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# School transfers in special education: frequency, direction, and timing of transfers between different school settings

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## ABSTRACT

Many countries provide multiple school settings for students with special educational needs (SEN), such as inclusive schooling in mainstream school, special classes, and special schools. However, even though school transfers are especially challenging for students with SEN, research on transfers between different school settings (i.e. placements) for students with SEN is scarce. The current study used administrative census data about students in Switzerland to investigate the frequency, direction, and timing of transfers between school settings attended by students with SEN. Results showed a relatively high percentage of transfers between school settings relative to the estimated number of students with SEN. The direction and timing of transfers varied by setting type. For special classes serving students with moderate SEN and special schools, transfers into these settings greatly outnumbered transfers out of the settings. Transfer peaks were observed at normative transition points (e.g. from kindergarten to primary school).

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School transfer; school transition; school mobility; special educational needs

## Introduction

Students typically undergo several school transfers throughout their school career. Some are due to normative transitions such as the move to a higher school level, and other transfers are instigated for other reasons, such as family relocation. School transfers can be challenging events (e.g. Galton and McLellan 2017; Rumberger 2015), especially for students with special educational needs (SEN). Students with SEN encompass a heterogeneous group of children and adolescents with various disabilities, learning difficulties, and/or other disadvantages (Organisation for Economic Co-operation and Development 2005). Studies show that students with SEN might be negatively affected by school transfers and generally need more individualised support in order to assure a smooth transition (e.g. Dockett and Perry 2013; Harris and Nowland 2020).

For students with SEN, different school settings often exist in parallel. Although a variety of settings exist, most fall into one of three primary categories: (1) Inclusive (or mainstream) settings, where students with and without SEN are schooled together in mainstream classes; (2) separated settings, where students

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with SEN attend a special class within a mainstream school; and (3) segregated settings, where students with SEN are taught in special schools. The existence of different parallel settings makes transfers between different school settings for students with SEN highly probable. However, to date, only a few studies have studied transfers between inclusive, separated, and segregated school settings (e.g. Mann, Cuskelly, and Moni 2018; Rens and Louw 2021). Therefore, the current paper aims to shed light on the frequency, directions, and timing of transfers between inclusive, separated, and segregated school settings.

## School transitions and school mobility

Transfers between schools have been studied for several decades (for an overview, see Jindal-Snape et al. 2021; Welsh 2017). Research on the general topic of *school transfers* can largely be divided into two strands: school transitions and school mobility.

*School transitions* are normative transfers for all students at a specific age and are related to a promotion. Most authors rely on a broad conceptualisation of transition as a 'change' with some authors stressing the fact that adaptations take place on multiple dimensions (Jindal-Snape 2016). Several reviews have reported that compared to students without SEN, students with SEN find the transitions to preschool (Malone and Gallagher 2009), primary school (Dockett and Perry 2013), secondary school (Harris and Nowland 2020; Jindal-Snape et al. 2019), and high school or vocational training (Foley et al. 2012; Jacobs, MacMahon, and Quayle 2018) challenging. Thus, students with SEN show higher anxiety levels related to school transitions (Hughes, Banks, and Terras 2013) and have more difficulties adapting to their new school environment (e.g. McIntyre, Blacher, and Baker 2006), which might negatively affect their future school trajectories (Harris and Nowland 2020). The reasons for these challenges are multifaceted and can relate to public policy, institutions, professionals, families, and student characteristics (e.g. Jindal-Snape et al. 2019; Malone and Gallagher 2009).

