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An Overview of Inclusive Education in the Canton of Vaud: Legislation, Organisation and Research

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An Overview of Inclusive Education in the Canton of Vaud

Legislation, Organisation and Research

SUMMARY

This report is part of the research conducted by the Swiss Centre for Barrier-Free Communication (BFC), in collaboration with Handi-Capable. It provides an overview of the special education system in the Canton of Vaud within a national and international setting. Firstly, it outlines the development of special education from a social and legal perspective and looks at the particularities of Vaud's education system, comparing available national and international special education-related statistics. Secondly, the report examines the state-of-the-art scientific literature on the impact of inclusive education on short-term and long-term indicators such as academic achievement and social integration. Finally, it proposes some avenues of research.

A collaboration between:



**UNIVERSITÉ
DE GENÈVE**

HANDI  CAPABLE

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The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the University of Geneva, the Swiss Research Centre for Barrier-free Communication or the Association Handi-Capable.

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Table of abbreviations

ABBREVIATION	FULL NAME*
AI	Assurance invalidité/Invalidity Insurance
CDIP	Conférence des directeurs de l'instruction publique/Swiss Conference of Cantonal Ministers of Education
CP	Cerebral Palsy
CRC	Convention of the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DFJC	Département de la formation, de la jeunesse et de la culture/Department of Education, Youth and Culture
DGEO	Direction générale de l'enseignement obligatoire/General Directorate for Compulsory Education
DRC	Declaration of the Rights of the Child
EASNIE	European Agency for Special Needs and Inclusive Education
ECES	École cantonale pour enfants sourds/Cantonal School for Deaf Children
ID	Intellectual Disability
ICF	International Classification of Functioning, Disability and Health
ISCED	International Standard Classification of Education
LAI	Loi fédérale sur l'assurance-invalidité/Federal Law on Invalidity Insurance
LEO	Loi sur l'éducation obligatoire/Law on Compulsory Education
LHAND	Federal Act on the Elimination of Discrimination against People with Disabilities
LPS	Loi sur la pédagogie spécialisée/Law on Special Pedagogy
OES	Office de l'enseignement spécialisé/Special Education Office
OFS	Office fédéral de statistique/Federal Statistical Office
PES	Procédure d'évaluation standardisée/Standardised Assessment Procedure
SEN	Special Educational Needs
SESAF	Service de l'enseignement spécialisé et de l'appui à la formation/Special Education and Training Support Service
UDHR	Universal Declaration of Human Rights
UDL	Universal Design for Learning
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization

*Whenever the full name is not available in English, the French version is followed by our translation.

Introduction

In March 2019, a project was launched by the Association Handi-Capable in collaboration with the Department of Translation Technology of the Faculty of Translation and Interpreting at the University of Geneva. Handi-Capable was concerned about the special needs education system in the Canton of Vaud.

This report is the first output of this collaboration project, and it aims to provide an overview of special needs education in the Canton of Vaud by outlining the broader legal, organisational and scientific context in which it is situated. The first section of this report sets the terminological framework and defines some recurring terms that could be otherwise misunderstood, as they are used differently by different stakeholders and scholars. In section 2, the legal framework is described at the international, national and cantonal level to show the transition from exclusion to segregation and, more recently, a tendency towards integration and inclusion. In section 3, the focus is placed on the special needs education system in the Canton of Vaud, as well as its ranking in national and international statistics. Section 4 summarises the research evidence collected on the impact of education on short-term and long-term indicators such as school achievement and social integration. Finally, section 5 is centred on summarising the findings of the previous sections and identifying research gaps.

1. Special needs education terminology

Overall, *special needs education* includes all the measures adopted to meet the special educational needs (SEN) that students have. To lay the terminological foundations of the present report, however, we refer to the General comment n. 4 of the Convention on the Rights of Persons with Disabilities (UN Committee on the Rights of Persons with Disabilities 2016), which identifies four main ways of dealing with the SEN of students with disabilities: exclusion, segregation, integration and inclusion. Currently, in Switzerland, *exclusion* is no longer practiced, but *segregation*, or placement in special schools, is still commonplace. The difference between *integration* and *inclusion* is more subtle, because both solutions imply placement in a mainstream institution, however, the requirements to access it and the quality of support provided in class differ. The document clearly states that “[p]lacing students with disabilities within mainstream classes without accompanying structural changes to, for example, organisation, curriculum and teaching and learning strategies, does not constitute inclusion. Furthermore, integration does not automatically guarantee the transition from segregation to inclusion”.

In the context of Switzerland, special institutions can be classified as *segregation*, special classes within mainstream schools as *integration*, and placement in mainstream classes as *inclusion*. While it could be argued that accommodation provided in Swiss mainstream classes is not enough to be considered *inclusion*, it is more than simple *integration*, according to the General comment’s definition. To overcome this issue, the term *full inclusion* will be used when referring to the highest possible level of inclusion, the one that entails “systemic reform” and Universal Design for Learning (UDL) (see Table 1).

Exclusion occurs when students are directly or indirectly prevented from or denied access to education in any form.
Segregation occurs when the education of students with disabilities is provided in separate environments designed or used to respond to one or more impairments, in isolation from students without disabilities.
Integration is a process of placing persons with disabilities in existing mainstream educational institutions, with the help of special classes.
Inclusion is common teaching of disabled and non-disabled students in ordinary classes, providing them with the necessary support to meet their specific needs and aiming at an optimal social integration.
Full inclusion involves a process of systemic reform embodying changes and modifications in content, teaching methods, approaches, structures and strategies in education (Universal Design for Learning) to overcome barriers with a vision serving to provide all students of the relevant age range with an equitable and participatory learning experience and environment that best corresponds to their requirements and preferences.

Table 1: Five types of special needs education settings (adapted from UN Committee on the Rights of Persons with Disabilities 2016, Bless 2004, Gremion *et al.* 2017)

2. Legislation for people with disabilities

The current legal framework is the outcome of centuries of debate, research and progress. Public opinion and social movements have played a crucial role in shaping the current tendency towards integration and inclusion. In this section, a chronological overview of international legislation is presented following a brief description of the social movements that underpin inclusive education. Finally, the relevant legislation in Switzerland, and more specifically in the Canton of Vaud, is examined more closely.

2.1 Social movements

From a sociological perspective, inclusive education stems from three movements that took place in the 20th century: the civil rights movements, the disability normalisation movement and the movement that questioned special needs education (Ramel and Vienneau 2016, 26). In the United States, the civil rights movement of the Sixties laid the foundations for advocating equal rights for minorities and prompted people with different disabilities to work together to achieve a common goal (Albrecht, Ravaud, and Stiker 2001, 47).

