11. Special education students' beliefs on inclusion and the role of prior experiences

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Introduction[1]

During students' academic education at university, the expectation is that their competencies and beliefs regarding the core of their future profession develop. This also applies to those pursuing studies to become a special educator (SE). In Sweden, these postgraduate students are experienced teachers of various forms. In Germany, such students also come directly from schools, although the latter come as former pupils and not former teachers. Moreover, the schools they leave behind for their university studies differ. Many future SEs in Germany leave a school form that collects academically minded and trained pupils. Due to its tracked nature, the latter school form (grammar school, in German 'gymnasium'), provides its pupils with very few inclusion experiences concerning a community of students with varying learning conditions. In contrast, Swedish prospective SEs' have genuine teaching experiences in a comprehensive school, which has for a long time provided joint instruction of students with very different conditions (Wermke, Höstfält & Magnusson, 2024).

The aim of this chapter is to show similarities and differences in SE students' beliefs on inclusive education in Sweden and Germany. Academic and professional training is an important part of a profession's nature. The core practices and beliefs concerning its 'professionalism' are developed here. Beliefs also have an impact on the choice of future careers. We argue, however, that the experiences special education students have prior to their academic training are also of significance. It has been shown that beliefs can change within these stages. Conversely, it has raised the question of whether students'

[1] We want to thank Heidi Pantzer, who has written her final thesis in the Special education pedagogue programme at Stockholm University in relation to this minor project. Our joint work with the data gave fertile insights for both the thesis and this research project.

beliefs manifest themselves in teacher education contexts whose curricula are explicitly oriented towards inclusion education (Moser et al., 2014).

This volume's theoretical starting point is the complex relation between professions, the individual professionals and the organisations they are active in, or thank their existence for (see Chapter 5, without schools, there can be no special education professions). From this perspective, we argue that experiences in organisations from before professional training must be investigated as well. This idea is indeed not new. Dan Lortie (1975) already conceived of the observation apprenticeship following interviews with teachers in 1963. Recognising that school students witnessed thousands of hours of teaching, Lortie (1975) put forward the impact this has on the professional development of teachers (Brunker, 2024).

Consequently, in relation to what we can expect from teacher and SE education concerning, for example, the development of inclusive education beliefs or other parts of professional practice, we must be aware of the potential effects of belief affirmation from the school before any academic training starts. By comparing two rather different national special education contexts, and active students' beliefs on the opportunities and limitations of inclusive education, we aim to show how big these differences can be. We use for our investigation several items from a theoretically and empirically developed questionnaire on teacher students' beliefs about in-school education support, which can be related to the operationalisation of inclusive learning environments (Moser et al., 2014).[2]

Beliefs in special education practice[3]

This study is interested in the beliefs regarding school-based support among special education students in various contexts. The foundation of research performed in this paper is based on the work of Moser et al. (2014), who examined potential differences in beliefs among students pursuing different

[2] The study aims to provide a first, glance at the diverse beliefs held by inclusion professionals. The noticeable complexity and occasional ambiguity reflect the exploratory nature of this initial approach and highlight starting points for further in-depth research. It is understood that more research is necessary to arrive at a clearer and more differentiated understanding of these beliefs.

[3] For further and more extended research on German and Swedish special education systems and professions, see Chapter 3.

teaching professions. The research focused on the examination of beliefs held by students enrolled in special education and elementary education teacher programmes (Moser et al., 2014). It showed the importance of these beliefs in shaping teaching practices and student outcomes, proposing a belief model and utilising a survey instrument to analyse and compare beliefs across different teacher education programmes. The study reveals significant differences in beliefs between special education and elementary education students. This showed that student might decide on the choice of their future profession, among others, by drawing on certain beliefs about the core of their future function. Concerning Moser et al. (2014), education beliefs comprise attitudes that can be understood as subjective value attitudes, which guide individual action. The term is used to designate individual, subjectively true, value-laden mental constructs that are the relatively stable results of substantial social experiences and that have a significant impact on one's interpretations of and contributions to classroom practice (Skott, 2015, p. 18). Beliefs are shaped by various factors, including personal experiences and insights. Regarding Moser et al. (2014), there are various dimensions in the beliefs which are assumed to influence SEs' practice and orientations.