*School mobility*, by contrast, refers to non-normative transfers between schools, for example due to the relocation of a student's family. It is often measured by the frequency of school transfers that students undergo. Higher levels of school mobility are associated with lower academic performance (Mehana and Reynolds 2004), more emotional or behavioural problems (Dinnen et al. 2020), and greater difficulties with social adjustment (Dupere et al. 2015). Causality cannot be inferred from these studies. Hence, although school mobility might have a negative effect on student outcomes, it also appears to depend on student characteristics such as ethnicity, socio-economic status or early academic achievement (Calibuso and Winsler 2021). Furthermore, while strategic moves (e.g. attending a higher quality school) can have a positive impact on student development, reactive moves (e.g. relocation due to parents' divorce) are likely to be more disruptive both socially and academically (Rumberger 2015). Slightly higher rates of student mobility are reported for students with SEN as compared to students without SEN (Barrat et al. 2014; Rübner Jørgensen and Perry 2021; Strand and Demie 2006) and mobility appears to be particularly high in students with emotional disturbances (Malmgren and Gagnon 2005).

## *Transfers between different settings for students with SEN*

Great variability exists in the avenues through which countries provide special educational support (Anastasiou and Keller 2014). Many countries have signed the United Nations' Convention on the Rights of Persons with Disabilities (CRPD) and have integrated those principles into national policies. However, the understanding and realisation of the policies vary substantially across countries and regions. As just one example, great variation can be seen in the rates of children assigned SEN across countries, as well as the percentages of students with SEN enrolled in inclusive, separated, and segregated school settings (Organisation for Economic Co-operation and Development 2005).

The European Agency for Development in Special Needs Education (2003) distinguishes three main categories in how European countries provide special education: (1) Countries with a one-track system aim to teach (almost) all students in common (i.e. mainstream) schools. (2) Countries with a two-track system have two different systems for mainstream and special schooling. (3) Countries with a multiple-track system offer a variety of services from inclusive schooling to separated special classes or segregated special schools. Given that many countries belong to this third category and provide multiple school settings for students with SEN (Bajrami 2017; Schwab 2021), the shortage of studies on transfers between different school settings for students with SEN remains an important gap to address.

A few studies have explored the *reasons* for transferring from an inclusive to a segregated setting (Bastges-Lienschöft et al. 2020; Kelly et al. 2014; Lelgemann et al. 2012; Mann, Cuskelly, and Moni 2018; Strotmann and Tietig 2002). Reasons described include mainstream schools not being able or willing to provide the required support, social factors such as bullying, and growing differences in academic achievements as students get older.

Some studies investigated the *transition process* or the *experience of transfers* between different school settings for students with SEN (Croydon et al. 2019; Frederickson et al. 2004; Kidd and Hornby 1993; Maturana, Mendes, and Capellini 2019; Pillay and Di Terlizzi 2009; Rens and Louw 2021). These studies consisted of interviews with various stakeholders. All but one study (Frederickson et al. 2004) considered a small number of cases and can thus be considered exploratory. Furthermore, the studies varied widely in terms of research questions, methods, and context characteristics (e.g. school settings, types of SEN) considered, making it difficult to draw generalised conclusions. Of note, Maturana, Mendes, and Capellini (2019) identified challenges during the transfer between settings that are similar to those reported by studies on normative school transitions (e.g. Malone and Gallagher 2009).

The research on school transfers between different settings for students with SEN still lacks basic information on the *frequency, direction, or timing* of such transfers. First results from Switzerland and England suggest higher frequencies of transfers from mainstream to segregated settings during kindergarten (Bundesamt für Statistik 2021) and primary school (Rübner Jørgensen and Perry 2021) as compared to secondary school. However, we found no reports on the frequency or timing of transfers in the other direction (i.e. from separated or segregated to inclusive school settings). To estimate the importance and impacts of transfers between different school settings for students with SEN, information on the occurrence of such transfers is needed.

## The current study

Although many countries provide a multiple track system for students with SEN, transfers between these different school settings have scarcely been investigated. The current study uses Switzerland as a case study of a country with a multiple track system where all three main settings for students with SEN exist in parallel. It aims to add to the state of research by investigating the following research questions: (1) What are the frequencies and directions of transfers between different school settings attended by students with SEN? (2) What is the timing of school transfers within school trajectories (i.e. at which grade) between different school settings attended by students with SEN?