A decade later, the concept of normalisation was defined by Wolfensberger as “[u]tilization of means which are as culturally normative as possible, in order to establish and/or maintain personal behaviors and characteristics which are as culturally normative as possible” (Wolfensberger *et al.* 1972, 28). In the field of education, this theory implies that children with mild disabilities can function in mainstream classes as long as they are provided with the necessary support (*ibid.* 51). The author even states that most children, regardless of their disability, should be educated in mainstream settings, although perhaps in special classes (*ibid.*). This view is consistent with the medical model of disability, where treatment aims at “fixing” the disability in order to normalise the individual as much as possible (Haegele and Hodge 2016, 202). Although this perspective may sound restrictive to the contemporary ear, normalisation challenged the assumption that disabled people could not live an ordinary life and it encouraged the discussion that later resulted in Perkarsky’s de-normalisation movement (Ramel and Vienneau 2016, 27; Perkarsky 1981, 323). By changing perspective, Perkarsky focused on the inadequacy of the environment and how it could be improved to meet the needs of everyone, instead of trying to make individuals conform to existing environmental conditions (Perkarsky 1981, 321; Granges 2019, 233). This viewpoint matches with the social model of disability, which does not

believe in fixing individuals but rather transforming society (Haegele and Hodge 2016, 202). According to this model, social arrangements such as accommodations and better understanding would significantly improve the well-being of people with impairments (*ibid.*).

Initiated around the same time in Scandinavia, the movement that questioned special needs education found support in the rest of Europe and in the United States (Ramel and Vienneau 2016, 27). In his article “Special education for the mildly retarded – is much of it justifiable?” Dunn (1968) challenged the efficiency and necessity of special classes, where disadvantaged students were often overrepresented (Vienneau 2002, 266). He also criticised the lack of empirical data to prove that segregated settings were indeed beneficial for disabled children (*ibid.*).

2.2 International legislation

Parallel to social progress, a number of international and national laws and regulations contributed to the current legislation. Ramel and Vienneau (2016) have identified three waves of legislation (see Table 2). The first one started in 1924 with the Declaration of the Rights of the Child (DRC), which is considered the first international declaration that specifically protects children and even briefly mentions children with disabilities (Ramel and Vienneau 2016, 28). Two decades later, the 1948 Universal Declaration of Human Rights (UDHR) states in article 26 that “[e]veryone has a right to education” (UN General Assembly 1948). In 1989, the revision and expansion of the DRC resulted in the Convention of the Rights of the Child (CRC) (UN General Assembly 1989; Ramel and Vienneau 2016, 28). Article 23 specifically addresses the rights of disabled children:

States Parties recognize that a mentally or physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community. [...] Recognizing the special needs of a disabled child, assistance [...] shall be provided free of charge, [...] and shall be designed to ensure that the disabled child has effective access to and receives education, training, health care services, rehabilitation services, preparation for employment and recreation opportunities in a manner conducive to the child's achieving the fullest possible social integration and individual development [...] (UN General Assembly 1989).

International legislation							
Legislation in favour of schooling of students with disabilities (1924-1989)			Legislation in favour of marginalised students (1990-1999)		International legislation that supports guidelines for inclusion (since 2000)		
Declaration of the Rights of the Child (DRC)	Universal Declaration of Human Rights (UDHR)	Convention of the Rights of the Child (CRC)	World Declaration on Education for All	Salamanca Statement and Framework for Action on Special Needs Education	International Classification of Functioning, Disability and Health (ICF)	Convention on the Rights of Persons with Disabilities (CRPD)	Policy Guidelines on Inclusion in Education

Table 2: International legislation (translated and adapted from Alcaide and Vieira 2017).

The second wave started with the World Declaration on Education for All, issued by the participants in the World Conference on Education for All, which took place in Thailand in March 1990¹. However, the single most ambitious guideline of the decade in terms of inclusive education is the Salamanca Statement and Framework for Action on Special Needs Education (UNESCO 1994) (Ramel and Vienneau 2016, 31–32). This international declaration goes beyond the call for access to education for all and promotes access to mainstream school. The term *inclusion* is used for the first time in an official declaration (*ibid.*; Alcaide and Vieira 2017, 14), as shown in article 2:

[E]very child has unique characteristics, interests, abilities and learning needs, education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs, those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs, regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system (UNESCO 1994).

The third wave began in the 21st century and included different kinds of document that are relevant to most of today's national and local legislation. The International Classification of Functioning, Disability and Health (ICF), for example, underpins the Standardised Assessment Procedure currently used in most Swiss Cantons (see section 3.1) by providing a common terminology as well as a new perspective on disability (Alcaide and Vieira 2017, 14). Regarding the functioning and disability of an individual as a dynamic interaction between health conditions and contextual factors (WHO 2001, 8), the ICF drew attention to

¹ <https://www.humanium.org/en/world-declaration-on-education-for-all/> (31.10.2019)

the fact that environmental factors play a crucial role in the functioning of people with disabilities and it is the society's responsibility to eliminate as many obstacles as possible (Alcaide and Vieira 2017, 14). In 2007, the Children and Youth version of the ICF was also published. From the same wave, the 2006 Convention on the Rights of Persons with Disabilities (CRPD) stipulates in article 2 that people with disabilities have a right to education and to "receive the support required, within the general education system, to facilitate their effective education" (UN General Assembly 2007). The same article also requires that "[e]ffective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion" (*ibid.*). Three years later, to boost the - arguably slow - implementation of the inclusion principles by the signatory countries, the Policy Guidelines on Inclusion in Education were published (Ramel and Vienneau 2016, 33–34). They recommend a series of measures such as flexible curricula and teaching methods and reforming teacher education. The goal of these guidelines is to "assist countries in strengthening the focus on inclusion in their strategies and plans for education, to introduce the broadened concept of inclusive education and to highlight the areas that need particular attention to promote inclusive education and strengthen policy development" (UNESCO 2009, 7).

2.3 Swiss legislation

As a full member of the United Nations, Switzerland has ratified, among other conventions, the CRPD and adapted its national legislation to fulfil some of the recommendations included in the above-mentioned guidelines. In the 1999 Federal Constitution, for example, several articles show the influence of the UDHR and the Salamanca Statement (see Table 3).

Article 2, section 2	[The Swiss Confederation] shall ensure the greatest possible equality of opportunity among its citizens.
Article 8, section 2	No person may be discriminated against, in particular on grounds of origin, race, gender, age, language, social position, way of life, religious, ideological, or political convictions, or because of a physical, mental or psychological disability.
Article 8, section 4	The law shall provide for the elimination of inequalities that affect persons with disabilities.
Article 41, section 1	[C]hildren and young people as well as persons of employable age can obtain an education and undergo basic and advanced training in accordance with their abilities; children and young people are encouraged to develop into independent and socially responsible people and are supported in their social, cultural and political integration.

Table 3: Selection of Swiss Federal Constitution's articles that specifically concern people with disabilities (1999).

The focus on equality that can be observed in these articles was later translated into a more specific law to protect people with disabilities (see Table 4). The Federal Act on the Elimination of Discrimination against People with Disabilities (2002), (LHand) aims at preventing, reducing or eliminating discrimination against disabled people. It lays down general conditions that make it easier for people with disabilities to participate in society and cultivate social contacts independently, to have access to education and training as well as employment (LHand 2002, Art. 1). Article 20 of the LHand states that:

The cantons shall ensure that children and young people with disabilities receive a basic education adapted to their special needs. Wherever possible and beneficial to the child or young person with a disability, the cantons shall provide suitable forms of schooling to encourage the integration of children and young people with disabilities in the regular school system. In particular, they shall ensure that that children and young people with perceptual or articulation disorders and persons close to them can learn a communication technique appropriate for the disability (LHand 2002).