The professional identity of SEs and their cooperation with regular teachers in Germany, with a focus on inclusive education Heinrich and colleagues (2014), are investigating by drawing on the challenges of the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD). This transformation of the school system has led to special needs educators and regular teachers working together and experiencing insecurity about how special needs educators can maintain their professional identity while collaborating in inclusive settings. The beliefs about their students' capabilities and personal experiences are pivotal in shaping their learning and educational processes as they develop their professional attitudes. The professional attitude of these students is characterised by a commitment to caring for pupils with disabilities, coupled with a strong influence of normative convictions. These beliefs include support for inclusion, alongside an idealised view of people with disabilities and their abilities, albeit based on a deficit-oriented perspective.

A few comparative studies thematise teacher education and inclusion from a comparative perspective. By comparing Sweden and Norway, Jortveit et al. (2019) focused on the beliefs and practices of SEs. The research found

both similarities and differences. For example, Swedish SEs take a more relational perspective in their beliefs compared to their Norwegian counterparts. However, practices such as individual teaching were more common in Sweden. The study suggested a possible gap between ideals and practices among SEs. Cameron et al. (2018) compared SE training in Sweden and Norway and explained the differences between the two Nordic countries. Sweden's education programme appears to focus more on social goals and inclusive learning environments, while Norway emphasises working with specific learning or behavioural difficulties. Consequently, beliefs about inclusive education are reproduced by the content of SE training. Takala et al. (2015) compared Sweden and Finland, focusing on education and expectations of special needs educator students. Both national groups expected their main tasks to involve working with students and promoting and accepting diversity, where both groups supported inclusion but found it a complex issue, with stronger support for inclusion and children's right to study in their own class among Swedish students.

Special educator training Education in Sweden and Germany[4]

Both Swedish programmes, that is, special needs teacher and special needs educator, co-exist; they are offered at a postgraduate study level, with six possible specialisations, comprising 90 study credits points, equivalent to one and a half years of full-time study or three years part-time, with admission to the programme requiring a minimum of three years of teaching experience. As described in Chapter 2, Germany presents a federal structure. Due to this, in the various federal states, SE and teacher education can differ. German special education can build on a bachelor's degree, three-four years of study in special education, which is followed by a one or two-year master's degree in special education. Alternatively, in some states, a four-year university education or prior work experience is not required for entry to the programme. After the university education, future SEs in all states, like regular teachers, attend an 18-month integrated practice and study period, which is led by appointed expert practitioners.

[4] For an extended description of the German and Swedish (special) education and SE systems, see Chapter 2.

Research design[5]

Instruments

The questions of Moser's and colleagues' 'Beliefs Inventory for Teachers in the Field of School Support' asks about various dimensions in assessing beliefs about teacher action, teaching, and the overall function of schools. This instrument, which builds on a systematic literature study (Moser et al., 2014), provides a tool for understanding educators' multifaceted beliefs across various domains. In total, the questionnaire consisted of 26 original questions, and the response was given using the four-step Likert scale, ranging from 'does not apply at all' (0) to (3) 'this does fully apply'. In this chapter, we report on several items from the developed item battery.

The survey items were initially developed in German. For use in a Swedish context, they had to be translated. The translation process was organised in the following way. Two senior researchers in special education with Swedish, German, and English language proficiency translated the original German survey into English and German. A third colleague, with Swedish and English proficiency, revised the Swedish items once more. The translated document (including all items) is attached in the appendix of this chapter. Several items were deleted from the original German version due to differences in the school systems in the two national cases. In a pilot study, we could also see that several items were misleading for Swedish students due to contextual differences in nation-specific schooling and special education practices. In other words, items on which students could not be assumed to answer were rejected. See two examples of this process below.

> German: Jede/r Schüler/in sollte nach einem individuellen Förderplan unterrichtet werden.
>
> English: Each pupil should be taught according to an individual support plan.
>
> Swedish: Varje elev ska undervisas enligt en individuell utvecklingsplan

[5] For further and extended details on the research design applied in this chapter, see Chapter 4.

This item was deleted because it is practised in Sweden for all students.