## Methods

### Study context

We adopt the operational definition by the European Agency Statistics on Inclusive Education specifying SEN as '[...] an official decision [that] leads to a child/learner being recognised as eligible for additional educational support to meet their learning needs' (Ramberg and Watkins 2020, 92). In Switzerland, parents, teachers, school principals, and in some cases community services ('Schulpsychologischer Dienst', 'Schulpflege') must give consent for students to be eligible to special educational support.

Originally, the special education system in Switzerland was organised as a dual track system (European Agency for Development in Special Needs Education 2003). However, with the reorganisation of responsibilities in 2008 (Kronenberg 2021) it now closer resembles a multitrack system like it is known in many other European countries. Students with SEN are schooled in mainstream, separated, or segregated settings. In *mainstream settings*, students with SEN receive additional support from specialised teachers and/or teaching assistants within regular classrooms ('Integrative Sonderschulung'). *Separated settings* have three types of special classes: Introductory special classes ('Einführungsklassen') to ease the start for younger primary school students, special classes for foreign language students who moved to Switzerland and do not speak the local language ('Fremdsprachige Klassen'), and special classes for students with moderate SEN (usually termed 'Kleinklassen'). In *segregated settings*, students with SEN are schooled at special schools ('Sonderschulen') with distinct focuses such as intellectual disability, autism, or sensory impairments.

### Data set

Administrative census data about students in Switzerland was provided by the Swiss Federal Statistical Office (Bundesamt für Statistik, BFS). Administrative data is collected yearly from schools at the beginning of the school year on a designated date. Personal identifiers, which were anonymised by the BFS for the purpose of this study, allow for the tracking of individual students across years.

Census data from students in compulsory school from 2014 to 2018 was used for the analysis (for the number of students, see Table 1). Compulsory school in Switzerland consists of kindergarten (two years in most regions) and nine school years (i.e. grades),

**Table 1.** Absolute numbers and percentages of students in different school settings in Switzerland from 2014–2018.

School setting		2014	2015	2016	2017	2018
Mainstream (A)	N	876,291	884,536	892,748	902,062	912,118
	%	97.00%	96.91%	96.94%	96.79%	96.81%
Separated (B)	N	3,901	3,447	3,239	3,282	3,243
	%	0.43%	0.38%	0.35%	0.35%	0.34%
Separated (C)	N	1,651	1,579	2,181	2,050	2,177
	%	0.18%	0.17%	0.24%	0.22%	0.23%
Separated (D)	N	7,935	7,829	7,713	7,664	7,608
	%	0.88%	0.86%	0.84%	0.82%	0.81%
Segregated (E)	N	13,621	15,330	15,086	16,940	17,051
	%	1.51%	1.68%	1.64%	1.82%	1.81%
All students	N	903,399	912,721	920,967	931,998	942,197
	%	100.00%	100.00%	100.00%	100%	100%

A: Mainstream class, B: Introductory special class, C: Special class for foreign language students, D: Special class for students with moderate SEN, E: Special school.

which are divided into primary school (six years in most regions) and lower secondary school. Data about students listed as permanent residents of Switzerland were used for the analysis. Duplicates were handled according to information provided by the BFS.

The data set does not include information on the SEN status of individual students. However, information on SEN status can be inferred from the variable *school setting*. All students in separated and segregated setting necessarily receive SEN support. For students attending a mainstream setting, it is not possible to determine SEN status. However, since the focus is on students who transfer between different settings, it can be inferred that all students who transfer to or from mainstream settings would have received SEN support during their placement in the separated or segregated setting. For example, if a student transfers from a special class to a mainstream class, it can be determined that this student received SEN support in the special class, but there is no information in the data whether the student still received SEN support after the transition.

Given this data set's limitations, we used other sources to obtain a rough estimate of the total number of students with SEN. BFS statistics on the general student population in Switzerland show that, in 2017, 14291 students were schooled in separated settings, 17042 students attended segregated settings, and 22,566 students received SEN support in mainstream settings (Bundesamt für Statistik 2019). Thus, it can be estimated that in 2017, roughly 54,000 students received additional support due to SEN.