In the field of education, although the Constitution and Federal laws provide a general framework, most policies are established at cantonal level (Ramel *et al.* 2016, 47). Special needs education used to be financed at the federal level according to the Federal Law on Invalidity Insurance (LAI) of 1959. However, in 2008, the Fiscal equalization reform came into effect and it established a new division of tasks between the Confederation and the

cantons². As a result, special needs education formally became a legal and financial responsibility of each canton³. An Inter-Cantonal Agreement, deemed necessary to coordinate and harmonise policies and practices, was concluded in 2007 and came into effect in 2011. Article 2 states that integrative solutions are prioritised over segregation, taking into account the well-being and development potential of the child as well as the school environment (CDIP 2007). The Agreement also fosters the use of the Standardised Assessment Procedure (PES) as a tool to determine the individual needs of the students who need special educational measures (Granges 2019, 223). As of the 28th May 2019, 16 cantons had ratified the Agreement⁴: Valais, Schaffhausen, Obwalden, Genève, Luzern, Vaud, Fribourg, Ticino, Appenzell Ausserrhoden, Basel-Stadt, Basel-Landschaft, Uri, Glarus, Neuchâtel, Jura, Zürich.

The Canton of Vaud, our main research focus, has ratified the Agreement and implemented its own cantonal Law on Compulsory Education (LEO) (Canton of Vaud 2011). It covers a range of education-related themes, including competencies, assessments, funds, rights and duties of students and parents. According to article 59, for example, whenever a student does not meet all the requirements to continue to the following school year, the school board is responsible for either authorising them to contingently continue or making them retake the school year. Students should never be more than two years behind their peers by the time they get to the eleventh year of compulsory education. However, in exceptional cases, the department may grant an exemption to these conditions (Canton of Vaud 2011, Art. 59, our translation). This rule is consistent with other European countries such as Norway (Myklebust 2006, 77; Myklebust and Båtevik 2014, 388; Ebersold 2011, 60), while in the US “students with disabilities are permitted to remain in high school through the age 21” (Schifter 2015, 480). Chapter IX of the LEO, the most important section with regard to special needs education, reused some articles from the Inter-Cantonal Agreement and, for the first time, a commitment towards inclusion emerged (Ramel *et al.* 2016, 48–49). Specifically, article 98 prescribed that “teachers use different teaching methods to make their teaching accessible to all of their students” and that “integrative settings are preferred to segregated settings” (Canton of Vaud 2011, our translation).

² <https://www.efd.admin.ch/efd/en/home/themen/finanzpolitik/national-fiscal-equalization/fb-nationaler-finanzausgleich.html> (31.10.2019)

³ <http://www.edk.ch/dyn/14642.php> (31.10.2019)

⁴ https://edudoc.educa.ch/static/web/arbeiten/sonderpaed/liste_rat_df.pdf (31.10.2019)

Another piece of legislation passed by the Canton of Vaud, illustrating the influence of the Inter-Cantonal Agreement, is the Law on Special Pedagogy (LPS). It prescribes the use of the PES to evaluate the necessity of special educational measures (LPS 2015, Art. 33), as detailed in section 3.1. Adopted in 2015, the PES has come into force in August 2019⁵.

Swiss legislation						
Federal level			Cantonal level		Canton of Vaud	
Federal Law on Invalidity Insurance (LAI)	Federal Constitution	Federal Act on the Elimination of Discrimination against People with Disabilities (LHand)	Inter-Cantonal Agreement	Standardised Assessment Procedure (PES)	Law on Compulsory Education (LEO)	Law on Special Pedagogy (LPS)

Table 4 : Swiss legislation (translated and adapted from Alcaide and Vieira 2017)

⁵ <https://www.vd.ch/toutes-les-autorites/departements/departement-de-la-formation-de-la-jeunesse-et-de-la-culture-dfjc/direction-generale-de-lenseignement-obligatoire-dgeo/actualites/news/legalite-des-chances-au-coeur-de-la-rentree-2019-2020-1566368625/> (31.10.2019)

3. Special needs education in the Canton of Vaud

After presenting the legal framework, in this section we focus on the Canton of Vaud's special needs education system. A description of the functioning of the system and the needs assessment procedure will be followed by a statistical comparison with other cantons and other countries, for broader context.

3.1 Organisation

In the Canton of Vaud, compulsory education is managed by the Special Education and Training Support Service (SESAF) and the General Directorate for Compulsory Education (DGEO), two services of the Department of Education, Youth and Culture (DFJC), which is responsible for the education and training of almost 130,000 children and adolescents⁶ (see Figure 1). These two institutions are currently being merged as part of a system overhaul and the introduction of a new policy known as *Concept 360°*, and they will officially become one in January 2020⁷. The Special education office (OES) is one of the units of the SESAf. It is responsible for:

- Funding special school and institutions.
- Enforcement of the LPS.
- Coordination of the Cantonal School for Deaf Children (ECES).
- Coordination of development classes and special education classes, as well as integration measures for students included in regular classes, in collaboration with the school principal⁸.

This last point is particularly relevant for us, as we are trying to determine how students with SEN are assigned to different school settings. To shed light on this matter, it is necessary to examine the above-mentioned Standardised Assessment Procedure and its application.

⁶ <https://www.vd.ch/toutes-les-autorites/departements/departement-de-la-formation-de-la-jeunesse-et-de-la-culture-dfjc/> (31.10.2019)

⁷ <https://www.vd.ch/toutes-les-actualites/communiques-de-presse/detail/communiqu%C3%A9/un-nouveau-directeur-general-et-une-nouvelle-approche-pour-lecole-vaudoise-1551966930/> (31.10.2019)

⁸ <https://www.vd.ch/toutes-les-autorites/departements/departement-de-la-formation-de-la-jeunesse-et-de-la-culture-dfjc/service-de-lenseignement-specialise-et-de-lappui-a-la-formation-sesaf/oes/> (31.10.2019)

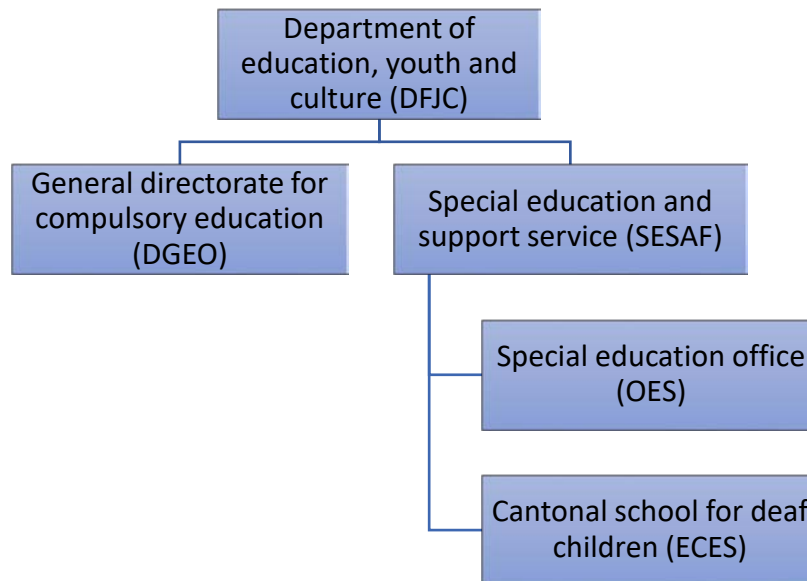


Figure 1: Simplified, non-exhaustive organisation plan of the education department in the Canton of Vaud (<https://www.vd.ch/toutes-les-autorites/departements/departement-de-la-formation-de-la-jeunesse-et-de-la-culture-dfjc/>).

