltsverzeichnis

1.	Which school do I fit in?	1
1.1	Learning difficulties	3
1.2	Four models of disability	4
1.3	The terms disability and impairment	6
1.4	Special educational needs (SEN)	6
2.	Historical review of special education in Germany	9
2.1	The school for Schwachsinnige (Imbecile)	9
2.2	The Expansion of special schools after 1950	14
2.3	New Order of Special Education (1972)	18
2.4	Special Educational Needs (1994)	18
2.5	Inclusive Education (2011)	19
2.6	Models of disability over time	19
2.7	The relationship between elementary school and special school	20
2.8	Changing Names as Changing Attitudes and Explanatory Patterns	20
3.	Special education from a scientific point of view	21
3.1	Defectology according to Vygotsky (1924)	22
3.2	Learning Disabilities according to Kanter (1974)	22
3.3	Begemann (1970)	23
3.4	Eberwein (1970)	23
3.5	Wocken (1996)	24
3.6	Hartke (2017)	25
3.6	Which label do we need?	26
4.	Teaching	29
4.1	Reference norm orientation	31
4.2	Autonomy or assistance as a challenge for special education	32
5.	Inclusive Education	33
5.1	Stage model of exclusion to inclusion	35
5.2	Tasks of special education teachers	38
5.3	Statistical data on school inclusion in Germany	39
5.4	Statistical data on school inclusion in Europe	41
6.	Empirical findings on special education in special schools and inclusive settings	44
6.1	School performance of students with SEN	44
6.2	School performance of students without SEN in inclusive classes	45
6.3	Self-concept, well-being, and participation	45
6.3	Measuring attitudes towards inclusion	46
6.4	The situation after the special school	47

7.	Special Educational Needs and Support Systems.....	48
7.1	Wait to fail problem	50
7.2	Financial and tax systems of inclusion	53
7.2.1	Model financing separated by type of school	53
7.2.2	Backpack model.....	53
7.2.3	Output model	54
7.2.4	Throughput model.....	55
7.3	Multi-Level Support Systems.....	57
7.3.1	Response to Intervention	57
7.3.2	The funding levels of the MTSS	58
7.3.3	Diagnostics in the RTI approach	60
7.3.4	Criticism of RTI.....	63
8	Dissolve special schools or special schools. But how?	64
9	Outlook: Inclusion as a decentralized form of organization	66
10	References.....	67
11	List of figures	77
12	List of tables	78

Structure of the book

The introductory work explores what special education is, for whom it was developed, and why it was created. Depending on the point of view of the experts, practitioners, or researchers you interview, you will receive very different answers to these questions. This work attempts to present various lines of reasoning and to make them tangible for students and interested parties.

- Chapter 1 is a brief introduction.
- Chapter 2 examines the past and the development of the German special school system, based on laws and recommendations from the education system. The initial concept of the special school, as well as the changes in the school system, are presented based on the recommendations of the KMK.
- Chapter 3 introduces the various perspectives on learning difficulties and special educational support in the area of learning, as discussed within the scientific community.
- Chapter 4 focuses on didactic ideas and concepts from a scientific perspective.
- Chapter 5 provides an overview of the concepts of integration and inclusion, highlighting the changes in the school system.
- Chapter 6 deals with individual empirical studies on the topic of inclusion and special education.
- Chapter 7 presents the special educational support systems and their framework conditions.

General book recommendations for the introduction, which are also available at the University Library in German and English:

Ellger-Rüttgardt, S. L. (2019). *Geschichte der Sonderpädagogik*. Reinhardt.

Heimlich, U. (2019). *Inklusive Pädagogik*. Kohlhammer.

Werning, R. and Lütje-Klose, B. (2016). *Einführung in die Pädagogik bei Lernbeeinträchtigungen*. Reinhardt.

Ellger-Rüttgardt, S. (1995). Special education in Germany. *European Journal of Special Needs Education*, 10(1), 75–91. <https://doi.org/10.1080/0885625950100108>

Moser, V. (2023). Profession, organization, and academic discipline. Differentiation of a special education science in Germany since 1900. *Journal of Curriculum Studies*, 1–11. <https://doi.org/10.1080/00220272.2023.2248213>

Powell, J.J.W. (2016). *Barriers to Inclusion: Special Education in the United States and Germany*. Routledge.

Kellems, R., Hansen, B., Grünke, M., Blodgett, S. , Tullis, L. and Dawson, Kaiya. (2024). *Special Education in Germany*. Journal of Special Education Preparation. <https://doi.org/10.33043/5z3dq453>

1. Which school do I fit in?

'Is Mia now intellectually disabled when she attends this school?' (6-year-old friend of Mia)

The statement from the 6-year-old describes Mia's current situation. The current special school, which Mia attends, no longer views itself as the optimal place for support. The school proposes a school for children with intellectual disabilities to the parents. For this, however, Mia has to be diagnosed with special educational needs for intellectual development (sonderpädagogischer Unterstützungsbedarf geistige Entwicklung). In Germany, a special educational need is a systemic category that is linked to the institution of special schools and their various forms. To attend a special school, you need a diagnosis of special educational needs, which also determines a classification. Mia was previously seen by herself, her environment, and the school not as a person with an intellectual disability, but as a person with learning difficulties. Now, attending the new school requires a different diagnosis of special educational needs.

Case study Mia:

Due to her premature birth, Mia has difficulties in learning, especially in reasoning. Mia developed some language and social skills a little later than other children. She has friends in the neighborhood and does not need any special help in everyday life. Only when the demands and hurdles in everyday life become too great does she react with frustration. She attended a regular kindergarten and enjoyed going there. However, she had difficulties there due to the large group size, the strong focus on theater activities, and the lack of supervision. As a result, the parents were advised to diagnose the child with special educational needs and send her to an inclusive kindergarten as an integrated child. Mia really liked it there.

The transition to school was difficult for the parents. The local elementary school that Mia's brother attended did not want to accept children with disabilities. During school counseling, the parents were told that attending as a regular kid without special support would be too much for their child. The state special school and the inclusive classes supervised by this school (Kooperationsklassen in Bavaria) were located in a socially deprived area and were mainly attended by educationally disadvantaged children. This frightened the family from a middle-class background. The parents didn't want to put Mia, who tended to be anxious, in such a class. They would rather look for a private, small, sheltered school with a limited number of pupils to give their child the best and easiest possible start at school.

After several visits to different schools and another year in the inclusive kindergarten, a private special school was found. There, all children were warmly welcomed, and individual support was promised. The start of school was promising, but from the beginning, there were difficulties in mathematics, as Mia could not meet the teacher's expectations. The teacher repeatedly complained to the parents that their child was not learning enough in math to be allowed to go to her private special school. After consulting with the teacher, the parents decided that for the third school year, Mia would attend a different private special school specializing in intellectual development.

Mia has been examined several times by the Social Paediatric Center (Medical Center). In all these reports, special education needs in the area of learning (Learning Disabilities) were diagnosed, as although her measured cognitive abilities were low, Mia left a positive impression in terms of her clinical characteristics.

Questions about the case study:

Describe the case study and the problem situation in your own words. Do you know of similar cases from your private or professional environment? Write down your answers in three to five sentences.

In the case study, Mia was passed on and on based on her difficulties. The decisive factor was not Mia's skills but her non-fit with the current school. In Germany, in addition to the

various types of general schools, there are also various special education centers for specific special educational needs. The basic idea is that in a differentiated school system with several types of schools, a pupil will find the school that best suits them. Pupils adapt to the school. However, research findings show that the choice of the right school is not perfect, neither when it comes to the question of the place of support (special school or elementary school, Wocken 2000) nor when it comes to the classification into the various secondary levels (Ditton and Krüsken 2006).

The problem here is that children from disadvantaged families in particular are disproportionately likely to attend lower secondary education (see also [OECD, 2019](#), p. 90). This also applies in particular to the transition of children with special educational needs. Although the competence and other child-related characteristics of the child are intended to influence transition decisions, they are also influenced by family and school-structural characteristics ([Lintorf and Schürer, 2023](#)). Special education support in inclusive and special schools is therefore not only diagnosed and made possible based on critical characteristics, but is also influenced by the school system to address current school issues, for example. The concept of homogenization and differentiation based on performance and division into various types of schools remains deeply ingrained in the German school system. The idea of dividing children into homogeneous performance groups, which has been prevalent in educational practice since the establishment of elementary schools in Germany in 1919 (Liebers, 2023), remains a feature of educational practice today, despite intense debate in academic circles and among the general public.

Contrasting to homogenization, is the idea of acknowledging inclusion and heterogeneity and perceiving them as an opportunity. Accordingly, the school can also adapt to the individual needs of all pupils ([Ainscow, 2016](#)). Inclusive classes are characterized by the fact that students with different learning requirements and learning needs learn together in a class community (Preuss-Lausitz 2016).

In these schools, for example, students exhibit a particularly high degree of heterogeneity with regard to socio-demographic characteristics (e.g., gender, migration background, family life circumstances) and learning-relevant characteristics (e.g., willingness to learn, learning skills, interests). Students with and without special educational needs also learn together in inclusive classes. Due to the higher performance heterogeneity and disability-specific needs, inclusive classes present new challenges (Hußmann and Schurig 2019). Of course, all children and young people have the right to a common education that suits their learning needs and enables them to learn at their own level of competence. This new form of joint teaching requires special support and resources, the allocation of which controls and influences the effectiveness of the system. With the [UN Convention on the Rights of Persons with Disabilities \(United Nations, 2006\)](#), this right was explicitly postulated and recognized by Germany, which is why Germany should finally implement inclusive teaching nationwide and rely on the recognition of heterogeneity.

In summary, it can be said that the school system rarely succeeds in sorting students into homogeneous groups based on school competences or certain types of disabilities or special education priorities for specific schools. This often has stigmatizing consequences and usually negative effects.

Assignment:

What is understood by the terms homogeneity and heterogeneity? How do these terms relate to the German school system? Why are poverty and educational achievement linked? What are the reasons why children with a low socio-economic background are overrepresented in special education support needs learning?

Further Information:

In his lecture [The Myth of Average](#) (2013), Tedd Rose asks whether it makes sense to design teaching materials, lessons, classrooms, and didactics based on the average. Discuss his arguments regarding your experience at school.

1.1 Learning difficulties

It is generally questionable whether there is a perfect school system and whether it can achieve its goal of supporting all children individually and optimally, tailored to their competences. There will always be teachers, children, and parents in every school system who disagree with or are dissatisfied with the current system. Therefore, to assess whether a school system works well, only certain indicators (manifest or latent variables) can be measured. From a special education perspective, the number of children dropping out of school or the proportion of high-risk students with insufficient basic skills in German and mathematics is particularly important for assessing the school system. These indicators indicate the extent to which the respective school system accommodates children with risk factors. Depending on the study and the country, the proportion of children at risk ranges from 15 to 20% of children and adolescents (Hußmann et al. 2017). In international research, these students are referred to as 'struggling students' or 'at-risk students' (Björn et al. 2018).

A risk of learning difficulties means that students do not acquire sufficient school skills during their school career to be able to actively participate later in their professional life. These students do not benefit from regular lessons to the same extent as their classmates. For this group, there is a risk that they will be left behind in regular lessons and lose touch. In the worst case, this leads to negative motivation, school displeasure, and a vicious circle begins. The reasons are numerous and can be due to a lack of fit between the teacher and student, difficulties on the part of the child, such as a lack of prior knowledge, concentration, and motivation, as well as a lack of parental or educational support. In most cases, a lack of learning success is not due to a single cause, but to various factors that occur cumulatively and hinder a successful learning environment (Heimlich 2016). Therefore, it is extremely challenging for teachers to detect slight, initial learning difficulties at an early stage and to compensate for them through intensive support before they become apparent. In particular, students with a risk of learning difficulties (but not with diagnosed special educational needs) are not sufficiently taken into account in the current German school system. The students need suitable help and support in the classroom, as well as progress assessments that positively acknowledge even small learning progress. The goal is an adaptive school and teaching design that provides teaching content and solvable, challenging tasks tailored to the student's level of competence.

Learning difficulties have numerous causes and often result in several problem situations, such as

- overwhelming and inappropriate learning situations at school and/or at home
- does not fit between school requirements and support for the home environment
- cognitive and motivational reasons in the person
- of external causes such as trauma and strokes of fate

John Corcoran explains [his life and difficulties in reading in a video](#). Describe in your own words why John Corcoran developed these difficulties and how he could be supported as a student today.

What is meant by the term 'struggling students' or 'at-risk students'?

Difficulties in learning arise from a variety of causes. The transition between an emerging learning difficulty and a manifested learning difficulty is fluid. Therefore, there is no clear boundary as to when a special education need begins and ends. This depends on the school system and the school's support options. For the area of special needs education, the question is not the disorder of the person, but how to enable participation and learning.

1.2 Four models of disability

The interpretation of [disability](#) also depends on the respective perspective and thinking about humanity and individual human rights (Moser and Sasse, 2008). While disability was seen as a person-related deficit at the beginning of the 20th century, this changed over the course of the last century (see chapters 2 and 3). Depending on which idea you associate with disability, there are also different recommendations for action. Disability is seen in science as a [latent construct](#), since it is not possible to define, explain, or grasp disability completely and sufficiently on the basis of a single observation. Therefore, a distinction is made in the **models of disability**, which deal on a theoretical level with the topics of disability, impairment, and being disabled. On the other hand, most people have an idea, definition, and terminology of disability. This is expressed in their explicit **concepts of disability** and guides their actions consciously or unconsciously ([Gebhardt et al. 2022](#)).

Video:

How can we balance the medical, social, and cultural aspects in understanding all types of disability? Tom Shakespeare explores approaches to disability:

[How can we redefine disability? – with Tom Shakespeare \(Youtube Video 1:00:42\)](#)

In the research literature, the most discussed are the contrasting individual-medical and the social model of disability ([Shakespeare, 2006](#)). Depending on the field of study and the context of application, there are various theoretical models of disability. For example, [Retief and Letšosa \(2018\)](#) have worked out nine models for theologians. Various models are also considered relevant for special education. In the following, four models of disability are presented, which are assumed to be fundamental ([Gebhardt, et al. 2022](#)):

According to the **individual** or **medical-oriented model of disability** (Michailakis, 2003), impairment is described on the basis of disability. Impairment is seen as a personal cause, and it is necessary to treat it. Impairments such as blindness or numbness lie with the person himself and cause problems in participation and social interaction in the "normal" world. People with disabilities need specific help and support to compensate for the impact of their impairment (Shakespeare, 2018). This is the traditional and sometimes still dominant view of disability in the public eye. This model is sometimes associated with the view of seeing disability as a personal fate or misfortune (Shakespeare, 2018).

Example: definition of learning disability according to the individual or medical-oriented model

A Learning disability is an impairment in the child, the causes of which are seen as predominantly organic or lying in the person (cognitive problems, difficulty concentrating, partial performance disorders, etc.). The support starts with specific training for the child in order to cope with or compensate for problems or deficits. Children with learning disabilities have an IQ between 70 and 85.

According to the social model, disability itself is no longer viewed as a characteristic of a person in most scientific texts, but rather arises as a result of social interaction between the person concerned and their environment. So a person is not disabled, but he becomes disabled. This view dates back to the social model of disability, which emerged in the 1970s and was supported by disability activists (Baldwinson, 2019; Hunt, 2019). The social model was later elaborated and theoretically substantiated (Barton, 1986; Finkelstein, 1980). The social model of disability focuses on the social and political conditions that make people disabled, regardless of their individual preconditions. According to this model, disability is a form of social exclusion, rather than an individual impairment (Shakespeare, 2006). In Germany, for example, [Wolfgang Jantzen \(1976\)](#) represented and made known the social model. Jantzen referred to the views of the cultural-historical school after [Vygotsky \(1924\)](#).

Example: definition of learning disability according to the social model:

In schools, learning disability arises due to a mismatch between the child, teacher, situation, learning content, and learning goals. Support starts with the teacher adapting the learning circumstances. In doing so, the learning content and goals are individually selected and promoted with specific methods for the child, if necessary, in order to enable optimal participation.

The **systemic concept of disability** questions the structural and institutionalized barriers and obstacles created by social and state orders. A person is therefore not disabled, but is disabled due to systemic and structural attributions. The systemic model is therefore an extension of the social model, with an emphasis on the interactions and relationships between an individual and their environmental system. [According to Bronfenbrenner's Ecosystem Approach](#) (1979; 1992; Bronfenbrenner and Ceci, 1994), an individual is involved in several microsystems (e.g., family, school, peers, etc.) that can overlap or interact with each other and form a mesosystem surrounded by other systems at the macro level (society, culture, traditions, ideology, etc.). It follows from this approach that disability depends on the specific circumstances of each system (for example, the school) and is described by those systems and their terms.

Example: definition of learning disability according to the systemic model:

Learning disability arises due to a mismatch between a child and the requirements of regular schools. Special educational needs are therefore a category in schools that allows for support services in both regular schools and special schools. This model demands that systemic barriers must be removed. Inclusive support systems must be established to ensure that the school system provides social participation and fair conditions for all children.

The fourth approach is the cultural model of disability, which is closely interwoven with the research field [of disability studies](#). This field questions why categories such as normal and abnormal are used in modern societies and how differentness is produced by society and culture (Waldschmidt, 2017). This is not about a specific definition of disability, but about how barriers are overcome as a cultural challenge (Retief and Letšosa, 2018). In 2006, Snyder and Mitchell first defined a cultural model of disability, a concept broader than the social model. The focus here is on the political participation of affected groups and the question of empowerment ([Brown, 2002](#)). People with disabilities share common experiences, which enable them to create their own cultural identity. The aim is to build resilience from experiences of oppression ([Brown, 2015](#)).

Example: a definition of learning disability according to the cultural model:

Learning disability is a cultural construct and experienced reality of children who do not receive adequate support in school, and is associated with the failure to learn. Improving the participation of these people is a political and social mission. Exclusion mechanisms must be socially discussed and eliminated by exposing and addressing them. Personal rights and the removal of barriers must be enforceable at school, in particular for persons with disabilities (or from marginalised groups).

Assignment:

Describe the four models of disability and argue which model prevails in society and the school system. What are the implications of the models for an inclusive and segregative education system?

Further information:

Read the questionnaire on the concepts of [Gebhardt et al. \(2022\)](#) and test your concept of disability.

Get more information about the Bronfenbrenner model, such as the [Sprouts video](#), and describe the ecosystem approach in your own words

Note:

Our understanding of disability is based on theoretical assumptions and models. Depending on the source, the term disability is based on different models. Therefore, one must first deconstruct the term in these sources or discourses in order to know what basic assumptions the text or the arguing person is based on.

1.3 The terms disability and impairment

As discussed above, there are different definitions of disability within various models and the actions derived from them. If generalized within this complexity, it can be noted that the purely individual-person-oriented approach has been further developed into a more complex, socially oriented approach.

At the level of the Federal Republic of Germany, the definitions in the Federal Government's Participation Report are groundbreaking. The [dritte Teilhabebericht der Bundesregierung Deutschland \(2021\)](#) in line with the [International Classification of Functioning, Disability and Health \(ICF\)](#) distinguishes between people with impairments (Menschen mit Beeinträchtigungen) and people with disabilities (Menschen mit Behinderung):

- **Menschen mit Beeinträchtigungen** (People with impairment) haben Schädigungen von Körperstrukturen oder -funktionen und ihre Leistungsfähigkeit ist bei Aktivitäten im Zusammenhang mit diesen Schädigungen dauerhaft beeinträchtigt.
- **Menschen mit Behinderung** (People with disabilities) sind Menschen mit Beeinträchtigung. Ihre Beeinträchtigung wirkt mit den Barrieren in ihrer räumlichen und gesellschaftlichen Umwelt zusammen. Dadurch ist ihre Teilhabe an einzelnen Lebensbereichen eingeschränkt.

Disability only arises through the interaction of impairment and barriers (Federal Ministry of Labour and Social Affairs, 2021). Disability is thus seen as a social and/or systemic construct. The participation report expresses this as follows:

„Eine Behinderung wird nicht mehr als Eigenschaft einer Person aufgefasst, sondern als das Ergebnis einer problematischen Wechselbeziehung zwischen individuellen Voraussetzungen und Umweltbedingungen beziehungsweise Kontextfaktoren. Die Person ist nicht behindert, sie wird behindert.“ (BMAS, 2021, S.22)

1.4 Special educational needs (SEN)

Special Educational Needs (SEN) is a categorization within the school system that enables and justifies the allocation of additional resources for individual students. The categorisation of special educational needs exists worldwide. However, the forms and manifestations that fall under the category of special educational needs vary from country to country. In the US, for example, the term 'special educational needs' covers all forms of special pedagogical support for students, most of whom receive support in regular school. This includes children with gifted students or those with specific difficulties in reading or mathematics, who would not be diagnosed as having SEN in European countries (Gebhardt et al., 2013; Grünke and Cavendish, 2016). According to the Conference of Ministers of Education and Cultural Affairs (KMK) (2019), approximately 7% of students in Germany required special education support in the 2017/2018 school year.

In Germany, the SEN is classified into sub-categories, each reflecting the predominant SEN to which the resources and special needs teachers are linked. For example, the classes in the school for children with intellectual disabilities are smaller, and there are teachers there who have studied education for children with intellectual disabilities.

In Germany, different special educational needs are categorized at school. The ministry defined categories as „Förderschwerpunkt“ (focus of support) and, since 2019, as „sonderpädagogischer Schwerpunkt“ (special educational focus of support). These categories are listed below and linked to the current recommendations of the Conference of Ministries of Education (KMK):

- [Kindern und Jugendlichen im sonderpädagogischen Schwerpunkt Lernen](#)
- [Kindern und Jugendlichen im sonderpädagogischen Schwerpunkt Emotionale und soziale Entwicklung](#)
- [Kindern und Jugendlichen im sonderpädagogischen Schwerpunkt Geistige Entwicklung](#)
- [Kindern und Jugendlichen im sonderpädagogischen Schwerpunkt Sprache](#)
- [Kindern und Jugendlichen im sonderpädagogischen Schwerpunkt Körperliche und motorische Entwicklung](#)
- [Kindern und Jugendlichen im sonderpädagogischen Schwerpunkt Hören](#)
- [Kindern und Jugendlichen im sonderpädagogischen Schwerpunkt Sehen](#)

These „sonderpädagogischer Schwerpunkt“ can be studied as separate subjects at the university. In most cases, you study two special education subjects in addition to the regular courses of teacher education. The German education system is federal. The special education categories vary in name and number in the respective federal states. Children with [autistischem Verhalten \(Autism\)](#) and [kranke students in clinic/hospital schools](#) also have a recommendation. However, they are not defined as a separate SEN in most federal states.

The diagnosis of individual „sonderpädagogischer Schwerpunkt“ is therefore viewed critically in research, and there are several expert reports that call for comparative standards between the federal states and in educational practice (for example, [Niederöst et al., 2024](#)). Therefore, the categorization of SEN should not be seen as a clear-cut distinction, but rather as a rough categorization of resource allocation. Figure 1 shows the numbers for Germany as a whole.

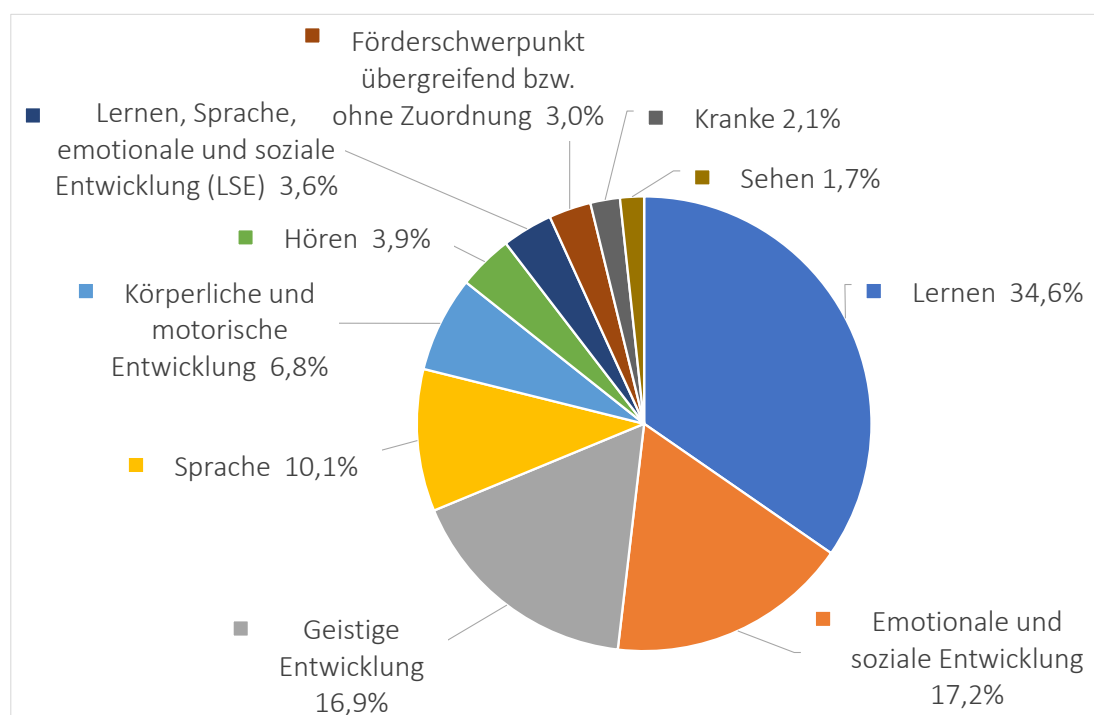


Figure 1 Distribution of special education focus according to the KMK ([2020](#))

Further information:

Kellems, R., Hansen, B., Grünke, M., Blodgett, S. , Tullis, L. and Dawson, Kaiya. (2024). Special Education in Germany. *Journal of Special Education Preparation*.
<https://doi.org/10.33043/5z3dq453>

2. Historical review of special education in Germany

In order to present the initial situation of special education, this introductory work begins with a historical review. A historical perspective is necessary to understand the current system of special education support. This review is based on selected documents as source studies. The text by Heinrich Ernst Stötzner (1864) was chosen because it is freely available and one of the earliest documents that advocated for this new type of school for learning. The other documents are expert opinions and recommendations of the Conference of Ministers of Education (KMK). Education is a matter for the federal states in Germany, so school types, curricula, textbooks, teacher training, and many other aspects vary across different federal states. As a result, many concepts have different names and titles but are often similar and comparable. With the help of the KMK, compromises are reached between the federal states, and as a result, there are also recommendations in the field of special education that the federal states can follow. You can find more information on the [KMK's homepage](#). All decisions relevant to special education can be found there, along with the KMK recommendations from 1960, 1972, 1994, and 2019.

When interpreting these historical sources, it is essential to consider the zeitgeist of the time, as each era brought its own language, values, and educational paradigms. Scientists and educators were either influenced by these movements or fought against the prevailing ones. For this reason, the following overview should always be considered in context to the prevailing attitudes of that time, from the end of the imperial period to the world wars and the young democracy of the Federal Republic of Germany.

Literature recommendation:

[Dietze, T. \(2019\). *Die Entwicklung des Sonderschulwesens in den westdeutschen Ländern. Empfehlungen und Organisationsbedingungen*. Klinkhardt. URN: urn:nbn:de:0111-pe-docs-170265 \(Open Access\)](#)

Ellger-Rüttgardt, S. L. (2019). *Geschichte der Sonderpädagogik*. Reinhardt.

Hänsel, D. (2006). *Die NS-Zeit als Gewinn für Hilfsschullehrer*. Klinkhardt.

Heimlich, U. (2016). *Pädagogik bei Lernschwierigkeiten*. Klinkhardt.

Other historical texts available at: <http://www.th-hoffmann.eu/archiv.html>

2.1 The school for Schwachsinnige (Imbecile)

The history of special education, as aptly stated by Heimlich (2016, p. 100), is a history of institutions. Initially, the focus was on establishing separate educational institutions and schools specifically for children perceived to be fundamentally different from their peers. This separation was justified by the assumption of a distinct group of students who could not be accommodated within the general education system. These children were either denied enrollment in general schools entirely or, if allowed to attend, received little to no consideration for their individual needs. In the 19th century, a clear distinction was made between students deemed bildungsfähig (capable of being educated) and those labeled bildungsunfähig (incapable of being educated; Dietze, 2019, p. 25). Children categorized as incapable of being educated were excluded from even attending elementary school. As a result, children with disabilities were systematically excluded from regular schooling, leading to the establishment of the first special schools, starting with [institutions for deaf children](#).