## Variables

### School setting

This variable was created from the variables 'education type' and 'education program'. In doing so, five different school settings were specified.<sup>1</sup> The (A) mainstream setting refers to students who are schooled in a mainstream class. In the separated setting, students are schooled in special classes within mainstream schools. This setting can be further divided into three groups: (B) introductory special classes, (C) special classes for foreign language students, and (D) special

classes for students with moderate SEN. In the (E) segregated setting, students are schooled at special schools. The type of special school is not further specified in the data set.

### *Transfer*

For each academic year, we determined the numbers of students who changed the school setting from one year to the next. We also calculated the percent of transfers compared to the total number of students for both the year prior to and following the potential transfer.

### *Grade*

The data set covers kindergarten, which lasts two years in most regions of Switzerland, plus primary and lower secondary school, which last from Grade 1 to Grade 9. Hence, there are similar numbers of students in each grade for Grade 1 to Grade 9 (387,000–409,000 students per grade) and more than double the number in kindergarten (835,000 students), since kindergarten covers two cohorts of students.

Information on grade level was used to investigate the timing of transfers between settings. However, grade level is only specified for students in mainstream settings that follow the Swiss national education programme. This restriction meant we could determine the grade *before* the transfer when students transferred from mainstream to separated or segregated settings. Conversely, we also determined the grade *after* the transfer, when students transferred from separated or segregated to inclusive settings. However, the timing of transfers between separated and segregated settings could not be determined. Similarly, transfers between mainstream settings with a foreign education programme (e.g. international schools that follow the curriculum of another country) and separated or segregated settings could not be analysed for timing of transfer (126 cases).

### *Analyses*

Descriptive statistics were calculated using the free, open-source software R (R Core Team 2016). The package ‘panelr’ was used to organise the data (Long 2020): The variable ‘transfer’ was created on the level of individuals (wide format), while descriptive statistics were computed on the level of measurements (long format).

## **Results**

### *General descriptive statistics*

Table 1 shows the numbers and percentages of students in each of the five school settings for every year. Over 3% of all students are schooled in separated or segregated settings every year. This number is consistent with the BFS reports (BFS 2019, 2020). The percentage of students in separated settings is slightly lower than in segregated settings (e.g. 2018: 1.38% in separated settings, 1.81% in segregated settings).

**Table 2.** Annual transfers between school settings across the four observation periods.

		2014 – 2015 N	2015 – 2016 N	2016 – 2017 N	2017 – 2018 N	2014–2018 % <sup>1)</sup>
Number of students enrolled before and after (potential) transfer		808,411	817,453	827,362	839,609	100.00%
Students transferring between different school settings		11,608	11,477	11,998	11,673	1.42%
School setting						
Before transfer	After transfer	2014 – 2015 N	2015 – 2016 N	2016 – 2017 N	2017 – 2018 N	2014–2018 % <sup>1)</sup>
Mainstream (A)	Separated (B)	1,974	1,944	1,975	1,892	0.24%
	Separated (C)	83	86	117	164	0.01%
	Separated (D)	2,131	2,127	2,224	2,108	0.26%
	Segregated (E)	1,721	1,735	2,081	2,117	0.23%
Separated (B)	Mainstream (A)	2,272	2,053	1,843	1,826	0.24%
	Separated (C)	0	0	0	0	0.00%
	Separated (D)	107	88	87	102	0.01%
	Segregated (E)	53	34	40	36	0.00%
Separated (C)	Mainstream (A)	1,024	971	1,244	1,128	0.13%
	Separated (B)	2	3	2	1	0.00%
	Separated (D)	59	52	86	80	0.01%
	Segregated (E)	19	5	19	17	0.00%
Separated (D)	Mainstream (A)	1,047	1,102	1,075	946	0.13%
	Separated (B)	5	2	2	0	0.00%
	Separated (C)	1	5	6	5	0.00%
	Segregated (E)	213	205	326	192	0.03%
Segregated (E)	Mainstream (A)	754	879	717	867	0.10%
	Separated (B)	10	11	11	15	0.00%
	Separated (C)	0	0	1	3	0.00%
	Separated (D)	133	175	142	174	0.02%

<sup>1)</sup>Percentage of students compared to the total number of enrolled students in the school year before and after the potential transfer across all four observation periods. A: Mainstream class, B: Introductory special class, C: Special class for foreign language students, D: Special class for students with moderate SEN, E: Special school.