In the framework of the Inter-Cantonal Agreement, the PES was commissioned by the Swiss Conference of Cantonal Directors of Education (CDIP) to provide a tool to assess the need for special measures. The first version was developed between 2006 and 2009 by Prof. Judith Hollenweger (Zurich University of Teacher Education), Prof. Peter Lienhard (University of Applied Sciences in Special Needs Education) and Prof. Patrick Bonvin (Lausanne University of Teacher Education), working closely with the cantons and associations. The PES is based on the World Health Organization's International Classification of Functioning, Disability and Health (ICF), in particular the Children and Youth version (see section 2.2). Between 2012 and 2014, a large-scale survey was conducted to assess the prototype. It involved the cantonal representatives of special pedagogy as well as the national organisations of teachers, parents and institutions for children and adolescents with disabilities. With the PES, the criteria for Invalidity insurance (AI), based on threshold limits giving entitlement to measures, are no longer in use. Instead, by systematically collecting information, it enables users to carry out a comprehensive and multidimensional needs assessment focused on the development and training objectives of children and adolescents. The standard PES entails three sections. The first two sections, baseline assessment and needs assessment, include the following elements⁹:

⁹ <https://www.csps.ch/themes/pes> (06.06.2019)

1. Information about the assessment service and the person in charge of the situation
2. Personal data of the child
3. Description of the situation and the issue
4. Context of care
5. Family background
6. Assessment of functioning
7. ICD diagnosis / brief description of the issue
8. Estimation of development and training objectives with reference to the areas of life defined by the ICF
9. Needs estimate
10. Recommendation/proposal regarding primary care location and measures

The third section, the decision process, is not standardized throughout Switzerland: the cantons issue and implement regulations on this subject as part of their special education strategies and legislation. The Canton of Vaud has published some documents regarding the PES¹⁰, but the decision process is not described.

In the following section, the question of the placement in different settings will be illustrated statistically and comparatively.

3.2 Comparison

In Switzerland, the most recent data on special education available refers to the school year 2017/18 and was published in a report by the Federal Statistical Office (OFS) in October 2019. The following graph (Figure 2) sheds some light on the national rate of segregation, integration and inclusion. Nationwide, 4.5% of compulsory school students receive some form of special measures. Interestingly, the data in the graph allow us to calculate the percentage of students with SEN who attend different settings: 53% attend a regular class, 6% attend a special class and 40% attend a special school. Unfortunately, this data is not available by canton at the moment.

¹⁰ <https://www.vd.ch/themes/formation/pedagogie-specialisee/pes/>

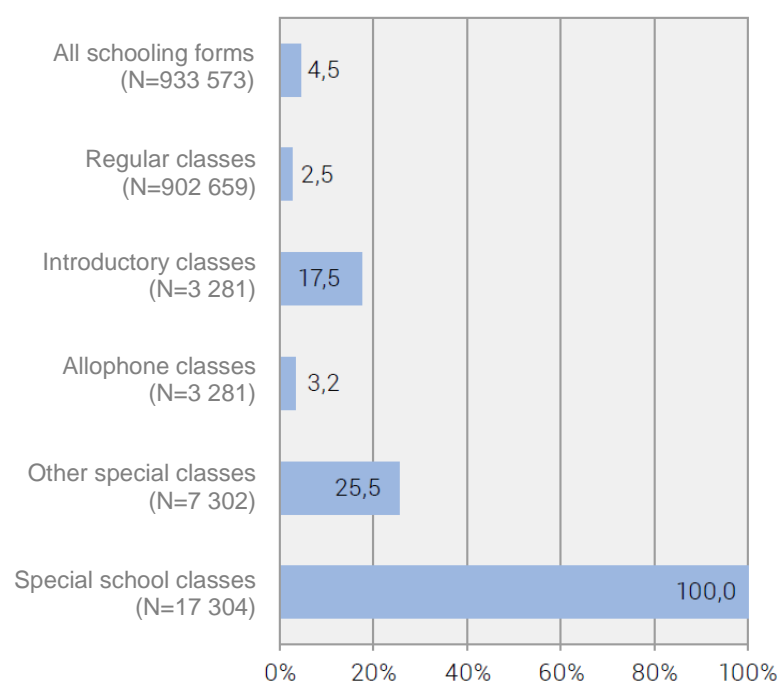


Figure 2: Rate of compulsory education students with special measures by form in the school year 2017/18, our translation (Federal Statistical Office 2019, 10).

Interestingly, cantonal data on the segregation rate is available (Figure 3): although the average segregation rate in Switzerland is 1.8%, it varies from 0.8% in the Canton of Valais to 2.7% in the Canton of Schaffhausen. The Canton of Vaud's rate is somewhat below the national average. The difference between the residency canton and the school canton data is due to the fact that some students attend a school in a different canton to the one they live in (in the case of the Canton of Appenzell Innerrhoden, for example, this is due to the lack of special institutions) (OFS 2019, 8).

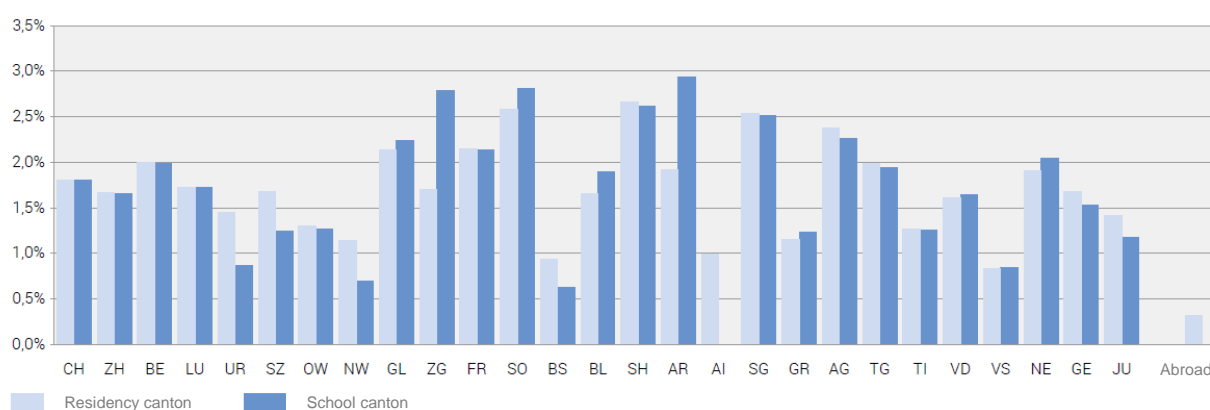


Figure 3: Percentage of compulsory school students educated in special schools (in terms of residency canton and school canton) in the school year 2017/18, our translation (Federal Statistical Office 2019, 8).