> German: Ein inklusives Schulsystem realisiert Chancengleichheit eher als ein gegliedertes Schulsystem.
>
> English: An inclusive school system is more likely to realise equal opportunities than a divided one.
>
> Swedish: Det är troligare att ett inkluderande skolsystem kan realisera likvärdig utbildning än ett parallellskolesystem.

This item was deleted because it does not apply to Sweden, which formally does not have a divided school system.

After this process, the questions were tested with eight SE students. The students commented on each item. All students found single items not understandable or not applicable from their Swedish perspective; such items were also removed.

Data collection and sampling

The questionnaire was designed as an online survey via Survey and Report. The link to the survey was distributed to students in special education programmes at six universities throughout Sweden.

In total, 504 Swedish students answered the survey. The German sample comprises 424 special education students from two universities. The data collection was conducted in 2021 and 2022. The chapter's presentation draws only on descriptive statistics (presented in detail in the chapter's appendix),[6] where the comparison of both groups aims to contribute to our theoretical understanding of education professions in education organisations, which is the umbrella of this volume. We have sorted the items of the original into three themes, which we have developed through discussions in the research group. These themes were seen as relevant for both German and Swedish student groups. The themes are presented in Table 11.1.

[6] For our discussion of statistical and theoretical representativity and generalisation, please see Chapter 4.

Table 11.1: Survey items divided into thematic categories

Beliefs about inclusion in school systems	Children with disabilities need the special school as a sheltered area.	An inclusive education system as it is today is more of a burden than an opportunity for teachers.	Inclusive schooling improves the self-confidence children with disabilities.	Inclusive settings are, in principle, suitable for all pupils.	Inclusion is a quality feature of schools.
Beliefs about school and classroom environment	The school must be responsive to the individual needs of its pupils.	Fostering a sense of community in a class helps the learning development of each individual.	If a pupil does not cooperate in class, the reason should be found in a personal conversation with him/her.	Pupils learn more efficiently in homogeneous school classes than in heterogeneous groups.	
Perceived need for medical, psychiatric, and psychotherapeutic knowledge	Educators need basic medical knowledge about pathological disorders of childhood and adolescence.	Behavioural therapeutical means are particularly important for certain students' social development in school.	Educators need knowledge about psychiatric illnesses in order to be able to educate pupils with special needs.		

Results

Beliefs about inclusions in school systems

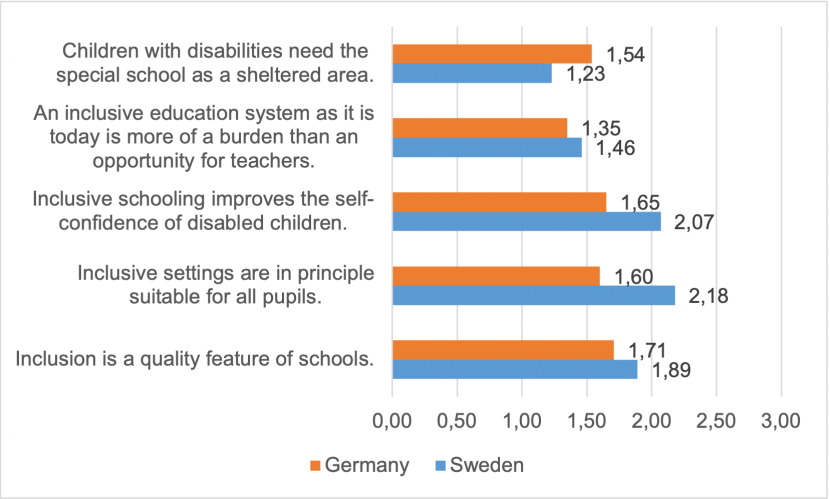

Figure 11.1: Beliefs about inclusions in school systems (descriptive statistics presented in the appendix)