### Frequency and direction of transfers

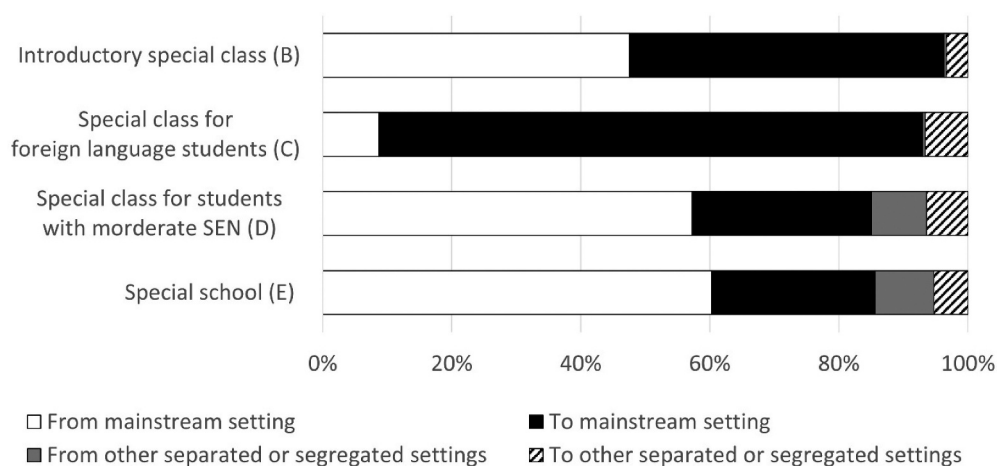
Our first research question focused on the frequency and direction of transfers between different school settings. Table 2 provides an overview of the number of transfers between different settings for every year.

#### Frequency

Every year, between 11,000 and 12,000 students transferred between different school settings (1.39% to 1.45% of total study sample). This represents a substantial number of students when compared to the percentage of students with SEN. For example, in the 2017 to 2018 school year, more than 11,000 school transfers occurred among an estimated 54,000 students receiving SEN support in 2017 (cf. Methods section), indicating that more than a fifth of all students with SEN underwent a transfer to a different school setting from 2017 to 2018.

The numbers of students transferring between settings varied by setting type. Over the analysed time span, each school year on average 4,098 students transferred to and from introductory specials classes (B), 3,752 transferred to and from special classes for students with moderate SEN (D), 3,176 transferred to and from special schools (E), and 1,295 transferred to and from special classes for foreign language students (C).





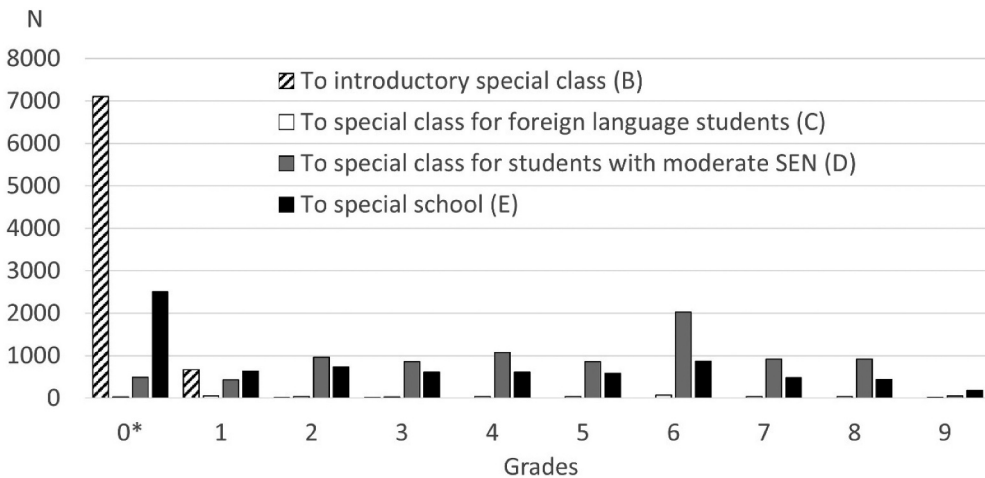
**Figure 1.** Percentages of transfers to and from other school settings depicted for each of the separated and segregated settings.