To compare statistical data between countries, it is necessary to adopt the International Standard Classification of Education (ISCED). The ISCED is a statistical framework that

enables the analysis of cross-national comparable data on national education systems and programmes, by the United Nations Educational, Scientific and Cultural Organization (UNESCO)¹¹. Within this framework, three levels of compulsory education (based on the Swiss education system) are relevant to the present analysis: (020¹²) pre-school, (1) primary and (2) lower secondary (UNESCO 2012, 21–28; Federal Statistical Office 2015).

The most recent cross-country report available was published by the European Agency for Special Needs and Inclusive Education (EASNIE) in 2018 and was based on the school year 2015-16. The following graph (Figure 4) shows the percentage of students with an official decision of SEN in inclusive education, based on the population of students with an official decision of SEN. Among the countries ranked in this graph, the highest inclusion rate of children with SEN is in Italy (99.21%), Malta (97.64%) and Scotland (92.90%) and the lowest in the Dutch-speaking Belgium (14.71%), Sweden (11.73%) and Denmark (4.98%) (European Agency for Special Needs and Inclusive Education 2018a). Although Switzerland did not submit any data for that specific statistic, the calculations based on the 2017/18 report by the OFS indicated a 53% national inclusion rate, somewhat below the European average of about 60%.

¹¹ <https://unstats.un.org/unsd/classifications/Family/Detail/1045> (31.10.2019); <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf> (31.10.2019)

¹² Education programmes at ISCED level 0 are coded 010 for early childhood educational development programmes and 020 for pre-primary education programmes.

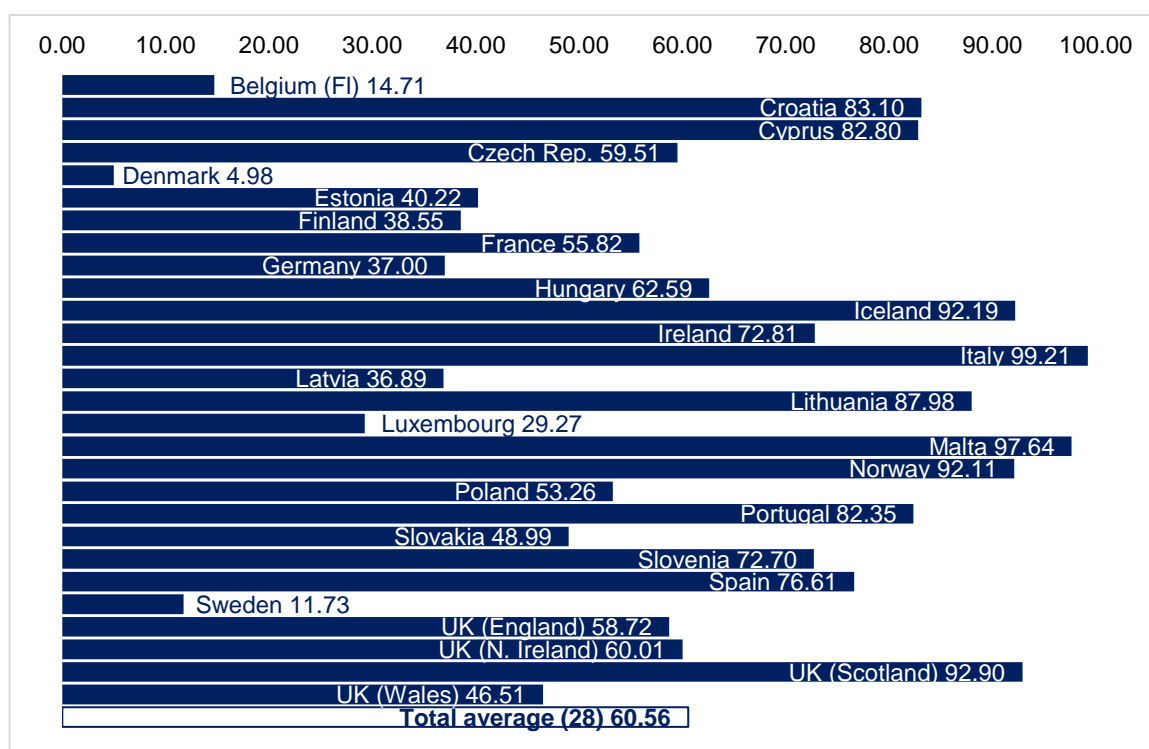


Figure 4: Percentage of students with an official decision of SEN in inclusive education, based on the population of students with an official decision of SEN (%) in the school year 2015-16, adapted (EASNIE 2018a)

Regarding the rates of segregation and integration (see Figure 5), the most recent available data has not yet been published in the form of a report, but is available on the website of the EASNIE (2019). A comparison shows that, in the school year 2016/17, the average percentage of children who were not enrolled in mainstream formal settings (out of all the children enrolled in education), and therefore presumably enrolled in special education, was 2.07%. Italy (0.04%), Portugal (0.09%) and Cyprus (0.15%) had the lowest segregation rate, while Lithuania (3.94%), Hungary (11.41%) and the Flemish region of Belgium (14.22%) had the highest segregation rate. Switzerland was slightly below the average (1.80%). It is also possible to measure the rate of integrated students by calculating the number of children enrolled in mainstream education settings but not enrolled in mainstream classes for at least 80% of the time. Some countries such as Austria, Belgium, Italy, Malta, the Netherlands, Serbia and Sweden do not appear to recur to integration classes, as their rate is 0%. Switzerland, with its 1.56%, has the third highest rate after Finland (3.81%) and Estonia (2.03%), and is above the average of 0.68%. (European Agency for Special Needs and Inclusive Education 2019).

In summary, although legislative efforts have been devoted to promoting inclusion, Switzerland still stands below the European average, with countries such as Italy, Malta, Norway, Portugal and Scotland taking the lead in terms number of students with SEN in

mainstream education. However, statistics do not provide any information on the quality of the teaching or support in class. Only an in-depth study of a smaller number of countries would enable us to investigate whether inclusive practices are successfully implemented.