We see many differences in the theme of inclusion orientation (see Figure 11.1). We were even surprised by the clear differences between the two national student groups. Seeing the two student groups as separate would show a slightly positive inclusion orientation in both. First, the comparison with a group of Swedish students, having other characteristics, disguises how much less German future SEs believe in the potential of inclusive education. In summary, German students are rather less inclusion-oriented as disability is connected to vulnerability and care rather than affirmation of diversity. In the item '*Children with disabilities need the special school as a sheltered area*' (Sweden: $M = 1.23$, Germany: $M = 1.54$), German respondents are more positive about special schools for certain students since it is a shelter for them, something, according to these students, pupils with a disability apparently need. This belief is also confirmed by the following item: *Inclusive schooling improves the self-confidence of disabled children*' (Sweden: $M = 2.07$, Germany: $M = 1.65$). German students do not believe that inclusive schooling could

improve children's self-confidence when they have a form of 'disability'. Apparently, German SE students think being different is not positive for one's self-esteem, at least not in German schools. The next items ask about inclusion as part of the school system. The differences between Germans and Swedish are confirmed: *'Inclusion is a quality feature of schools'* (Sweden: $M = 1.89$, Germany: $M = 1.71$). The results show that both countries express agreement with the statement, but Sweden again has a higher mean score. This becomes even clearer in the big difference in the item *'Inclusive settings are in principle suitable for all pupils'*, in which German students see apparently clear limitations (Sweden: $M = 2.18$, Germany: $M = 1.60$).

Finally, in the item *'An inclusive education system as it is today is more of a burden than an opportunity for teachers'*, Swedish students ($M = 1.46$) are more in agreement than their German counterparts ($M = 1.35$), even if this is a rather low agreement level in general. This might indicate that Swedish students also see more challenges in inclusive work, as it is operationalised in schools today. Another interpretation can be that Swedish students are already experienced educators, whereas German students often have very little professional experience. Their experiences come from their own school biography in a tracked school system. In other words, they do not know what a 'significant' burden for active teachers can be.

Beliefs about school and classroom environment

In the second theme, German and Swedish students had to consider what they think about school and classroom instruction (see Figure 11.2). This is an important dimension since inclusive education is operationalised in schools and their instruction. As our research review shows, questions of accepted heterogeneity in learning groups, child-centredness, social community, etc., are the foundation for how inclusive education is seen as an opportunity or limitation.

Again, Swedish student respondents have a more positive perspective on difference, child-centredness and social community. The first item, *'The school must be responsive to the individual needs of its pupils'* (Sweden: $M = 2.74$, Germany: $M = 2.46$), aligns with inclusive education principles that recognise and address the diverse needs of all students. The mean scores for *'Fostering a sense of community in a class helps the learning development of each individual'* are for Sweden 2.71 and Germany 2.45. Even if Swedish and German students

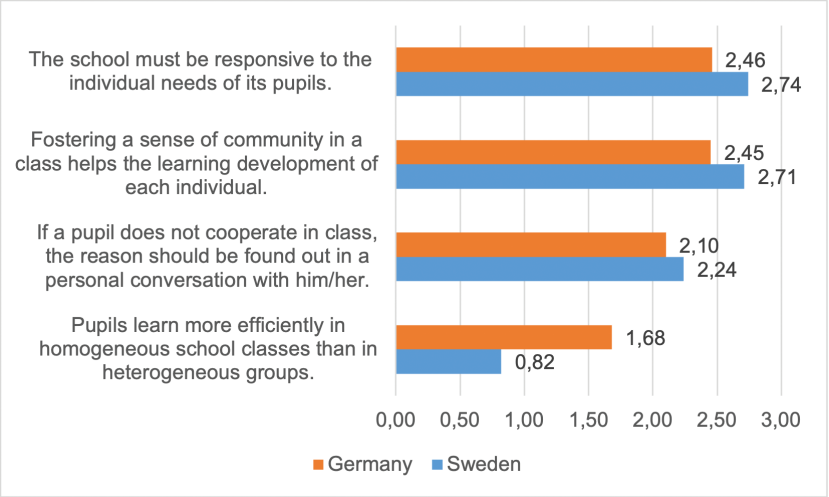

Figure 11.2: Beliefs about school and classroom environment

express a higher level of agreement with statements, the Swedish population has higher mean scores. *This indicates a higher belief in child-centredness. It is the child's conditions which determine instruction, not, for example, the content of teaching or the teacher himself or herself. Accordingly, the following item has, again, a higher Swedish mean value. 'If a pupil does not cooperate in class, the reason should be found in a personal conversation with him/her'* (Sweden: $M = 2.24$, Germany: $M = 2.10$). This indicates a slightly higher belief in trying to get a pupil's perspective on problem solutions.