Comparing these numbers with the average number of students in each setting as shown in [Table 1](#), it can be deduced that transfers were more likely to occur to and from introductory special classes (B) and special classes for foreign language students (C), than for special classes for students with moderate SEN (D). Transfers were least likely for special schools (E).

Furthermore, we found different rates of transfers out of each setting. While on average less than 1% of students in regular classes (A) transferred to a different setting from one year to the next, the percentage was roughly 7% for students in special schools (E), 20% for students in special classes for students with moderate SEN (D), 42% for students in introductory special classes (B), and 80% for students in special classes for foreign language students (C). Thus, even though we do not know the exact time students spent in the respective settings, especially the latter two settings (B, C) can be seen as representing only temporary measures.

### Direction

For each of the separated and segregated school settings, we considered the proportions of transfers leaving or entering the respective setting ([Figure 1](#)). Transfers from separated or segregated settings to different separated or segregated settings were pooled together, since there were much larger numbers of transfers to and from mainstream settings. For introductory special classes (B), we observed a slightly greater number of transfers that left the setting than entered it. For special classes for foreign language (C), most transfers left the setting. For special classes for students with moderate SEN (D) and special schools (E), the proportions of transfers leaving or entering the respective setting were very similar. Here, more than half of transfers were from a mainstream (A) to separated (D) or segregated (E) setting, while slightly more than a fourth were transfers in the opposite direction, namely from separated (D) or segregated (E) settings to a mainstream (A) setting. Thus, the number of students who entered these settings (D or E) was about double those who left.



**Figure 2.** Number of transfers from mainstream to separated or segregated school settings by grade before transfer (2014–2018). Notes. \* Grade 0 = kindergarten, covering two years in most regions.

### Timing of transfers

The second research question focused on transfer timing. Overall, students underwent transfers at any grade. However, we found distinct patterns by school setting type. As described in the Methods section, transfers to and from the mainstream setting were analysed separately.

#### Transfers from mainstream to separated or segregated settings

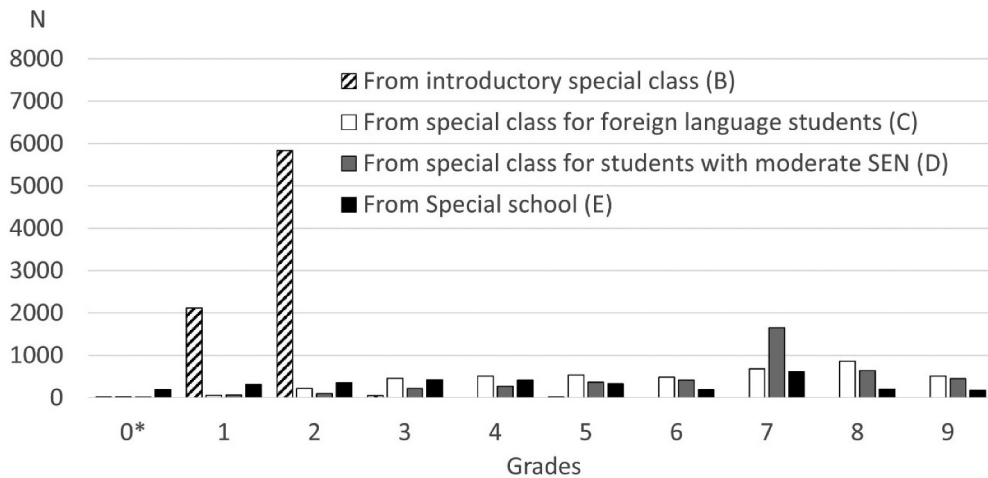
Figure 2 shows the number of transfers from mainstream to separated or segregated settings by student grade *before* the transfer. Transfers from Grade 9 were rare, since compulsory school (and thus the data set) ends after Grade 9. This implies that, in this data set, transfers from Grade 9 necessarily indicate repetitions of this grade.