In the 19th century, compulsory education was introduced in most German countries. However, schools were only gradually founded, and in elementary schools, class sizes were quite large, ranging from 60 to 100 children. Instructor-focused teaching was the norm, and students received no individual support; instead, they were treated as a homogeneous group.

To address the needs of children who were either not admitted to elementary school or who could not meet its learning expectations, initial solutions included remedial classes within elementary schools. These were later followed by the establishment of the first special remedial classes, for example, in Elberfeld (1879), Braunschweig (1881), and Leipzig (1881), and eventually led to the foundation of independent remedial schools (Hilfsschulen; Heimlich, 2016). The expansion of these schools was strongly promoted by the Association of Remedial Schools in Germany, founded in 1889, which played a central role in expanding the model across the country (Dietze, 2019). A key figure in this development was Heinrich Kielhorn (1847–1934), one of the founders of the Association of Teachers in Remedial Classes. Kielhorn was particularly influential in advocating for the creation of separate schools (Moser, 2023).

A first definition of the educational group of children was developed by the teacher of deaf children, Heinrich Ernst Stötzner (1864), in his book [Schulen für schwachbefähigte Kinder](#) (School for feeble-minded children). In this book, he distinguished **schwachbefähigte Kindern (imbecilic children)** from **blödsinnigen Kindern (idiotic children)** who, in his opinion, were incapable of education. On the other hand, the imbecile child learns only very slowly compared to normally educated children (Stötzner, 1864). Through this educational need, Stötzner derives the necessity of schools for imbecile children.

More Information:

[Hoffmann, T. and Moser, V. and Stöger, Ch. \(2023\). Räume des "Anderen" im \(sonder-\)pädagogischen Diskurs 1860 - 1880 - 1940. In M. Hoffmann, T. Hoffmann and L. Pfahl \(Hrsg.\), *Raum Macht Inklusion. Inklusive Räume erforschen und entwickeln* \(255.-263\). Julius Klinkhardt](#)

[Garz, J. T. \(2022\). Zwischen Anstalt und Schule: Eine Wissensgeschichte der Erziehung» schwachsinniger «Kinder in Berlin, 1845-1914 \(p. 250\). transcript Verlag.](#)

Off-topic:

One of Struwwelpeter's [most successful children's](#) books appeared in 1844. It is one of the first comic-like children's books.

Nun, man suche diese Kinder in Anstalten für Blödsinnige unterzubringen. — Das ist aber in den meisten Fällen erst recht kostspielig und dann steht dem ein großes Bedenken entgegen. Das schwachsinige Kind ist eben noch nicht blödsinnig. Es steht geistig auf einer höhern Stufe. Wohl ist sein Auffassungsvermögen gering, seine Sprache schwerfällig, sein Wollen und Empfinden schwach; aber es kann doch denken, wollen und empfinden; wenn Alles auch viel langsamer vor sich geht, als bei normal gebildeten Kindern. Bei dem eigentlich Blödsinnigen dagegen ist die Seele gänzlich gebunden. Mit sehendem Auge sieht er nicht, mit hörendem Ohre hört er nicht und deshalb gehen ihm auch alle Vorstellungen und Begriffe ab. Seine Sprache besteht in gedankenlosem Schwatzen oder er stößt nur unartikulierte Laute aus.

Quote from Stötzner (1864, p. 9).

Similar to deaf-mute and blind institutions, Stötzner advocates that this group of children is also given the right to education in their own schools. In his opinion, general schools do not adequately address the needs of these students, nor do they accept them. He describes these students as 'imbecilic', since they stand between the normally educated and the 'idiotic' children (Stötzner, 1864, p. 5). He sees the admission of these students into a general class as wrong, since the other children physically and mentally surpass these weak, sickly students. Stötzner describes the imbecilic children as naturally slow learners, indicating that different teaching methods are necessary. The imbecilic child has a 'weak sense', which is pathological:

„Wohl fühlt der Lehrer, daß das Kind viel, viel weitergebracht werden könnte, wenn er mehr Zeit für dasselbe übrig hätte; aber diese ist eben zu beschränkt und erlaubt ihm nicht, sich täglich stundenlang mit dem armen Kinde beschäftigen zu können. Oder wer will es dem Lehrer zumuten, daß er sich nach beendeten Schulstunden, in denen er reichlich des Tages Last und Hitze getragen, noch stundenlang mit den Stumpfsinnigen seiner Klasse abmühen soll?“ (Stötzner, 1864, S. 7)

According to Stötzner's conception (1864), the weak sense lies within the child and is therefore not changeable. However, through educational measures, it is possible to train these students to become 'useful people' (p. 8). For teaching, he has the following guidelines:

- Clear as possible
- Step by step
- To combat boredom, change subjects every 15 minutes, at first.

In this way, Stötzner describes the teaching principles of the time, which accompanied the special schools for further decades.

Assignment:

What are schwachbefähigte Kindern (imbecilic children) and blödsinnigen Kindern (idiotic children) according to Stötzner?

Why did they need such a distinction, and what is the significance of such identification?

How were children with school difficulties supported at the time?

What concept of school was prevalent at the time?

Overall, however, Stötzner himself and his work had rather little influence on the design of the remedial schools. But other people shared the ideas he describes. Möckel (2007) views the city school councils and the education administration as influential in the development of the auxiliary schools. What was new and successful was that the focus was not on a particular disorder or educational problem, but that the remedial school understood itself in terms of external differentiation as a lower level to the regular school system, similar to the differentiation in secondary school between the lower, intermediate, and academic tracks (Hauptschule/Realschule/Gymnasium; Möckel, 2007).

In particular, the Verband der Hilfsschulen and its representative [Arno Fuchs](#) helped further the expansion of remedial schools in the following period. Fuchs himself also wrote a book in 1905 entitled [Beobachtungen an schwachsinnigen Kindern \(Observations on Imbecile Children\)](#). What these schools looked like at that time can be seen in the book [Wehrhahn, Albert \(1913\): Deutsche Hilfsschulen in Wort und Bild \(German Special Schools in words and pictures\)](#):



Hilfsschüler beim Flechten von Körbchen.

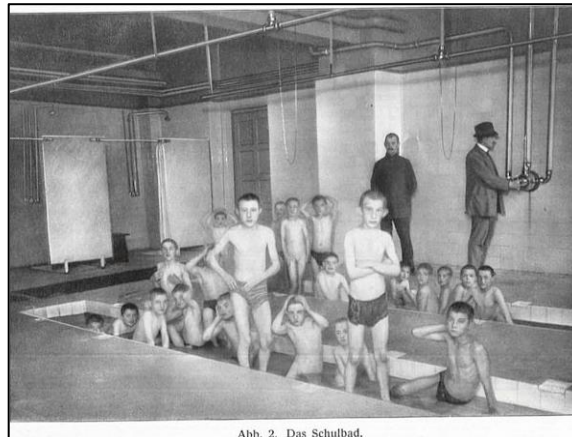


Abb. 2. Das Schulbad.

Figure 2 Pictures from Wehrhahn (1913, S. 13 und S.40)

Imbecility was viewed as congenital, typically inherited, and incurable, both educationally and medically (Kottmann, 2006). A transfer back to elementary school could therefore only take place in exceptional cases (Dietze, 2019). Medicine had a strong influence on special education between 1850 and 1945. Many special educators completed additional medical studies (Heimlich, 2016). Identification and assignment to the remedial schools were also in the hands of conventional physicians and linked to the question of educational ability (Moser and Frenz, 2022).

Further information:

[Moser, V. and Frenz, S. \(2022\). Profession und normative Ordnungen in der Entstehung der urbanen Hilfsschule. Die Modernisierung der Regierung des Sozialen Oder: Die Entstehung einer pädagogischen Tatsache. In V. Moser and J. Garz \(Hrsg.\), Das \(A\)normale in der Pädagogik 1880-1980. Wissenspraktiken – Wissensordnungen – Wissensregime \(S. 17-50\). Klinkhardt.](#)

The concept of disability was viewed pathologically in children and reinforced by the advent of [Social Darwinism](#) at the beginning of the 20th century. Social Darwinism and eugenics also gained influence in education. Former curative educators, such as Stötzner, had discussed biological nature and the soul, but now heredity and the genes became increasingly important. Social Darwinism also had an influence on reform pedagogy, such as that of [Maria Montessori](#). She believed in a eugenically perfect child.

From 1933, social Darwinist and racial views became official state policy in the Nazi state. During [the Nazi era](#), questions about the ability to educate were increasingly raised alongside questions about the use of resources in the context of usefulness to society, such as Tornow (1940) in his guide „[Denken Sie nur: unser Fritz soll in die Hilfsschule!](#)“ (Just think about it: our Fritz in remedial school!):

in die Dummenschule.“ Die Hilfsschule ist keine Dummenschule, sondern sie ist die Schule für das geistig geschädigte Volksglied, das in ihr zur Brauchbarkeit innerhalb der Volksgemeinschaft erzogen wird.

(Tornow, 1940, S. 23).

The utility for Germany is the predominant argument and stands above the individual rights of each person. The argument is based on an ideology that posits social problems are also explained by inheritance. Tornow and Weinert (1942) state that a child with serious imbecility and serious idiocy is of no use to society and belongs in the medical-therapeutic

educational institution (Anstalt), while children of the Hilfsschule (school for imbecile) can be educated to be useful craftsmen and soldiers. According to this logic, selection is one of the important tasks of special education. The goal is a healthy population by preventing hereditary problems through infertility (Tornow and Weinert, 1942). Reasoning with Social Darwinism led to sterilization, but also to murder, which was implemented, for example, in the so-called [Action T4](#) in individual medical-therapeutic educational institutions.

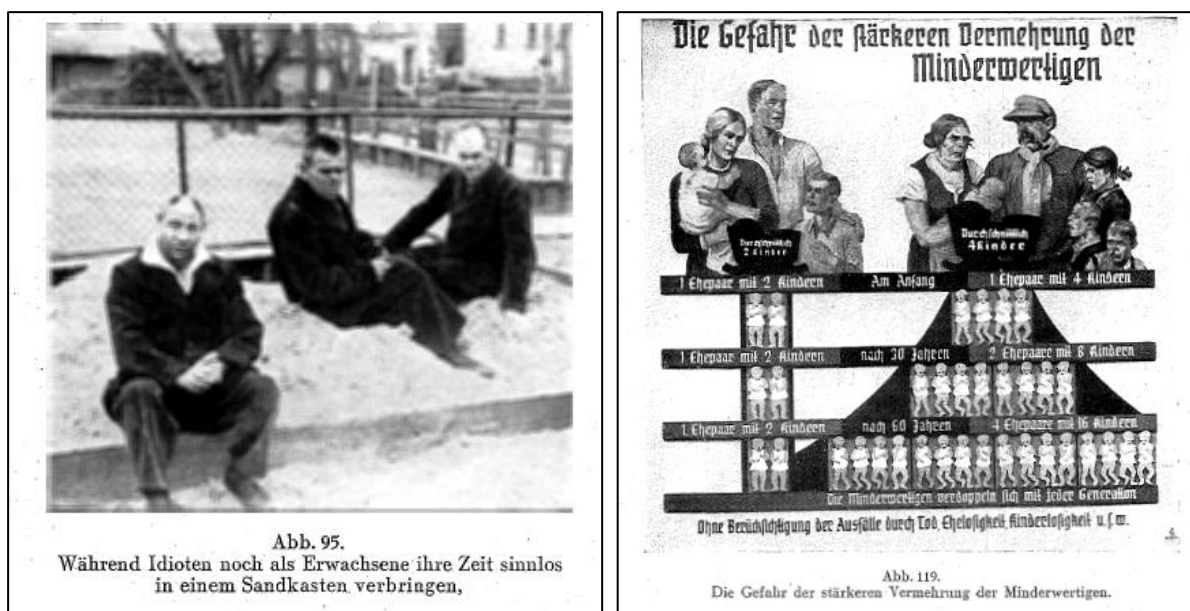


Figure 3 Pictures of Tornow und Weinert (1942, S. 156 und 203)

For standardization, the existing institutions and remedial schools were included in the canon of special schools in accordance with the Reichsschulpflichtgesetz (1938) and thus established as a compulsory school for children labeled „hilfsschulbedürftig“ (Dietze, 2019). This was an important step in the formation of special education, as it had previously consisted of many different currents and concepts. The structures and terms were standardized during the Nazi era and improved for remedial school teachers (Hänsel, 2006). Since then, special education teachers have been regarded as the primary representatives of the school for individuals with disabilities. This also had the consequence for the teacher group of the Hilfsschul teachers that the state recognized they needed more knowledge in education and qualification than general school teachers at the primary level. Thus, after completing education as an elementary school teacher, additional education was often pursued, which could later also be reflected in higher salaries.

Although euthanasia and its methods originated in the field of institutions for people with disabilities, the Nuremberg Trial did not prosecute the euthanasia of people with disabilities, in contrast to the other crimes against humanity (Longmore, 2003). Only in individual trials were those responsible later prosecuted. Karl Tornow and Erwin Lesch, for example, were influential figures in special education during the Nazi era. Both were denazified after the war, were not charged, and were allowed to continue practicing their profession. A scientific reappraisal and debate took place much later in 1970. It is therefore questionable what changes there were in practice after the Second World War and to what extent one can speak of a new beginning.

Assignment:

Work out significant differences in the view of the Hilfsschule (remedial school) at the time of Stötzner and during the Nazi era. What reasons have been stated for remedial schools in each case?

What is Social Darwinism?

Why was selection described by Karl Tornow as one of the important special educational tasks in the Nazi state?

Further Information:

[Dagmar Hänsel „Die Historiographie der Sonderschule“ \(2005\)](#)

[Tötungsanstalt Hadamar im Rahmen der Aktion T4 \(1941 bis 1945\)](#)

[Gedenkort der Aktion T4](#)

Further Information from <http://www.th-hoffmann.eu/archiv/>

[Fuchs, Arno \(1903\). Beobachtungen an schwachsinnigen Kindern.](#)

[Tornow, Karl \(1940\). Denken Sie nur: unser Fritz soll in die Hilfsschule!](#)

[Tornow, Karl and Weinert, Herbert \(1942\). Erbe und Schicksal – von geschädigten Menschen, Erbkrankheiten und deren Bekämpfung.](#)

[Wehrhahn, Albert \(1913\). Deutsche Hilfsschulen in Wort und Bild.](#)

2.2 The Expansion of special schools after 1950

In 1949, the Verband Deutscher Hilfsschulen (Association of German Remedial Schools) was refounded and renamed Verband deutscher Sonderschulen (Association of German Special Schools, VDS) in 1955. The VDS still exists as [Verband Sonderpädagogik e.V.](#) and is organized in regional subgroups within the federal states. Despite the reformation, former members like Gustav Lesemann still held leading positions within the association. Gustav Lesemann first considered and welcomed euthanasia in writings before and during the Nazi era (Hänsel, 2006).

Enabling school education for children with disabilities was a priority after 1950. Attendance at a special school was predominantly seen as the only option. [Thorsten Dietze \(2019\)](#) detailed the expansion of special education in his dissertation, which he subsequently published under Open Access. According to Dietze (2019), the percentage of all children with SEN among all schoolchildren in Germany increased from 1.6% in 1955 to 4% in 1976, 5.8% in 2007, and currently stands at 7% of all students in 2018 (KMK, 2019). This increase in funding is closely tied to the question of which students should be transferred to a special school or, more recently, to promote special education in inclusive settings. You can see that these figures are politically controlled and fixed. Thus, the need for places in special schools was estimated to be about 3 to 4% of all students in 1950, and an expansion of the special schools was recommended (KMK, 1960) and later realized (Dietze, 2019). The expansion of special schools occurred over the following years, reaching a peak in 1973. While there were previously major gaps in access to educational opportunities for children with disabilities, comprehensive coverage by special schools was expanded from the 1970s onwards.

Work-order:

Association of German Remedial Schools?

What is the rate of special education support needs, and why does this rate increase over time?

The organization of the special school system was first described in the report (1960) for the newly established [Conference of Education Ministers](#) (KMK) in the Federal Republic of Germany under the common name of special school. The following schools became special schools: Blindenschule (school for the blind children), Sehbehindertenschule (school for children with visual impairment), Gehörlosenschule (school for deaf children), Schwerhörigenschule (school for children with impaired hearing), Sprachheilschule (school for children with speech impairment), Krankenschule und Hausunterricht (school for sick/hospitalized children and home schooling), Hilfsschule (school for children with learning impairment/ remedial school), Beobachtungsschule (school of SEN not decided and further

observation), Erziehungsschwierigenschule (school for children with educational issues due to behavior), Gefängnisschule (prison school), Sonderberufsschule (special vocational school).

A significant part of the special schools was the Hilfsschule, which later became the Schule für Lernbehinderte (learning disabilities). The Hilfsschule welcomed students with mental and emotional weaknesses, because it was believed they could not follow the course of regular teaching and would significantly inhibit their fellow students (Dietze, 2019). The problem was seen as the child himself. The influence of the environment and the school system was hardly noticed. Below are excerpts from the 1960 KMK:

„Besonderes Anliegen dieser Schulen ist es, den Kindern und Jugendlichen zu helfen, ihre eigenen Unzulänglichkeiten zu erkennen, sich aber dennoch über ihre eigenen Fähigkeiten und Kräfte klar zu werden“ (KMK, 1960, S. 5).

Translation:

“The mission of these schools is to help children and teenagers to recognize their own shortcomings, but nevertheless to be aware of their own abilities and powers (KMK, 1960, p. 5).”

„Außerdem ist die Frage zu prüfen, ob und inwieweit Sonderschulbedürftige ihre Mitschüler in der allgemeinen Schule stören oder gefährden und von der allgemeinen Schule eine besondere Aufsicht oder Pflege erwartet und vertreten werden kann. In den Fällen, in denen der Aufenthalt Sonderschulbedürftiger in der allgemeinen Schule sowohl für diese selbst als auch für die übrigen Mitschüler einen pädagogischen Gewinn darstellen würde, muss die Frage der Unfallverhütung und -haftung vorsorglich geklärt werden“ (KMK, 1960, S. 6).

Translation:

“It is also necessary to examine if and to what extent people with a need for special education disturb or endanger their classmates in a regular school, and whether special supervision or care can be expected and provided by the regular school. In cases where the attendance of regular schools would be an educational gain both for people with a need for special education and for the other students, the question of accident prevention and liability must be clarified as a precautionary measure” (KMK, 1960, p. 6).

„Hilfsschule:

Die Hilfsschule nimmt **Kinder mit geistigen und seelischen Schwächen** auf, die zwar imstande sind, in Gemeinschaft mit Gleichgearteten ein in sich geschlossenes Bildungsgut zu erwerben, denen aber die Volksschule mit den ihr zur Verfügung stehenden Unterrichts und Erziehungsmethoden, -mitteln und -maßnahmen nicht gerecht werden kann.

Der Besuch dieser Sonderschule ist notwendig, weil solche Kinder in der Volksschule dem Gang des Unterrichts nicht folgen können und ihre Mitschüler erheblich hemmen, **in der Hilfsschule aber auf eine ihrer Eigenart entsprechende Weise gefördert** werden können.

Zu diesen lernbehinderten und leistungsschwachen Kindern gehören:

Aufnahmeschwäche, deren Schwäche in der psychischen, kinästhetischen und motorischen Sphäre liegt, Aufmerksamkeits- und Konzentrationsschwäche, Verarbeitungs- und Gestaltungssehwahe“ (KMK, 1960, S. 27, Hervorhebung durch Autor).

Translation:

„Hilfsschule:

The Hilfsschule welcomes **children with intellectual and mental weaknesses**, who are indeed able to acquire coherent educational content along with peers, but whom the elementary school cannot address properly with teaching and educational methods and measures.

Attendance at special schools is necessary because such children cannot follow the course of instruction in elementary school and significantly hinder their classmates; **however, they can be supported in the Hilfsschule in a manner that corresponds with their nature.**

These learning-impaired and low-performing children include:

Weakness in reception, whose weakness lies in the psychic, kinesthetic, and motor spheres, lack of attention and concentration, processing and design vigilance (KMK, 1960, p. 27, emphasis added).”

If one compares these passages with Stötzner's writing (1864), then both texts agree that the school problem is caused by the child, so the problem within the child is in primarily

looked at. The medical-pathological argumentation is not explicitly emphasized, but is named with the term „**Kinder mit geistigen und seelischen Schwächen**“ (‘intellectual and mental weaknesses’).

As an argument in favour of the special school, special pedagogical expertise is then brought to the fore, since only in the special school can the children be supported in a way that is „**Eigenart entsprechende Weise gefördert**“ (‘appropriate for their nature’) (KMK, 1960, p. 27). In particular, the word ‘Eigenart’ emphasizes a special characteristic in the person. Thus, separate elementary and special schools are justified by the special group of students and not by the educational methods.

The concept of imbecility is no longer used by the KMK (1960); instead, the concept of learning disability has been introduced. Here, too, the difficulties are due to the deficit in the person's ability to learn compared to regular students. The other provisions of the recommendation also regulate the transfer of funds. Thus, the elementary school identifies children, and the special school teacher checks the need for special education and determines the extent to which the failure of the student is related to the weaknesses characteristic of the special education children (KMK, 1960):

“In the case of a thorough curative education examination, it must be left to the examiner whether he considers the use of tests to be necessary, which scientifically recognised tests he may need, whether the examination is carried out in an individual or group procedure and whether other means (e.g. trial participation in the classroom) are considered necessary to clarify the personality picture. The procedure and result of the review and the observations made during it must be documented objectively and verifiably in writing using a form (Auxiliary School Review Form). The parents of the children shall be invited to a debate before the verification. Their observations must be recorded in the form (KMK, 1960, p. 30).”

For the Association of German Special Schools, it was a central concern at that time to justify the individual special school types on the deficits and needs of their students (Dietze, 2019). Astonishingly, the “Schule für geistig Behinderte” (‘School for the Mentally Disabled’) did not emerge as a specialization until the 1960s, as these children were then still considered incapable of being educated. In the KMK report at the time, this type of school was described as “Heilpädagogischer Lebenskreis für pflegebedürftige Kinder „ (a curative pedagogical circle for children in need of care). These children were also granted the right to education for the first time, although the wording seems very hesitant from today's perspective.

Questions:

What is the German Education Council and the Conference of Ministers of Education and Cultural Affairs (KMK)?
What were the main objectives and innovations in the report on the organization of special education (1960)?
Which concept of disability was discussed in the report?
Why does the concept of mental deficiency no longer exist and by what term has it been replaced?
What forms of school and what support are there?

Off-topic: Corporal punishment

While corporal punishment was banned in schools in the Soviet occupation zone and later in the GDR, it wasn't banned in Hamburg until 1969, in the rest of West Germany until 1973, and in Bavaria until 1983. It was also used daily in remedial schools. For example, in the farewell speech of principal Erwin Lesch, it was said: "They have helped many a bad boy with their cane".

In some countries, corporal punishment is still not [forbidden in schools](#), such as in some states in the USA or Singapore.

Video: [Should Teachers Use Corporal Punishment On Students? \(HBO\)](#)

Video: [Hamburg damals \(4:13\)](#)

Article: [A systematic review of corporal punishment in schools: Global prevalence and correlates](#)

2.3 New Order of Special Education (1972)

With the introduction of the new KMK in 1972, the structure of the special school system was reorganized. While general guidelines and the medical concept of disabilities were already described in the 1960 report of the KMK, the individual school types were now established. All these schools were now grouped under the term special schools and linked by the same rules. The former „Hilfsschulen“ are now renamed the „Schule für Lernbehinderte“ („School for the Learning Disabled“), and the „Schule für geistig Behinderte“ („School for the Mentally Disabled“) was introduced. Children with intellectual disabilities now had their own school. With that, their right to receive an education was also established.

The concept of „geistigen und seelischen Schwäche“ (mental and emotional weakness) (KMK, 1960) is thus replaced by the concept of „Schädigung“ („impairment;“ KMK, 1972). The term „Behinderung“ disability was introduced as a disorder in the child, which can be treated or compensated by special educational measures. Disability was thus introduced as an individual medical concept. According to KMK (1972), special education was designed to support children and young people who are so impaired in their development and learning and who thus cannot be sufficiently supported in general schools. Since the student is also limited in his performance due to his disability, and has more of his time taken up by therapeutic measures and special education, learning material must be selected so that the student is not overwhelmed (KMK, 1972):

„Unerlässlich sind dabei sonderpädagogische Methoden, Mittel, und Maßnahmen, bei denen das ständige, zielstrebige Üben der Funktionen, die behindert oder gestört sind, und das Üben der noch erhaltenen Kräfte im Vordergrund steht. Da der Schüler infolge seiner Behinderung auch in seiner Leistungsfähigkeit begrenzt ist, und außerdem durch besondere therapeutische Maßnahmen in seinen Kräften und in seiner Zeit stark beansprucht wird, ist bei der Auswahl des Lernstoffs zu beachten, daß der Schüler nicht überfordert wird.“ (KMK, 1972, S. 7).

There was also an attempt to define specifications and rules for the individual impairments.

The terms „Lernbehinderung“ (learning disability, LD (Kanter, 1974)) and „geistige Behinderung“ (intellectual disability (Bach, 1974)) were further defined in additional expert reports of the deutschen Bildungsrat (German Education Council = KMK). This term emphasized that a child with an LD can be encouraged and improved, in contrast to the imbecile child, for whom hardly any progress could be expected. Such a term had the defining feature of incurability, while a learning disability does not have to be unalterable.

2.4 Special Educational Needs (1994)

Nationally and internationally, the influence of proponents of inclusive education had been growing. While the [Salamanca Statement \(1994\)](#) already made clear international demands for inclusive education, it was now made possible as an option alongside special schools in Germany. [Recommendations on special educational support in German schools of 06.05.1994](#) (KMK, 1994) enabled integration. Previously, children with disabilities were only able to complete compulsory schooling at a special school due to their „Sonderschulbedürftigkeit“ (special school need). The KMK (1994) defined special needs for students with disabilities. Special educational support is intended to realize the right of children and teenagers with and at risk of disability to receive education and training appropriate to their personal abilities. It supports and accompanies these children and teenagers through individualized support to achieve the highest possible level of integration, social participation, and independent living. In contrast to the previous definitions, failure is no longer seen as solely the child's fault, but rather as a disparity between the school's requirements and the child's abilities.

2.5 Inclusive Education (2011)

In 2011, based on [the UN Convention on the Rights of Persons with Disabilities \(2006\)](#), the KMK adopted the [Recommendation on Inclusive Education of Children and Young People with Disabilities in Schools of 20.10.2011](#) to provide the basis for equal participation and inclusive practice in the education system. The right to inclusive education was strengthened and emphasized. However, inclusive education was viewed as a lengthy process, and special schools continued to be seen as a suitable alternative.

The [recommendation on the education, guidance, and support of children and adolescents with special educational needs in the area of learning](#) of 14.03.2019 can be seen as the latest recommendation, the current view, and definition of the special education focus. Views and definitions have changed repeatedly in the past and have evolved from a child-centered perspective to a child-environment-related focus.

The focus of special education shifted from identification and diagnosis to an intensive, individually tailored, and coordinated system for advice and support. While in older KMK recommendations, the different needs for special education have played a role in inclusive education, recommendations now focus on the support system. It is now a question of what policies and services define special education in inclusion and special schools. The result is a series of questions and new opportunities that make up the inclusive school at all levels - for example:

- Which support programs help which students in the fields of reading, spelling, and mathematics?
- To what extent are these support programs to be adapted, intermediate steps to be incorporated, material to be made more accessible and comprehensible, and related to the life situation of the students?
- Which educational content and goals are relevant, which goals must be adapted or omitted?
- When does a student need individual, group-specific or class-specific support? When does it make sense to work with other teachers, not child-centered, but classroom- and school-centered, for better accessibility to educational content, material, goals, and rules?

The current KMK recommendation on the special education focus on learning (2019) underscores the need for special educational support, placing greater emphasis on systematic factors, namely environmental influences and the impact of the learning situation. There is hope that a multi-layered, formally verifiable support system will develop within the school system in the coming years, and that stigmatizing processes on the part of educational institutions will be a thing of the past.

2.6 Models of disability over time

In the KMK report on special education (1960), the students who visited the Hilfsschule were described as students with mental and emotional weaknesses. In arguing for a separate type of school, the report claimed that these students could not follow instruction via regular teaching in general schools and their presence significantly inhibited the learning of other students (Dietze, 2019). The lack of academic success was seen as a problem for the child themselves, while the circumstances of the school were accepted as fixed. However, little attention was paid to the influence of the environment and the school system. The concept of disability described in the KMK report (1960) was therefore largely an individual and person-oriented model of disability.