	Children not enrolled in mainstream formal educational settings	Children enrolled in mainstream education settings but not in mainstream classes for at least 80% of the time
Austria*	1.04%	0.00%
Belgium (Flemish)	14.22%	0.00%
Belgium (French)	N/A	N/A
Bulgaria	0.43%	0.07%
Croatia	N/A	N/A
Cyprus	0.15%	1.08%
Czech Republic	2.15%	1.10%
Denmark	N/A	N/A
Estonia	1.91%	2.03%
Finland*	0.73%	3.81%
France	0.65%	0.66%
Germany	N/A	N/A
Greece	0.88%	0.96%
Hungary	11.41%	1.89%
Iceland*	0.37%	0.89%
Ireland*	2.30%	0.66%
Italy	0.04%	0.00%
Latvia*	3.49%	0.38%
Lithuania	3.94%	0.46%
Luxembourg	0.34%	0.39%
Malta	0.43%	0.00%
Netherlands	2.88%	0.00%
Norway*	0.22%	0.41%
Poland	1.43%	0.05%
Portugal	0.09%	0.81%
Serbia*	0.81%	0.00%
Slovakia	3.44%	1.52%
Slovenia	1.53%	0.23%
Spain	0.47%	0.13%
Sweden	0.81%	0.00%
Switzerland	1.80%	1.56%
UK (England)	1.12%	0.18%
UK (Northern Ireland)	1.52%	0.74%
UK (Scotland)*	0.86%	0.52%
UK (Wales)*	2.66%	N/A
Total average	2.07%	0.68%

Figure 5: Percentage of students educated in segregated and integrated settings, based on the country data by the EASNIE in the school year 2016-17 (<https://www.european-agency.org/data/data-tables-background-information>); the colour scale indicates figures closer to 0 with green and figures further away from 0 with yellow.

4. Research evidence on the impact of inclusive education

4.1 Methodology

As mentioned in the introductory section, this report also aims to map research evidence on inclusive education and its impact on the life of the children with special needs. To achieve this goal, three recent reviews of the literature were used as primary sources (see Table 5) and a snowball approach was adopted to collect a set of peer-reviewed papers selected according to the following criteria:

- They focus on education, and more specifically on the impact of education on other areas of life, such as social inclusion, employment etc.;
- They were published after the year 2000;
- Their target population is either students with SEN in general or students with disabilities such as motor impairment, learning disability, intellectual disability and speech impairment.

Hehir, Thomas. 2017. 'A Summary of the Evidence on Inclusive Education'. Harvard Graduate School of Education: Instituto Alana; Abt Associates.
European Agency for Special Needs and Inclusive Education. 2018b. Evidence of the Link Between Inclusive Education and Social Inclusion: A Review of the Literature. Edited by Simoni Symeniodou. Odense, Denmark.
Bless, Gérard. 2017. 'Integrationsforschung: Entwurf einer Wissenskarte'. <i>Zeitschrift für Heilpädagogik</i> , no. 5: 216–27.

Table 5: Primary sources for the review of the literature.

A total of 17 papers in English, French and German were divided into two categories according to their focus:

1. Impact of inclusion in terms of school achievement, self-confidence and other *short-term indicators*.
2. Impact of inclusive education and vocational training on *long-term indicators* such as access to higher education, social integration, employment and economic independence later in life.

In the next two sections those papers are analysed and compared to identify strengths, limitations and research gaps. The present literature review does not aim to be exhaustive,

but to identify patterns in the research evidence so far that can be used as a starting point for further research.

4.2 Short-term impact

The question of whether mainstream or separated classes are the best option for children with SEN has been debated for a long time. Research overwhelmingly shows that, under the right circumstances, students with disabilities can benefit academically and socially from inclusive settings (Bless 2017; Brørup Dyssegaard and Søgaaard Larsen 2013; European Agency for Special Needs and Inclusive Education 2018b; Hehir 2017; Ruijs and Peetsma 2009). In this section, a selected sample of research evidence collected on this subject is presented and analysed. Results are compared, taking into account scope, target population, time and geographical differences. It is important to highlight that the lack of findings regarding a major negative impact of inclusion is not due to a selection, but simply to the fact that none were found during our research. Minor drawbacks are presented later in the section.

Large-scale project such as SEELS, in the United States, aimed at identifying combinations of curricula, instruction, and other services that correlate with developmental growth in key areas and with school success. SEELS was a six-year study of a nationally representative sample of students receiving special needs education aged 6-12 at the inception of the study. Students were selected randomly from those receiving special needs education services in about 300 school districts nationwide. SEELS collected information about sample members in three waves (in the years 2000, 2002, 2004). It documented their functional abilities, educational and related services, and academic and social outcomes, identifying combinations of curricula, instruction, and other services that correlate with developmental growth in key areas and with school success¹³. Concerning the impact of educational settings, Chapter 7 of the project report examines the relationships between the educational setting (curricula, instruction, and support) and academic and social outcomes for students with disabilities, both overall and in six disability clusters (high-incidence, cognitive, behaviour, sensory, physical/health, severe). The results show that that, across measures, students with disabilities who took more academic classes in general education settings had greater academic achievement than peers who took fewer classes there

¹³ <https://www.sri.com/work/projects/special-education-elementary-longitudinal-study-seels>.

(Blackorby *et al.* 2007, 7–7). More specifically, taking more than 80% of academic classes in general education is associated with higher W-scores¹⁴ in passage comprehension for students overall and in four disability clusters (high incidence, sensory, physical/health and severe disability clusters) (*ibid.*). Students, overall and for each disability cluster, could read faster when they were mostly educated in mainstream settings (*ibid.*). Mathematics performance was also better for students overall and those in the high-incidence, physical/health, and severe disability clusters who took more academic classes in general education settings (*ibid.*).

These results are in line with a similar study conducted in the Netherlands (Peetsma *et al.* 2001) that compared the development of more than 200 matched pairs of students with learning and behavioural difficulties or mild intellectual disability who attended general and specialised schools. For the quantitative section of this study, researchers used data from the PRIMA cohort database, which contained longitudinal data from every alternate school year after 1994–1995 on 40000 students in Dutch primary schools: 5000 students from specialised schools and 35,000 from regular schools. The pairs of students, matched by gender, ethnic and socioeconomic background, type of school and age, were followed over a 4-year period and were administered standardised achievement tests. The researchers found that students' cognitive development in language and mathematics in regular schools was significantly stronger than in specialised institutions (Hehir 2017, 15; Peetsma *et al.* 2001, 130). Both research studies are extremely valuable because they provide longitudinal empirical evidence from a sample that is large and varied. However, dating back to the late nineties and early two-thousands, they do not take into account changes in education and society that occurred over the past twenty years.

The same matched-pair method was used in a more recent German study, which recruited students with SEN based on results of the 2011 IQB National Assessment Test, a standardised tool to test competences in German and Maths in fourth-year students (Kocaj *et al.* 2014). Propensity score matching was applied to control for differences in achievement-related characteristics between the two groups. SEN students in inclusive educational settings showed significantly higher test scores in German reading and listening comprehension as well as in mathematics than comparable SEN students in special schools (*ibid.*). The authors do not claim to know the reasons behind these results, but they

¹⁴ Metric used in the research edition of Woodcock-Johnson III (WJ III) test.

hypothesize that the socially stimulating environment has a positive impact on school performance (Kocaj *et al.* 2014, 183).