Transfers to introductory special classes (B) occurred after kindergarten or Grade 1, which is in line with regulations for this setting. As shown above, transfers to special classes for foreign language students (C) were a rare occurrence and no time pattern could be identified. Transfers to special classes for students with moderate SEN (D) were less frequent after kindergarten and Grade 1 and peaked after Grade 6, which corresponds to the end of primary school in 25 of 26 Swiss cantons (in canton Ticino, lower secondary school starts after Grade 5). Transfers to segregated settings (E) peaked after kindergarten with a second smaller peak after Grade 6.

#### Transfers from separated or segregated to mainstream settings

Figure 3 shows the number of transfers from separated or segregated to mainstream school settings by student grade *after* the transfer. Overall, transfers from a separated or segregated setting to mainstream kindergarten settings were rare.

We observed transfers from introductory special classes (B) to mainstream Grade 1 or 2 classes; in contrast, transfers from special classes for foreign language



**Figure 3.** Number of transfers from separated or segregated to mainstream school settings by grade after transfer (2014–2018). Notes. \* Grade 0 = kindergarten, covering two years in most regions.

students (C) to mainstream settings (A) were more frequent in later grades. Transfers from special classes for students with moderate SEN (D) to mainstream settings (A) were rare for mainstream Grades 1 and 2 and peaked for mainstream Grade 7. Grade 7 is the start of secondary school in 25 of 26 Swiss cantons, thus, a greater number of transfers between settings occurred at the normative transition from primary to secondary school. Transfers from special schools (E) did not vary much across grades, but also showed a small peak of transfers to mainstream Grade 7.

## Discussion

The timing, frequency, and distribution of transfers between different school settings for students with SEN has been understudied. Thus, even basic information on the occurrence of such transfers is lacking. We used administrative census data about students in Switzerland to investigate the frequency, direction, and timing of transfers between different school settings attended by students with SEN.

### *Frequency and direction of transfers between school settings*

Overall, the number of transfers between school settings is substantial, when compared to the estimated total number of students with SEN in Switzerland. Given the evidence that normative school transitions are challenging for students with SEN (e.g. Harris and Nowland 2020) and that school transfers between different school settings for students with SEN appear to be similarly demanding (Maturana, Mendes, and Capellini 2019), this is an important finding.

Moreover, we found that the frequency of transfers varied by the school setting, with the greatest transfers to or from temporary special classes (B, C) and the fewest for special schools (E). As mentioned before, this may partly be explained by settings B and C being

temporary measures. Furthermore, the placement (i.e. choice of school setting) of students with SEN is likely to be related to disability severity. In particular, students with the most severe disabilities are schooled in separated or segregated settings (Kleinert et al. 2015). Thus, students attending special schools might experience fewer transfers, because their severe needs are usually addressed in highly specialised institutions. In contrast, students with mild and moderate disabilities have the potential to be served in various school settings and therefore might experience more transfers.

The experience and consequences of transfers between different settings probably depend on the types of transfers such as strategic versus reactive moves (Rumberger 2015), which most likely will also differ between the settings considered. Thus, transfers to and from temporary special classes (B, C) might be experienced as less disruptive than transfers to and from special classes for students with moderate SEN or special schools. Regarding transfer direction, results varied by school setting. For introductory special classes (B) and special classes for foreign language students (C), most transfers took place to and from mainstream settings, with only occasional transfers to other separated or segregated settings. For introductory special classes (B), transfers in both directions (to and from the mainstream setting) were equally frequent. For special classes for foreign language students (C), almost all transfers occurred unidirectionally, into the mainstream setting. This result is reasonable given special classes for foreign language students are usually the first class these students attend in Switzerland. Interestingly, the direction of transfers for students attending special classes for students with moderate SEN (D) and special schools (E) were very similar. For these two settings, most transfers were from mainstream settings into the respective settings. In contrast, far fewer students left separated or segregated settings and transferred to mainstream settings. This pattern may reflect a tendency to favour inclusive settings, as envisaged by the CRPD, which, however, cannot be sustained for older students. Reasons for transfers from mainstream to separated or segregated settings may include schools not being able to meet students' academic, emotional, and social needs (e.g. Lelgemann et al. 2012; Mann, Cuskelly, and Moni 2018).