In contrast, the concept of disability in the current KMK recommendation (2019) takes into account not only the impairment in the person but also the environment. Significant difficulties in school learning (e.g., the lack of core experiences and fundamental requirements for learning, challenges in developing competences, learning strategies, and mental and

learning habits) can occur at school due to challenging life conditions. Traumatization, cognitive and organic difficulties, and growing up in a socioculturally and socioeconomically disadvantaged environment are cited as reasons (KMK, 2019). The term special educational needs thus means a difficult learning situation, which can and must be improved by (special) educational action.

2.7 The relationship between elementary school and special school

The elementary school, as it is currently known, dates back to the Weimar Constitution (Article 146). The new form of elementary school was no longer segregated by social class. Instead, it was intended to provide basic education for all children in the population (Brandt et al., 2021). Thus, for the first time, elementary school provided a basic education for all children. This idea was also viewed critically at the time, as was the idea that the elementary school should be ideologically neutral (Götz and Sandfuchs, 2011).

Elementary school at that time was an inclusive school from today's perspective, as it only accepted children who were also considered "ready for school." This was set in the Reichspflichtschulgesetz (1938):

„Für Kinder, die wegen geistiger Schwäche oder wegen körperlicher Mängel dem allgemeinen Bildungsweg der Volksschule nicht oder nicht mit genügendem Erfolge zu folgen vermögen, besteht die Pflicht zum Besuch der für sie geeigneten Sonderschulen oder des für sie geeigneten Sonderunterrichts“ (Gesetz über die Schulpflicht im Deutschen Reich, 1938, §6 (1)).

"Children who are unable to follow the general educational path of the elementary school or are not able to follow it with sufficient success because of mental weakness or physical defects are obligated to attend the special schools suitable for them or the special education suitable for them (Law on compulsory schooling in the German Reich, 1938, §6(1))."

After 1945, elementary school was no longer defined as part of the public school system, but rather as a separate stage of the school system, linked to the pedagogical concepts of the Weimar Republic. An extension of elementary school was prevented by conservative forces with reference to possible communist ideas in the concepts of comprehensive schools (Götz and Sandfuchs, 2011). The idea of an inclusive elementary school for all children has only become socially accepted in modern times and was previously the topic of individual reform-oriented and innovative schools (generalization movement).

Assignment:

How does the development of special schools relate to elementary school?
When is an elementary school considered inclusive?

2.8 Changing Names as Changing Attitudes and Explanatory Patterns

The names and terms of special education and school types have changed greatly over time. These conceptual changes are in constant flux and also entail a change in attitudes and explanatory patterns (Schwab, 2018). However, the multitude of terms and temporal overlap have also led to the fact that the terms are blurred or used synonymously in pedagogical practice. Many of the outdated terms are still used today in everyday language as insults (idiot, cripple, imbecile, etc.).

Thus, as early as the 1970s, the term „Schwachsinn“ (imbecile) was hurtful and derogatory (Klauer, 1975) and was replaced by "special needs pupil who is mentally weak under the Reichsschulpflichtgesetz" (Klauer, 1975, p.23). However, this description is also negatively bound to the person, and a name change only treats the symptoms. Thus, all terms of special education in general use of language were experienced by those affected as defamatory. Table 1 shows a selection of terms used in special education:

Table 1*Overview of names related to support needs Learning*

time	School name	Name of child
until 1972	Remedial school	children with intellectual and mental weaknesses,
from 1972	School for the learning disabled	children with learning disabilities,
from 1994	Support school/center	children in need of special education,
from 2019	Support center	Children with special educational needs and learning disability
		children with special educational needs with focus on learning,
from 1994	Inclusion	Colloquially: The Inclusion Child

Otto Speck (1969) recognized this negative spiral and concluded that it could only change if there were a general new attitude towards disability in society. The attitudes of educational actors or society are examined sociologically, for example, in the fields of [group-focused enmity](#) and in attitude research on inclusion in special education (Gebhardt, 2018). One goal of inclusion is to dismantle prejudices and to propagate a common life in diversity. Teachers and schools have the opportunity to promote these attitudes within their school through educational content, social training, and the school culture itself (Krull, 2018). In addition to life at school, however, it also requires greater social change that accepts diversity and enables framework conditions and a culture that fosters democracy.

The problem for schools is that specific support measures, labelling, or entire types of schools will always be seen negatively when specific groups continue to be separated, supported in a segregated manner, or are simply seen as "different" or "special" by the majority. It is therefore more sensible to design school programs in a way that recognizes diversity and where specific measures are tailored to each individual. This means that no rating or hierarchy is discernible, and it is more about inclinations or preferences, as in the field of leisure. If evaluations or hierarchies are unavoidable, they should be defined transparently and comprehensibly for all parties involved.

This requirement is already a challenge for inclusion and special education alone, as specific measures on teaching content often lead to the child being quickly considered "different." Diagnosis and treatments can lead to open identification as a "child in inclusion" and can be experienced as stigmatizing, similar to attending a special education school. Therefore, an inclusive system must solve the dilemma of resource allocation without negatively labeling individuals (Wocken, 1996). This can be achieved, for example, by providing individualized help to all individuals and offering regular educational support. The aim is that individual support in everyday life has no highlighting or even stigmatizing consequences. Thus, research into participation and social participation is a crucial component of school inclusion, determining the degree of successful participation.

Assignment:

Why was the name of the remedial, support, and special schools changed so often?
What are the potential problems in identifying individual children?

3. Special education from a scientific point of view

The terms of the KMK were compromises reached by many participants, including political representatives. As a result, they may not reflect scientific perspectives and theory. For this reason, in Chapter 3, the conceptual definitions surrounding the topics of disability, learning disability, and learning difficulties are presented by several scientists with their respective opinions.

3.1 Defectology according to Vygotsky (1924)

[Cultural-historical psychology](#) had a significant impact on special education in Germany. [Lev Vygotsky](#) (1896-1934) viewed the problems of the child not solely through a biological lens, but also through a social lens ([Vygotsky, 1924](#)).

„Ein Mangel des Auges oder des Ohrs bedeutet daher vor allem den Ausfall wichtiger sozialer Funktionen, die völlige Veränderung der gesellschaftlichen Beziehungen, die Verschiebung aller Verhaltenssysteme“ (Vygotsky, 1924, S. 66).

‘A lack of sight or hearing therefore predominantly means the failure of important social functions, the complete change in social relations, the displacement of all behavioural systems’ (Vygotsky, 1924, p. 66).

Vygotsky’s perspective was fairly modern for the time, as the predominant view at the time was a medical construct-dominated one. In contrast to the (special) educational practice of the time, he argued that children with disabilities are also capable of regular development and thus are not different throughout their entire (learning) development. For instance, a blind person does not experience their life as being in constant darkness, contrary to assumptions at the time. Rather, this notion is constructed and imposed by the surrounding environment. It is also the environment that, instead of nurturing the child, isolates the child. Vygotsky (1924), therefore, sees the defect not as an illness, but as a social problem resulting from the way the immediate environment and society handle disability.

Vygotsky’s understanding of play and learning is a defining feature of modern formative assessment. In doing so, he also defined the ‘zone of proximal development’ ([Vygotsky 1933](#)), which represents the learning and development of abilities that a child can achieve through cooperation with adults and peers, in contrast to their current developmental level, which represents abilities that they can already achieve alone. For Vygotsky, therefore, lessons should focus on and take place in the zone of proximal development, rather than on the current developmental level. This idea was and is revolutionary. It requires an individually tailored approach to teaching, one that not only considers the students’ development but also demands that the teacher act at the right moment and in the right way.

Additions:

https://en.wikipedia.org/wiki/Cultural-historical_psychology

Assignment:

What model of disability does Vygotsky use?
What is the next development zone?

Additional: Materialistic disability education is based on Vygotsky’s views. A representative here is the late [Wolfgang Jantzen](#), on whose homepage <http://www.basaglia.de/> his texts and research results can still be found. For him, disability is not a deficient characteristic of a person but a social process of hindering learning and development opportunities through social exclusion, stigma, and isolation.

3.2 Learning Disabilities according to Kanter (1974)

The term Lernbehinderung (learning disability) was defined by Gustav Kanter (1974) in a report for the German Education Council. Kanter (1974) sees the concept of learning disability as a current ‘work concept’ (p. 117), which at the time had become established in both scientific discourse and educational practice. It replaced the earlier term of ‘Hilfsschulbedürftigkeit’ (necessity for separate schooling; Kanter, 1974, p. 137).

In general, he views the field of learning disability as a multivariate issue with many causes, as well as a 'school organizational problem' (p. 117). He categorizes learning disabilities primarily into three types (from page 165 et seq.):

Type 1: Children with learning disabilities with significant intellectual disability

- Severe, prolonged, and wide-ranging impairment
- IQ ranging between 55 and 75

Type 2: Children with a learning disorder

- Failure in one or more aspects of school
- Mildly diminished IQ level (75/80)
- Tendency to underachieve

Type 3: Children with behavioral issues and structural disadvantages

- Behavioral disorder
- Learning gaps and performance deficits
- IQ between 75 and 95

By establishing these types, structural and environmental influences are only acknowledged in the third type. The core demand is the recognition of the 'distinctiveness of the personality traits, learning, and performance behavior of individuals with disabilities' (p. 169). Consequently, tailored learning and educational support are necessary. Kanter emphasizes both the individual and biological conditions of the child, while also acknowledging social causes.

3.3 Begemann (1970)

Ernst Begemann (1970) views the concept of learning disabilities critically. He argues that while people with learning disabilities have lower intelligence scores and lower performance, intelligence alone does not account for school failure. Begemann emphasizes the low socioeconomic background of students with learning disabilities and positions them on the margins of society. For Begemann, academic deficits are viewed as a form of educational deprivation in this group of people. Therefore, he condemns the perspective that solely pinpoints and attributes school deficits to the child. Begemann (1970) uses a social and systemic concept of disability.

It therefore considers the enrollment rules of a regular elementary school as an 'age-based grouping system' as outdated, because they systematically marginalize children from disadvantaged backgrounds. He considers deferment without support irresponsible for children from the lower class. Since the elementary school does not want to enroll such children, he depicts the special school as a necessary institution for socio-culturally disadvantaged, marginalized lower-class children (Begemann, 1970). Begemann regards the term Lernbehindertenpädagogik (Education for learning disorders) as a 'provisional working concept' (1984, p. 16).

Assignment:

What is a learning disability according to Begemann?

3.4 Eberwein (1970)

Hans Eberwein was one of the first advocates to endorse integration and published the essay 'Die Sonderschule als Integrationsfaktor der Gesamtschule' (The Special School as an Integrative Factor within the Comprehensive School) in the Zeitschrift für Heilpädagogik in 1970. In addition to viewing the special school as an independent educational approach, he advocates for supporting children with special educational needs within the comprehensive school to be recognized as a distinct responsibility, implemented through special

education expertise. Eberwein suggests an 'integrated special school' (p. 321) within the comprehensive school.

Eberwein (1975) primarily sees children from socially disadvantaged backgrounds as being at greater risk of developing learning disabilities, which are subsequently labeled as disabilities by both our school system and societal structures, thereby placing the responsibility for their situation on them. Although the current discourse does acknowledge that social factors and school context also play a role in addition to the student themselves, the perception of a person with learning disabilities as a 'personal failure and deviant' persists (Eberwein, 1975, p. 70). 'Deviant behavior or learning disabilities are therefore primarily the result of the enforcement of norms and sanctions by others' (Eberwein, 1975, p. 71). 'The classification of learning disability is, ultimately, a function of societal and educational expectations, with the inherent consequence of negative attribution.' (p. 72). With these definitions, Eberwein suggests that defining learning disability should not focus solely on the child but also consider the interaction with educational stakeholders and the school context. It thus has an interactionist concept of disability, which is also systemically rooted in the expectations and rules of the school system and society.

For further information:

See also [interview with Hans Eberwein](#) or <https://www.blickzurücknachvorn.net/hans-eberwein/>

3.5 Wocken (1996)

Hans Wocken is one of the advocates for integration. He has shown in several studies (Wocken, 2000, 2009) that children from socially disadvantaged backgrounds often attend schools for children with learning disabilities or support centers. In an [interview with Hans Wocken](#), you can read about his life path and the findings on pedagogy. As early as 1982, Wocken identified the school for students with learning disabilities as being in a crisis of legitimacy. In his opinion, 80% of students receiving learning support come from the underprivileged working class. Furthermore, proponents of special schools have yet to demonstrate that their schools are indeed a better environment for supporting children. Third and most importantly, there exists an absence of a clear and consistent distinguishing characteristic that distinguishes learning-disabled students from low-achieving elementary school students (Wocken, 1982).

Therefore, Wocken (1996) rejected an individual or medical concept of disability and viewed the lack of accommodation for affected children in school as the essential reason for the term pedagogy for learning disorders (Lernbehindertenpädagogik). He advocated for the following:

'I am in favor of a narrower version of the concept of disability. According to Italian practice, students who struggle with learning, language, or behavior are not considered disabled. The diagnostic label is an unnecessary discrimination for students with learning disabilities, speech impairments, and behavioral impairments

[...].

In children with learning, language, and behavioral issues, the concept of special educational needs should not be interpreted as an individual, person-related characteristic. Special educational support for children with learning, speech, and behavior disorders is rather a **systemic category**' (Wocken, 1996, p. 4).

Wocken, therefore, pleads for an integrative allocation of special educational resources for school inclusion to avoid branding the student. In his opinion, 6-8% of all children require special educational support, which is why a full special education unit should be established at the regular school for these children (Wocken, 1996). This approach was realized in the Hamburg school experiment "Integrative Regelklasse" ([Hinz and Wocken, 1988](#)).

In his study of the social and educational situations of students in special schools, with a focus on learning, Wocken (2000) considers the problem of learning disability to be multi-factorial and therefore selected several instruments for assessing intelligence, school

performance, social status, cultural status, family status, and individual status (Wocken, 2000).

Assignment:

What is a Learning Disability according to Wocken?

What concepts of disability does Wocken use?

Which school type does Wocken prefer?

For further information:

Hans Wocken runs his own homepage www.hans-wocken.de, where many of his texts are available. Wocken can be seen in several videos on YouTube. For example, '[Inclusion now](#)'. His [opinion on inclusion in Bavaria](#) is also worth reading.

Videos:

[Interview with Hans Wocken](#)(09:21) from 19.01.2023

3.6 Hartke (2017)

Bodo Hartke and Kirsten Diehl (2013) view the terms "learning difficulties," "learning impairment," "learning disability," and "special educational needs" as distinct manifestations of significant learning gaps, each with its own analytical focus. They advocate for a framework and concept of preventive measures within general schools to avoid the manifestation of difficulties and disorders that are more crucial than the precise definition and categorization of a specific group.

According to Hartke (2017a), any student may begin to experience developmental difficulties in the areas of learning, language, or behavior at school when risk factors are present, and the school lacks a preventative approach to addressing such issues. As a result, a learning difficulty may manifest and, over time, develop into a persistent problem. Hartke refers to the resilience theory, which was established by Emmy Werner (1982). According to this developmental psychological approach, there are not only at-risk situations such as poverty or deaths and illnesses within the family, but also external support factors in the social environment (committed parents, friends, community, etc.) and internal resilience factors (self-efficacy, social competence, etc.), which help the child overcome difficult situations and achieve success later in adulthood, despite facing significant challenges in life.

Students with an increased risk profile for severe learning difficulties predominantly come from educationally disadvantaged and/or poverty-stricken families (Wocken, 2000; Gebhardt et al., 2015). Additional negative factors in the family and environment, such as a difficult parenting style, illness, and addiction, as well as emerging developmental issues in the child, such as a lack of precursor skills for learning processes (e.g., phonological awareness or early mathematical competencies), language development delays, and low abilities in emotion regulation, further exacerbate the situation.

Therefore, children do not attend school in the same way, but with an individual risk profile that may lead to either academic success or failure, depending on the expectations and adaptations of the teaching. Internal and external support features within and outside of school can help children to start school successfully. Although the larger social forces and the internal characteristics of a child may change only slowly, schools and other educational and social institutions (such as afterschool programs, community-based social work, and clubs) can offer preventive support measures. Such initiatives may include adapting the school to risk groups through a multi-level prevention concept with interlinked measures (see 7.3 RTI), data-driven funding decisions, and team meetings, which is crucial for Hartke (2017a), so that learning difficulties don't arise and manifest themselves. Based on these approaches, he designed and continuously evaluated the [Rügen Inclusion Project](#) (2012; 2019).

Assignment:

What is a learning disability according to Hartke?
What models of disability does Hartke use?
Which school type does Hartke prefer?

Further recommendation:

Further information, videos, and descriptions can be found on the page <https://www.rim.uni-rostock.de>

3.6 Which label do we need?

School systems still predominantly apply an individualized medical model of disability, which is further reinforced by selective mechanisms within the system. However, particularly in the field of special education with a focus on learning, the specific portrayal of a group of children or the use of a medical diagnosis such as Minimal Cerebral Disorder (Clemens, 1966) has not resulted in any significant added value, but has instead contributed to stigmatization. The identification of a specific characteristic always carries the risk of excluding individuals who share that characteristic.

According to the social model, disability arises from the interaction between the individual and their environment. In the case of special educational focus on learning, this means that disabilities arise from the interaction between an individual's skills and traits and the academic demands and support of the school. In most cases, learning is also affected within the individual. However, there are also cases where learning difficulties arise solely from barriers in the interaction with educational institutions. Learning is an active process of the individual, enabled and supported by the alignment between personal needs and the educational resources of the school. In an ideal scenario, a school would be able to adapt to the individual needs of all learners, thereby preventing learning difficulties. In practice, however, this is not always possible for a variety of reasons. Therefore, the goal of special education, with a focus on learning, is to remove barriers, provide access to education, and ensure equal participation. For example, children diagnosed with special educational needs related to learning often fail not only due to the educational content but also because of the socially and culturally shaped challenges of the school system.

Individual dispositions, such as cognitive abilities, work habits, and social skills, play a significant role in the school system. For predicting school success, diagnostics at the individual level alone, such as those in an expert report, only make sense in the context of school requirements and support. Therefore, the need for special education support is more a question of the school's support system than of the individual's abilities or impairments. Instead of describing a group of people, it is necessary to ask what tasks and activities are required, and which support concepts in the field of learning are effective for all children. This support is a dimensional concept, ranging from children with learning difficulties to those with special learning needs. Thus, this understanding would also encompass children with intellectual disabilities and those with giftedness, if they require support in school learning, particularly in subjects such as mathematics and German. This leads to the general question:

Are individual special education focuses still necessary? A thought experiment.

Similar to the development of terminology in various KMK recommendations, the scientific discourse has also shifted from a child-centered, individual perspective to a systemic and social perspective. This chapter was limited to the concepts of learning disability and special educational needs. However, the discourses on the concept of disability in different life circumstances and contexts are far more comprehensive (Bilgeri and Lindmeier, 2020).

In general, one must ask whether a specific technical term like 'learning disability' (Grünke and Grosche, 2014) is needed from a scientific perspective, given that such terms have always been defined within their corresponding practical contexts, such as the (school) system itself. Accordingly, the scientific term 'learning disability' was originally conceived as a working or provisional concept. Following Bleidick's perspective, the goal was to establish a distinct professional field and scientific discourse, thereby differentiating it from general educational science or psychology.

From the perspective of inclusion and with regard to the students, it must be questioned whether a distinct academic discipline is truly necessary for each special educational [focus of support](#) (e.g., learning, emotional and social development (ESD), visual impairment, hearing impairment, language, physical and motor development, intellectual development). These disciplines are often distinguished by specialized knowledge about a particular group of students or specific methods. However, this differentiation was already questionable within special schools in the past and hasn't become less complex in the context of inclusive education (see also Criticism Moser in Chapter 7). According to Möckel (2007), the success of special schools lies in offering themselves as a lower tier of the educational system serving as a form of external differentiation, rather than as a specialized institution for a clearly defined group. In pedagogical practice, the special education focus on learning has always involved a heterogeneous group of students with diverse needs. Similarly, everyday special education practice typically requires a combination of concepts and approaches drawn from several areas of special education, pedagogy, and psychology. **Inclusive education covers the full range of special educational focuses and includes all dimensions of professional expertise and support resources in special education.** A division based on specific categories of individuals or students is not necessarily the most appropriate approach. Instead, it is more beneficial to organize it around thematic areas and topics that align with the core principles of inclusive education, complemented by professional expertise in special education. These areas may include topics that support participation, learning, and quality of life for individuals with and without disabilities, such as life skills education, Universal Design for Learning, assistive technologies, Augmentative and Alternative Communication, and diagnostics and support in areas like reading.

The designated special education focuses within the school system are relatively unspecific, as categorization alone does not determine concrete resources or interventions. Consequently, these focuses can be replaced by a more general type of special educational support, characterized by specific measures or individualized assignment of resources, depending on the selected funding model (see Chapter 7).

A pragmatic approach could therefore be to allocate special educational needs on an **ordinal scale in three categories**: few, moderate, or many resources. This can be justified by the fact that special educational needs ultimately represent a funding category within the system. Furthermore, it is currently unclear what specifically is included within a certain labelling to a focus of support (e.g., intellectual development), as these labels often provide little information about the actual methods, support goals, or specific support process. However, an ordinal classification would still constitute a form of categorization, which may carry the risk of stigmatizing consequences due to the hierarchical staging.

Another form of special educational support could involve **reclassification based on defined measures** within the inclusive school system. These measures would have to be specified in terms of duration, target group, and type of support. The more specific the measures, the more categories would emerge. A simple model could define the form of support according to the type of intervention, such as individual and group support, as well as support implemented within the school:

- 1 Special educational needs support **as an individualized support offer** with specific measures, such as assistive technology, for children requiring specialized counseling and support (e.g., autism, vision impairment, hearing loss, or learning difficulties in a particular subject). These individualized measures are typically categorized as mobile use in special education for individual integration within the system.

- 2 Special educational needs support **as a group-specific support offers** with proven special educational measures, for example, learning support across multiple subjects, for behavior, or for language issues, primarily in an inclusive setting (or if truly effective as a separative measure).
- 3 Special educational needs support, **as school-specific support**, involves comprehensive, almost complete special educational assistance within an inclusive setting or as a separate school form. This could include permanent special education assistants, a curriculum with a different educational aim, and customized educational content, along with specific support measures. In the case of inclusion, this could be implemented for individual students or even for a group, with special education primarily taking responsibility.

If the special education focus areas are to be maintained, it would probably make sense to reduce and consolidate the funding priorities. While the focuses of learning, language, and ESD are currently combined in practice, the combination makes more or less sense depending on the assumed cognitive development of the students. For example, the focus of support for physical and motor development (KME) intersects differently with other focuses depending on the group of students, and combining it with other focuses may be more or less beneficial.

Assignment:

To what extent is the terminology of individual special education focuses needed?
What are the advantages and disadvantages of setting focuses?
Argue if you disagree.

4. Teaching

Didactics is the art of teaching. It has changed over time, along with the pedagogical concepts behind it (see chapters 2 and 3). Since the establishment of the first *Hilfsschulen* (remedial schools), there has been a strong emphasis on activity- and action-oriented learning. Physical work in workshops and school gardens was seen as shaping children's minds, while health was promoted through activities such as swimming in the school's own pool ([Wehrhahn, 1913](#)). Didactic concepts at that time were associated with weak senses and were often underdeveloped. Since then, teacher training has become more scientific, including in-depth theoretical and empirical examinations of didactics. Therefore, there are now many writings on didactics. Important expert perspectives on the focus on learning are presented below.

Klauer (1975) calls this didactics of prevention (*Didaktik der Vorsorge*) and summarizes the following principles:

- Reduced Content
- frequently change topics and teaching methods
- small-steps
- Slow progress
- specialized instructional strategies for individual difficulties and individual support

These didactic methods are aimed at helping children cope with individual learning problems. Currently, these methods are also found in special schools and in extracurricular [learning therapy](#). However, these methods are only effective if the learning problems stem from difficulties in information reception and cognitive processing. Traditional remedial school didactics and special schools for learning disabilities may create additional unfavorable conditions by reducing motivation, limiting joy in learning, or stigmatization.

The same is true for **Bleidick (1968b)**. He assumes a 'reduced educability of the cognitively disabled child'. Remedial school didactics, according to Bleidick, is characterized by supportive-corrective learning and educational assistance (Trümmer, 1980).

Begemann (1968) notes that a large proportion of remedial students come from lower social classes that do not align with the schools' middle-class culture. To give remedial schoolchildren a worldview, the school must create opportunities for interactions between students' inner worlds and the school environment, as well as the community in which they live. For Begemann, a critical issue is the overprotection in homes and workshops for people with disabilities, where children are no longer educated towards maturity and independence (Begemann, 1968).

Many aspects of the **didactics of prevention** (Klauer, 1975) can therefore also be found in modern classrooms and can be justified by newer concepts. For the special education focus on learning, whose students come mainly from non-educational backgrounds outside the German middle-class norm, the connection of didactics to the **inner world** of these students (Begemann, 1968) and their previous experiences and knowledge was a significant advancement. This approach led to a better understanding among the mostly middle-class teachers.

In the establishment of the first inclusive model schools (e.g., [Fläming Elementary School Berlin](#)), an inclusive didactics approach developed, focusing on **participation and individual support** (Feyerer and Prammer, 2003). Inclusive didactics incorporates individual living environments, students' limitations, and students' needs. It creates an environment that is as inclusive as possible by emphasizing social participation, classroom atmosphere, and the well-being of all students. Thus, special education didactics is more individualized than the didactics of the general education school.

Another way to distinguish didactic approaches is by whether they emphasize more instructional or more constructivist elements. Instructional approaches try to optimally present, demonstrate, explain, and practice educational content. In particular, the method of [direct instruction](#) has been shown to be effective for children with learning difficulties ([Grünke, 2006](#)). The teacher strongly controls and structures the learning process, breaking the content into many small learning goals. Although the word 'learning goal' is often used in practice, the term 'instructional goal' (Klauer and Leutner, 2012, p. 45) would be more fitting, as it is aimed at the teacher's instruction and not towards self-determined goals of the learner. In the USA, this is the predominant approach in special education, whereas in Germany, it is often applied without explicit mention and is hardly known in pedagogical practice. This approach is fundamentally based on the considerations of the [Cognitive Load Theory](#).

In the **constructivist approach**, the learning process is foregrounded. Learners are encouraged to explore and experiment with multiple solutions to a given task or problem. Methods of [discovery learning](#) and problem-based learning are used, with an emphasis on the child's independent development of solutions.

Both methods have their strengths and limitations and can be justified depending on the context, specific requirements, and learning objectives. The instructional approach shows strong results in learning therapy and in teaching skills, strategies, and sub-skills—such as learning techniques, reading fluency, or vocabulary acquisition. In contrast, the constructivist approach is better suited for exploring subject-specific content or engaging in deeper learning on particular topics. Depending on the topic, content, and skills involved, an effective learning environment incorporates both instructional and constructivist approaches to varying degrees. Consequently, methods may vary depending on the students' group and the teacher's role. While class teachers in elementary and middle schools in the USA are more likely to use constructivist methods such as inquiry-based teaching, which can be assessed with tools like the [Framework for Teaching \(FFT\)](#), special education teachers in inclusive settings tend to use direct instruction with individualized feedback (Jones et al., 2022).

It is the teacher's responsibility to design the most effective learning environment possible for each student individually, despite limited learning time. Specific support or therapy, such as performance games, social learning, perception training, or animal-assisted support, can be beneficial and stimulating for children with learning difficulties. However, interventions in separate rooms can take valuable time away from lessons in core subjects or joint activities. Furthermore, participation in certain measures can have a stigmatizing effect, for example, when only students facing challenges are placed in the mathematics training group.

Depending on both the implementation and the child's needs and interests, the same methods can have either a positive or negative effect on academic learning and social participation. Simple phrases like 'the more ..., the ...' should be viewed critically. Therefore, methods must be examined on a case-by-case basis and evaluated in relation to the intended learning objectives. The primary focus should remain on the optimal academic and social development of each individual child, ensuring full participation and social inclusion.