The last statement in this category was *'Pupils learn more efficiently in homogeneous school classes than in heterogeneous groups'* (Sweden: $M = 0.82$, Germany: $M = 1.68$). We think that this difference is very illustrative of our argument that previous school experiences have an impact on students' beliefs. This big difference can be related to the German system of organisational differentiation in a tracked school system. Many German students have during their school biography attended a homogenising school system with strict ability grouping in different schools, while the Swedish students are experienced teachers who work in a school system which is built to deal with much wider heterogeneity. We might argue that due to a lack of experience

of heterogeneity, differences due to disabilities are not challenging for the German pupils in question but rather for their future SEs.

Perceived need for medical, psychiatric, and psychotherapeutic knowledge

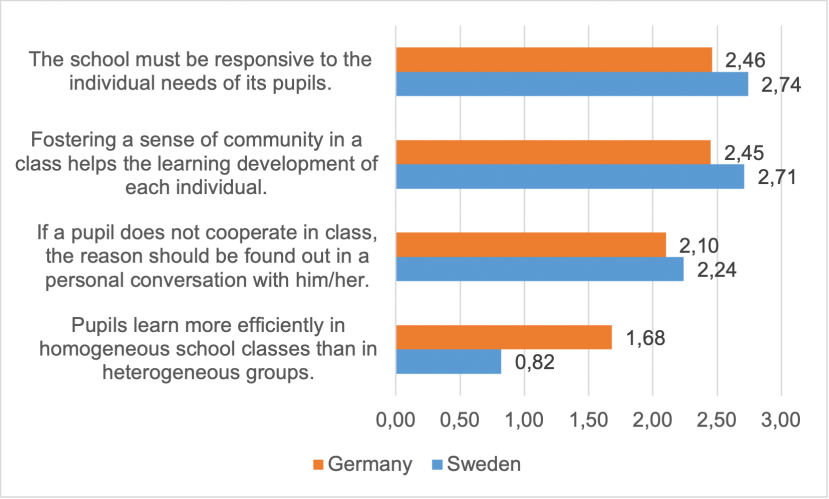

Figure 11.3: Perceived need for medical, psychiatric, and psychotherapeutic knowledge

The final theme in this study looks at how much the two countries' SE student groups believe in medical, psychiatric or therapeutical knowledge and strategies in relation to helping students in need of special education support (see Figure 11.3). Here, we searched for eventual existing beliefs and eventual medical categorical reasoning by the SE students. Interestingly, both national student populations strongly believe in the necessity of such a knowledge body as future SEs. When we investigate varying bodies of medical knowledge, psychiatric knowledge is valued the highest among students in both countries.

However, the medical paradigm is first of all presented by a wish for psychiatric strategies among SE students. *The item's results, 'Educators need*

knowledge about psychiatric illnesses' (Sweden: *M* = 2.49, Germany: *M* = 2.25), show that the wish for psychiatric knowledge is even greater in Sweden. This kind of medical knowledge is apparently seen as separated from both medical and psychological explanation models for eventual schooling problems and their solutions. The following two items have smaller means in both national contexts: '*Behavioural therapeutic means are particularly important for certain students' social development in school*', (Sweden: *M* = 1.99, Germany: *M* = 1.95); *Educators need basic medical knowledge about pathological disorders of childhood and adolescence*', (Sweden: *M* = 1.69, Germany: *M* = 2.04). This phenomenon might be about internationally ongoing discussions about schooling problems related to psychiatric diagnoses, intensively discussed and summarised in Sweden as neuro-psychiatric disabilities (such as, e.g. ADHD or eventually autism), which are often connoted with pharmaceutical (medication) and segregating educational solutions (special groups, special schools). In other words, the knowledge body of SEs concerns only very limited parts of a medical paradigm, the world of few neuro-psychiatric diagnoses and their respective treatments.