Although smaller in scope and focusing exclusively on children with intellectual disability, a Swiss study also aimed at comparing the progress of students in inclusive versus special school settings. Researchers found that the included children made slightly more progress in literacy skills than children in special schools (Sermier Dessemontet 2012, 7). Progress was measured by two standardised tests: LEst 4–7 and the LEst 6–9. These tests measure literacy (phonological awareness, reading, writing, grammar and vocabulary) and mathematic skills (counting, knowing numbers, ordering numbers, arithmetic and measures) and were standardised with a sample of 1,000 Swiss children (Sermier Dessemontet 2012, 3–4). Regarding mathematical progress, no significant difference was registered. However, as the author points out, this finding does not necessarily contradict Peetsma's, as the time period between the measurements was shorter in Sermier Dessemontet's study, so it is possible that it takes longer to observe a difference in the progress made in mathematics in the two settings (*ibid.*).

A different approach to investigate the efficacy of inclusion is to analyse progress and well-being of students with SEN in regular classes compared to their peers without SEN. While Sermier Dessemontet compared children with SEN attending mainstream classes and children with SEN in special schools, other Swiss researchers have compared students with and without SEN attending regular classes (Altmeyer *et al.* 2018). In their pilot study WiRk, Altmeyer *et al.* (2018) investigated the effectiveness of inclusive classes. Based on data from 431 students in German-speaking Switzerland, the study compared progress over one school year in terms of school performance, behaviour, integration and well-being of students with and without SEN. The tools used to measure progress and self-esteem were the following: Klassencockpit (three tests over a school year in mathematics and German), the Grundintelligenztest Skala 1 (CFT 1) and Skala 2 (CFT 20-R), the German version of the Strengths and Difficulties Questionnaire (SDQ-Deu), the Perceptions of Inclusion Questionnaire (PIQ). The questionnaires were filled by children and/or teachers (Altmeyer 2018, 7-8). Results suggest that, although the initial performance level was generally lower for children with SEN, performance progress was similar to their classmates without SEN. According to the answers of their teachers, behaviour of students with SEN improved more than it did for their classmates. However, the study recorded lower academic self-esteem (as per the Perception of Inclusion Questionnaire) in children with SEN, compared to their

classmates (*ibid.*). In his review of the literature, Bless (2017) summarises similar results, but also points out that this must not be interpreted as a point in favour of segregation over integrative or inclusive settings. In fact, self-esteem depends on the reference group and a higher level of self-esteem in a special class or school is not guaranteed to last outside of it (Bless 2017, 217).

School performance and self-esteem were not the only short-term aspects that were investigated in the literature, social participation in and out of class were also considered. In Austria, Schwab (2015) analysed data from 1,115 students attending primary or secondary school and compared four subthemes of social participation (friendships, interactions, peer acceptance and self-perception of social integration) between students with and without SEN. To collect data, the researchers asked the students to nominate their best friends and provided them with the German *Fragebogen zur Erfassung Emotionaler und Sozialer Schulerfahrungen von Grundschulkindern dritter und vierter Klassen* (Questionnaire for measuring emotional and social school experiences in the 3rd and 4th school year, our translation). They then examined reciprocal nominations and calculated the index of social acceptance (Schwab 2015, 74–75). Results showed that children with SEN in inclusive classes had lower scores on all four subthemes compared to their peers without SEN, regardless of their gender and age (*ibid.*). The author notes that a longitudinal study would be needed to investigate the causes of this outcome and that the quantitative methods used does not provide information about the quality of the friendships and interactions (Schwab 2015, 78). In any case, these results are complementary to the findings about self-esteem described by Altmeyer *et al.* (2018), but both studies present some limitations with regards to the purpose of this section. Firstly, they do not provide many details about the type of special needs or disability of the students that took part in the research. Secondly, they only contribute indirectly to answering the question of which type of school setting is best for students with SEN, because they just compare their experience in mainstream classes with that of their peers without SEN.

The influence of the type of school setting on social links was investigated by Grimaudo (2013) in a Swiss study that compared the activities carried out by SEN students in their free time. The author tested a self-constructed questionnaire with 191 SEN students in the Canton of Nidwalden and then distributed it among 115 SEN students who attended the 4th, 5th or 6th school year in the Cantons of Uri, Schwyz, Nidwalden and Obwalden. Three groups were formed with increasing social interaction possibilities based on the variables of school

setting and distance between home and school: (a) integrated and remote; (b) integrated and close; (c) included and close (Grimaudo 2013, 52). Results showed that, while distance from school did not appear to have a significant impact, included students tend to spend less time on media such as DVDs, videogames and TV and more time with friends, doing sports or homework than their peers in special classes (Grimaudo 2013).

From the research summarised so far, we can argue that, overall, inclusive classes have a positive impact on the short-term development of children with SEN. However, some critics challenge inclusion with the argument that, having one or more SEN students in the class would have a negative impact on their peers without SEN. Although this topic is outside the scope of this report, it was deemed important to provide an insight into the evidence that the inclusion of students with SEN does not hinder the learning achievement of their classmates. On the contrary, it seems to have either a neutral or a positive impact (Bless 2017). Two papers have been selected as representative and geographically relevant examples.

Another Swiss study (Sermier Dessemontet and Bless 2013) investigated the impact of children with intellectual disability (ID) included in general education classrooms on the academic achievement of their low-, average-, and high-achieving peers without disability. The researchers recruited second-year primary school students who attended classes with and without classmates with ID and matched 202 pairs taking into account criteria such as gender, socioeconomic status, mother tongue, age, intelligence quotient and academic achievement at the pre-test (Sermier Dessemontet and Bless 2013, 26–28). The study found that the progress of primary students without disability is not compromised by the inclusion of a child with ID in their classroom with 4.5 to 6.5 hours of support from a special education teacher per week, regardless of their level of academic achievement (*ibid.*).

In 2009, Noël conducted a longitudinal qualitative study to identify the benefits of inclusion on children without SEN in six classes in the French-speaking part of the Canton of Fribourg (Noël 2009, 184–85). The researcher asked the students to rate their level of interaction with their classmates at the beginning and the end of the school year and then compared the average score with that of the students with SEN. The main teacher of the class was also interviewed regarding their personal opinion about inclusion, the place of the included student in the class group, the attitude of peers towards the child with SEN and the perceived contribution in terms of cognitive and socio-affective development of the peers (*ibid.*). The results obtained from the questionnaires about the interaction level between

children indicate that children with SEN were not significantly less integrated than their peers without SEN and that the level of integration tended to increase over the school year. The study thus identifies some key conditions for the success of inclusion for all the students in the class, including the teacher's positive perception, provision of necessary support in class (e.g. special education teacher), collaboration between teachers, and the child's personality (Noël 2009, 195). According to the teachers, integration had more to do with the personality of the students than their disability, and they mentioned respect for diversity and development of patience, listening skills and open-mindedness as the main positive effects of inclusion on students without SEN (Noël 2009, 189).

4.3 Long-term impact

While the children's achievement, social inclusion and general well-being are crucial criteria for the choice of the kind of education they should receive, long-term indicators also need to be considered for the assessment of the matter. Research indicates that employment and financial independence are important life domains for the health and well-being of adults with cerebral palsy (Huang *et al.* 2013; Liptak 2008) and with disabilities in general. One of the broader missions of school is to prepare children for their adult lives. This includes providing them with the knowledge, skills and qualifications necessary to continue education or find employment and become financially independent. In this section, a selection of studies that investigated this subject is presented.