Inclusive schooling requires high-quality, accessible teaching that incorporates both structured and open formats to support learning for all children. However, high-quality instruction alone may not always be sufficient to address the learning needs of students with special educational requirements. For these learners, individualized approaches are essential. This is referred to as [individualized learning](#), where each student's progress is the primary focus. Teaching is therefore more open in this context and involves multiple levels of differentiation, similar to the principles of adaptive teaching. While instruction and the learning environment can be designed jointly for all students, teachers must remain attuned to each student's individual learning development. Therefore, such interwoven

learning systems require a hierarchical competence framework that allows each child to learn at their own level. The child can decide when the learning unit is completed and demonstrate their knowledge through a final test or portfolio. Individualized learning is especially suitable for foundational skills in performance-heterogeneous learning groups. Given the performance heterogeneity in special schools and inclusive classrooms, special education didactics always necessitates a significant focus on individualized learning.

4.1 Reference norm orientation

Regarding the implementation of didactics and teaching, a key question is how students receive feedback on their achievements. Teachers can provide feedback in various ways and through different approaches. Often, feedback is based on test results and grades. Feedback not only affects a student's learning motivation and academic self-concept (Martschinke and Frank, 2002) but also influences social status and participation within the class and the development of intellectual humility (Huber et al., 2015; DeVries et al., 2018; DeVries et al., 2025). These factors correlate and influence each other. Consequently, students who receive positive feedback are more likely to like going to school and find learning more enjoyable. Students with negative feedback are more likely to become demotivated, and there is a risk that a negative academic self-concept will develop.

According to [Rheinberg \(2006\)](#), there are three reference norms: Individual, social, and criterion-based. An **individual** reference norm examines a person's learning progress over time, while the **social** reference norm compares the person to a group at a specific point in time. The **criterion-based** reference norm evaluates a person according to a fixed external criterion, such as the attainment of a skill.

In contrast to teachers, parents usually use a purely individual reference norm, as they usually only have their own child's past learning achievements to compare with. They observe their child's development over time but have limited access to social comparisons or standardized criteria in their daily lives, unlike teachers.

- *'My son reads much more fluently than he did a month ago.'* (Individual reference norm)

Teachers, on the other hand, usually teach in a classroom setting and thus receive immediate performance feedback from multiple students.

- *'Ali reads faster than Peter and Rolf. Karl is really reading very slowly compared to his classmates.'* (Social reference norm).

Only through standardized observation and comparison based on clear criteria can teachers apply a categorical reference standard.

- *'Ali reads 30 words per minute and has a very good reading fluency for a first grader.'*
- *'Rolf has a cardinal number concept and can count to 20.'*

In general, all reference standards are necessary for assessing students' achievements. Effective and inclusive teaching, in particular, should positively motivate all students and provide performance feedback based on individual learning progress. According to [Krawinkel et al. \(2017\)](#), social participation in the classroom was more positive when in a supportive social climate and when the individual reference norm was applied. Therefore, it is recommended that students with learning difficulties primarily use the individual and criterion-based reference norms when providing feedback. Thus, they collaboratively work toward academic goals and successful graduation. This is particularly achievable in full-day schools that provide multi-level, individually tailored, and engaging learning opportunities ([Schurig and Gebhardt, 2020](#)). In practice, teaching is described as 'skill-oriented teaching and teaching with differentiated objectives', yet it typically uses the same sample for all children based on the social reference standard for assessment.

Assignment:

Describe the approaches towards teaching in your own words.
Compare them to a different country in a few sentences.?

4.2 Autonomy or assistance as a challenge for special education

Determining the extent of case-by-case intervention, guided by the phrase 'as much as necessary and as little as possible', is a key educational challenge. Even with targeted differentiation and individualization, educators must find the right balance between challenge and support to enable learning success, prevent frustration, and maintain social inclusion.

Students with special educational needs inherently require various forms of support, but typically, no one wants to feel singled out or different. Similarly, a person with a disability does not want to be placed in an 'atypical situation' ([Capovilla et al., 2018](#)), where their difference is unnecessarily emphasized. Supporting individuals with disabilities, therefore, requires a high degree of sensitivity. It is important to recognize when support is helpful and when it may endanger autonomy or self-determination. Dino Capovilla (2021) examines this issue from the perspective of a person with a disability. He argues that well-intentioned help can sometimes restrict autonomy or self-determination. In his book, on page 110, he recounts an experience in an aid shop where he attempts to purchase a cane for the blind. The saleswoman unsolicitedly informs him that he is holding the cane incorrectly and asks whether he has completed orientation and mobility training. When he negates this, she initially refuses to sell him the cane. Only after threatening to buy it online can Capovilla finally obtain the cane. Capovilla refers to this as a 'habitually embedded professional intervention logic' (Capovilla, 2021, p. 111), in which all possible aids must be provided and are automatically legitimized. The question of whether he needs such training, whether it is necessary for his case, or whether he even wants to participate in such training was not considered relevant by the seller.

In addition, any pedagogical action or the mode of action of the support system can have a stigmatizing effect by highlighting the person and marking them as in need of help (Cloerkes and Markowetz, 2003). Therefore, interventions that complicate transitions to life beyond these systems (or even prevent them) should be viewed critically. This is particularly true in the case of "safe spaces" style support systems. This challenge exists across all systems of special education support, as these usually end with school graduation or with the achievement of a vocational qualification, particularly within the focus on learning difficulties. It is important to consider whether job-relevant skills and the realization of self-determination can be better learned in an inclusive or a segregated system (Gebhardt et al., 2011). Thus, in a "safe spaces"- style support system, there is a risk that many learning challenges may not arise. Experiencing such challenges earlier could help prevent students from struggling on their own in later professional life.

Special educational support not only has advantages, but, like any pedagogical action, can also have disadvantages or negative consequences. The pedagogical benefit of professional action can be lost not only through insufficient or inappropriate support but also through excessive support.

Assignment:

What does Capovilla mean by an 'atypical situation'?
What do the terms self-determination and autonomy mean?
What do they mean for the implementation of special education support?

5. Inclusive Education

Since the ratification, school inclusion has been mandated for all educational institutions (KMK, 2011). This educational mandate ensures that all students, with and without disabilities, learn together in the same environment. It guarantees both the quality and scope of the necessary support and establishes cooperation among all involved individuals and institutions, enabling special education, counseling, and support services to enable high-quality joint learning (KMK, 2011). Especially, Article 24 II of the UNCRPD makes specific demands on the school system:

[UN Convention on the Rights of Persons with Disabilities \(2006\)](#) Article 24 II

2. In realizing this right, States Parties shall ensure that:
 - a) Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability;
 - b) Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live;
 - c) Reasonable accommodation of the individual's requirements is provided;
 - d) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education;
 - e) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.

The article shows that inclusion goes beyond merely placing students with special educational needs in regular schools. Thus, Article 24(2)(a) refers to the absence of exclusion, Article 24(2)(b) to access, and Article 24(2)(c) to reasonable accommodation. It is not enough to provide the same resources and measures for students with special educational needs as for all students; the necessary support must be provided in accordance with paragraph 2(d), and, according to paragraph 2(e), individually adapted and **effective measures** are required to ensure participation. Only these additional measures in the inclusive school provide the foundation for effectively preventing disadvantages. Therefore, the UN Convention on the Rights of Persons with Disabilities reiterates, on the one hand, universal human rights for all people and, on the other hand, the necessary additional support measures for persons with disabilities.

In addition to school development, school inclusion is often defined by participation, exemplified through social participation ([see also Scheer's video on 16 November 2020](#)). Therefore, according to the interpretation of the UN CRPD, school inclusion can be viewed on three levels:

- Accessibility to educational institutions and content (see also UNCRPD Article 9)
- Social participation, well-being, and involvement
- Learning, development, and individualized effective support measures

Although the UN CRPD itself is not legally binding as federal law for the education legislation of the federal states, it nevertheless serves as a significant driver of the implementation of school inclusion. The Conference of Ministers of Education and Cultural Affairs has also addressed the realization of school inclusion. According to the recommendation of the KMK (2011), people with disabilities must be placed on an equal footing with people without disabilities when choosing a school, and at the same time, appropriate measures must be taken to ensure that all students can assert their right to personal development and participation in school life. In principle, however, there are different approaches to the interpretation of the UN CRPD. For example, [Wocken \(2015\) criticises the fact that Bavaria views special schools as inclusive school locations](#) (school inclusion profile).

However, the UN itself monitors the implementation in individual countries and is dissatisfied with Germany on this point. For example, it criticizes the preservation of special schools (UN,[2023](#)).

Assignment:

Why are there so many terms, and what do they mean? Integration, Inclusion, Participation, joint teaching, Exclusion, Separation, Cooperation classes.

What is the UN CRPD (2006), and what does it mean to be ratified?

What does equal opportunities mean?

What does Article 24(2) say?

Where is it established that schools in Bavaria are inclusive (see [case book](#) Lutz and Gebhardt)? Which criticisms of the implementation of inclusion in Bavaria are mentioned by Wocken (2015)?

The publications currently available describe inclusive teaching as teaching in which students with and without special educational needs learn together in the same classroom. Support for students with special educational needs is provided in a differentiated manner, but only to a limited extent in separate rooms. The goal is to provide optimal support for all children based on their individual developmental stage. Therefore, didactics are differentiated, individualized, and characterized by open cooperative forms of learning (Feyerer, 1998; Heimlich, 2004).

Inclusion aims to ensure that every student with a disability has the right to participate fully in all areas of life. Therefore, another important aspect of school inclusion is that joint lessons are held close to the student's home (Heimlich, 2019), and that students with disabilities have the opportunity to be included in their local community's social life. This is only possible to a limited extent when education takes place in residential institutions or special support centers that require long commutes. The fundamental idea of schooling close to home is based on the [principle of normalization \(Nirje, 1994\)](#). As a central maxim for social services and educational institutions, this principle aims to make the lives of adults with cognitive impairment as normal as possible at all stages of life. These include, for example, a normal daily rhythm, the separation of work, leisure, and living, a right to self-determination, and rights in the context of social conditions (Nirje, 1994). The idea of normalization was developed in the 1950s as a counter-proposal to the large institutions. It closed residential care facilities in which people with mental disabilities or mental illness were accommodated. In particular, the representatives of the principle of normalization criticized the fact that, in these institutions, individuals were largely socially isolated and not afforded privacy (Heimlich, 2019). The central idea of normalization is that society and its institutions must strive for the inclusion of people with disabilities. For inclusive schools, this means the school must adapt and change to create 'normal' conditions for students with disabilities similar to those experienced by students without disabilities.

Therefore, inclusion cannot be understood solely as a task of school organization; it also represents a social mission. In a broader sense, inclusion can be considered based on four key elements (Ainscow [and Miles, 2009](#); [Lindmeier and Lütje-Klose, 2015](#)):

- Inclusion is a process that requires continuous effort to improve how we handle diversity.
- Inclusion identifies and removes barriers.
- Inclusion requires the presence, participation, and success of all participants, and does not exclude any group.
- Inclusion highlights and supports learners who are particularly at risk of exclusion, marginalization, and underachievement.

Especially the fourth aspect is a key requirement of special education ([Gebhardt et al., 2018](#)), as otherwise individuals who are particularly at risk may be left behind in

educational measures intended for all. Thus, a *pedagogy for everyone* does not mean the average learner, but also refers to marginal groups. So, “everyone” means everyone, and not merely the “average” learner. The pedagogical intention is always directed at certain defined groups of people. Only when a didactic or pedagogical measure or a learning environment is sufficiently differentiated to allow both the fastest and the slowest to participate, can a measure be described as inclusive.

For pedagogy, this means that inclusion must not only [create equal starting opportunities and equality](#), but also ensure [equity](#) in learning and participation. Without adequate support measures, assistive technology, and accessible joint teaching, at-risk groups will be left behind even when starting from a similar starting level due to personal and environment-related impairments or disadvantages.

In summary, there are two different definitions of inclusion:

- Inclusion in the narrow sense or as a so-called ‘narrow term’ refers to individuals with disabilities or special educational needs.
- Inclusion in the broad sense or as a so-called ‘wide term’ refers to all marginalised groups or to all groups of people.

5.1 Stage model of exclusion to inclusion

Inclusion is often presented as a step model to make the different stages more understandable. The following step model by Sander (2004) ranges from the level of *exclusion* to the level of *diversity as the normative case*. This model has been supplemented with information from the previous chapters:

At the *exclusion* stage, students with support needs or disabilities are prevented from attending school. Until the KMK’s recommendation in 1960, this was particularly the case for students with intellectual disabilities, who were considered incapable of education.

In the stage of *separation*, students with support needs or disabilities attend their own auxiliary, special, or special education schools, as general schools are unwilling to accept these children. The special school form is seen as the optimal place for support. This stage has persisted since the establishment of the first special facilities and continues to this day.

At the level of *integration*, students with support needs or disabilities attend regular schools. Support is provided only after a diagnosed need for special educational support. Depending on the type of needs, the curriculum, the number of special education teaching hours, and any necessary aids, the curriculum is determined. This stage was first made possible by the KMK’s 1994 recommendation and continues to be in practice.

At the *inclusion* stage, all students attend regular schools and are supported individually within the community according to their strengths and weaknesses. Pedagogical measures are available to all students, and no complex diagnosis with expert reports is required to implement additional support measures. As outlined in Article 24, Paragraph 2(e) of the UNCRPD, individually adapted and effective support measures are provided for high-risk students with special needs to ensure equal opportunities. This level has been partially achieved through various inclusive model projects, such as the Rügen Inclusion Project (RIM; Hartke, 2017a).

At the highest level, *diversity* is considered the *normative case*. Therefore, inclusion is only achieved if full social participation is the rule. Achieving the fifth level of *diversity as the normative case* would require not only an inclusive school but also an inclusive society in which the goals of this level of inclusion are realized in everyday life. In a society this inclusive, discrimination and group-based misanthropy would not occur (Heitmeyer, 2006). According to many scholars, exclusion and prejudice have a long tradition in our culture. Haeblerlin (2005), for example, interprets the level of diversity as a normative, but utopian, goal in professional circles.

Video:

[Development of the special school in figures](#)

Assignment:

Describe the step model and determine where the school system is at right now according to your personal experience. In your opinion, what would it take to reach the next level?

Inclusive lessons are needed for students with special learning needs. In the classroom, a distinction can be made between preventive and remedial support (Wittich and Kuhl, 2021).

- Preventive support measures are aimed at all learners and are initiated before any difficulty in the learning process is identified. This strategy seeks to prevent learning difficulties from arising in the first place through effective teaching.
- Remedial support measures, on the other hand, specifically address an identified difficulty to remedy it (Wember, 2013). In remedial support, basic skills are primarily targeted and developed in depth to create better conditions for further learning. Thus, the majority of special education work can be described as remedial, as it occurs only after a special educational need has been identified. In the narrower sense, remedial support focuses directly on the most manifest and thus most urgent disturbance or difficulty.

The step model provides an overview that illustrates the historical development of inclusion as a concept and how it should evolve moving forward. However, since this is a simplification, it is challenging to clearly delineate the stages in specific cases. The step model, ranging from exclusion to inclusion (Sander, 2004), addresses both the attitudes and actions of the teachers involved and the regulations and policies of the school system. It was particularly shaped by historical contexts. The boundaries in the area of integration are blurred. Therefore, a more differentiated step model, based on observable criteria and adapted to the diverse possibilities within the modern school system, would be easier to apply. In the following, an **extended step model from exclusion to inclusion**, including new terms, is briefly outlined. Other distinguishing features have been added (Capovilla, 2021; Gebhardt, 2015):

- **Exclusion:** Individuals with different characteristics (outside the norm) are not allowed to attend school.
- **Separation:** Individuals with different characteristics are placed in special schools that are attuned to those characteristics.
- **Placement in special classes:** Individuals with atypical characteristics may attend general schools, but only in separate classes, following their own curriculum. Shared lessons or breaks are limited to specific times. The school system's laws and regulations continue to maintain a clear separation between special education and general education.
- **Placement in the general school:** Individuals with different characteristics may attend general schools and follow their own curriculum. There is joint instruction, but it is only partially adapted to their specific needs. The laws and regulations of the school system still uphold the separation between special education and general education, though they permit mobile support.
- **Shared teaching with partial participation:** Persons with different characteristics may attend a general school. Students learn according to their own curriculum. There is joint instruction, accessible to a person with different characteristics. This is supported by teachers and assistive technology, which aim to compensate for the deviating feature through **remedial** measures. The laws and regulations of the

school system still uphold the separation between special education and general education, though they permit mobile support.

- **Joint teaching with the aim of full participation:** Persons with different characteristics may attend a general school. You learn according to your own or the general curriculum. There is joint instruction, which is **fully accessible** to the person with different characteristics. Teacher support is both preventive and remedial, ensuring equal opportunities. The laws and rules of the school system support inclusion in the general school and promote decentralized, inclusive support systems.
- **Teaching together in an open school:** All individuals are recognized, and deviant traits are not diagnosed. The school is no longer a therapy institution; it focuses on questions of school and social development using preventive methods. All children learn according to their own general but adaptive curriculum. Disability-specific content and assistive technology are used cautiously, only when they increase accessibility and participation without creating stigmatising tendencies. All teachers involved accept diversity as the norm.
- **The open school with diversity as the norm: All persons are recognized individually.** There is no longer a curriculum with special education goals, and these goals are achieved individually in different ways. For each student, there are individual, effective, and evidence-based support options to ensure social and educational development. All pedagogical measures are preventive and remedial only in justified exceptional cases. All teachers involved understand diversity as the rule. Therefore, personal characteristics are included only in relation to didactic and pedagogical decisions aimed at achieving the educational goals jointly defined with the person and the parents.

Assignment:

Discuss the four key elements of inclusion according to Ainscow and Miles (2009).

What does "School for All" or "Diversity Education" mean?

Discuss the narrow and broad concepts of inclusion.

What is the difference between preventive and remedial support?

How does the extended step model differ from the exclusion to inclusion model from the simple step model?

Excursus New school models for inclusion:

Inclusive schools are usually characterized by overcoming traditional teaching structures that rely on 45-minute lessons and by integrating team structures into their everyday lives. There are very different ways to do this, which are taken in practice.

In award-winning [schools](#), in addition to very committed teachers, one often finds a focus on project-based teaching to ensure an in-depth examination of a topic and subject matter, and on the other hand an individual, structured program, mostly in the core subjects of German and mathematics, with support systems for children with special needs to enable and ensure basic skills for all students. Inclusive schools, therefore, usually have to offer several different programs and interventions and interlink them to successfully support all students in their learning. A fixed 45-minute lesson structure, with learning content delivered through lectures and assignments with the same tasks for all students, is no longer up to date.

For more information, see: <https://www.deutscher-schulpreis.de>

Note:

Inclusion is more than school placement. Rather, it is about accessibility, participation, development and social participation.

5.2 Tasks of special education teachers

The tasks of special education teachers have become more diverse as a result of the expansion of the inclusive school since the time of the support school system. During that time, teachers had to conduct diagnostics and write reports to admit children to the support schools. After reforms, the essential activity of special education was to teach teachers in special education schools to promote students individually. However, in the most inclusive systems, the general education teacher does class management, and special education teachers are now required to consult, network, develop support concepts, diagnose, and write applications for individual children, the whole school, or educational regions. These tasks can vary greatly depending on the school system. Melzer, Hillenbrand, Sprenger, and Hannemann (2015) confirmed this by interviewing 1,000 special education teachers in Hesse. All special education teachers stated that teaching is still one of their most important tasks. However, decentralised, inclusive institutions place greater emphasis on counselling.

Especially in inclusive schools, planning, pedagogical expertise, and pedagogical measures take on a new, more collaborative role. Only when all team members are informed about the needs and abilities of all students and also have a connection to the special educational tasks and activities, can cooperation be successful. Special educational support by itself, remedial, in a separate room, and concerning specific school subjects, without anchoring in regular teaching, is therefore not very effective. In order to achieve the teaching and funding goals, joint planning and coordination of different methods is more effective. This is more feasible in elementary schools with permanent small teams and sufficient teacher hours than in secondary schools, where larger teams with many specialist teachers are common (Gebhardt et al., 2015).

Based on various studies and models (Gebhardt et al., 2015; Scruggs et al., 2007), various forms of organization for team and co-teaching in inclusive classes between special education and class teachers are described below, to give an overview of the multitude of activities:

- **Consultation model:** The special education teacher advises the class teacher and diagnoses and clarifies questions about possible intervention measures for individual students.
- **Individual funding model:** The special needs teacher supports individual students with special needs outside the class or in their own class.
- **One Teacher – One Assistant** is a form of the team teaching model. Here, the special education teacher supports the class teacher in the classroom and monitors participation and accessibility, especially for students with support needs. The planning of the lessons can, but does not have to, be done together. This model is also known as the co-teacher model.
- **Team-teaching** means that both teachers plan and guide the lessons on an equal footing. In this model, the special education teacher is involved in and responsible for the teaching of all children.

- In the **Network Model**, the special education teacher primarily serves as the coordinator for inclusive school development and the design and implementation of inclusive or remedial measures in and out of the classroom.

Assignment:

Describe the tasks of the special education teacher in inclusion and special school. What organizational forms do you know from your internship?

5.3 Statistical data on school inclusion in Germany

The majority of students with special educational needs currently attend a special education school, although the proportion of students with disabilities in joint teaching is continuously increasing (Bildungsberichterstattung, 2014). This change from a segregated school system with several types of support schools to a school system with school inclusion poses a major challenge for the German school system (KMK, 2011), as existing structures and buildings must be changed, and new forms of cooperation must be established.

An overview of the number of students with and without special educational needs and their quotas can be found on the [homepage of the KMK](#). [Aktion Mensch](#) prepares the KMK data on a map of Germany and thus provides a simple overview. The data is collected and passed on by the individual ministries of culture. As such, they are not reviewed by any independent institution outside the school system, raising questions about inclusion. Specifically, it is unclear whether a student is taught inclusively. Currently, an inclusive student should attend the regular school and participate in the joint lessons for 50% of their school day. Whether the 50% criterion really applies is rather questionable. Another uncertainty is that the need for special education support in some federal states is only diagnosed and reported from a higher grade level. The data are presented and processed in data documentation and individual data collections for the special school and the general school.

Assignment:

All important quotas for the [2023/2024 school year](#) can be found in the data collection, Special Pedagogical Support in General Schools without Special Schools 2023/2024. Table 2 and page 8 of the linked document show the numbers and odds.

Compare the different special education focuses in special schools and general schools. Why are there differences? Find possible explanations and justifications.

The special education support rate is the proportion of students with special education support needs compared to all students. In Germany, 7.5% of students had special educational needs in the 2023/2024 school year. The rate of is made up of various special educational needs. The highest of which is FS learning with 2.96% compared to all students, followed by the focus on socioemotional development (ESD). In practice, the distinction between individual needs for support is not always clear, making it difficult to interpret such data. Overall, the share of learning and ESD in special education support needs is highest. That is, it is the rather softer, not immediately apparent support needs, which are more likely to arise in a situation or are increasingly systemic, that play a greater role compared to severe multiple disabilities, the need for support mental development, or specific impairments in vision, hearing, or in the area of physical and motor development.

Table 2*Special needs support rates for the 2023/2024 school year, according to KMK data*

	Percentage of students with SEN in		SEN %	Special school %
	Special schools %	Regular schools %		
Total	55,9	44,1	7,50	4,2
FS Learning	47,8	52,2	2,96	1,4
Other FS Together	61,2	38,8	4,54	2,8
FS See	48,7	51,3	0,12	0,1
FS Hearing impairment	47,9	52,1	0,26	0,1
FS Speech	50,0	50,0	0,78	0,4
FS KME	64,3	35,7	0,50	0,3
FS intellectual development	87,0	13,0	1,40	1,2
FS ESD	42,4	57,6	1,36	0,6
FS Cross-cutting	85,0	15,0	0,07	0,1
FS LSE	100,0	0,0	0,02	0,0
FS not assigned yet	26,9	73,1	0,03	0,0

Assignment:

Describe the table in your own words. What are the most important parts?

What is the Special Education Funding Rate?

Define the funding priorities in your own words.

Why are there different funding rates?

The special school attendance rate is the proportion of students attending special schools compared to all students. These students are taught predominantly in separate schools or in designated special education classes within a general school. Aktion Mensch considers this rate an exclusion rate, as these children are excluded from general schools.

As an integration rate or inclusion rate, one can either see the proportion of students with special educational needs in the general school relative to all students, or the percentage of students with special educational needs in the general school relative to students in the special education school.

Among all students, 7.2% have special educational needs, divided between those attending a special education school (4.2%) and those attending a general school (3.0%). In Table 2, the KMK statistics also show the percentages of students with special needs for each group. For example, 42% of all students with SPU attend a general school, while 58% attend a special education school. The proportion of students with special educational needs is similarly high across most needs for support in inclusion. The rate is just over 50% in FS ESD and learning, and the rate is around 50% in FS vision, hearing, and language. The inclusion rate is slightly lower in the FS KME at 35% and in the FS Overarching at 31%.

The exception is FS mental development, with an inclusion rate of only 13%. For this group, there are still many special schools that usually offer additional therapeutic and medical services beyond the school. On the other hand, an inclusive school for this group of students would also need to adapt further to ensure accessible classrooms and an inclusive, full-participation approach. The statistic only shows the current view of the school system, not its future possibilities.

However, the need for learning support varies across the federal states. For example, the support rate for special needs education in 2009 ranged from 1.0% in Bavaria (BY) to 4.0% in Saxony (SN). In 2018, this ratio ranged from 0.1% in Bavaria (BY) to 3.3% in Saxony (SN) ([KMK, 2020](#)). For example, Bavaria jointly identifies the need for support in learning, language, and emotional and social development in the special education support centres as a category LSE, which is listed in the KMK Statistics under the heading of overarching funding priority. The determination of the need for special pedagogical support lies within the purview of each federal state. Since the criteria for awarding or determining the need for special education support are usually neither formally nor uniformly regulated, diagnosed need for support is not sharply defined. Therefore, one should use such statistics only to identify current and past quotas for special educational needs and to estimate approximate levels of inclusion.

Assignment:

What is the Inclusion Rate?

How does the KMK measure students in inclusion?

What is the support school attendance rate?

Why are the quotas different between the federal states?

When comparing historical data, the rate of students identified with special educational needs has steadily increased—from 1.6% in 1955 to 4% in 1976, 5.8% in 2007, and 7% in 2018 (KMK, 2019). In the 1970s, political representatives and special education associations advocated expanding the special school system, as the demand for additional support was perceived as significantly higher than available resources. A similar dynamic can be observed today. While the special school system is no longer being expanded, there is a growing emphasis on inclusive education for students with special educational needs (SEN). If the identification of SEN were based on a stable and objective set of criteria, one would expect the rate to remain relatively constant over time. However, this has not been the case. The steady increase in the support rate suggests that, without reform in how resources are allocated, the number of students diagnosed with SEN and, consequently, the demand for support will likely continue to rise in the future.

5.4 Statistical data on school inclusion in Europe

A particularly distinctive feature is the existence of separate schools for specific types of disabilities or funding priorities. Historically, Germany introduced special classes, originally called auxiliary schools, which, due to the relatively dense population in urban areas, quickly evolved into entirely separate schools, such as schools for students with learning disabilities or for deaf students. This structural differentiation parallels Germany's general education system, which is also divided into multiple school types (e.g., academic, intermediate, and lower secondary school). In contrast, many other European countries, especially those with sparser populations, opted to create special classes within general schools, accommodating students with various support needs in a more integrated setting. From the 1970s onward, countries such as Finland and Italy began placing increasing emphasis on school inclusion, although their approaches differed significantly. For example, Italy has dissolved all segregated institutions for people with disabilities and sees special education as a relatively small part of regular education, while Finland has reformed its school system and implemented a multi-level support system.

Compiled comparisons of inclusion and special education support can be found on the European Agency for Special Needs and Inclusive Education's homepage. For the 2016/17 school year, there is a [data by a country comparison \(2018\)](#). While the 2012 country report still distinguished between special classes and special schools, only special school attendance rates and an inclusion rate for all students are now collected and presented in Table 3 for a simpler overview of the very different criteria for special educational needs.

Table 3

Percentages of students diagnosed with special needs and their type of school compared to all students, according to data from the European Agency for Special Needs and Inclusive Education, 2018.

	SEN %	Form of school		
		Special schools	Special education classes in the regular school	Inclusive
Belgium	7.50%	6.07%	-	1.43%
Germany	5.45%	3.09%	-	2.37%
Finland	7.45%	0.73%	3.81%	2.90%
France	3.39%	0.58%	0.81%	2.00%
Italy	3,55%	0.03%	-	3.51%
Austria	3.34%	1.04%	-	2.30%
Switzerland	3.86%	1.96%	1.90%	-
Czechia	10.16%	2.61%	0,64%	6.95%

Video:

[Transition to inclusion in Styria](#)

Assignment:

What is the European Agency?