### *Transfer peaks observed at normative transition points*

For introductory special classes, the patterns in transfer timing we observed can be explained by the framework of this setting. Introductory special class typically starts after kindergarten and lasts for one or two years. Conversely, for special classes for foreign language students, we observed very few transfers in the lower grades. Making the assumptions that students move to Switzerland at all ages and only stay in special classes (C) for one to two years, this finding would reflect a tendency for direct immersion (schooling in mainstream classes right from the beginning) for younger students, as was found in Sweden (Nilsson and Bunar 2016). Conversely, older students are referred to special classes (C) and only move to regular classes later.

For special classes for students with moderate SEN (D) and special schools (E), transfers in both directions occurred at all grade levels. However, a greater number of transfers were observed at normative transition points. This pattern seems reasonable, given that normative transitions to primary or secondary school would be a natural time to reassess the fit of a student's current setting, which would make increase the likelihood of transfers to a different setting. For special classes for students with moderate SEN (D), transfers peaked at the transition point

from primary to secondary school. In contrast, students attending special schools (E) often experienced transfers when transitioning from kindergarten to primary school, with a less pronounced second peak at the transition to secondary school. A possible explanation for this difference could be that students who transfer to a segregated setting likely have more severe disabilities and thus transfer to a segregated setting at an earlier age.

### *Strengths, limitations, and future directions*

To our knowledge, this study is the first to provide detailed descriptive findings on the frequency, directions, and timing of transfers between different school settings for students with SEN. The large census data set allowed for the investigation of transfers between school settings for the total student population of Switzerland, providing one case of a country that provides multiple school settings for students with SEN. However, the transfer patterns seen here should not be overgeneralised to other countries because country-specific implementation parameters can nevertheless be expected to play an important role.

The current data set has some limitations. One limitation is that individual SEN status can only be inferred from students' placements in separated or segregated school settings. Second, grade level is only specified for mainstream settings, which created some limitations on the analysis on the timing of transfers. Third, the data set only includes school years 2014 to 2018. Furthermore, the focus of this study is solely on school transfers between different school settings. Other important selection measures (e.g. class retention, school transfers within mainstream schools) were not part of the analyses, which may downplay the extent of school transfers. Finally, it should be noted that the results are only descriptive and thus preclude us from drawing correlational or even causal conclusions.

Nevertheless, within this national school system with multiple tracks for students with SEN, our results show that transfers occur rather frequently between different school settings and that transfer patterns vary by setting type. Although we have put forth possible explanations for such discrepancies, the factors affecting transfers by school setting and specific types of SEN should be investigated in greater detail in future research. It will be important to identify the support needs for each of the groups to smooth school transfers. Furthermore, while school transfers peak at transition points, they happen at all grades, thus support will not only be needed at normative transition points.

Additional avenues for research include the implications of transfers between settings for student outcomes (e.g. students' academic achievement or social development,) and systematic assessment of the subjective experiences by students, parents, and other concerned parties. Moreover, analyses of entire school trajectories of students with SEN might help to identify factors that lead to transfers between different school settings. Educational professionals may benefit from the insights of such research when deciding on students' transfers between school settings and when providing additional support to students before, during, and after school transfers.

## Note

1. Between 2014 and 2016, some cases could not be specified into separated or segregated because of an old category system. These cases were excluded from the analyses due to missing information.

## Disclosure statement

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