In the United States, a study by Schifter (2015) used the survival analysis method to investigate graduation patterns of students with disabilities. The author exploited the data available in the Massachusetts Department of Elementary and Secondary Education (MADESE) database to examine the proportion of students with SEN that graduated on time (i.e. four years after beginning secondary education), which was 68% (against 85% of students without SEN) (*ibid.*). She found that students who are included have considerably better graduation outcomes than those who spend less than 40% of the day in regular classes, even when controlling for disability category and demographic variables (Schifter 2016, 481, 494).

These results are consistent with those of a longitudinal study that took place in Norway (Myklebust 2006). The author interviewed young adults aged 23, whose data had been collected six years previous through a questionnaire and found that students receiving special support in ordinary classes obtain vocational or academic qualifications more often

than students in special classes, even when variables such as functional level, family stability and gender are taken into account (*ibid.*).

Similarly, Baer *et al.* (2011) used regressive analysis to predict postsecondary enrolment - but also employment - for students with intellectual and multiple disabilities in Michigan, USA. Collecting data through school records, interviews at graduation and phone interviews one year after graduation, the researchers identified inclusion as the only evidence-based programme predictor for postschool engagement of students with ID (*ibid.*). Although only 21% of students with ID in the sample were schooled in inclusive settings, “[t]he logistic regression model for postsecondary education predicted correctly 90% of the time, suggesting that inclusion of students with ID in regular classes more than 80% of the time was almost a prerequisite for successful postsecondary education enrolment” (Baer *et al.* 2011, 8). Results concerning employment were less unambiguous, as career education, technical education and work study programs were not determined to be significant predictors of full-time postschool employment.

Another study in the US investigated predictors of employment at the time of graduation for students with severe disabilities (White and Weiner 2004). Correlations were used to examine predictive relationships between some independent variables and the dependent variable of post-school integrated employment. The authors found that mental ability as measured by intelligence quotient (I.Q.), behaviour problems, physical disability and participant demographics did not correlate with successful employment outcome, whereas the duration of community-based training (CBT), which included on-the-job training, and age appropriate physical integration with non-disabled peers, did (White and Weiner 2004, 152).

In Europe, most research on employment outcomes is conducted in Scandinavia. In 2009, Myklebust and Båtevik published a report looking at the financial independence of former students with SEN. They applied a life course approach to data from a Norwegian longitudinal study and investigated the extent of financial independence among 373 youths with disability in their mid-twenties (Myklebust and Båtevik 2009). In this study, instead of recording the participants’ exact wages, the researchers asked the respondents to subjectively evaluate their salary and whether their income was sufficient without other sources of support. According to their findings, about 50% of the study participants were financially independent, and the analysis indicated that students schooled in regular classes attained vocational or academic competence and obtained a driving licence more often than

students educated in special classes did. By having a positive *direct* impact on these factors, regular class placement *indirectly* increased the chances of earning a living (*ibid.*). Further studies based on the same data (Bele and Kvalsund 2015; Myklebust and Båtevik 2014) reveal more details about the impact of class placement on the life course of former students with SEN in their late twenties and mid-thirties. On the one hand, experiences of exclusion (in this context, for instance, being solely in special classes) during upper secondary school have a marked negative effect on being in a small and potentially isolating social network at age 24 compared with other variables such as personal diagnostic characteristics and psychosocial stress in the family (Bele and Kvalsund 2015). On the other hand, the class placement variable seems to lose its significant effect at age 29 (*ibid.*) and at age 34 (Myklebust and Båtevik 2014).

In Switzerland, to our knowledge, there is a scarcity of longitudinal studies about the impact of school placement on the employment outcome at graduation or later in life. Eckart *et al.* (2011) did investigate long-term effects of school inclusion on social integration and employment. However, they focused on children with learning difficulties and children with a migratory background. The authors had access to the data collected in the framework of the *IntSep* research project (University of Fribourg) conducted in the previous decade on students with learning difficulties in the German-speaking cantons. They interviewed 452 young adults over the phone about their current situation regarding higher education and employment, social links and attitudes towards foreigners, self-perception, social integration, inequality perception (Eckhart *et al.* 2011, 15–18). Regressive analysis indicates that segregation in special classes seriously undermined the chances of students with learning difficulties to be socially and professionally integrated three years after the end of compulsory school (*ibid.*).

5. Concluding remarks and open questions

This report has provided an overview of the general context and the current situation of special needs education in Switzerland, and more specifically in the Canton of Vaud. In this section, we summarise our findings and identify some research gaps based on the evidence collected so far.

Section 3 detailed the decision-making process that determines whether a child is educated in a mainstream or a special school setting. Of course, a more detailed investigation could be helpful to test the efficacy of said process and, perhaps, its impact on the evolution of the segregation rate. The statistical comparison in section 3.2, on the other hand, illustrated the main differences in the special education system between the Canton of Vaud and other cantons, as well as between Switzerland and other European countries. An in-depth comparison between Switzerland and another country could also be carried out, but a preliminary investigation would have to be performed beforehand to identify a suitable candidate for the comparison. Criteria such as size, GDP, federalism and multilingualism should be taken into account.

Section 4 presented research evidence from a sample of studies that investigated the impact of the school setting on children with SEN. Specifically, section 4.2 focused on short-term indicators of success and well-being, such as school achievement, self-perception, and integration. Scientific evidence indicates that mainstream schools are the best settings for children with SEN. There, students tend to obtain better scores in reading, mathematics and listening comprehension and show higher levels of social participation compared to their peers in special settings. Although their academic self-esteem and social inclusion is generally lower than their peers in special settings, they demonstrate similar progress in academic and behavioural development and their presence in inclusive classes does not appear to hinder the achievement of their peers. On the contrary, students without SEN in inclusive classes benefit from their presence in terms of acceptance of diversity and empathy. Section 4.3, on the other hand, focused on long-term indicators such as social integration and employment. Research on this subject is particularly scarce in Switzerland, but, overall, it seems to point to inclusive solutions over segregation to foster graduation and future employment. Although the positive effect of inclusive education on employability and social integration seems to fade over time, more longitudinal research is needed to confirm these findings.

This report shows that a lot has been done, including in Switzerland, to investigate the advantages and drawbacks of inclusive education. Scientific evidence has been slowly transposed into laws and regulations and, from a legal point of view, inclusive settings are recognised to be the best solution in the vast majority of circumstances. However, laws and regulations have not always been implemented in practice, and many children are still segregated in the Canton of Vaud and elsewhere. We can only speculate on the reasons behind this gap: *lack of funds* is often mentioned to explain why full inclusion has not been implemented; *teachers' attitude* is certainly a major component (Alcaide and Vieira 2017; Oswald and Swart 2011; Sharma, Forlin, and Loreman 2008) and so is the attitude of other actors involved, such as principals and decision-makers, parents and classmates (WHO and World Bank 2011, 216). Any further research in this area, should focus on a specific disability cluster, as opposed to *students with SEN*, to fill the current evidence gap that emerges from Bless' analysis (2017).

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