What is the situation regarding inclusion in Europe?

Where are the differences?

In the video, the situation in Austria is briefly outlined on the basis of the following articles:

[Buchner, T. and Gebhardt, M. \(2011\). *On school integration in Austria*](#)

[Gebhardt, M., Krammer, M. and Rossmann, P. \(2013\). *On the historical development of school integration in Styria. Journal of Medical Education, 64\(6\).*](#)

[Gebhardt, M., Schwab, S., Krammer, M. and Gegenfurtner, A. \(2015\). *General and Special Education Teachers' Perceptions of Teamwork in Inclusive Classrooms at Elementary and Secondary Schools. Journal for Educational Research Online, 7\(2\), 129-146.*](#)

[Gebhardt, M., Schwab, S., Reicher, H., Ellmeier, B., Gmeiner, S., Rossmann, P. and Gasteiger-Klicpera, B. \(2011\). *Attitudes of teachers towards the school integration of children with special educational needs in Austria. Empirical Special Education, 3\(4\), 275-290.*](#)

Please read the article [Gebhardt, Krammer and Rossmann \(2013\)](#) and discuss the differences between Styria and a German state of your choice.

Take-home message:

Different countries have different definitions and criteria for special education support or disability, so the figures are important indicators, which can only be interpreted in a limited way to reflect reality.

Excursus Open Access articles about information about other countries:

Framework conditions influence the funding rates in Switzerland:

[Wicki M. T. and Antognini, K. \(2022\). Effects of the regulatory framework on funding rates in the context of increased special education measures. Quarterly Paper for Curative Education and its Neighboring Territories, 91\(4\), 300-316.](#)

Composition of integration leave in Austria:

[George, A. C. and Schwab, S. \(2019\). Austria's integration classes: Skill deficits due to social disadvantage? A comparison between integration and rule classes.](#)

Historical development of inclusion in Italy:

[Ines Dario et al. \(2020\). Inclusive education in Italy: Historical steps, positive developments, and challenges.](#)

6. Empirical findings on special education in special schools and inclusive settings

The following section briefly highlights selected studies and findings on school performance, self-concept, and well-being. The number of empirical studies has increased significantly in recent years, so this chapter can only provide a limited overview. Readers are therefore encouraged to explore the topic further on their own.

Assignment:

English:

Get an overview for yourself: Enter various keywords like 'Inclusion', 'Support needs'/'Special educational needs', 'Special education' with further links such as 'Performance', 'Skills', 'Participation' in the [FIS Education database](#) and search for interesting studies.

German:

Get an overview for yourself: Enter various keywords like „Inklusion“, „Förderbedarf“, „Sonderpädagogik“ mit weiteren Verbindungen wie „Leistung“, „Kompetenz“, „Soziale Partizipation“ in the [FIS Education database](#) and search for interesting studies.

What studies have you found?

An earlier source on the subject:

[Haeberlin, U. \(1991\). Integration of low-achieving students](#)

6.1 School performance of students with SEN

Empirical findings from recent decades indicate that students with special educational needs, particularly in the area of learning, tend to achieve better academic outcomes in inclusive settings than in separate classes or schools (Baker et al., 1995; Carlberg and Kavale, 1980; Lindsay, 2007). Similar results were also reported in early studies on integration from German-speaking countries (Haeberlin et al., 1991; Merz, 1982; Tent et al., 1991). In professional life, students with special needs who attended inclusive settings achieved better academic performance and vocational qualifications than those from special schools. Although segregated settings include a higher proportion of students with more severe disabilities, this variable was accounted for in the analysis (Myklebust, 2006). The results of a Norwegian longitudinal study are particularly noteworthy. Among 592 students with special educational needs in integrative classes, academic performance more frequently met curriculum standards, and the early school-leaving rate was lower than in special classes. These outcomes were not influenced by the degree or severity of the students' disabilities (Myklebust, 2002). Similar findings on joint teaching were reported in a Swiss study involving students with intellectual disabilities. In a parallel longitudinal design, students with intellectual disabilities in inclusive settings performed significantly better in Mathematics and German than those in special schools ([Sermier Dessemontet et al., 2011](#)).

Empirical findings suggest that school inclusion can have a positive impact on academic performance. However, results concerning self-concept and social participation tend to be neutral or slightly negative. A common limitation of these studies is that many focus on individual European countries or specific German federal states. Nationwide, standardized assessments, such as the nationwide IQB Federal-State comparison of children with special educational needs at the primary education level (Kocaj et al., 2014), are still the exception.

The central issue in comparing special schools with inclusive education is whether both systems are equally available or are being further developed. This is often not the case, as states typically choose one system for organizational reasons. In inclusive systems, such as in Styria, there is no fully developed special school system but only individual centers with small, mixed-age classes ([Gebhardt et al., 2013](#)).

In general, the current research suggests that inclusive education has a neutral to positive effect when compared to segregated schooling. It remains methodologically challenging to determine an exact value of the effect size. In their meta-analysis, [Krämer et al. \(2021\)](#) saw a moderate positive effect ($d = 0.3$) for inclusive education for students with general learning difficulties. [In their video \(34:02\), David Scheer and Markus Gebhardt discuss](#) the problems posed by different definitions, diagnostics, and models of inclusion and segregated support across different countries and states, as well as by the varying instruments used in the studies. Therefore, it is advisable to interpret the effect size of $d = 0.3$, as a rough guideline. Even complex economic analyses using data from St. Gallen suggest that inclusion is the preferred model regarding performance tests and later employment in professional life (Balestra et al., 2020). Given that most studies report neutral to positive outcomes for inclusive models, the key question becomes which specific models, methods, and practices within inclusive education are most effective for different student groups in supporting both academic achievement and social development.

6.2 School performance of students without SEN in inclusive classes

[Gebhardt et al. \(2015\)](#) studied the academic skills of students without special educational needs in both inclusive and regular class settings, as part of an additional survey of ninth-grade classes in the PISA 2012 study. In successful inclusive lessons with students who have SEN, students without SEN should also receive optimal support. However, a common concern voiced by both parents and teachers is that students without special educational needs may not learn as effectively in an inclusive class setting as they would in a regular classroom without students requiring support ([Schwab et al., 2015](#)). The results indicate that the average competence of students in integrative classes, across the investigated school types, does not systematically differ from that of students in regular classes, nor do the characteristics assessed through the questionnaire, such as school atmosphere, sense of belonging, and frequency of school truancy. Only in certain areas do some inclusive classes show significantly higher or lower values compared to regular classes ([Schwab et al., 2015](#)).

It can therefore be stated that inclusive teaching has no negative impact on the school performance of students without special educational needs. In several studies, no difference in performance was found between inclusive and parallel classes (Haeberlin et al., 1991; Feyerer, 1998; Sermier Dessemontet et al., 2011).

6.3 Self-concept, well-being, and participation

Regarding self-concept, previous studies found no difference between inclusively taught students and students in special schools (Bear et al., 2002). However, in terms of school performance-related self-concept, students with SEN tend to score lower. While these students are aware of their learning difficulties, this awareness does not affect their global self-concept (Bear et al., 2002). Similarly, no negative findings have been reported regarding inclusion in terms of social or emotional self-concept (Rossmann et al., 2011; Sauer et al., 2007).

Compared to the statements on self-concept, the responses from students with special educational needs regarding friendships and social participation in class are much more critical. Students requiring support have fewer friends, feel less accepted, and are more likely to see themselves as victims of aggressive behavior than students without special

educational needs (Huber, 2006; Klicpera and Gasteiger-Klicpera, 2003; Pijl et al., 2008). The Bielefeld Longitudinal Study on Learning in Inclusive and Exclusive Support Arrangements in NRW (BiLieF) found no differences between inclusive and special schools but identified the attitudes and didactic-methodological approaches of teachers, as well as class composition, as influencing factors at the classroom level. At the individual school level, factors such as pedagogical attitudes among staff and school leadership, along with cooperative structures and processes, were also important ([Lütje-Klose et al., 2018](#)). Similarly, the study by [Krawinkel et al. \(2017\)](#) found that in inclusive schools, the more teachers focused on the social climate and used individual reference standards, the higher the perceived social participation in the classes.

An important tool for studying well-being and social participation is the Perceptions of Inclusion Questionnaire (PIQ), which was developed based on an existing measurement instrument used in the Swiss integration study by Haeberlin et al. (1991). The PIQ of [Venetz et al. \(2014\)](#) has demonstrated stable measurement properties. The PIQ is freely available at <https://piqinfo.ch> and has since been translated into several languages.

Further information (in German):

Video on [Social Participation and Inclusion with Carmen Zurbriggen \(19:33\)](#)

[Discussion Research with David Scheer on the article Social Participation in Inclusive Classes \(22:41\)](#)

Article by [Sermier Dessemontet et al., 2011](#)

6.3 Measuring attitudes towards inclusion

Measuring stakeholders' attitudes toward inclusion is an important indicator of its successful implementation in the school system. Inclusive practices are more likely to emerge when teachers and parents believe in the value of inclusion and feel confident in their ability to implement it. In Austria, inclusion was legally established as the preferred approach in 1993 (Buchner and Gebhardt, 2011). Since then, the attitudes of elementary and special education teachers, both in inclusive settings and in special schools, have become increasingly positive between 1998 and 2009. Although research on teachers' attitudes toward inclusion was already widespread internationally in the 1990s and was reviewed by Avramidis and Norwich in 2002, this area of study only began to receive attention in Germany after the ratification of the UN Convention on the Rights of Persons with Disabilities (UN CRPD). Since then, the number of published studies in this area has steadily increased. This development indicates that it was not academic discourse alone that advanced this field of research, but rather the concrete challenge of transforming the education system. Surveys of teachers reflect both the broader social debate about inclusion and the political and professional uncertainties surrounding its implementation. The collection of teachers' attitudes toward inclusion is expected to provide insight into the current process of implementing inclusive education, representing a less demanding alternative to on-site observation of inclusive practices. While surveying teachers is an important indicator of successful inclusion, it must be supplemented by additional indicators, such as observation instruments, documentation of framework conditions, and academic achievements, to create a comprehensive picture (Gebhardt, 2018).

Differences in attitudes toward inclusion are identified by presenting case descriptions of various types of special educational needs. Attitudes toward students with behavioral issues were the most negative, followed by similarly negative views of students with intellectual impairments. In contrast, attitudes toward students with learning disabilities were somewhat less negative. The most positive attitudes were expressed toward students with physical impairments (Gebhardt et al., 2011; Gidlund, 2018; Soodak et al., 1998).

If people are asked directly about their attitudes, this is called an explicit attitude measurement because respondents consciously choose an answer option or express their opinion openly. In contrast, an implicit measurement, such as the [Implicit Association Test \(IAT\)](#), does not involve direct questioning but instead estimates attitudes from reaction times to images. This method is often used to detect stereotypes. With explicit measurements, there is a risk that responses may be deliberately distorted—for example, when participants answer in a socially desirable way or fear that an answer perceived as incorrect could have negative consequences for them. In research on teacher attitudes and inclusion, there is a risk of socially desirable response tendencies because the concept of inclusion is anchored in school legislation and is therefore considered politically desirable within the school system. Despite this, explicit attitude measurements generally show higher reliability than implicit ones. For this reason, explicit attitude surveys are typically used in research, often conducted anonymously and on a voluntary basis with teachers.

Further information:

[Guillemot, F., Lacroix, F. and Nocus, I. \(2022\). Teachers' attitude towards inclusive education from 2000 to 2020: An extended meta-analysis. *International Journal of Educational Research Open*, 3, 100175.](#)

[Paseka A. and Schwab S. \(2020\) Parents' attitudes towards inclusive education and their perceptions of inclusive teaching practices and resource. *European Journal of Special Needs Education*, 35\(2\), 254272.](#)

6.4 The situation after the special school

Special educational needs is a category within the school system and applies only to the school years. After leaving school, the employment agency is responsible for determining disability status under the Social Code (SGB IX) and defining the type and severity of a young person's disability. Only a very small number of young people with special educational needs go on to do vocational training or attend university. Those who do not get a vocational training spot are often placed in one or more preparatory measures after leaving school, which can lead to a trajectory of interventions. Overall, the labor market situation is described as precarious for former special education students even after obtaining a vocational qualification ([Gebhardt et al., 2011](#)). For this reason, research recommends shifting away from institutions for special vocational education toward an inclusive, decentralized, supportive training and employment system (Balestra et al., 2020), as offered by the [Supported Employment](#) approach. This approach currently makes it possible, particularly for individuals with intellectual disabilities, to gain employment in the primary sector labor market rather than working in sheltered workshops. In this model, challenges are addressed and mastered through on-the-job training and support provided by a job coach.

Further information:

[Menze, L., Sandner, M., Anger, S., Pollak, R. and Solga, H. \(2021\). Jugendliche aus Förderschulen mit Schwerpunkt "Lernen": Schwieriger Übergang in Ausbildung und Arbeitsmarkt. \(IAB-Kurzbericht 22/2021\), Nürnberg.](#)

[Menze, L., Solga, H., and Pollak, R. \(2023\). Long-term scarring from institutional labelling: The risk of NEET of students from schools for learning disability in Germany. *Acta Sociologica*, 66\(3\), 289-306.](#)

7. Special Educational Needs and Support Systems

Special Educational Needs (SEN) is a school-specific systemic construct ([Gebhardt, 2023](#)). The allocation of support is necessary to enable a single child to receive special educational support and further assistance. According to the definitions in the respective laws, special educational support is provided when the regular support available in general schools is not sufficient to promote the child's social and educational development. To enable access to educational content, participation, and equal opportunities, special educational support is then assigned.

The general approach dates back to the time before the ratification and implementation of the UN Convention on the Rights of Persons with Disabilities (United Nations, 2006), which occurred in 2009, when students with disabilities were not enrolled in regular schools and were instead sent to special schools. For this process, an application to the school authority was required by either the school or the legal guardians. In Germany, diagnostics are performed by a special education teacher, whereas in Austria, they are conducted by an external service. Based on a special educational needs assessment report, the support need is determined, and it becomes mandatory for a child with identified special educational needs to receive a tailored support plan. The will of the legal guardians and the child is taken into consideration in all German federal states (Sälzer et al., 2015). In most cases, a consensus is reached between the parents and the school administration. Legally, however, the final decision on school placement in Germany rests with the school authority. Austria had already strengthened parental rights in the 1990s. According to the [Federal Act on Mandatory Schooling 8a \(3\)](#), the school administration is tasked with initiating or applying for measures to enable an inclusive school placement. Notably, the implementation of the UN Convention on the Rights of Persons with Disabilities (2006) has accelerated the expansion of inclusive schooling in most German states.

In most countries, special educational needs are defined as those that can be formally requested when the school's regular support measures are no longer sufficient, and the child cannot be adequately supported or taught. This definition is therefore based on the requirement that justification or supporting evidence must be provided in an official report, demonstrating which regular measures have been applied and why they were insufficient. Only on this basis can special educational support be formally granted.

A child receives special educational support in either an inclusive school or a special education school if they have undergone an '**determinative diagnostic assessment**' (KMK, 2019, p. 11), usually performed by a special education teacher, and has been assigned a special educational needs assessment report with outlining the scope and type of support required (Gebhardt and Jungjohann, 2020). The basis for allocating additional resources and the underlying procedures are defined by the laws and regulations of the individual federal states. Although the federal states differ in their specific laws, the implementation of inclusive education, and the rates of special education support, there are also notable similarities across the German federal states (Piezunka et al., 2016) as well as in terms of implementation in Austria (Buchner and Gebhardt, 2011) and Switzerland (Mejeh and Powell, 2018). The assignment of special educational needs is jointly decided and negotiated by all parties involved through the school board, based on a determinative diagnostic assessment. The decision is made on a case-by-case basis, considering both the child's individual needs and the school's available support resources. While in the past, decisions were often limited to choosing the school placement, there is hope that in the future, multiple support systems and options within inclusive schools for addressing special educational needs will also be considered.

Determinative diagnostic assessments should be child-centered and needs-oriented, focusing on the learning environment of the school. However, the diagnostic process and the resulting reports are often criticized for,

- unclear differentiation of the support focus,
- assessments not specific to the classroom or school, but based on IQ and family situation,
- and that diagnostics are necessary in order to obtain resources.

Therefore, determinative diagnostic assessments are not independent expert opinions, but a systematic recognition of special needs.

Depending on the needs of the child and the requirements of the school, several support measures may be necessary simultaneously, drawing on the expertise of different special education areas. There are large overlaps, for example, in the focus of support on learning and emotional and social development (Petermann and Petermann, 2010). An assignment to a specialized school is therefore always linked to the question of whether the child fits into the school and whether another special school can respond even better to a specific difficulty or attend to the child's needs. This difficult decision does not arise in an inclusive school system, because the support of all special educational needs is to be made possible at the student's current school. An inclusive school is close to the student's home and ideally the general school of the district (school district). As a result, a legally binding legitimation of the school placement through determinative diagnostic assessments becomes unnecessary. The next question is whether the resources from time-consuming determinative diagnostic assessments can be optimally invested in a multi-stage preventive system.

Case study: The process of determinative diagnostic assessments using the example of the special educational needs assessment report

In a case report on the mobile special needs service, [Beckstein and Sroka \(2019, 2022\)](#) describe the process of determinative diagnostic assessment. This process begins informally when the class teacher and a special education teacher meet in the staffroom in November. During this initial contact, the teachers exchange information about a student's learning difficulties. The class teacher expresses the suspicion that there may be a need for special educational support. In a joint discussion, the teachers agree that, in this case, an in-depth determinative diagnostic assessment of the student's learning difficulties is necessary. In the following months, the review of special educational needs is planned and coordinated through multiple phone calls and meetings. Additionally, discussions with the legal guardians, school psychologists, and the school authorities are also required. The student completes several extensive individual tests and is observed multiple times in various school situations. By February, the special education report is prepared. It serves as the basis for discussions on future support measures.

This process takes several months, as all steps must be documented in a legally compliant and comprehensible manner to prepare an expert opinion, and all stakeholders must be involved. The advantage of these diagnostics is that a reliable legal opinion is compiled and a comprehensible decision is made. Such an elaborate procedure is necessary for important and fundamental decisions, such as the justification of a special school placement. It is critical to note that, in the four months since the diagnosis was made, no funding target has yet been specified, and no additional funding has been allocated.

7.1 Wait to fail problem

The determinative diagnostic assessment has been used to comprehensively capture children's status through an extensive evaluation, aiming to justify both the need for support and school placement. This process effectively creates two categories: regular students and students with special educational needs. Such categorization can have negative consequences in everyday pedagogical practice and may lead to exclusion. This labeling establishes a barrier between students, as the student with special educational needs is no longer perceived as one of the regular or "normal" students. Hinz (2002) criticized this system, referring to it as a **two-group characteristic**, which is fundamentally unsustainable for genuine school inclusion. This terminology can lead to the stigmatization of so-called "integration children" (or "i-children") within inclusive schools and may reinforce selective teaching practices.

It may also be the case that children with similar abilities are diagnosed differently at the state level or even the school level. As a result, the same child could be diagnosed as needing support in one district, but not in another. There are very few uniform standards for diagnosis across the country. Even if such standards existed, they would still need to be considered in the context of each local situation. Special educational support determinations assess whether the general school's support measures are insufficient for the individual child. However, what is considered "insufficient" can vary from school to school, district to district, and state to state. This is reflected in the varying rates of identified special educational needs across regions.

Simply put, the core problem of special education diagnostics is whether the need for support is viewed as a specific, differentiable construct with clear criteria, or as a negotiation process between the capacity of the regular school and the available special education resources. In the second case, it would be a systemically reasoned decision. In pedagogical practice, both aspects likely play a role, depending on the school and the specific situation, with varying emphasis. For special education, this represents a key issue. There is a risk that special education support needs will be categorized as lower than they should be, rather than being based on specific needs and targeted special education measures. This systemic issue is also described as the **buffering function** that the special school provides for the general school ([Dietze, 2011](#)).

Whenever labeling is tied to the assignment of resources, there is a risk of stigmatization in everyday school life. In research, this is known as the **resource labeling dilemma** (Wocken, 1996). However, completely avoiding labeling or identification is difficult in the context of inclusion, since special entitlements, accommodation, and additional support are directly linked to the individual and must also be verifiable. A solution to this dilemma is only possible if it can be ensured that the resources reach the fitting child without causing stigma through identification. One approach in everyday school practice is to attend to the needs of all students and to enable individualized learning. Organizationally, this would mean that each student has access to various support settings, groups, or measures on different topics, interests, or intensities.

Currently, the school system typically provides additional support only to students who have been formally identified and assessed as having special educational needs. However, alongside these students, there are also children with learning difficulties or so-called high-risk students who show low academic performance and are at risk of completing school without adequate skills in mathematics or reading. Depending on the comparative study (such as PISA, PIRLS, etc.), this group makes up between 15 and 20% of all students. These students also require more support and more individualized instruction than the current education system typically provides. Figure 4 presents these needs in a stepwise form. However, it can be assumed that the need for support in inclusive classrooms is neither linear nor step-shaped, since students in general education settings also require

support from teachers. Although this model is a significant simplification, it shows that the current theoretical assumptions in funding, which are based on equal distribution, cannot be effectively implemented in practice. This raises the open question of how the school system intends to address and meet these diverse needs within an inclusive educational framework.

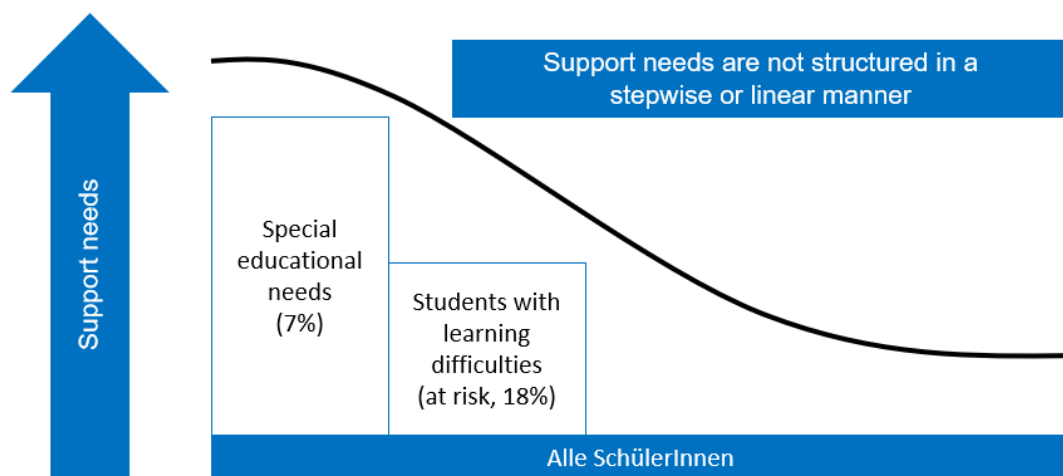


Figure 4: *Distribution of support needs at school*

Assignment:

Describe the two-group characteristic, buffering function, and resource labeling dilemma in your own words and write a few sentences on the connections you made between them.

Another problem is that assessment diagnostics currently take too long, and there is little or no preventive support in the existing school system (Hartke and Diehl, 2013). When examining the determination of special needs in the area of learning, identification does not occur in kindergarten, but rather once the child is in school. As shown in Figure 5, the school problem persists to such an extent that the general school's resources have been fully utilized, clearly demonstrating the need for special educational support. In the figure, this is symbolized by the red line, which must surpass a certain capacity limit.

Diagnostics can only determine the need for support if the child's academic performance lags behind that of the other children in the standard group by at least one standard deviation. Huber and Grosche (2012) refer to this as the "Wait to Fail Problem." A preferable course is shown in blue in Figure 5 and calls for the early detection of school difficulties, along with timely and tailored support. In an inclusive school system, it should be recognized that identifying and addressing school problems is not the sole responsibility of an individual teacher. Instead, there should be consistent rules, standards, and systemic support to make a course like the blue line possible.

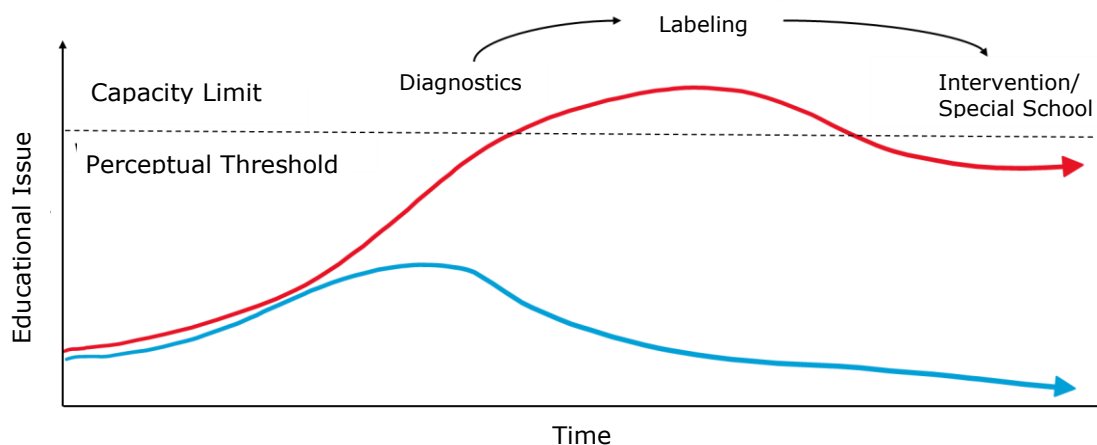


Figure 5 *Wait to Fail problem based on Huber and Grosche (2012)*

Another problem with assessment diagnostics and the related financing model is the increase in the special education support rate in the context of inclusion (see Chapter 5). This is a global issue, particularly in the areas of learning as well as social and emotional development, and has also been observed in the United States (Vaughn et al., 2003). In Germany, the proportion of students with special educational needs has risen from 5 percent in the 1990s to 7 percent today (Dietze, 2019). The situation in Austria and Switzerland is similar to that in Germany.

Video:

[Multi-stage funding system - The Response to Intervention Approach \(RTI\)](#)

Assignment:

What defines diagnostics in Special Education?

What does Hinz (2002) mean by two groups?

What does Hinz criticize about the categorization?

Describe the current problems of determinative diagnostic assessments in your own words.

What kind of diagnostics could an inclusive system need?

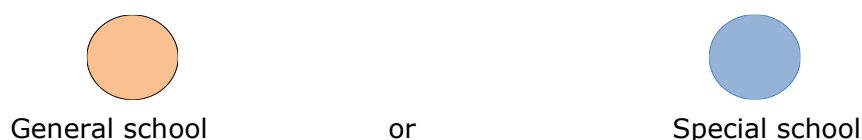
Describe the problems in the assignment of special educational needs in a few sentences.

7.2 Financial and tax systems of inclusion

Although the topics of financing and taxation are often considered unpopular, they are essential for practical implementation. Inclusive teamwork can only become the norm when the governing rules enable and support inclusive practices. According to a study by Wolf et al. (2022), school administrations traditionally operate in an input-oriented manner, allocating resources based on organizational models. An output-oriented governance of school inclusion, based on achieved criteria and goals, has not been observed.

7.2.1 Model financing separated by type of school

The traditional model is the simplest approach. Funding is provided based on the type of school. Each school operates with defined class sizes and designated teacher hours. The number of students is indirectly funded. Each school receives teacher hours according to its needs. Students with special educational needs attend special schools, while students in the general education system attend regular schools. Funding is allocated from distinct sources within the state budget.



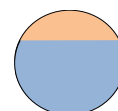
7.2.2 Backpack model

The second model is based on the idea that students with special educational needs are taught in regular schools and additionally receive all the resources of special schools ("backpack model" or "direct input funding"; Meijer, 1999, p. 11). In this model, all resources from the special education school are calculated per student and proportionally assigned to the backpack of the student diagnosed with special educational needs. The resources are directly assigned to the student.

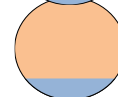
In the classic backpack model, there is a need for diagnoses of needs for special education support. With a diagnosed need, a student is entitled to special educational support within the regular school. The advantage of this model is that the allocation of resources is clear for all participants, and there is legal certainty that the necessary disability-specific resources are provided to the student.