Conclusion

Swedish and German special education students present different perspectives on inclusion. In Sweden, our survey findings underscore a consistent and more positive orientation toward inclusive education. The Swedish participants express a belief in the suitability of inclusive settings for all pupils, emphasising their positive impact on self-confidence among children with disabilities. Furthermore, there is an acknowledgement of the significance of tailoring educational approaches to meet individual student needs, particularly in fostering a sense of community within classrooms. Accordingly, the Swedish respondents favour heterogeneous groups over homogeneous ones, signalling a commitment to diverse and inclusive learning environments. This can be related to the long history of such arrangements in the Swedish comprehensive school system. In comparison, German special education students face challenges in maintaining their professional identity within the inclusive education framework due to their socialisation in and preparation for a tracked school system. Previous research in Germany discusses the distinct roles and responsibilities special education teachers have compared

to their regular teacher counterparts, something mirrored in the defensive beliefs of the German participants regarding the inclusion of students.

In conclusion, we can see two dynamics in our investigations of future SEs in Sweden and Germany. The first dynamic shows that school organisations are apparently also stabilised by the students in the professional study programmes, that is, future SEs. Special education students entering academic training have both pupil and professional experiences. For the German students, this rationale is easy to explain. Due to the tracked nature of the German school systems, a significant number of special education students at university attend theoretically directed grammar schools. This school form is, in this case, the major way to university studies. It is characterised by the significant homogenisation of students, considering the high cognitive learning conditions and high social-economic status. German students have few experiences of heterogeneity and inclusive education. This group, with its experiences in the school system, apparently reproduce defensive inclusion beliefs even in their professional education.

Their future colleagues in Sweden will have significantly different experiences when they enter academic SE training. Even these stabilise their respective organisation, but they have been socialised in a comprehensive school as pupils. However, more importantly, when they enter special education training, this is due to the entrance requirements for experienced teachers. They thus have extensive experience with special education and inclusive education. Although these differences were expected, but we argue it is still interesting to see how significantly different the starting point for SEs in both countries is structurally, thereby considering their beliefs on inclusion. This is a very strong argument for the claim that, although inclusive education is a global expectation of democratic states, its praxis already differs from the beliefs of those who are supposed to make inclusive education happen. In addition, the differences are substantial.

Also interesting is the other dynamic found in our data, namely the shared wishes for psychiatric competence in the special education body of knowledge for students in the various contexts. This is apparently independent of how different the contexts and the students in them might be. Eventually, the global common denominator of special education or SEs will not only be the wish for an inclusive school but also a wish for a strong neuro-psychiatric knowledge base.

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Appendix

Descriptive statistics

Table 1

Item		Sweden			Germany	
	N	*M (0–3)*	*SD*	*N*	*M (0–3)*	*SD*
Children with disabilities need the special school as a sheltered area.	502	1,23	.79	419	1,54	.804
An inclusive education system as it is today is more of a burden than an opportunity for teachers.	502	1.46	.877	425	1.35	.829
Inclusive schooling improves the self-confidence of children with disabilities.	502	2,07	.733	414	1.65	.891
Inclusive settings are in principle suitable for all pupils.	502	2,18	.988	423	1.60	1.016
Inclusion is a quality feature of schools.	502	1,89	.848	421	1.71	.859

Table 2

Item		Sweden			Germany	
	N	*M (0–3)*	*SD*	*N*	*M (0–3)*	*SD*
The school must be responsive to the individual needs of its pupils.	502	2,74	.513	427	2.46	.945
Fostering a sense of community in a class helps the learning development of each individual.	502	2,71	.549	425	2.45	.943
If a pupil does not cooperate in class, the reason should be found in a personal conversation with him/her.	502	2,24	.82	425	2,1	.846
Pupils learn more efficiently in homogeneous school classes than in heterogeneous groups.	502	0,82	.827	423	1.68	.877

Table 3

Item		**Sweden**			**Germany**	
	N	*M (0–3)*	*SD*	*N*	*M (0–3)*	*SD*
Educators need basic medical knowledge about pathological disorders of childhood and adolescence.	502	1,69	.943	419	2.04	.846
Behavioural therapeutical means are particularly important certain students' social development in school.	502	1,99	.76	419	1,95	.706
Educators need knowledge about psychiatric illnesses to be able to educate pupils with special needs.	502	2,49	.705	427	2.25	.842