Financing is provided by the general school as a regular student, with additional special education support, which, in the best case, corresponds to the proportion of costs in the special education school:

Backpack model with high special educational support:



Backpack model with low special educational support:



Example of Austria:

In Austria, inclusive schools can bring together several students with special educational needs in an inclusive class. Through the combination, the additional teacher hours of the special education teacher are combined, so that with five children with special education support needs, a special education teacher with about 19 teaching hours is available for the class (Buchner and Gebhardt, 2011).

The backpack model can be criticized for requiring increased diagnostic effort and for contributing to the overall rise in the rate of identified special educational needs across European countries (European Agency, 2018). If diagnostic processes identified the same number of cases as before the introduction of inclusive systems, there would, in theory, be no difference in the distribution of resources between special education and inclusion. However, experiences in Austria, the Netherlands, and Germany indicate that an increasing number of children are being diagnosed within inclusive schools. Since special education diagnostics does not rely on clear, standardized indicators but is an interactive process shaped by many factors, the previously used indicators are often stretched. These indicators could be established by the school administration, as has been attempted, for example, through the development of guidelines. However, making such determinations at the administrative level is politically sensitive and pedagogically controversial in terms of the applied standards. Another approach is to assign the diagnosis and determination of support needs to external special educators who later do not work directly with the child. This often results in a centralization of diagnostics in regional centers (Preuss-Lausitz, 2016). Furthermore, it is criticized that the tedious process of determinative diagnostic assessments consumes part of the financial resources but does not contribute to the actual promotion and support of the student (Meijer, 1999). This is particularly the case when the diagnostic results are either unavailable or not used by the supporting teachers due to data protection concerns or a lack of communication.

7.2.3 Output model

In the output model, the school receives resources for additional special education support based on data-driven experience and usually includes an additional social indicator (Meijer, 1999). Therefore, in an output model, alongside the organizational structures and standards (input), empirical statistics on inclusive school environments, such as the number of students, teacher hours, identified needs, and support programs, must also be collected and evaluated.

Due to an adapted calculation model, the inclusive school receives a certain amount of resources and teacher hours, which the school is free to assign. This is illustrated in Figure 6's arrows. There is no need for additional determinative diagnostic assessments, and support hours can be used preventively. A flat distribution based on social indicators is particularly useful for special educational needs (such as learning, language, and emotional and social development) that occur in larger numbers at an inclusive school. In contrast to the backpack model, the output model no longer identifies students with special educational needs. As a result, funds are no longer tied to individual students, resulting in a lack of transparency on how funds are distributed on a per-student basis. The allocation of designated funds and their intended use are not clearly defined in this model, leading to criticism. (Preuss-Lausitz, 2016).

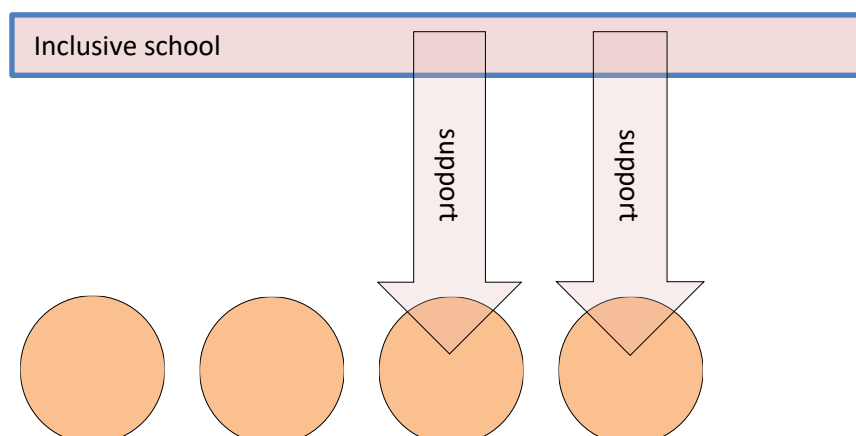


Figure 6 Output model with flat distribution

7.2.4 Throughput model

An extension of the decentralized system is the establishment of central special education support services. These service centers are not assigned directly by the teachers but operate based on pedagogical measures with a clearly outlined task profile. This is done using the so-called "Throughout Funding" (Meijer, 1999, p. 13), which Preuss-Lausitz (2016) calls the throughput model. Service centers receive all funds from the original supportive school (supportive funding) and distribute specific measures or educational services to the schools. For example, they might enable support programs in reading or social participation. In this model, support is conditional on evidence of needs. However, this may take the form of preventive testing. Instead of lengthy assessment diagnostics, a short reading screening in an inclusive school class could justify the need for additional teacher hours in order to initiate a program supporting children with reading difficulties.

The aim is to allocate teachers' hours more effectively than in the traditional system, in order to utilize them as preventively and as need-based as possible. Figure 7 illustrates these measures using the arrows.

The throughput model, therefore, focuses on educational practice and specific individual measures. These measures must be interconnected and coordinated to ensure that expenses are accurately accounted for and to demonstrate that the affected students have indeed received the resources to which they are entitled. This model can also be imagined as a special school without students, where the educational measures and services are predefined. It is also recommended that each measure has already been positively evaluated and proven its effectiveness at least once. According to Preuss-Lausitz (2016), this approach has been successfully implemented in several school pilot projects. Preuss-Lausitz (2016) also identifies the Rügen model as an example of a throughput model.

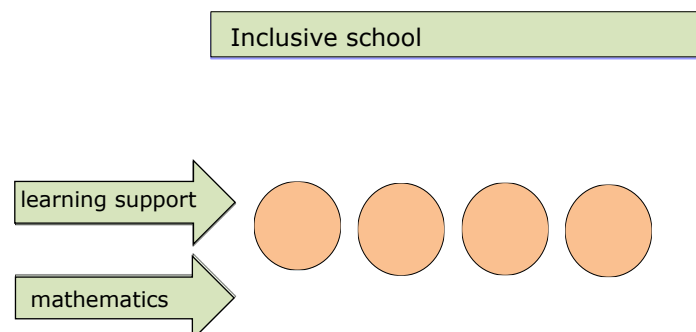


Figure 7 *Throughput model with specific measures*

For all financing models, scientific evidence for the individual models has been provided so far only in the initial stages or in small districts, and the financing structure of the federal states has remained largely unchanged in recent years (Meijer and Watkins, 2019). The existing simple structure of school types in most states is not sufficient to meet the needs of an inclusive school system. Many problems are also caused by the form of resource allocation (Preuss-Lausitz, 2016).

Assignment:

Describe the individual models of financing in your own words and explain the differences between each model.

Describe in a few sentences what the problem is in the allocation of special educational needs. What financing models are there?

What model do we currently have in Bavaria?

How could an implementation of the throughput model look like in schools in your area?

Video:

[Framework conditions and funding for school inclusion](#)

7.3 Multi-Level Support Systems

Multi-level support systems in the USA, referred to as Multi-Tiered Systems of Support (MTSS), were influenced by models of public health research, according to Fletcher et al. (2019). For schools, these multi-level support systems function primarily as a financing and school model concept. The MTSS framework is closely linked to the [response-to-intervention \(RTI\) approach](#).

7.3.1 Response to Intervention

In this approach, the focus is on the individual learning progress of each student. Unlike traditional determinative diagnostic assessments, which often lead to the segregation of students into different schools, classes, or support programs, this method investigates whether current teaching or support strategies are effective in helping students achieve their academic goals (Fuchs and Fuchs, 2006). The child's learning success is prioritized to prevent learning difficulties and enable the most positive academic path. This approach is particularly beneficial for children with learning difficulties and those at risk, as it helps avoid both the risk of being left behind in regular instruction and the risk of not being sufficiently challenged through overprotection in a special school. This approach is not a closed concept in itself, but rather emphasizes data-driven decisions and the evaluation of previous support measures and choices as the core of its action (Hosp et al., 2016). The learning progress of students is continuously monitored and evaluated through Lernverlaufsdagnostik (Learning Progress Monitoring), the German equivalent of Curriculum-Based Measurement (CBM). Learning Progress Monitoring is a tool that can be administered in brief intervals, typically three to five minutes per test session, and reliably and sensitively tracks learning development (for a review, see Jungjohann et al., 2018). These assessments can be conducted via paper-and-pencil tests (e.g., Lernlinie.de) or through online-based platforms (e.g., Levumi.de; Mühling et al., 2019). The results of these tests are typically visualized in a graph format. For instance, Figure 8 shows an example of learning progress based on a one-minute reading test. The green dots represent the number of words correctly solved at each testing time, while the purple dots represent the cumulative results of the classmates.

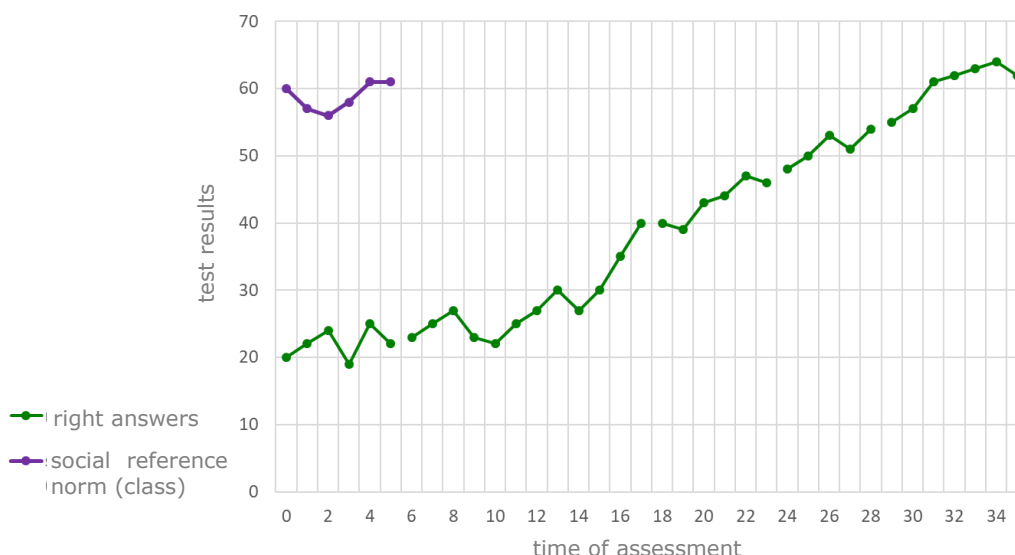


Figure 8 Learning Development of Learning Progress Monitoring in Reading Fluency

Learning Progress Monitoring (LPM) serves to individually monitor the learning process and support the individual reference norm (Jungjohann and Gebhardt, 2018). Social

comparisons with classmates are only useful to a limited extent, as the primary focus is on improving the individual learning situation of the affected child. The core idea of the Response to Intervention (RTI) concept—as the name suggests—is to place the individual child with a learning difficulty at the center of attention, along with the guiding question of which interventions can effectively support their learning. RTI is therefore a child-centered, ecological approach that is typically embedded within a systemic support framework. Learning Progress Monitoring provides data to make instructional and educational decisions about support measures. It serves as a key indicator of whether a student is on track to achieve learning goals. However, interpreting this data requires consideration of the broader ecological context of the learning environment. Therefore, teachers should collaboratively discuss the results of progress monitoring and integrate additional data and observations into their support planning. Vaughn et al. (2003) identify the use of data for monitoring learning development as a key indicator of a broader paradigm shift from determinative assessment diagnostic aimed at categorization toward needs-oriented assessments focused on planning and evaluating individualized learning environments. Determinative assessment practices invest significant time in summative assessments of the current state and the drafting of educational support reports, leaving limited time for actual support and evaluation. In contrast, the RTI approach emphasizes investing as much time as possible in targeted interventions, their documentation, and collaborative team decisions regarding the student's academic path.

Videos:

[Multi-stage funding system - The Response to Intervention Approach \(RTI\)](#)
[Learning process diagnostics explained in a few words](#)

Assignment:

What is the Response to Intervention approach?

What is the difference between the RTI approach and the traditional diagnostic approach of special education?

What's new about Learning Progress Monitoring? Why and when should you use it?

Literature recommendation:

[Learning process diagnostics with the online platform Levumi \(2019\)](#)

[Gebhardt, M., Diehl, K. and Mühling, A. \(2016\). Online learning progression measurement for all students in inclusive classes. *www. LEVUMI. de. Journal of Medical Education* , 67\(10\), 444-454.](#)

[Jungjohann, J., Diehl, K., Mühling, A. and Gebhardt, M. \(2018\). Interpreting and applying graphs of learning progression diagnostics - Reading promotion with the Levumi online progression measurement. *Research language*, 6\(2\), 84-91.](#)

[Blumenthal, S., Gebhardt, M. , Förster, N. and Souvignier, E. \(2022\). Internet platforms for the diagnosis of learning processes of students in Germany. A comparison of the platforms Lernlinie, Levumi and quop. *Journal of Medical Education* \(4\), pp. 153-167.](#)

Free German LPM test-online-systems on the net

www.levumi.de

[Learning Line – CBM from the RIM project](#)

7.3.2 The funding levels of the MTSS

The RTI concept is typically associated with a multi-level support system. Currently, such multi-tiered support systems are being implemented in model projects in countries like the United States, Finland, and Germany, for example, in the Rügen Inclusion Project ([Björn et al., 2018](#); Voß et al., 2016). A prerequisite for the successful implementation of a multi-level support system is the redistribution and coordination of all available

resources within the school district for specific support measures, special schools, educational assistants, and inclusive schools. Currently, many schools in Germany rely on various, mostly temporary support measures and funding pools designated for specific groups, often financed by different funding bodies. The goal of a Multi-Tiered System of Support (MTSS) is to dissolve these fragmented structures and integrate them into a unified, coherent framework. However, due to the differing interests of special schools, general schools, school social services, and educational administrations, this integration has only been successfully implemented in isolated cases within Germany.

Figure 9 illustrates a three-tiered multi-level support system in the form of a pyramid (Hartke, 2017a). This system begins at Tier I with regular classroom instruction and extends up to Tier III, which provides intensive, individualized support for individual students. While at the base level, support is typically covered by the general education system, each higher level involves increased support intensity. The higher the tier, the more teacher-directed, systematic, structured, and frequent the support becomes (Fuchs and Fuchs, 2006). MTSS is an open framework according to which schools or districts organize additional support measures. Schools or individual teams decide which interventions or systems are appropriate for each student. Consequently, MTSS implementation may vary across schools depending on their educational approach and student needs. It is recommended that interventions are both evaluated for effectiveness and supported by theoretical and empirical evidence. In special education, outdated and ineffective methods—such as Facilitated Communication for children with autism (Jacobson et al., 1995; Probst, 2003), or phoneme gestures used in reading instruction for children with learning disability (Walter et al., 1997) continue to be popular in practice, including among parent associations and publishers. Given the limited time and resources available in schools, it is essential to critically examine which special education methods are being used. Educational research recommends the use of evidence-based practices whose effectiveness has been empirically validated, rather than relying on approaches lacking a scientific foundation (Wember, 2015; Kuhl et al., 2017). However, since there will never be evidence-based or theoretically grounded guidelines for all problems, even in the field of special education, the selection of appropriate methods ultimately remains a professional responsibility of the team (Voß et al., 2014).

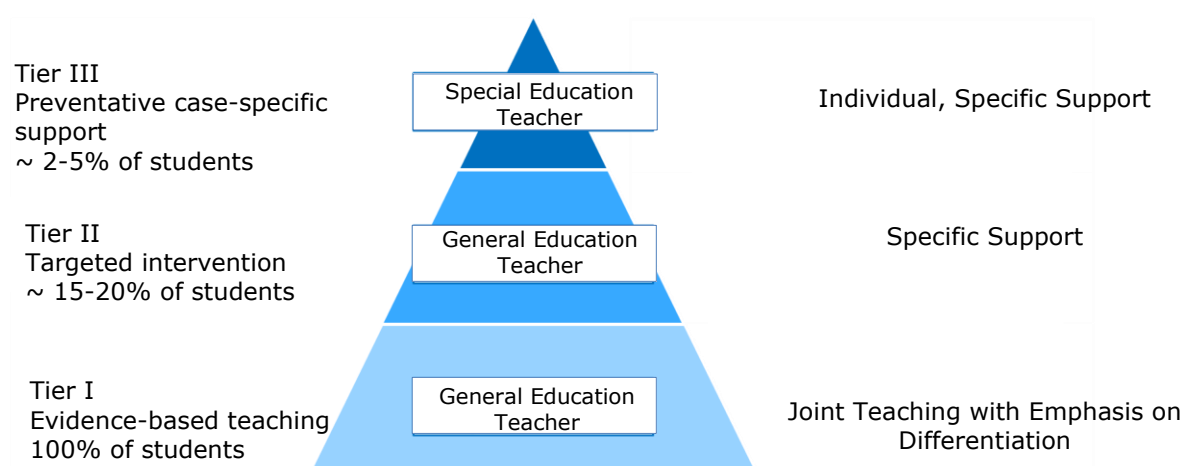


Figure 9 Three-stage multi-tiered support system

Note:

MTSS is a formal support system with several interlocking funding levels.

The idea behind MTSS is to integrate special education support within the regular inclusive school and to define clear areas of responsibility to facilitate practical collaboration. The specific implementation may vary depending on the availability of resources and the school's focus. Across the three tiers, the challenge lies in applying the limited special

education resources in a transparent, effective, and comprehensible way within the inclusive school without creating parallel structures or areas lacking clear responsibility (Meijer, 1999). To continue providing intensive support to a small number of students with significant special educational needs, Level III is available and is organized as inclusively as possible under the guidance of a special education teacher. Levels I and II fall under the responsibility of the general education teacher. Level I consists of high-quality, inclusive instruction delivered by the regular classroom teacher, without the use of additional resources. Level II involves supplementary resources, support lessons, and targeted interventions designed to prevent learning difficulties or to address short-term, increased support needs. Through determinative assessment diagnostics, students with learning difficulties can be identified and then supported adaptively and temporarily within Level II. Level II is designed to support up to 20% of students. Funding and support at this level can be implemented through small-group instruction, as recommended in American models (Fletcher et al., 2019), or through internal differentiation and open learning formats that utilize appropriate materials and targeted support. Level II represents the core innovation within the MTSS framework. Its successful implementation requires pedagogical agreement and effective collaboration among all stakeholders. It is essential that support measures at this level are conceptually flexible, allowing for a smooth transition between Levels II and III. Assignment to the levels is based on data-informed decisions made jointly by the involved parties and is reviewed semi-annually.

Assignment:

What is the MTSS system, and what do the three levels mean for educational practice?

Describe the model in your own words.

What are the advantages and disadvantages of a multi-level system?

Why hasn't a model like this been introduced nationwide in Germany yet?

Literature recommendation:

<https://www.rim.uni-rostock.de/en/>

[Huber, C. and Grosche, M. \(2012\). Das response-to-intervention-Modell als Grundlage für einen inklusiven Paradigmenwechsel in der Sonderpädagogik. *Zeitschrift für Heilpädagogik*, 312-322.](#)

[Voß, S., Blumenthal, Y., Sikora, S., Mahlau, K., Diehl, K. and Hartke, B. \(2014\). Rügener Inklusionsmodell \(RIM\) - Effekte eines Beschulungsansatzes nach dem Response to Intervention-Ansatz auf die Rechen- und Leseleistungen von Grundschulkindern. *Empirische Sonderpädagogik*, 6\(2\), pp. 114-132.](#)

7.3.3 Diagnostics in the RTI approach

In the RTI approach, diagnostics consist of two different lines and instruments. The first line corresponds to the status tests already used in traditional determinative assessment diagnostics. On the second line are the instruments for learning progress monitoring diagnostics. While status diagnostics show the current status of a student in comparison to their classmates and provide a broad insight into a child's learning profile, learning progress monitoring measures a specific area with sensitivity over time. In other words, the instruments cover different aspects of the same topic. They are necessary for a comprehensive assessment of a child's past and future developmental steps in an inclusive school.

In the Rügen Inclusion Model, the three levels of the RTI model are implemented and successfully evaluated in the four learning areas of German, mathematics, language, and emotional/social development at all twelve elementary schools on Rügen island (Hartke, 2017a). to ensure an optimal fit between instruction and individual student learning progress. Each learning area is evaluated independently, meaning that a child may be placed

at Level II in one area while remaining at Level I in others. These placements are not fixed and can change over time based on the student's progress. To carry out **status diagnostics, broad skill tests and screenings** are used to provide normative comparisons. Children scoring **below the 16th percentile** (i.e., two standard deviations below the mean) in any of the four areas are identified as being at risk. Figure 10 illustrates this identification process. While the assignment of support levels is comparable to traditional assessment diagnostics—using standardized tools to describe current learning outcomes and derive support recommendations—the RTI model differs significantly in its application. Instead of making decisions about school placement or referring to external support systems, all necessary resources are already embedded within the inclusive school and are organized into tiered levels of support.

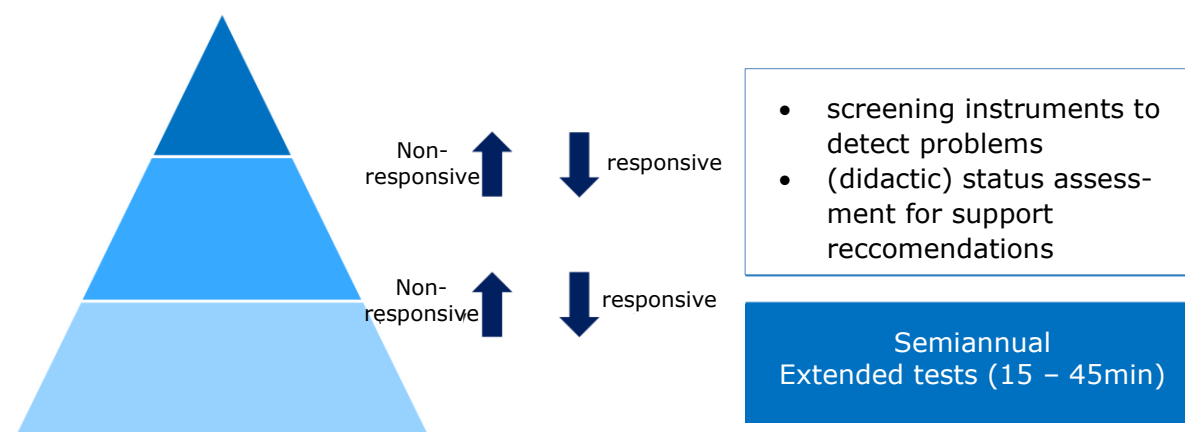


Figure 10 *Change of levels based on status diagnostics*

In contrast to traditional models, RTI extends the diagnostic approach at Levels II and III by incorporating **progress monitoring** to evaluate the effectiveness of support measures. This is also illustrated in Figure 10. After defining support goals and interventions every six months, a key innovation in the RTI model is the documentation and evaluation of learning development through a series of short formative assessments. The primary goal of Level II is preventive interventions. Ideally, learning difficulties are addressed promptly so they remain temporary. If the child achieves the support objective and measurable learning progress is confirmed through progress monitoring, the student can transition back to Level I. The overarching aim of this support system is to prevent or mitigate the so-called Matthew Effect in education—where “those who have, receive more, and those who have little, fall further behind”, or the scissor effect. By addressing difficulties early, especially for students from disadvantaged backgrounds, the model seeks to facilitate a more equitable and positive educational trajectory. The different levels of the MTSS are therefore designed to be as flexible as possible, enabling responsive and preventive action. In Figure 10, arrows represent this dynamic. **Non-responsive** indicates that the current instructional or support approach does not adequately meet the student's needs, prompting an adjustment or intensification of support. **Responsive** means that the current level of support aligns well with the student's needs, and after meeting the support goal, a reduction in support or transition to a lower level may be considered.

Note:

Diagnostics in RTI consists of a combination of screening/status tests and progression monitoring.

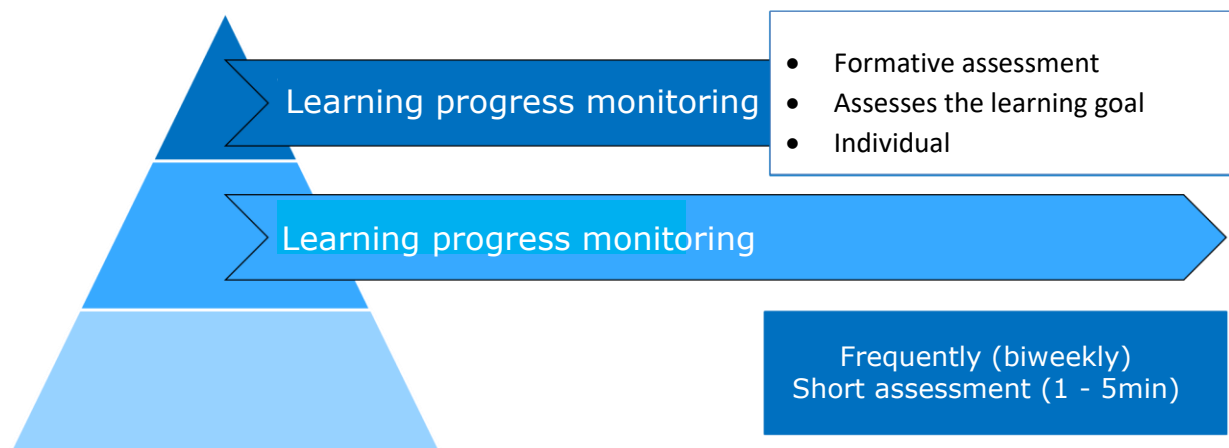


Figure 11 *Learning progress monitoring as accompanying learning documentation*

In addition to status diagnostics, which play a key role in identifying learning needs and setting support goals based on current performance, learning [progress diagnostics \(LVD\)](#) and in ESD represent the second essential component of the RTI model. Progress monitoring is used to document ongoing learning development and serve as a means to determine whether learning goals are being met, providing critical feedback for instructional decision-making. Based on this feedback, teaching teams can assess whether current interventions are effective or if adjustments and alternative strategies are necessary. Progress diagnostics can be implemented across all support levels, particularly when long-term competencies are being targeted. At Level I, for example, an LVD might be used to monitor meaningful reading development, with evaluations conducted every 6 to 8 weeks. At Levels II and III, more frequent use of LVDs may be beneficial, particularly for assessing the impact of targeted interventions. An example would be a numeracy training program focused on addition within the number range up to 20, accompanied by an LVD designed to measure progress specifically in that area. This approach enables the documentation of even small gains and their communication in a positive, evidence-based manner.

Which methods are used in practice and how closely special education diagnostics relate to intervention and support strategies within individual MTSS approaches of different districts remain open questions. Currently, only a limited number of these approaches have been thoroughly documented and made accessible to external observers.

Overview of the different categories of diagnostic procedures

According to [Hasbrouck and Tindal \(2006\)](#), four categories of diagnostic instruments can be distinguished depending on the field of application:

- **Screenings** measure a specific sub-area of learning at a particular point in time that is especially important for the development of a key competence. For example, a reading screening should be brief and easily administered within the whole class to identify students with reading difficulties as early as possible, ideally at the beginning of the school year. So alternative forms of support can be introduced. Screenings should be highly sensitive to detect every child who may be at risk.
- **Academic performance tests for diagnostic reports (status tests)** are used to comprehensively assess a child's performance in a particular skill area at a given point in time. These tests typically consist of multiple subtests, have longer administration times, and require more advanced interpretive expertise to develop a detailed profile of a student's strengths and support needs. For this reason, they are typically used in combination with special educational assessments.
- **Learning progress monitoring** involves at least three, usually shorter, assessments administered at regular intervals (typically, weekly or monthly) to track a student's learning development over time. The aim of these diagnostics is to: a)

assess the student's ongoing learning progress, b) identify students who are not making adequate progress, and c) evaluate the effectiveness of instructional strategies for students at risk.

- **Criterion-referenced tests (or outcome measures)** are wide-ranging school performance tests intended to determine whether students have met the grade-level goal or the defined criterion. These tests are performed either at the end of an intervention or at the end of the school year.

Video:

[Multi-stage funding system - The Response to Intervention Approach \(RTI\)](#)

Assignment:

How do you get to change tiers in the MTSS?

What are the benefits of multiple levels in inclusive settings?

What danger could the levels pose to practical implementation?

Which diagnostic methods are applied according to Hasbrouck and Tindal (2006)?

Describe the different forms of diagnostics, their purpose and how diagnostics are intertwined with support in the RTI model.

Literature recommendation:

Kuhl, J., Vossen, A., Hartung, N. and Wittich, C. (2021). *Evidence-based support for learning difficulties in inclusive elementary school*. Reinhardt.

Gebhardt, M. and Jungjohann, J. (2020). Analysis of learning outcomes and learning development - processes of support diagnostics. In: U. Heimlich and F. Wember (Eds.), *Didactics of Teaching in Learning Difficulties: A Handbook for Studies and Practice* (pp. 367-380). Cabbage hammer.

7.3.4 Criticism of RTI

RTI is a formalized approach that has both advantages and disadvantages depending on the application. Like any educational innovation, RTI has been subject to criticism from various perspectives. Most critiques target the RTI model itself, rather than the broader Multi-Tiered System of Support (MTSS) framework. The empirical and data-based approach itself is often criticized by people who do not focus on empirical-quantitative research. However, this criticism typically does not address the validity of specific implementation studies or diagnostic tools. Rather, it concerns the degree of formalization and the prioritization of evidence-based interventions, which some argue can constrain teachers' autonomy, reduce professional judgment, and potentially contribute to stigmatization effects. There is concern that evidence-based support may be implemented mechanically, resembling programmed instruction rather than being adapted through reflective pedagogical practice (Amrhein, 2015). In particular, there are also concerns that at Level III of the MTSS, inclusive teaching no longer occurs. Rather, children with special educational needs are mainly taught in small groups or their own classes within the regular school.

"In this paper, I argue, however, that RTI is not so much a reform but a tactic, aimed at returning to the status quo of segregated special education and reinvigorating many of the foundational assumptions of traditional special education practice" (Ferri, 2012, p. 863).

This raises the important question of the underlying beliefs and intentions behind the use of RTI. What concept of disability is being applied, and what is the prevailing attitude toward inclusion? RTI originates from the fields of special education and educational psychology and functions primarily as a prevention and intervention model. According to Werning (2019), RTI is not a comprehensive framework for inclusive schooling, since its structure can also be used to justify remedial or segregated practices, especially at Level

III. The core of the criticism, therefore, is not directed at the model itself, but rather at how inclusion is conceptualized and enacted. Instead of using RTI to explain special education measures, it should be critically reflected on which support measures truly enhance inclusion and how to maintain high levels of participation and accessibility in shared learning environments. As such, greater emphasis should be placed on the Levels I and II, where inclusive strategies can be most effectively embedded. Currently, however, this debate remains largely theoretical and normative, due to a lack of empirical evidence.

This debate is both valid and necessary. Rather than focusing on comparisons between inclusive settings and special schools, questions about the approach, necessity, and funding of all forms of support should be critically examined. The challenge, however, lies in the scarcity of evaluable models. Aside from the Rügen Inclusion Model and a few school pilot projects, there are few systematically documented and empirically evaluated models of inclusion. Many practice models remain unresearched and anecdotal. From the standpoint of empirical educational research, it is therefore crucial to analyze pedagogical practices, teachers' attitudes, and funding systems individually, while also evaluating their interconnected effects. Additional models will be included in this book only if they have been thoroughly documented and quantitatively assessed.

Assignment:

What criticism is there of the RTI approach?

Why is there a need for knowledge on types of funding and forms of support?

Literature recommendation:

Werning, R. (2019): Inclusion in early childhood and school. In O. Köller, M. Hasselhorn, F. W. Hesse, K. Maaz, J. Schrader, H. Solga, H., K. Spieß and K. Zimmer (eds.): *Education in Germany. Stocks and potentials*. Klinkhardt.

8 Dissolve special schools or special schools. But how?

Whether an inclusive education system requires no special schools or only a limited number of specialized ones remains an open question. However, there is a broad consensus that an inclusive system must dismantle separate support structures to redirect resources to inclusive schools. Maintaining parallel systems is not only the most expensive financial option but also inefficient, as the dual structures often hinder each other. To effectively implement inclusion in everyday educational practice at a low threshold, separate support systems must be dismantled and replaced with inclusive ones that align with standardized approaches. This reorganization affects not only teacher positions but also leadership roles and the school administrative structure. Currently, most of these are still organized by school type and must first be adjusted for inclusive education.

While scientific opinion on the implementation of inclusion is relatively positive, and there are numerous demands and implementation ideas, socio-political opinion is mixed. For the political implementation of the dismantling of an expanded support school system with its own school buildings, a strategy is needed that is carefully communicated and also widely understood and supported by the majority of society. Although inclusion is increasingly covered in the media, public discourse often frames it not as a fundamental right but as an added burden for regular schools. Reports of special school closures, sometimes accompanied by parent protests, reflect the complexity of public perception.

Nordkurier vom 16.03.2023:

[„Inklusionszwang in MV - Vorpommern schließt Förderschulen 2027“](#)

Rundblick 3.10.2022:

[„Pro & Contra: Soll es in Niedersachsen auch zukünftig Förderschulen geben?“](#)

A simpler approach than closing schools directly would be, according to David Scheer, to discourage special schools from enrolling new students. According to media reports, such an approach appears to be applied in Lower Saxony.

[Schulform ist politisch umstritten: Stader Landrat gibt Bekenntnis zur Förderschule ab - Stade \(kreiszeitung-wochenblatt.de\)](#) [28.06.2023]

<https://www.sueddeutsche.de/politik/landtag-hannover-ministerin-foerderschulen-ler-nen-werden-abgeschafft-dpa.urn-newsml-dpa-com-20090101-230322-99-46981>
[23.06.2023]

Another pragmatic step could be to focus on individual schools or school associations undergoing renovation or new construction. These moments offer valuable opportunities to redesign infrastructure and embed inclusive practices. Inclusion then also becomes part of urban planning. Unlike special schools that were often built on the outskirts, near highways and designed for long commutes, inclusive schools should be centrally located within residential areas, ensuring accessibility for all children.

To guide the transition strategically, scientific support is essential. This ensures that inclusion is not reduced to a subject of political controversy and that concerned parents are not misled or unsettled. Public discourse often characterizes inclusion as a risky social experiment, despite strong evidence to the contrary. Similarly, the notion that inclusion is merely a cost-cutting measure can be addressed and corrected through transparent presentation of data and funding models.

How to construct inclusive educational structures as efficiently and sustainably as possible remains an open question. At present, inclusive school development is happening sporadically rather than through a coherent national strategy. Instead of launching a comprehensive master plan, existing structures are being minimally adjusted, often so subtly that external observers hardly see any change. However, genuine inclusion requires a system-wide transformation at all levels of educational institutions, administration, and governance. These must move beyond traditional school-type divisions and be reorganized around types of educational content and students' needs rather than types of school. Inclusion is not simply about closing special schools. It is about building a fair education system particularly for children with disabilities.

Video interview with Tobias Buchner:

[Part 1 Inclusive School in Austria \(23:46\)](#)

[Part 2 Challenges of inclusive school \(17:15\)](#)

More information:

[Contribution by Tobias Buchner: Including spaces?](#)

Video: [Action Human DISPUTE: How inclusive is our school system? with Andrea Schöne \(journalist\) and Michael Felten \(grammar school teacher\) \(30:16\)](#)

9 Outlook: Inclusion as a decentralized form of organization

In the 19th century, it was common for teachers to live in or near their schools (see Stötzner, 1864), and children from the surrounding neighborhood would walk to school. Over time, however, urban planning shifted, school routes became longer, and automobiles were given greater priority. From the 1960s onward, special schools were often built in centralized, car-accessible locations, and children were transported by bus. Similarly, teachers and students in general education began commuting increasingly longer distances to attend their selected schools. This trend was largely driven by the desire to access optimally suited, specialized educational institutions, which became more feasible with improved mobility. As a result, many children with special educational needs, particularly those in rural areas, face long travel times and spend extended periods on school buses ([Ebenbeck et al., 2022](#); 2023). Especially for students with severe disabilities, these distant institutions mean long travel times and different living environments. Friendships and life in general often occur in special institutions rather than the home environment.

In addition to the issue of school transportation, the growing number of so-called "parent taxis" during leisure hours has led to increased traffic congestion around schools and sports facilities. As a result, it is usually not the nearest facility that is chosen, but the best or most optimal facility. As living close to the attended school becomes rarer, distances to schools and to extracurricular activity locations are increasing. This situation not only contributes to increased emissions but also leads to situations with a heightened risk of accidents, caused by congestion and stressful conditions. A shift in urban planning and mobility concepts is therefore necessary to ensure that children can reach school and extracurricular activities safely on their own, even in urban areas.

However, this is not solely the responsibility of urban planning, but also an educational task. Instead of continually striving for larger centralized institutions, decentralized and community-based models should be prioritized. Upgrading local schools or education centers through decentralized resources and digital assistance would make it possible to offer high-quality educational services not only at remote specialized centers but also at local district schools. The aim should be to create flexible schools that provide a range of educational options for diverse groups of students, while also considering ecological sustainability. Inclusive education must therefore be close to home. Inclusive education is not just about schools, but also encompasses all aspects of everyday life. Modern urban planning, such as the [15-minute city](#), should make it possible for everyone to have access to facilities for living, working, commerce, healthcare, education, and entertainment. Inclusion is then an integral part of everyday life, enabling people to live and interact locally within a community. This approach should also apply to rural areas in a modified form. In rural areas, especially, schools should be understood as part of a wide-ranging educational hub that offers both digital and in-person learning opportunities, reaching from early childhood education to adult learning.

The traditional model of organizing and operating schools solely for high-capacity centralized classes is no longer adequate in the 21st century. It results not only in the loss of educational opportunities and inclusion but also in the inefficient use of economic and ecological resources. Moving beyond the conventional notion that a single teacher leads and supervises a class in a set room, usually in a strict manner of frontal instruction followed by work materials, one can develop more open concepts close to home that promote individual learning and working in children.

10 References

- Ainscow, M. (2016). Collaboration as a strategy for promoting equity in education: possibilities and barriers. *Journal of Professional capital and community*, 1(2), 159-172.
- Ainscow, M., & Miles, S. (2009). *Developing inclusive education systems: How can we move policies forward?* [http://www.ibe.unesco.org/fileadmin/user_upload/COPs/News_documents/2009/0907Beirut/DevelopingInclusive Education Systems.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/COPs/News_documents/2009/0907Beirut/DevelopingInclusive_Education_Systems.pdf)
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-147. <https://doi.org/10.1080/08856250210129056>
- Autorengruppe Bildungsberichterstattung. (2014). *Bildung in Deutschland 2014: Ein indikatorengestützter Bericht mit einer Analyse zur Bildung von Menschen mit Behinderungen*. W. Bertelsmann Verlag.
- Bach, H. (1974). *Geistigbehinderte unter pädagogischem Aspekt*. Klett.
- Baker, E. T., Wang, M. C., & Walberg, H. J. (1994). The effects of inclusion on learning. *Educational Leadership*, 52, 33-35.
- Baldwinson, T. (2019). *UPIAS – The Union of Physically Impaired Against Segregation (1972–1990): A public record from private files*. TBR Consulting.
- Balestra, S., Eugster, B., & Liebert, H. (2020). Peers with special needs: Effects and policies. *The Review of Economics and Statistics*, 104(3), 602-618. https://doi.org/10.1162/rest_a_00960
- Barton, L. (1986). The politics of special educational needs. *Disability, Handicap and Society*, 1(3), 273-290. <https://doi.org/10.1080/02674648666780291>
- Bear, G. G., Minke, K. M., & Manning, M. A. (2002). Self-concept of students with learning disabilities: A meta-analysis. *School Psychology Review*, 31(3), 405-427. <https://doi.org/10.1080/02796015.2002.12086165>
- Beckstein, G., & Sroka, S. (2019). Wo du gerade da bist – ich hätte da ein Kind. *Spuren*, (1), 13-19.
- Begemann, E. (1968). Weltkunde in der Hilfsschule als einsichtige Eigenwelterweiterung. *Zeitschrift für Heilpädagogik*, 19, 426-438.
- Begemann, E. (1970). Zum Problem der Einschulung der „Hilfsschüler“. *Zeitschrift für Heilpädagogik*, 21, 173-192.
- Begemann, E. (1984). *Schüler und Lern-Behinderungen*. Klinkhardt.
- Bilgeri, M., & Lindmeier, C. (2020). Ein human-ökonomisches Modell von Behinderung. *Vierteljahresschrift für Heilpädagogik und ihre Nachbargebiete*, 107-122. <http://dx.doi.org/10.2378/vhn2020.art14d>
- Björn, P. M., Aro, M., Koponen, T., Fuchs, L. S., & Fuchs, D. (2018). Response-to-intervention in Finland and the United States: Mathematics learning support as an example. *Frontiers in Psychology*, 9, 800. <https://doi.org/10.3389/fpsyg.2018.00800>
- Bleidick, U. (1968). Über Lernbehinderung. Begriffliche und psychodiagnostische Überlegungen. *Zeitschrift für Heilpädagogik*, 19, 449-464.
- Blumenthal, S., Gebhardt, M., Förster, N., & Souvignier, E. (2022). Internetplattformen zur Diagnostik von Lernverläufen von Schüler:innen und Schülern in Deutschland: Ein Vergleich der Plattformen Lernlinie, Levumi und quop. *Zeitschrift für Heilpädagogik*, 2022(4), 153-167. <http://doi.org/10.5283/epub.52069>
- Blumenthal, Y., & Mahlau, K. (2015). Effektiv fördern – Wie wähle ich aus? Ein Plädoyer für die evidenzbasierte Praxis in der schulischen Sonderpädagogik. *Zeitschrift für Heilpädagogik*, 66(9), 408-421.
- Bundesministerium für Arbeit und Soziales (BMAS). (2021). *Dritter Teilhabebericht der Bundesregierung über die Lebenslagen von Menschen mit Beeinträchtigungen: Teilhabe – Beeinträchtigung – Behinderung*. https://www.bmas.de/SharedDocs/Downloads/DE/Publikationen/a125-21-teilhabebericht.pdf?__blob=publicationFile&v=4
- BMBF – Bundesministerium für Bildung und Forschung. (2018). *Rahmenprogramm empirische Bildungsforschung*. Bundesministerium für Bildung und Forschung.

- Brandt, B., Hoffmann, J., Ibelshäuser, B., Wagener, M., & Werner, C. (2021). 100 Jahre Grundschule in Deutschland – eine Schule für alle? In N. Böhme, B. Dreer, H. Hahn, S. Heinecke, G. Mannhaupt, & S. Tänzer (Eds.), *Mythen, Widersprüche und Gewissheiten der Grundschulforschung. Jahrbuch Grundschulforschung* (Vol. 25). Springer. https://doi.org/10.1007/978-3-658-31737-9_4
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development* (pp. 187–250). Jessica Kingsley Publishers.
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature–nurture reconceptualized in developmental perspective: A bioecological model. *Psychological Review*, 101(4), 568–586. <https://doi.org/10.1037/0033-295X.101.4.568>
- Brown, S. E. (2002). What is disability culture? *Disability Studies Quarterly*, 22(2), 34–50. <https://dsq-sds.org/article/view/343/433>
- Brown, S. E. (2015). Disability culture and the ADA. *Disability Studies Quarterly*, 35(3), 34–50. <https://dsq-sds.org/article/view/4936>
- Buchner, T., & Gebhardt, M. (2011). Zur schulischen Integration in Österreich – historische Entwicklung, Forschung und Status Quo. *Zeitschrift für Heilpädagogik*, 62(8), 298–304. <http://doi.org/10.5283/epub.43901>
- Capovilla, D. (2021). *Behindertes Leben in der inklusiven Gesellschaft*. Beltz.
- Capovilla, D., Gebhardt, M., & Hastall, M. (2018). „Mach mal Platz, hier kommt ein Behinderter“. Schulische Inklusion und problematische atypische Situationen am Beispiel von Lernenden mit einer Beeinträchtigung des Sehens – inklusive Fettnäpfchen. *Vierteljahresschrift für Heilpädagogik*, 87(2), 112–125. <http://dx.doi.org/10.2378/vhn2018.art13d>
- Carlberg, C., & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: A meta-analysis. *The Journal of Special Education*, 14(3), 295–309. <https://doi.org/10.1177/002246698001400304>
- Clemens, S. D. (1966). *Minimal brain dysfunction in children: Terminology and identification; Phase one of the Three-Phase Project*. U.S. Department of Health, Education, and Welfare.
- Cloerkes, G., & Markowetz, R. (2003). Stigmatisierung und Entstigmatisierung im Gemeinsamen Unterricht. *Zeitschrift für Heilpädagogik*, 53(11), 452–460.
- DeVries, J. M., Rathmann, K., & Gebhardt, M. (2018). How does social behavior relate to both grades and achievement scores? *Frontiers in Psychology*, 9, 857. <https://doi.org/10.3389/fpsyg.2018.00857>
- DeVries, J. M., Orton, G.A., & Arum, R. (2025). How expectations, feedback, and course materials relate to intellectual humility in higher education: Toward a framework for intellectual humility cultivation. *Assessment & Evaluation in Higher Education*, 1–19. <https://doi.org/10.1080/02602938.2025.2571223>
- Deutsche Forschungsgemeinschaft. (2019). *Leitlinien zur Sicherung guter wissenschaftlicher Praxis*. Deutsche Forschungsgemeinschaft e.V. https://www.dfg.de/download/pdf/foerderung/rechtliche_rahmenbedingungen/gute_wissenschaftliche_praxis/kodex_gwp.pdf
- Dietze, T. (2011). Sonderpädagogische Förderung in Zahlen. *Zeitschrift für Inklusion*, 6(2). <https://doi.org/10.25656/01:4330>
- Dietze, T. (2019). *Die Entwicklung des Sonderschulwesens in den westdeutschen Ländern: Empfehlungen und Organisationsbedingungen*. Klinkhardt. <https://doi.org/10.35468/5736>
- Ditton, H., & Krüskens, J. (2006). Sozialer Kontext und schulische Leistungen: Zur Bildungsrelevanz segregierter Armut. *ZSE: Zeitschrift für Soziologie der Erziehung und Sozialisation*, 26(2), 135–157. <https://doi.org/10.25656/01:5645>
- Ebenbeck, N., Rieser, J. & Gebhardt, M. (2023). Das sonderpädagogische Fördersystem und die schulische Inklusion in Bayern zwischen 2010 und 2020. Eine räumlich-strukturelle Analyse auf Basis statistischer Daten. *Spuren*. <http://doi.org/10.5283/epub.53485>
- Ebenbeck, N., Rieser, J., Jungjohann, J. & Gebhardt, M. (2022). How the existence of special schools affects the placement of students with special needs in inclusive primary

- schools. *Journal of Research in Special Educational Needs*, 22(3), 274-287. <https://doi.org/10.1111/1471-3802.12565>
- Eberwein, H. (1970). Die Sonderschule als Integrationsfaktor der Gesamtschule. *Zeitschrift für Heilpädagogik*, 21, 311-327.
- Eberwein, H. (1975). Lernbehinderung – eine negativ sanktionierte Normabweichung. *Zeitschrift für Heilpädagogik*, 25, 68-76.
- Ellger-Rüttgardt, S. L. (2019). *Geschichte der Sonderpädagogik*. Reinhardt UTB. <https://doi.org/10.36198/9783838587653>
- Ellinger, S. (2017). Einführung in die Pädagogik bei Lernbeeinträchtigungen. In C. Einhellinger, S. Ellinger, O. Hechler, A. Köhler, & E. Ullmann (Eds.), *Studienbuch Lernbeeinträchtigungen: Band 1: Grundlagen* (pp. xx-xx). Athena. (Bitte Seitenzahlen ergänzen)
- European Agency for Special Needs and Inclusive Education. (2018). *2018 dataset cross-country report*. <https://www.european-agency.org/resources/publications/european-agency-statistics-inclusive-education-2018-dataset-cross-country>
- Ferri, B. A. (2012). Undermining inclusion? A critical reading of response to intervention (RTI). *International Journal of Inclusive Education*, 16(8), 863-880. <http://dx.doi.org/10.1080/13603116.2010.538862>
- Feyerer, E. (1998). *Behindern Behinderte? Integrativer Unterricht auf der Sekundarstufe 1*. Studien-Verlag.
- Feyerer, E., & Prammer, W. (2003). *Gemeinsamer Unterricht in der Sekundarstufe I: Anregungen für eine integrative Praxis*. Beltz.
- Finkelstein, V. (1980). *Attitudes and disabled people*. World Rehabilitation Fund.
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2019). *Learning disabilities: From identification to intervention*. The Guilford Press.
- Fuchs, A. (1903). Beobachtungen an schwachsinnigen Kindern. *Zeitschrift für Pädagogische Psychologie und Jugendkunde*, 5(3), 179-193.
- Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41(1), 93-99. <http://www.jstor.org/stable/4151803>
- Gasteiger-Klicpera, B., & Klicpera, C. (2003). Warum fühlen sich Schüler einsam? Einflussfaktoren der Einsamkeit im schulischen Kontext. *Praxis der Kinderpsychologie und Kinderpsychiatrie*, 52(1), 1-16. <https://doi.org/10.25656/01:938>
- Gebhardt, M. (2015). *Schulische Inklusion: Empirische Studien zur Situation von Kindern und Jugendlichen mit sonderpädagogischem Unterstützungsbedarf* [Unpublished cumulative habilitation thesis]. Technical University of Munich. <http://dx.doi.org/10.13140/RG.2.2.32677.40160>
- Gebhardt, M. (2018). Einstellungen von Lehrkräften zur schulischen Inklusion in Deutschland. In K. Rathmann & K. Hurrelmann (Eds.), *Leistung und Wohlbefinden in der Schule: Herausforderung Inklusion* (pp. 338-349). Beltz.
- Gebhardt, M. (2024). *Inklusiv- und sonderpädagogische Pädagogik im Schwerpunkt Lernen: Eine Einführung (Version 0.6)*. Ludwig-Maximilians-Universität München.
- Gebhardt, M. (2023). *Pädagogische Diagnostik. Leistung, Kompetenz und Entwicklung messen, bewerten und interpretieren für individuelle Förderung. (Version 0.3)*. Ludwig-Maximilians-Universität München.
- Gebhardt, M., Schurig, M., Suggate, S., Scheer, D., & Capovilla, D. (2022). Social, systemic, individual-medical or cultural? Questionnaire on the concepts of disability among teacher education students. *Frontiers in Education*, 6, 701987. <http://dx.doi.org/10.3389/educ.2021.701987>
- Gebhardt, M., Schurig, M., Suggate, S., Scheer, D., Diehl, K., Melzer, C., Schröter, A., Förster, M., Schmid, A., Link, P., Roos, S., & Capovilla, D. (2022). *Questionnaire on the Concept of Disability (CoD)*. Universität Regensburg. <http://dx.doi.org/10.5283/epub.52369>
- Gebhardt, M., Heine, J.-H., & Sälzer, C. (2015). Schulische Kompetenzen von Schüler:innen und Schülern ohne sonderpädagogischen Unterstützungsbedarf im gemeinsamen Unterricht. *Vierteljahresschrift für Heilpädagogik und ihre Nachbargebiete*, 84(3), 246-258. <http://dx.doi.org/10.2378/vhn2015.art28d>

- Gebhardt, M., & Jungjohann, J. (2020). Digitale Unterstützung bei der Dokumentation von Verhaltens- und Leistungsbeurteilungen. In B. Meyer, T. Tretter, & U. Englisch (Eds.), *Praxisleitfaden auffällige Schüler und Schüler:innen* (pp. 41–50). Beltz.
- Gebhardt, M., Krammer, M., Schwab, S., Rossmann, P., & Gasteiger-Klicpera, B. (2013). What is behind the diagnosis of learning disability in Austrian schools? An empirical evaluation of the results of the diagnostic process. *International Journal of Special Education*, 28(2), 147–153. <http://www.internationalsped.com/>
- Gebhardt, M., Kuhl, J., Wittich, C., & Wember, F. B. (2018). Inklusives Modell in der Lehr- amtsausbildung nach den Anforderungen der UN-BRK. In S. Hußmann & B. Welzel (Eds.), *Dortmunder Profil für inklusionsorientierte Lehrer:innen- und Lehrerausbildung* (pp. 279–292). Waxmann. <https://www.researchgate.net/publication/326556997>
- Gebhardt, M., Krammer, M., & Rossmann, P. (2013). Zur historischen Entwicklung der schulischen Integration in der Steiermark. *Zeitschrift für Heilpädagogik*, 64(6).
- Gebhardt, M., Sälzer, C., Mang, J., Müller, K., & Prenzel, M. (2015). Performance of students with special educational needs in Germany: Findings from PISA 2012. *Journal of Cognitive Education and Psychology*, 14(3), 343–356. <https://doi.org/10.1891/1945-8959.14.3.343>
- Gebhardt, M., Sälzer, C., & Tretter, T. (2014). Die gegenwärtige Umsetzung des gemeinsamen Unterrichts in Deutschland. *Heilpädagogische Forschung*, 40(1), 22–31. <https://www.researchgate.net/publication/261830596>
- Gebhardt, M., Schwab, S., Krammer, M., & Gegenfurtner, A. (2015). General and special education teachers' perceptions of teamwork in inclusive classrooms at elementary and secondary schools. *Journal for Educational Research Online*, 7(2), 129–146. <http://www.j-e-r-o.com/index.php/jero/article/viewFile/570/244>
- Gebhardt, M., Schwab, S., Reicher, H., Ellmeier, B., Gmeiner, S., Rossmann, P., & Gasteiger-Klicpera, B. (2011). Einstellungen von Lehrer:innen zur schulischen Integration von Kindern mit einem sonderpädagogischen Unterstützungsbedarf in Österreich. *Empirische Sonderpädagogik*, 3(4), 275–290. https://epub.uni-regensburg.de/43765/1/gebhardt_FIS.pdf
- Gebhardt, M., Tretter, T., Schwab, S., & Gasteiger-Klicpera, B. (2011). The transition from school to the workplace for students with learning disabilities: Status quo and the efficiency of pre-vocational and vocational training schemes. *European Journal of Special Needs Education*, 26(4), 443–459. <https://doi.org/10.1080/08856257.2011.597181>
- Gidlund, U. (2018). Teachers' attitudes towards including students with emotional and behavioural difficulties in mainstream school: A systematic research synthesis. *International Journal of Learning, Teaching and Educational Research*, 17(2), 45–63. <https://doi.org/10.26803/ijlter.17.2.3>
- Götz, M., & Sandfuchs, U. (2011). Geschichte der Grundschule. In W. Einsiedler, M. Götz, & F. Heinzel (Eds.), *Handbuch Grundschulpädagogik und Grundschuldidaktik* (pp. 32–44). Klinkhardt.
- Grosche, M. (2015). Was ist Inklusion? In P. Kuhl, P. Stanat, B. Lütje-Klose, C. Gresch, H. Pant, & M. Prenzel (Eds.), *Inklusion von Schüler:innen und Schülern mit sonderpädagogischem Förderbedarf in Schulleistungserhebungen* (pp. xx–xx). Springer. https://doi.org/10.1007/978-3-658-06604-8_1 (Bitte Seitenzahlen ergänzen)
- Grünke, M. (2006). Zur Effektivität von Fördermethoden bei Kindern und Jugendlichen mit Lernstörungen: Eine Synopse vorliegender Metaanalysen. *Kindheit und Entwicklung*, 15(4), 239–254. <https://doi.org/10.1026/0942-5403.15.4.239>
- Grünke, M., & Cavendish, W. M. (2016). Learning disabilities around the globe: Making sense of the heterogeneity of the different viewpoints. *Learning Disabilities: A Contemporary Journal*, 14(1), 1–8.
- Guillemot, F., Lacroix, F., & Nocus, I. (2022). Teachers' attitude towards inclusive education from 2000 to 2020: An extended meta-analysis. *International Journal of Educational Research Open*, 3, 100175. <https://doi.org/10.1016/j.ijedro.2022.100175>
- Haeberlin, U. (2005). *Grundlagen der Heilpädagogik: Einführung in eine wertgeleitete erziehungswissenschaftliche Disziplin*. Haupt.

- Haeberlin, U., Bless, G., Moser, U., & Klaghofer, R. (1991). *Die Integration von Lernbehinderten: Versuche, Theorien, Forschungen, Enttäuschungen, Hoffnungen* (1st ed.). Haupt. <https://doi.org/10.25656/01:1980>
- Hänsel, D. (2006). *Die NS-Zeit als Gewinn für Hilfsschullehrer*. Klinkhardt.
- Hartke, B. (2017a). Gelingende Inklusion: Das Rügener Inklusionsmodell. In B. Hartke (Ed.), *Handlungsmöglichkeiten schulische Inklusion: Das Rügener Modell kompakt*. Kohlhammer.
- Hartke, B. (2017b). *Handlungsmöglichkeiten Inklusion: Das Rügener Inklusionsmodell*. Kohlhammer.
- Hartke, B., & Diehl, K. (2013). *Schulische Prävention im Bereich Lernen: Problemlösungen mit dem RTI-Ansatz*. Kohlhammer.
- Hasbrouck, J., & Tindal, G. A. (2006). Oral reading fluency norms: A valuable assessment tool for reading teachers. *The Reading Teacher*, 59(7), 636–644. <https://doi.org/10.1598/RT.59.7.3>
- Heimlich, U. (2004). Didaktische Konzepte für den zieldifferenten Gemeinsamen Unterricht. *Zeitschrift für Heilpädagogik*, 55(6), 288–295.
- Heimlich, U. (2016). *Pädagogik bei Lernschwierigkeiten*. Klinkhardt.
- Heimlich, U. (2019). *Inklusive Pädagogik: Eine Einführung*. Klinkhardt.
- Heimlich, U. (2020). *Studienbuch Inklusion: Ein Wegweiser für die Lehrerbildung*. Klinkhardt.
- Heimlich, U., & Kiel, E. (2020). *Studienbuch Inklusion: Ein Wegweiser für die Lehrerbildung*. Klinkhardt.
- Hinz, A. (2002). Von der Integration zur Inklusion – terminologisches Spiel oder konzeptionelle Weiterentwicklung. *Zeitschrift für Heilpädagogik*, 52(9), 354–361.
- Hinz, A., & Wocken, H. (1988). Der Schulversuch im Überblick. In H. Wocken, G. Antor, & A. Hinz (Eds.), *Integrationsklassen in Hamburger Grundschulen: Bilanz eines Schulversuchs* (pp. 49–60). <http://bidok.uibk.ac.at/library/hinz-schulversuch.html>
- Hoffmann, T., & Moser, V. (2023). Räume des „Anderen“ im (sonder-)pädagogischen Diskurs 1860–1880–1940. In *Raum. Macht. Inklusion. Inklusive Räume erforschen und entwickeln* (pp. 255–264). Verlag Julius Klinkhardt. <https://doi.org/10.35468/5993-29>
- Hosp, M. K., Hosp, J. L., & Howell, K. W. (2016). *The ABCs of CBM: A practical guide to curriculum-based measurement*. Guilford Publications.
- Huber, C. (2006). *Soziale Integration in der Schule?! Eine empirische Untersuchung zur sozialen Integration von Schülern mit sonderpädagogischem Förderbedarf im gemeinsamen Unterricht*. Tectum.
- Huber, C., Gerullis, A., Gebhardt, M., & Schwab, S. (2018). The impact of social referencing on social acceptance of children with disabilities and migrant background: An experimental study in elementary school settings. *European Journal of Special Needs Education*, 33(2), 269–285. <https://doi.org/10.1080/08856257.2018.1424778>
- Huber, C. and Grosche, M. (2012). Das response-to-intervention-Modell als Grundlage für einen inklusiven Paradigmenwechsel in der Sonderpädagogik. *Zeitschrift für Heilpädagogik*, 62, 312–323.
- Hunt, J. (2019). *No limits: The disabled people's movement – a radical history*. TBR Consulting.
- Hußmann, A., Wendt, H., Bos, W., Bremerich-Vos, A., Kasper, D., Lankes, E. M., & Valtin, R. (2017). *IGLU 2016: Lesekompetenzen von Grundschulkindern in Deutschland im internationalen Vergleich*. Waxmann. <https://doi.org/10.25656/01:15476>
- Hußmann, A., & Schurig, M. (2019). Unter der Norm – Kompetenz und Diagnostik in IGLU 2016. *Empirische Sonderpädagogik*, 11(4), 279–293. <https://doi.org/10.25656/01:18335>
- Jantzen, W. (1976). Materialistische Erkenntnistheorie, Behindertenpädagogik und Didaktik. *Demokratische Erziehung*, 2(1), 15–29.
- Jacobson, J. W., Mulick, J. A., & Schwartz, A. A. (1995). A history of facilitated communication: Science, pseudoscience, and antiscience (Science Working Group on Facilitated Communication). *American Psychologist*, 50, 750–765. <https://doi.org/10.1037/0003-066X.50.9.750>

- Jones, N. D., Bell, C. A., Brownell, M., Qi, Y., Peyton, D., Pua, D., Fowler, M., & Holtzmann, S. (2022). Using classroom observations in the evaluation of special education teachers. *Educational Evaluation and Policy Analysis*, 44(3), 429–457. <https://doi.org/10.3102/01623737211068523>
- Jungjohann, J., & Gebhardt, M. (2018). Lernverlaufsdiagnostik im inklusiven Anfangsunterricht Lesen – Verschränkung von Lernverlaufsdiagnostik, Förderplanung und Wochenplanarbeit. In F. Hellmich, G. Görel, & M. F. Löper (Eds.), *Inklusive Schul- und Unterrichtsentwicklung* (pp. 160–172). Kohlhammer.
- Jungjohann, J., Gegenfurtner, A., & Gebhardt, M. (2018). Systematisches Review von Lernverlaufsmessung im Bereich der frühen Leseflüssigkeit. *Empirische Sonderpädagogik*, 10(1), 100–118. <https://doi.org/10.25656/01:15963>
- Kanter, G. (1974). Lernbehinderungen, Lernbehinderte, deren Erziehung und Rehabilitation. In Deutscher Bildungsrat (Ed.), *Sonderpädagogik* (pp. 117–234). Klett.
- Klauer, K. J. (1975). *Lernbehindertenpädagogik*. Marhold.
- Klauer, K. J., & Leutner, D. (2012). *Lehren und Lernen: Einführung in die Instruktionspsychologie* (2nd ed.). Beltz.
- Kultusministerkonferenz (KMK). (1960). *Gutachten zur Ordnung des Sonderschulwesens*.
- Kultusministerkonferenz (KMK). (1972). *Empfehlung zur Ordnung des Sonderschulwesens*.
- Kultusministerkonferenz (KMK). (1994). *Empfehlung Sonderpädagogische Förderung in den Schulen in der Bundesrepublik Deutschland*. http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/1994/1994_05_06-Empfehl-Sonderpaedagogische-Foerderung.pdf
- Kultusministerkonferenz (KMK). (1999). *Empfehlungen zum Förderschwerpunkt Lernen*. <https://www.kmk.org/fileadmin/Dateien/pdf/PresseUndAktuelles/2000/sopale.pdf>
- Kultusministerkonferenz (KMK). (2000). *Empfehlungen zum Förderschwerpunkt geistige Entwicklung*. <https://www.kmk.org/fileadmin/pdf/PresseUndAktuelles/2000/geist.pdf>
- Kultusministerkonferenz (KMK). (2011). *Inklusive Bildung von Kindern und Jugendlichen mit Behinderung in Schulen*. http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2011/2011_10_20-Inklusive-Bildung.pdf
- Kultusministerkonferenz (KMK). (2019). *Inklusive Bildung von Kindern und Jugendlichen mit Behinderung in Schulen* (rev. ed.). http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2011/2011_10_20-Inklusive-Bildung.pdf
- Kultusministerkonferenz (KMK Statistik). (2020). *Statistische Veröffentlichungen der Kultusministerkonferenz: Dokumentation Nr. 223 – Februar 2020. Sonderpädagogische Förderung in Schulen 2009 bis 2018*. https://www.kmk.org/fileadmin/Dateien/pdf/Statistik/Dokumentationen/Dok223_SoPae_2018.pdf
- Kocaj, A., Kuhl, P., Kroth, A. J., Pant, H. A., & Stanat, P. (2014). Wo lernen Kinder mit sonderpädagogischem Unterstützungsbedarf besser? Ein Vergleich schulischer Kompetenzen zwischen Regel- und Förderschulen in der Primarstufe. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 66, 165–191. <https://doi.org/10.1007/s11577-014-0253-x>
- Koch, K., & Ellinger, S. (2016). Förderung sozial benachteiligter Kinder durch Förderung mathematischer Vorläuferkompetenzen – Evaluation des Programms „Kuno bleibt am Ball“ (KUBA). *Zeitschrift für Heilpädagogik*. (Withdrawn article.)
- Kottmann, B. (2006). *Selektion in die Sonderschule: Das Verfahren zur Feststellung von sonderpädagogischem Unterstützungsbedarf als Gegenstand empirischer Forschung*. Klinkhardt.
- Krämer, S., Möller, J., & Zimmermann, F. (2021). Inclusive education of students with general learning difficulties: A meta-analysis. *Review of Educational Research*, 91(3), 432–478. <https://doi.org/10.3102/0034654321998072>
- Krawinkel, S., Südkamp, A. S., & Tröster, H. (2017). Soziale Partizipation in inklusiven Grundschulklassen: Bedeutung von Klassen- und Lehrkraftmerkmalen. *Empirische Sonderpädagogik*, 9(3), 277–295. <https://doi.org/10.25656/01:15172>
- Krull, J. K. (2018). *Die soziale Integration von Schüler:innen und Schülern mit Lern- und Verhaltensproblemen in der Primarstufe: Eine zentrale Herausforderung beim Aufbau*

- eines inklusiven Bildungssystems [Doctoral dissertation, Universität zu Köln]. <http://kups.ub.uni-koeln.de/id/eprint/8481>
- Kuhl, J. (2018). „Wahrscheinlich wirkungsvoller“ – Warum Evidenzbasierung nicht alles, aber wichtig ist. In DIFGB – Deutsche Interdisziplinäre Gesellschaft zur Förderung der Forschung für Menschen mit geistiger Behinderung (Ed.), *Evidenzbasierung – Kontroverse im Kontext von Autismus-Spektrum-Störungen und geistiger Behinderung* (pp. 28–36). Eigendruck der DIFGB. <https://www.difgb.de/fachtagungen/download/1148/465/17>
- Kuhl, J., Gebhardt, M., Bienstein, P., Käßler, C., Quinten, S., Ritterfeld, U., Tröster, H., & Wember, F. (2017). Implementationsforschung als Voraussetzung für eine evidenzbasierte sonderpädagogische Praxis. *Sonderpädagogische Förderung*, 62(4), 383–393. <http://dx.doi.org/10.3262/SOF1704383>
- Kuhl, J., Vossen, A., Hartung, N., & Wittich, C. (2021). *Evidenzbasierte Förderung bei Lernschwierigkeiten in der inklusiven Grundschule*. Reinhardt. <https://doi.org/10.5283/epub.53149>
- Liebers, K. (2023). *Leistungsheterogenität in der Grundschule: Umgang mit Vielfalt im Unterricht*. Kohlhammer.
- Lindmeier, C., & Lütje-Klose, B. (2015). Inklusion als Querschnittsaufgabe in der Erziehungswissenschaft. *Erziehungswissenschaften*, 51(2), 7–15. <https://doi.org/10.25656/01:11565>
- Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British Journal of Educational Psychology*, 77(1), 1–24. <https://doi.org/10.1348/000709906X156881>
- Lintorf, K., & Schürer, S. (2023). Kriterien der Übergangsempfehlung bei Kindern mit sonderpädagogischem Förderbedarf: Die Bedeutung kindbezogener, familiärer und schulstruktureller Merkmale im Vergleich. *Zeitschrift für Erziehungswissenschaft*, 26, 1547–1570. <https://doi.org/10.1007/s11618-023-01181-9>
- Longmore, P. K. (2003). *Why I burned my book and other essays on disability*. Temple University Press.
- Lutz, S., & Gebhardt, M. (2021). *Fallbuch zum sonderpädagogischen Schwerpunkt Lernen*. Universität Regensburg. <https://doi.org/10.5283/epub.46131>
- Lütje-Klose, B., Neumann, P., Gorges, J., & Wild, E. (2018). Die Bielefelder Längsschnittstudie zum Lernen in inklusiven und exklusiven Förderarrangements (BiLieF): Zentrale Befunde. *Die Deutsche Schule*, 110(2), 9–23. <https://doi.org/10.31244/dd.2018.01.02>
- Martschinke, S., & Frank, A. (2002). Wie unterscheiden sich Schüler und Schüler:innen in Selbstkonzept und Leistung am Schulanfang? In F. Heinzel & A. Prengel (Eds.), *Heterogenität, Integration und Differenzierung in der Primarstufe. Jahrbuch Grundschulforschung* (Vol. 6, pp. xx–xx). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-322-99542-1_21 (Bitte Seitenzahlen ergänzen)
- Meijer, J. W. (1999). *Finanzierung der sonderpädagogischen Förderung*. https://www.european-agency.org/sites/default/files/financing-of-special-needs-education_Financing-DE.pdf
- Meijer, J. W., & Watkins, A. (2019). Financing special needs and inclusive education – From Salamanca to the present. *International Journal of Inclusive Education*, 23(7–8), 705–721. <https://doi.org/10.1080/13603116.2019.1623330>
- Mejeh, M., & Powell, J. (2018). Inklusive Bildung in der Schweiz – Zwischen globalen Normen und kantonalen Besonderheiten. *Bildung und Erziehung*, 71(4), 412–431. <https://doi.org/10.13109/buer.2018.71.4.412>
- Melzer, C., Hillenbrand, C., Sprenger, D., & Hannemann, T. (2015). Aufgaben von Lehrkräften in inklusiven Bildungssystemen – Review internationaler Studien. *Erziehungswissenschaft*, 26(2), 17–18.
- Merz, K. (1982). Lernschwierigkeiten – Zur Effizienz von Fördermaßnahmen an Grund- und Lernbehindertenschulen. *Heilpädagogische Forschung*, 1, 53–69.
- Michailakis, D. (2003). The systems theory concept of disability: One is not born a disabled person, one is observed to be one. *Disability and Society*, 18(2), 209–229. <https://doi.org/10.1080/0968759032000044184>

- Möckel, A. (2007). *Geschichte der Heilpädagogik oder Macht und Ohnmacht der Erziehung*. Klett-Cotta.
- Moser, V. (2012). Gründungsmythen der Heilpädagogik. *Zeitschrift für Pädagogik*, 58(2), 262–274. <https://doi.org/10.25656/01:10505>
- Moser, V. (2023). Profession, organization, and academic discipline: Differentiation of a special education science in Germany since 1900. *Journal of Curriculum Studies*. <https://doi.org/10.1080/00220272.2023.2248213>
- Moser, V., & Frenz, S. (2022). Profession und normative Ordnungen in der Entstehung der urbanen Hilfsschule: Die Modernisierung der Regierung des Sozialen oder die Entstehung einer pädagogischen Tatsache. In V. Moser & J. Garz (Eds.), *Das (A)normale in der Pädagogik 1880–1980: Wissenspraktiken – Wissensordnungen – Wissensregime* (pp. 17–50). Klinkhardt.
- Moser, V., & Sasse, A. (2008). *Theorien der Behindertenpädagogik*. Reinhardt.
- Mühling, A., Jungjohann, J., & Gebhardt, M. (2019). Progress monitoring in primary education using Levumi: A case study. In H. Lane, S. Zvacek, & J. Uhomoibhi (Eds.), *CSEDU 2019. Proceedings of the 11th International Conference on Computer Supported Education, 2–4 May, 2019, Heraklion, Greece* (pp. 137–144). SCITEPRESS – Science and Technology Publications. <http://dx.doi.org/10.5220/0007658301370144>
- Myklebust, J. O. (2002). Inclusion or exclusion? Transitions among special needs students in upper secondary education in Norway. *European Journal of Special Needs Education*, 17(3), 251–263. <https://doi.org/10.1080/08856250210162158>
- Myklebust, J. O. (2006). Class placement and competence attainment among students with special educational needs. *British Journal of Special Education*, 33, 76–81. <https://doi.org/10.1111/j.1467-8578.2006.00418.x>
- Nirje, B. (1994). Das Normalisierungsprinzip – 25 Jahre danach. *Vierteljahresschrift für Heilpädagogik und ihre Nachbargebiete*, 63(1), 12–32.
- OECD. (2019). *PISA 2018 Results (Volume II): Where all students can succeed*. OECD Publishing. <https://doi.org/10.1787/b5fd1b8f-en>
- Paseka, A., & Schwab, S. (2020). Parents' attitudes towards inclusive education and their perceptions of inclusive teaching practices and resources. *European Journal of Special Needs Education*, 35(2), 254–272. <https://doi.org/10.1080/08856257.2019.1665232>
- Petermann, F., & Petermann, U. (2010). Themenschwerpunkt Aggression. *Kindheit und Entwicklung*, 19(4), 205–208.
- Piezunka, A., Gresch, C., Sälzer, C., & Kroth, A. (2016). Identifizierung von Schülerinnen und Schülern nach Vorgaben der UN-BRK in bundesweiten Erhebungen: Sonderpädagogischer Förderbedarf, sonderpädagogische Förderung oder besondere Unterstützung? In V. Moser & B. Lütje-Klose (Eds.), *Schulische Inklusion* (pp. 190–211). Beltz Juventa. <https://doi.org/10.25656/01:17180>
- Pijl, S. J., Frostad, P., & Flem, A. (2008). The social position of students with special needs in regular schools. *Scandinavian Journal of Educational Research*, 52(4), 387–405. <https://doi.org/10.1080/00313830802184558>
- Preuss-Lausitz, U. (2016). Throughput instead of input: Herausforderungen beim Wegfall der Feststellungsdiagnostik in den Förderbereichen Lernen, emotionale und soziale Entwicklung und Sprache. *Zeitschrift für Heilpädagogik*, (2016) 5, 204–214.
- Probst, P. (2003). „Gestützte Kommunikation“: Eine unerfüllbare Verheißung. <http://www.autismus-in-berlin.de/gk-verheissung-1.pdf>
- Retief, M., & Letšosa, R. (2018). Models of disability: A brief overview. *HTS Teologiese Studies / Theological Studies*, 74(1). <https://doi.org/10.4102/hts.v74i1.4738>
- Rheinberg, F. (2006). Bezugsnormorientierung. In H.-K. Arnold, U. Sandfuchs, & J. Wiechmann (Eds.), *Handbuch Unterricht* (pp. 643–648). Klinkhardt. https://www.researchgate.net/profile/Falko_Rheinberg/publication/316128414
- Rossmann, P., Gasteiger-Klicpera, B., Gebhardt, M., Roloff, C., & Weindl, A. (2011). Zum Selbstkonzept von Schüler:innen mit einem sonderpädagogischen Förderbedarf in Sonderschulen und Integrationsklassen: Ein empirisch fundierter Diskussionsbeitrag.

- In R. Mikula & H. Kittl-Satran (Eds.), *Dimension der Erziehungs- und Bildungswissenschaft* (pp. 107–120). Leykam.
- Sander, A. (2004). Konzepte einer inklusiven Pädagogik. *Zeitschrift für Heilpädagogik*, 54, 240–245.
- Sälzer, C., Gebhardt, M., Müller, K., & Pauly, E. (2015). Der Prozess der Feststellung sonderpädagogischen Förderbedarfs in Deutschland. In P. Kuhl, P. Stanat, B. Lütje-Klose, C. Gresch, H. Pant, & M. Prenzel (Eds.), *Inklusion von Schüler:innen und Schülern mit sonderpädagogischem Förderbedarf in Schulleistungserhebungen* (pp. 129–152). Springer. https://doi.org/10.1007/978-3-658-06604-8_5
- Sauer, S., Ide, S., & Borchert, J. (2007). Zum Selbstkonzept von Schüler:innen und Schülern an Förderschulen und in integrativer Beschulung: Eine Vergleichsuntersuchung. *Heilpädagogische Forschung*, 33(3), 135–142.
- Scheer, D., & Melzer, C. (2020). Trendanalyse der KMK-Statistiken zur sonderpädagogischen Förderung 1994 bis 2019. *Zeitschrift für Heilpädagogik*, 71, 575–591. <http://dx.doi.org/10.25656/01:24724>
- Schwab, S. (2018). *Attitudes towards inclusive schooling: A study on students', teachers' and parents' attitudes*. Waxmann.
- Schwab, S., Gebhardt, M., Krammer, M., & Gasteiger-Klicpera, B. (2015). Linking self-rated social inclusion to social behaviour: An empirical study of students with and without special education needs in secondary schools. *European Journal of Special Needs Education*, 30(1), 1–14. <http://doi.org/10.1080/08856257.2014.933550>
- Schurig, M., & Gebhardt, M. (2020). Schule, Ganzttag inklusiv? *Zeitschrift für Heilpädagogik*, 71(7), 328–338. <http://doi.org/10.5283/epub.43462>
- Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*, 73(4), 392–416. <https://doi.org/10.1177/001440290707300401>
- Sermier Dessemontet, R., Benoit, V., & Bless, G. (2011). Schulische Integration von Kindern mit einer geistigen Behinderung. *Empirische Sonderpädagogik*, 3(4), 291–307. <https://doi.org/10.25656/01:9329>
- Shakespeare, T. (2006). The social model of disability. In J. Lennard (Ed.), *The disability studies reader* (pp. 266–273). Routledge. https://www.academia.edu/download/32344952/Davis_Reader_social_model.pdf
- Shakespeare, T. (2018). *Disability: The basics*. Routledge. <https://doi.org/10.4324/9781315624839>
- Snyder, S. L., & Mitchell, D. T. (2006). *Cultural locations of disability*. University of Chicago Press.
- Soodak, L. C., Podell, D. M., & Lehman, L. R. (1998). Teacher, student, and school attributes as predictors of teachers' responses to inclusion. *The Journal of Special Education*, 31(4), 480–497. <https://doi.org/10.1177/002246699803100405>
- Speck, O. (1969). Sozietäre Komponenten der Sondererziehung. *Zeitschrift für Heilpädagogik*, 20, 338–347.
- Stötzner, H. E. (1864). *Schulen für schwachbefähigte Kinder*. <https://books.google.de/books?id=USINAAAacAAJ>
- Tent, L., Witt, M., Bürger, W., & Zschoche-Lieberum, C. (1991). Ist die Schule für Lernbehinderte überholt? *Heilpädagogische Forschung*, 1, 289–320.
- Tornow, K., & Weinert, H. (1942). *Erbe und Schicksal*. Metzner.
- Tornow, K. (1940). *Denken Sie nur: Unser Fritz soll in die Hilfsschule!* Deutscher Volksverlag.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. <http://www.un.org/disabilities/default.asp?id=259>
- Vaughn, S., Linan-Thompson, S., & Hickmann, P. (2003). Response to instruction as a means of identifying students with reading/learning disabilities. *Exceptional Children*, 69(4), 391–409. <https://doi.org/10.1177/001440290306900401>
- Venetz, M., Zurbriggen, C., & Eckhart, M. (2014). Entwicklung und erste Validierung einer Kurzversion des "Fragebogens zur Erfassung von Dimensionen der Integration von Schülern (FDI 4–6)". *Empirische Sonderpädagogik*, 6(2), 99–113. <https://doi.org/10.25656/01:9247>

- Voß, S., Blumenthal, Y., Mahlau, K., Marten, K., Diehl, K., Sikora, S., & Bodo, H. (2016). *Der Response-to-Intervention-Ansatz in der Praxis: Evaluationsergebnisse zum Rügener Inklusionsmodell*. Waxmann.
- Voß, S., Blumenthal, Y., Sikora, S., Mahlau, K., Diehl, K., & Hartke, B. (2014). Rügener Inklusionsmodell (RIM) – Effekte eines Beschulungsansatzes nach dem Response to Intervention-Ansatz auf die Rechen- und Leseleistungen von Grundschulkindern. *Empirische Sonderpädagogik*, 6(2), 114–132. <https://doi.org/10.25656/01:9248>
- Walter, J., Malinowski, F., Neuhaus, N., Reiche, T., & Rupp, M. (1997). Welche Effekte bringt das zusätzliche Einbinden von Lautgebärden für den Leseunterricht bei Förderschülern? *Heilpädagogische Forschung*, 23, 122–131.
- Wehrhahn, A. (1913). *Deutsche Hilfsschulen in Wort und Bild*. Marhold.
- Wember, F. (2013). Herausforderung Inklusion: Ein präventiv orientiertes Modell schulischen Lernens und vier zentrale Bedingungen inklusiver Unterrichtsentwicklung. *Zeitschrift für Heilpädagogik*, 64, 380–388.
- Wember, F. (2015). Unterricht professionell: Orientierungspunkte für einen inklusiven Unterricht mit heterogenen Lerngruppen. *Zeitschrift für Heilpädagogik*, 66, 456–473.
- Wember, F. (2017). Sonderpädagogische Förderung als evidenzbasierte Praxis. *Zeitschrift für Heilpädagogik*, 68, 444–468.
- Wember, F., & Heimlich, U. (2020). *Didaktik im Förderschwerpunkt Lernen*. Kohlhammer.
- Werner, E. E. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. McGraw-Hill.
- Werning, R. (2019). Inklusion im frühkindlichen und schulischen Bereich. In O. Köller, M. Hasselhorn, F. W. Hesse, et al. (Eds.), *Das Bildungswesen in Deutschland: Bestand und Potentiale*. UTB, Klinghardt.
- Werning, R., & Lütje-Klose, B. (2016). *Einführung in die Pädagogik bei Lernbeeinträchtigungen*. Reinhardt.
- Wittich, C., & Kuhl, J. (2021). Grundlagen der evidenzbasierten Förderung bei Lernschwierigkeiten in der inklusiven Schulpraxis. In J. Kuhl, A. Vossen, N. Hartung, & C. Wittich (Eds.), *Evidenzbasierte Förderung bei Lernschwierigkeiten in der Grundschule* (pp. 7–17). Reinhardt.
- Wocken, H. (1982). Didaktische Leitideen der Schule für Lernbehinderte: Ein Beitrag zur Theorie der Sonderschule. *Zeitschrift für Heilpädagogik*, 33, 637–647.
- Wocken, H. (1996). Sonderpädagogischer Unterstützungsbedarf als systemischer Begriff. *Sonderpädagogik*, 26, 34–38. <http://www.hans-wocken.de/Werk/werk14.pdf>
- Wocken, H. (2000). Leistung, Intelligenz und Soziallage von Schülern mit Lernbehinderungen: Vergleichende Untersuchungen an Förderschulen in Hamburg. *Zeitschrift für Heilpädagogik*, 51, 492–503.
- Wocken, H. (2015). Inklusion als Feigenblatt. *Magazin-Auswege.de*. http://www.magazin-auswege.de/data/2015/12/Wocken_Inklusion_als_Feigenblatt.pdf
- Wocken, H., & Gröhlich, C. (2009). Kompetenzen von Schüler:innen und Schülern an Hamburger Förderschulen. In W. Bos, M. Bosen, & C. Gröhlich (Eds.), *KESS 7 – Kompetenzen und Einstellungen von Schüler:innen an Hamburger Schulen zu Beginn der Jahrgangsstufe 7* (pp. 133–142). Waxmann.
- Wolf, L. M., Dietze, T., Moser, V., & Kuhl, J. (2022). „Sie wissen ja, welche Schätze sie im Kollegium haben“ – Der Einsatz förderpädagogischer Lehrkräfte in Grundschulen aus der Perspektive der Educational-Governance. *ZfG*, 15, 81–99. <https://doi.org/10.1007/s42278-021-00131-w>
- Vygotsky, L. S. (1924). Zur Psychologie und Pädagogik der kindlichen Defektivität. <http://www.th-hoffmann.eu/archiv/wygotski/wygotski.1924.pdf>
- Vygotsky, L. S. (1933). Das Spiel und seine Bedeutung in der psychischen Entwicklung des Kindes. <http://www.th-hoffmann.eu/archiv/wygotski/wygotski.1933.pdf>

11 List of figures

number	title	page
1	<i>Distribution of special education focus according to the KMK (2020)</i>	7
2	<i>Pictures from Wehrhahn (1913, S. 13 und S.40)</i>	12
3	<i>Pictures of Tornow und Weinert (1942, S. 156 und 203)</i>	13
4	<i>Distribution of support needs at school</i>	52
5	<i>Wait to Fail problem based on Huber and Grosche (2012)</i>	52
6	<i>Output model with flat distribution</i>	55
7	<i>Throughput model with specific measures</i>	56
8	<i>Learning Development of Learning Progress Monitoring in Reading Fluency</i>	57
9	<i>Three-stage multi-tiered support system</i>	59
10	<i>Change of levels based on status diagnostics</i>	61
	<i>Learning progress monitoring as accompanying learning documentation</i>	62

12 List of tables

number	title	page
1	<i>Overview of names related to support needs Learning</i>	21
2	<i>Special needs support rates for the 2023/2024 school year according to KMK data</i>	41
3	<i>Percentages of students diagnosed with special needs and their type of school compared to all students, according to data from the European Agency for Special Needs and Inclusive Education, 2018</i>	43